**Development Control Committee**

Meeting to be held on 23 September 2014

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| Electoral Division affected:West Lancashire North |

**West Lancashire Borough: application number. LCC/2014/0047**

**Retention of the site compound and access track for a further 3 years to allow pressure monitoring of the Hodder Mudstone and Bowland Shale rock formations, followed by plugging and abandonment of the existing exploratory well and site restoration. Becconsall Shale Gas Exploration Site, Banks Enclosed Marsh, Bonny Barn Road, Hundred End, Banks.**

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| Executive SummaryApplication – Retention of the site compound and access track for a further 3 years to allow pressure monitoring of the Hodder Mudstone and Bowland Shale rock formations, followed by plugging and abandonment of the existing exploratory well and site restoration. Becconsall Shale Gas Exploration Site, Banks Enclosed Marsh, Bonny Barn Road, Hundred End, Banks.Recommendation – SummaryThat subject to the applicant first providing a unilateral undertaking in respect of the off site ecological mitigation measures to be provided throughout the wintering wildfowl seasons (31st October – 31st March) while the Becconsall Shale Gas exploration Site is present, planning permission be **granted** subject to conditions relating to time limits, working programme, ecology, soils and overburden, hours of working, highway matters, noise, floodlighting, safeguarding of watercourses and drainage, restoration and aftercare.  |

**Applicant’s Proposal**

Planning permission is sought to retain the drilling platform and associated highways access at the Becconsall Shale Gas Exploration Site to undertake pressure monitoring of the Hodder Mudstone and Bowland Shale rock formations for a period of approximately 12 months. Following the testing, the well would be plugged and abandoned and site restored back to agriculture within a period three years from the date of the granting of planning permission for the pressure monitoring.

The proposed pressure monitoring is a type of test program to obtain reservoir pressure that will be needed for a full evaluation of the Bowland Shale formation. The purpose is to understand initial reservoir pressures within the formation of the Bowland shale so as to be able to model the future well performance and the

recoverability, or not, of the shale gas reserves and particularly with regard to the amount of hydrocarbons (natural gas) in and the permeability of the various rock formations (primarily the Hodder Mudstone but also the Bowland Shale).

The pressure monitoring is undertaken from inside the existing drilled exploratory well. The target rock formations are located between depths of approximately 6200 - 10300 ft. below the surface of the ground.

The pressure monitoring testing procedure would first involve re-circulating the existing fluid (sodium chloride brine) within the well to ensure that there is sufficient pressure within the well to prevent it from collapsing. If pressure within the well is required to be increased, then more fluids in the form of clean water or brine fluid can be added to the well. The suspension fluid is not required to undertake the pressure monitoring testing although the fluid will remain in the well throughout the pressure monitoring period.

Following recirculation/ adjustment of the well fluids, a packer would be set below the test zone. The well casing would then be perforated in 4-6 points over several feet to allow entry points in the zone to be tested. The perforations would be achieved by setting off a small contained charge, making a hole a half inch or less in diameter that would extend 2-4 feet into the rock formation to be tested. Pressure gauges would then be installed in the test zone. A packer would then be set above the test zone to pressurise and isolate it. The pressure levels in the test zones during the “shut in” periods have not been provided. This procedure would be repeated in a number of test zones. Installation of the pressure monitoring equipment would take 2 weeks. The subsequent shut in (monitoring) period would be for approximately 12 months. Over this period, the pressure gauges would monitor any change in reservoir pressure which is considered to be a key variable in characterising the potential of a rock formation to contain gas. A 12 month monitoring period would be required because the rock formations to be tested are expected to have very low permeability. The procedure does not require the pressuring of the well to create fractures in the surrounding rock.

After completion of the pressure monitoring, a period of approximately 4 weeks would be required to plug and abandon the well, followed by a 12-14 week period to fully restore the site. Restoration would involve sealing the well head and removing all surface and subsurface features of the drilling platform and the stone access road and passing place and replacing the subsoil and topsoil (currently stored as landscaped screens around the site) to return the site to agricultural use.

The hours of working would be 24 hours a day for the full 2 week period when rigging and setting up the pressure monitoring equipment, and during the plugging and abandonment of the well.

The applicant has proposed to offset the loss of bird foraging habit by the provision of a 22.97ha wintering bird mitigation area that would be greater than the combined size of the footprint of the exploratory site and any surrounding land that would not be used for feeding by birds due to the presence of the exploratory site. The mitigation has involved a signed agreement between the land owner/s and the applicant to implement the mitigation. A comprehensive list of measures to avoid harm to the qualifying interest features (bird species) has been provided and includes supplementary feeding, cessation of shooting rights, wardening, farming, restrictions on vehicle movements, compliance checks and bird monitoring. There would also be the need to ensure protection is afforded to nesting birds outside the wintering wild fowl season.

**Description and Location of Site**

Becconsall shale gas exploration site is located in a field within an area of flat Grade 1 agricultural land used for the growing of arable crops known as 'Banks Enclosed Marsh' approximately 1.5km northwest of the village of Banks, 3km west of the village of Becconsall and 700m to the north of Marsh Road that links the settlements of Banks and Becconsall.

The surface area of the works measures 0.99ha and consists of the drilling platform and site access. Access to the site is via an existing field access on the east side of Bonny Barn Road, an existing un-adopted farm track that serves Marsh Nurseries and links to Marsh Road. The existing field access has been widened and a new 163m length of a stone surfaced track constructed to provide access through the field to the drilling platform. The first 35m of the track from Bonny Barn Road is 14m wide to allow for the passing and manoeuvring of vehicles. The remaining 128m length of the track is 4m wide.

The working platform is bound by an open ditch, for the purpose of pollution prevention control, on all sides except for the south-west side where the majority is piped and covered to allow access on to the platform. Beyond the ditches, the north-west and part of the south-western edges of the working platform have 3m high soil bunds formed from the stored topsoil and subsoil removed during the construction of the working platform. Controlled watercourses in the form of field drainage ditches run parallel near to the north-east and south-east sides of the working platform. Two completed wells have been vertically drilled (known as the primary and secondary wells) that are located near the centre of the working platform.

The nearest residential properties are at Marsh Nurseries approximately 200m to the west and at Marshfield Farm approximately 400m to the north. A Public Right of Way is located approximately 290m to the east of the edge of the working platform.

The site is located within the Marsh Farm Fields; North Meols Biological Heritage Site (BHS). The Ribble Estuary Site of Special Scientific Interest (SSSI) that forms a part of the European designated Ribble and Alt Estuaries Special Protection Area (SPA) and Ramsar site are approximately 650m to the north being separated from the Marsh Farm Fields; North Meols BHS by a sea embankments/ flood defences.

# Background

Planning permission for the temporary change of use from agriculture to site for drilling an exploratory borehole and testing for hydrocarbons including construction of a drilling platform was granted on 20 October 2010 (ref. 08/10/0973). Condition 1 of the permission required the site development works, drilling operations, testing and site restoration to be completed within a period of eighteen months from the commencement of the development, with the drilling operations to be completed within a period of three months from the date of their commencement.

The development of the site commenced on the 28th March 2011; consequently the site had to be restored by the 27th September 2012. The construction of the drilling platform, creation of access to the highway and the drilling of the exploratory borehole has been completed.

An application to extend time periods for the completion of well testing and restoration was submitted on 19th September 2012 (ref. 08/12/1032). The application proposed that the well testing operations by fracking and site restoration be completed by 28th March 2014. A screening opinion was undertaken and which concluded that the proposal would require an Environmental Impact Assessment (EIA).

On the 6th June 2013 the applicant proposed a revision to the application (08/12/1032). The amended well testing operations were to involve undertaking a reservoir diagnostics programme, the purpose of which would be to collect better data on geological conditions and collect natural gas samples and formation water samples from 4 different shale intervals at different depths in the well. The testing would have been for a period of 60-90 days and to commence in late July 2013. The data would then have been used to help determine the recoverability of the natural gas contained in the Bowland Shale. The site would then have been restored by 28th

# September 2014. However, given it had been determined that the development as initially proposed constituted EIA development, it was subsequently determined that the application could not be amended in the way proposed. No EIA has been submitted and the application remains undetermined and held in abeyance at the request of the applicant. Depending on the outcome of the current application, the application may be withdrawn.

A Habitats Regulations Screening Assessment of the current application has been undertaken and concludes that the pressure monitoring, as proposed, and in combination with the existing three seismic monitoring boreholes installed in the Marsh Farm Fields; North Meols BHS would not give rise to a significant effect on the qualifying interest features (bird species and habitats) of the European designated site of the Ribble and Alt Estuaries SPA and would therefore not give rise to a likely significant effect as defined in the Habitats Regulations 2010.

A screening opinion of this proposal has been undertaken and it was concluded that the proposed development is not Environmental Impact Development for the purposes of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

# Planning Policy

National Planning Policy Framework (NPPF)

Paragraphs 11 – 14, 17, 56 – 66, 79 – 81, 87 – 90, 100, 103, 109, 118 – 125, 144 and 147 are relevant with regard to the requirement for sustainable development, core planning principles, the requirement for good design, protecting green belt land, flood risk, conserving and enhancing the natural environment and facilitating the sustainable use of minerals.

National Planning Practice Guidance

Flood Risk and Coastal Change

Light Pollution

Natural Environment

Minerals

Noise

Joint Lancashire Minerals and Waste Development Framework Core Strategy Development Plan documents (LMWDF)

Policy CS1 Safeguarding Lancashire's Mineral Resources

Policy CS5 Achieving Sustainable Minerals Production

Joint Lancashire Minerals and Waste Local Plan – Site Allocation and Development Management Policies – Part One (LMWLP)

Policy NPPF 1 Presumption in favour of sustainable development

Policy DM2 Development Management

West Lancashire Local Plan 2012-2027 Development Plan Document

Policy SP1 A Sustainable Development Framework for West Lancashire

Policy GN1 Settlement Boundaries

Policy GN3 Criteria for Sustainable Development

Policy EC2 The Rural Economy

Policy EN2 Preserving and Enhancing West Lancashire's Natural Environment

# Consultations

West Lancashire Borough Council – No objection.

Sefton Council – No objection.

North Meols Parish Council - No objection.

Hesketh-with-Becconsall Parish Council - No observations received.

LCC Developer Support (Highways) – No objection; the highway conditions to planning permission 08/10/0973 are still appropriate and should be retained for this application.

The Health and Safety Executive – No objection.

The Department for Energy and Climate Change - No observations received.

Environment Agency – No objection.

Natural England – No objection. Agree with the conclusion of the Habitats Regulations Screening Assessment that the proposal is not likely to have a significant impact on the Ribble and Alt Estuaries SPA and Ramsar site.

LCC Specialist Advisor (Ecology) - No objection.

Representations – The application has been advertised by press and site notice, and neighbouring residents informed by individual letter. 244 representations have been received to date objecting to the proposal for the following summarised reasons:

* The site lies within 700m of the Ribble and Alt Estuaries SPA and Ramsar site that have been designated for their wintering bird populations and for breeding seabirds and bird passage and is one of Britain's largest wetland habitats of national and international importance.
* One of the surface water dispersal routes from the site is via existing surrounding watercourses. Pollutants from the proposed activities may be discharged into the nearby SPA and Ramsar site via the watercourses.
* A Habitats Regulations Screening Assessment (HRSA) should be undertaken by LCC to determine the effect of the application, either alone, or in combination with other projects in the nearby area, on the SPA and Ramsar site. The HRSA should conclude that the proposal is likely to have a significant negative impact on the substantial residential and seasonal bird populations frequenting the immediate and surrounding area and that a pollution incident associated with the operations at the site could result in widespread contamination of the SPA marshes.
* There is an absence of technical detail about the proposed pressure monitoring testing. There are no details of the fluid that would be circulated within the well.
* Many seismic monitoring points have been drilled in the area but there is no evidence that monitoring equipment has yet been installed so how would any seismic activity as a consequence of the pressure monitoring testing be recorded?
* There have been a high percentage of well integrity failures in America. The proposal should be the subject of an Environmental Impact Assessment to determine the potential for the migration of gas into the atmosphere.
* Polluted surface water may also contaminate land in the surrounding area. The land is highly productive grade 1 arable land that produces potatoes, vegetables and salad crops and is seen locally and nationally as a significant contributor to the economy of Lancashire.
* No amount of science or robustness of a regulatory regime can prove fracking is safe or ensure the level of safety now or in the future as nobody can predict there will not be human error or machine and equipment failure, or whether the integrity of the well will not be affected by natural events such as earthquakes or ground movements, by a build up in formation pressure during drilling, production or long after plugging and abandonment of a well or by the natural corrosion of the well casing consisting of steel and concrete.
* The Health and Safety Executive (HSE) were not consulted with regards to the application for the original planning permission 08/10/0973 for this site.
* British Petroleum (BP) has admitted that burning all known reserves would probably cause global temperatures to rise by more than 2 degrees Celsius.
* Cuadrilla was chastised in 2012 by ministers.
* There is a lack of clearly defined health and safety procedures.
* There is a breach of condition 23 of planning permission 08/10/0973 as the site has not been restored.
* Clean energy production should be a priority for LCC. Fracking just increases dependence on fossil fuels.
* Any gas produced would be sold on international markets so it is a false claim that the gas would help the country to be energy self-sufficient.
* There would not be any benefit to the local people with regard to jobs are there are no experts in the area.
* The Interdepartmental Panel on Climate Change (IPCC) emphasise the need to reduce pollution which already exceeds World Health Organisation (WHO) recommendations due to overuse of fossil fuels. A recent IPCC report informs that UN scientists advise that the world must shift to solar and wind power rapidly to avoid catastrophic global warning
* The proposal is within the Greenbelt and should be refused.
* Who would be liable for damage to foundations and buildings as a consequence of earth tremors originating from activity at the site?
* The waste that would be removed from the ground is potentially hazardous, toxic and radioactive.
* The roads in the area are not adequate to carry the number of large vehicles coming to and from the site. They will create pollution, noise and danger in the area.
* Concerns if any explosives would be used and the safeguards in place as to their storage, transportation and use.
* The cost of house insurance in the area may increase and house prices may fall.

One letter of support has been received that the proposal would not affect the environment as much as is feared; it would help in the provision of gas supply for the country and reduce reliance on imported gas.

Representations have also been received from Friends of the Earth (FOE) and two local groups, Ribble Estuary Against Fracking (REAF) and Sefton Green Party objecting to the proposal for the following summarised reasons:

FOE

* The proposal is inconsistent with the original permission which was based upon a time limited period of operation.
* There is insufficient information about proposed operations and evidence on impacts (both existing and future) including pressure levels during the “shut in” period.
* The proposal should be accompanied by an Environmental Impact Assessment.
* The proposal is inconsistent with the precautionary principle and EU Water Framework Directive.
* The proposal is inconsistent with the National Planning Policy Framework.
* The proposal is inconsistent with policies of the West Lancashire local plan and the Lancashire minerals and waste local plan.
* The proposal would impact on climate change and would be inconsistent with policy on climate change.

REAF - Submitted an Extended Phase 1 Habitats Survey of the Becconsall Exploration Site and a 10km overview to highlight the ecological sensitivity and importance of the surrounding area, and made the following comments:

* Cuadrilla's original submission states that the site area would be 0.99ha but this did not take into account the subsurface area that would have taken it over the 1 hectare threshold. ARUP now state that the site is 1.12ha. This criterion would present the application as an EIA development and therefore subject to the appropriate assessment.
* Reports by Ecology Services UK Ltd. and by Sensible Ecological Survey Solution Ltd suggest that an area of 10.43ha and 30ha, respectively, should be set aside for bird mitigation purposes for overwintering birds outside of the farm track disturbance area.

Sefton Green Party

* The Environment Agency (EA) suggest that it would not be required to include a condition on the granting of any planning permission to require the submission of details of the well abandonment schedule. The effect of this would be to leave no instrument in place to regulate the well completion. In this respect, it is considered that the EA have misinterpreted paragraph 206 of the NPPF relating to the imposition of planning conditions and, particularly, with regard to this matter.

**Advice**

The application is for the retention of the existing drilling platform and associated highways access at the Becconsall Shale Gas Exploration Site for a further 3 years to allow pressure monitoring of the rock formations, followed by plugging and abandonment of the existing exploratory well and site restoration. The current site was granted permission 08/10/0973. The drilling platform and access to the highway have been constructed, and the exploratory borehole drilled, in accordance with the permission. No testing has taken place. The full history of the current site is explained in the background section above.

The proposed pressure monitoring test program is intended to obtain information as to the amount of hydrocarbons (natural gas) in and the permeability of the various rock formations (primarily the Hodder Mudstone but also the Bowland Shale) located between depths of approximately 6200 - 10300 ft. below the surface of the ground at the existing Becconsall shale gas exploration site.

The procedure would monitor any change in pressure in a number of test zones within the existing primary drilled exploratory well for a period of approximately 12 months. After completion of the pressure monitoring the exploratory well would then be plugged and abandoned and the exploration site restored within a period of three years from the date of the granting of planning permission for the pressure monitoring.

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan, unless material considerations indicate otherwise. In considering the issues that arise from the proposed development, it is necessary to take into consideration the relevant policies of the Development Plan and the planning history of the site and all other material planning considerations. Government policy is a material consideration that should be given appropriate weight in the decision making process.

Government policy supports the exploration, testing (appraisal) and production of economic onshore hydrocarbon reserves. This application relates to the first two phases; exploration and testing (appraisal). The site would then be restored. The restoration and aftercare of minerals sites section of the National Planning Practice Guidance in relation to minerals seeks to ensure worked land is reclaimed at the earliest opportunity through the imposition of appropriate conditions and that highquality restoration and aftercare of mineral sites takes place, and on a site-by-site basis following discussions between the minerals operator and the mineral planning authority.

The Development Plan for the site is made up of the Joint Lancashire Minerals and

Waste Development Framework Core Strategy Development Plan documents (LMWDF), the Joint Lancashire Minerals and Waste Local Plan – Site Allocation and Development Management Policies – Part One (LMWLP) and the West Lancashire Local Plan 2012-2027 Development Plan Document.

The site is located on land designated as Green Belt, a Nature Conservation Site and Ecological Network, a Coastal Zone and a Mineral Safeguarding Area in the West Lancashire Local Plan 2012-2027 Development Plan Document.

Policy CS1 of the LMWDF seeks to ensure that Lancashire's Mineral Resources will be identified and conserved where they have an economic, environmental or heritage value. Mineral resources with the potential for extraction now or in the future will be identified as Mineral Safeguarding Areas and protected from permanent sterilisation by other development.

Policy CS5 of the LMWDF seeks to ensure, amongst other criteria, that our natural resources including water, air, soil and biodiversity are protected from harm and opportunities are taken to enhance them; workings will not adversely contribute to surface water flooding; proposals for mineral workings incorporate measures to conserve, enhance and protect the character of Lancashire's landscapes; the amenity, health, economic well-being and safety of the population are protected by the introduction of high operating standards, sensitive working practices and environmental management systems that minimise harm and nuisance to the environment and local communities throughout the life of the development, and the sensitive environmental restoration and aftercare of sites take place, appropriate to the landscape character of the locality and the delivery of national and local biodiversity action plans.

Policy DM2 of the LMWLP supports developments for mineral operations (including hydrocarbons) where it can be demonstrated that all material, social, economic or environmental impacts that would cause demonstrable harm can be eliminated or reduced to acceptable levels. In assessing proposals, account will be taken of the proposal's setting, baseline environmental conditions and neighbouring land uses, together with the extent to which its impacts can be controlled in accordance with current best practice and recognised standards. Development will be supported in accordance with the requirements of Policy CS5 of the LMWDF. Impacts and issues to be considered are the quality of design, layout, form, scale and appearance of buildings; the control of emissions from the proposal including dust, noise, odour, light and water; the control of the numbers, frequency, timing and routing transport related to the development and, the restoration within agreed time limits, to a beneficial after use and the management of landscaping. Policy GN3 of the West Lancashire Local Plan has very similar criteria in relation to sustainable development.

Policy GN1 (part b) of the West Lancashire Local Plan refers to development outside settlement boundaries and states that proposals within the Green Belt will be assessed against national policy and any relevant Local Plan policies.

Policy EC2 of the West Lancashire Local Plan refers to the rural economy and seeks to not permit the irreversible development of open, agricultural land where it would result in the loss of the best and most versatile agricultural land, except where absolutely necessary to deliver development allocated within this Local Plan or strategic infrastructure, or development associated with the agricultural use of the land.

Policy EN2 of the West Lancashire Local Plan refers to preserving and enhancing West Lancashire's Natural Environment. Part 1 of the policy refers to Nature Conservation Sites and Ecological Networks. It refers to the hierarchy of nature conservation sites, these being international (including Ramsar sites and Special Protection Areas (SPA)), National (including Sites of Special Scientific Interest (SSSI)) and Local (including County Biological Heritage Sites (BHS)). The amount of protection given is commensurate with the level of status. International sites are given the strongest possible protection. In relation to National sites, developments that would directly or indirectly affect them will only be permitted where there are exceptional circumstances and where the benefits of the development at the site clearly outweigh the impacts to the site and the wider ecological network. In the case of SSSI's, consideration will be given to the likely impact of the development on the features of the site. In relation to Local sites, developments that would directly or indirectly affect them will only be permitted where it is necessary to meet an overriding local public need or where it is in relation to the purposes of the nature conservation site. Where development is considered necessary within or affecting nature conservation sites, adequate mitigation measures and compensatory habitat creation will be required through planning conditions and/or obligations, with the aim of providing an overall improvement in the site's biodiversity value. Where compensatory habitat is provided it should be of at least equal area and diversity, if not larger and more diverse, than what is being replaced.

Part 2 of Policy EN2 of the West Lancashire Local Plan refers to the Borough's Coastal Zone and seeks to limit development to that which is essential to meet the needs of coastal navigation, amenity and informal recreation, tourism and leisure, flood protection, fisheries, nature conservation and/ or agriculture. Development will not be allowed that would involve the loss of secondary sea embankments.

The retention of the exploration site and the proposed pressure monitoring activities would result in the continuation of concerns related to a number of actual and perceived impacts associated with the development; acceptability in the locale and nature conservation interests, pollution of surface and ground water resources and air, traffic and seismic activity.

Acceptability in the locale and Nature Conservation interests

The site is located on Grade 1 agricultural land and is designated as Green Belt, a Nature Conservation Site and Ecological Network and a Coastal Zone.

In relation to the Green Belt designation, Paragraphs 87-90 of the NPPF states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. ‘Very special circumstances’ will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. The proposal does not fall within the list of exceptions to the inappropriate development. The proposal can, however, be classed as a mineral exploration use and a potential precursor to any mineral extraction. It therefore falls within the list of certain other forms of development that are 'not inappropriate' provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt. Paragraph 80 of the NPPF states the five purposes of the Green Belt are to:

* check the unrestricted sprawl of large built-up areas;
* prevent neighbouring towns merging into one another;
* assist in safeguarding the countryside from encroachment;
* preserve the setting and special character of historic towns; and
* assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

The site is in a flat agricultural area and hence the only purpose with which it could conflict is to assist in safeguarding the countryside from encroachment. Views of the site are limited mainly to the presence of the 3m high soil bunds that would be used in the restoration of the site. The equipment that would be on site on a temporary basis for approximately 4 months and that would be used for the pressure monitoring testing and the plugging and abandonment of the well would be a work over rig measuring 22m in height, a mud tank, a wireline unit, a pump and a generator. Three portacabins would be sited on a permanent basis for use as office, toilets and storage, but they would be screened. It is considered that the continued presence of the site and associated plant, storage / office containers and equipment for a further temporary period of three years would not generate visual and landscape impacts that would affect the openness of the Green Belt. The proposed use would be temporary for a three year period which could be controlled by condition and the land would be restored back to agriculture. It would not permanently encroach on the countryside and would not result in the irreversible development of open, agricultural land and would not result in the permanent loss of the best and most versatile agricultural land. The proposal is therefore considered acceptable for the purposes of Policies GN1 and EC2 of the West Lancashire Local Plan and Paragraphs 79 – 81 and 87-90 of the NPPF.

In relation to nature conservation interests, the site has already been constructed and the impacts therefore relate to the effects of the testing activities and retention of the pad throughout the wintering wildfowl season that takes place between the dates of 31 October – 31 March. The applicant proposes that the set-up of the pressure monitoring equipment would be completed prior to 31 October before the adjacent areas of agricultural land within the Marsh Farm Fields; North Meols BHS are used as a foraging area by bird species associated with the Ribble and Alt Estuaries SPA. The actual pressure monitoring period of approximately 12 months would have potential disturbance from traffic and people, light pollution and noise associated with the operations and so could have impacts on the SPA or on ecological interests within the BHS. Disturbance from traffic and people would be very limited as the pressure monitoring period would generate only very occasional light vehicle movements and so create minimal disturbance to birds. The greatest potential for the generation of noise disturbance was from the drilling operations but these have now been completed. The noise that would be generated from the pressure monitoring would be from a site generator. Providing they are fitted with silencing equipment so that noise levels at the site boundaries would not exceed 42 dB Laeq(I hour) (free field), then there should not be any disturbance to birds. Should planning permission be granted, a condition could control the well abandonment and site restoration, and any setting up and the demobilisation (removal) of equipment outside of the wintering wildfowl season. The only vehicles allowed should be those associated with the pressure monitoring period and necessary routine site visits.

It is proposed that the drilling rig would be illuminated at night for safety reasons. However, use of any sort of lighting is likely to create some degree of glare so it is proposed to prevent the use of the rig within the wintering wildfowl season and which could be controlled by condition. Outside of the season, to ensure the lighting is not excessive and would not extend beyond the area of land that has to be illuminated, should planning permission be granted, a condition is proposed requiring details of the lighting to be submitted.

The retention of the site compound area would result in a direct loss of bird foraging habitat during the bird wintering wildfowl season and which may extend further than the actual site area due to the impacts of the site screening bunds. Consequently, it is recognised that a risk exists of there being negative ecological impacts to birds and particularly wildfowl which may use the BHS as supporting habitat to the Ribble and Alt Estuaries SPA, and therefore impacts on the SPA itself, given its functional relationship.

The site is proposed to be retained for a further three years as this is the time period for which the applicant has applied to undertake the pressure monitoring, well plugging and abandonment and site restoration. If it is assumed that the drilling platform would be present over winter 2016 / 17 then it would be the sixth consecutive winter where this site has been unavailable as supporting habitat to the SPA. The reason the site is proposed to be present for up to 3 years is because no works that could create disturbance are proposed to be undertaken during the wintering wildfowl season that takes place between the dates of 31 October – 31 March. However, the site is relatively small and is a small proportion of the overall habitat area that is available to birds that use the SPA. The adverse impact on birds using the SPA could be offset by a scheme of mitigation involving the enhanced management of an equivalent area of land to that effectively 'lost' to development for the benefit of SPA species. The mitigation could involve supplementary feeding, cessation of shooting rights, wardening, restrictions on vehicle movements, compliance checks and bird monitoring.

The applicant has proposed to offset the loss of bird foraging habit by the provision of a 22.97ha wintering bird mitigation area that would be greater than the combined size of the footprint of the exploratory site and any surrounding land that would not be used for feeding by birds due to the presence of the exploratory site. The mitigation has involved a signed agreement between the land owner/s and the applicant Cuadrilla to implement the mitigation. A comprehensive list of measures to avoid harm to the qualifying interest features (bird species) has been provided and includes supplementary feeding, cessation of shooting rights, wardening, farming, restrictions on vehicle movements, compliance checks and bird monitoring.

A Habitats Regulations Screening Assessment has been undertaken that assessed the removal and physical damage of the BHS habitat and it was concluded that the pressure monitoring, as proposed, and in combination with the existing three seismic monitoring boreholes installed in the Marsh Farm Fields; North Meols BHS would not give rise to a significant effect on the qualifying interest features (bird species and habitats) of the European designated site of the Ribble and Alt Estuaries SPA and would therefore not give rise to a likely significant effect as defined in the Habitats Regulations 2010. Natural England and LCC's Specialist Advisor (Ecology) agree with the conclusion of the Habitats Regulations Screening Assessment providing that the wintering bird mitigation area is implemented. It is proposed to require the delivery of such via a planning condition.

While adequate mitigation measures and compensatory habitat creation are proposed, an issue does remain that the retention of the drilling platform for a further three years appears excessive, particularly given the installation of the pressure monitoring equipment, the pressure monitoring period, the plugging and abandonment of the existing exploratory well and site restoration are proposed over a 72 week timeframe. Despite an acceptable wintering bird mitigation area being in place, the intention of the policies of the West Lancashire Local Plan are to reduce the impact on the Green Belt and nature conservation issues. The best way to do this, should planning permission be granted, would be to minimise the time period for which the site would be present.

If there were time to install the pressure monitoring testing equipment prior to the end of October 2014 then the pressure monitoring would take place over the winter 2014 / 15 and be completed by October 2015. The plugging, abandonment and restoration works would, according to the applicant, take approximately 4 months but, as no such works could be undertaken during the wintering wildfowl season between the dates of 31 October 2015 – 31 March 2016, then the pressure monitoring would still be in place for this period and hence would actually be undertaken for a total minimum period of 17 months. The site could then be restored April 2016 onwards and theoretically by the end of August 2016. However, to take into account potential inclement weather conditions, it is considered reasonable to give the applicant some leeway over and above the approximate 4 months that it would take to restore the site. The site would then be present for the 2014 / 15 and 2015 / 2016 wintering wildfowl seasons. In this situation if the pressure monitoring testing equipment were to be installed prior to this coming 2014 / 15 wintering wildfowl season, then an additional two year period up until 31 October 2016 (prior to the 2016 / 2017 wintering wildfowl seasons) is considered to be sufficient time to restore the site from the date of commencement of works involving the installation of the pressure monitoring equipment and prevent the retention of the site beyond what would be necessary. Should planning permission be granted, this could the subject of a condition.

However, if there is insufficient time to install the pressure monitoring testing equipment prior to the end of October 2014, then the site could still be restored by 31 October 2016. The pressure monitoring equipment would be installed post 31 March 2015 and by the end of May 2015, which would be plenty of time given that the applicant has advised that the pressure monitoring equipment would only take 2 weeks to install. As the equipment would be in place for 12 months, then the pressure monitoring period would finish the end of May 2015. Five months up until the end of October 2016 would again be ample time to restore the site. There would therefore be no reason as to why the site would have to be present over the 2016 / 2017 wintering wildfowl seasons and certainly not for an additional 3 years. Again, should planning permission be granted, this could the subject of a condition.

Notwithstanding the need to protect wintering wildfowl there is also the need to ensure the protection of nesting birds outside the wintering wildfowl season. This is proposed to be achieved by condition should planning permission be granted.

Subject to the imposition of conditions for the site to be present for a further 2 years only and to be restored by the end of October 2016, the proposal is therefore considered acceptable for the purposes of Policy EN2 of the West Lancashire Local Plan and Paragraphs 118 – 119 of the NPPF.

Pollution of surface and ground water resources and Air Pollution

The site construction involved laying an impermeable membrane over the whole compound area to prevent any accidental spillage and rainwater from entering the underlying soils, groundwater and nearby water courses. The working platform is bound by an open ditch, for the purpose of pollution prevention control, on all sides except for the south-west side where the majority is piped and covered to allow access on to the platform.

The well has been drilled to a particular design to avoid affecting the Permo-Triassic aquifer through which it passes and which is an important aquifer located beneath the site. To prevent surface water pollution, conditions are proposed for the provision for the collection, treatment and disposal of all water entering or arising on the site, that all foul drainage shall be discharged to either a public sewer or to a sealed watertight tank, that any chemical, oil or fuel storage containers on the site shall be sited on an impervious surface with bund walls, and to have buffer zones to protect the nearby ditches and watercourses along the boundaries of the site. Subject to the imposition of such conditions, the development is considered to be acceptable in relation to pollution control matters and would accord with Paragraphs 109, 120 – 121 and 123 – 125 of the NPPF.

The pressure monitoring testing procedure would first involve re-circulating the existing fluid (sodium chloride brine) within the well to ensure that there is sufficient pressure within the well to prevent it from collapsing. If pressure within the well is required to be increased, then more fluids in the form of clean water or brine fluid would be added to the well. The suspension fluid is not required to undertake the pressure monitoring testing although the fluid would remain in the well throughout the pressure monitoring period.

The process of pressure monitoring does not involve the use of fracking fluids and does not require the pressuring of the well to create fractures in the surrounding rock. There would therefore be no increased risk of gas migrating to and contaminating ground water, and in turn, the surface water of the Ribble and Alt Estuaries SPA.

The well is designed to prevent, on a permanent basis, the transfer of any gas from the underground rock formations via the well and so avoid fugitive gas emissions to the air and the contamination and pollution of ground and surface waters.

In relation to the plugging and abandonment of the well, the Sefton Green Party has expressed concerns that the EA has not suggested that a condition be included on the granting of any planning permission to require the submission of details of the well abandonment schedule as the effect of this would be to leave no instrument in place to regulate the well completion.

The concerns raised by Sefton Green Party are understood but the plugging and abandonment of the well including the monitoring of the ground water quality and gas concentrations are matters for the Health and Safety Executive, the Department for Energy and Climate Change and the Environment Agency and their respective regulatory regimes. In particular, the plugging and abandonment of the borehole is regulated by the Health and Safety Executive under the Offshore Installations and Wells (Design and Construction etc) Regulations 1996. These Regulations contain provisions relating to well integrity and abandonment as well as the selection of materials. The Regulations apply to all wells drilled under landward licences, the key objectives of which are to prevent the escape of fluids from the well which might result in pollution of freshwater or ground contamination. Under the Regulations, well abandonment techniques must prevent the transfer of fluids created by pressure gradients between different zones. Such transfer is achieved by means of the original borehole casing and the cementing and plugging operations that are undertaken as part of well abandonment.

Paragraph 122 of the NPPF requires that planning authorities should not seek to control processes or emissions were these are subject to approval under separate pollution control regimes and that LPA's should assume that these regimes will operate effectively. In this case, the impacts and techniques of well abandonment are regulated through other legislation and it is considered that the planning system should focus on ensuring that the site is restored in a manner that allows the former agricultural activities on this site to resume.

Traffic

The vehicle movements associated with the construction of the site and drilling activities have already occurred. The pressure monitoring, well abandonment and site restoration will all involve vehicle movements.

A Transport Assessment has been submitted with the application that estimates that the pressure monitoring set-up stage would generate 10 two-way HGV movements and 12 two-way light vehicle movements per day for 2 weeks. The 12 month pressure monitoring period would generate only very occasional light vehicle movements. The well plugging and abandonment would generate approximately 1-2 two-way HGV movements and 4 two-way light vehicle movements per day for 4 weeks. The demobilisation (removal) of remaining equipment would generate approximately 10 two-way HGV movements and 12 two-way light vehicle movements per day for 4 days. The removal of the drilling platform and site restoration would generate approximately 13 two-way HGV movements and 4 two-way light vehicle movements per day for 4 weeks. HGV's travelling to and from the site would use an agreed route.

The site is accessed from the minor 'C' Class road of Marsh Road that links the settlements of Banks and Becconsall, via an existing farm track known as Bonny Barn Road that serves Marsh Nurseries to the west of the site. A visibility splay and sightline have been provided at the junction of Bonny Barn Road and Marsh Road, a visibility splay at the site entrance from Bonny Barn Road, and passing places for HGV's along Bonny Barn Road and inside the site entrance.

All vehicle movements associated with the development would continue to follow a route to and from the site through the village of Banks to the roundabout on the A565 Water Lane via Banks Road, Ralph's Wife's Lane, Church Road, Chapel Lane, New Lane Pace, Marsh Road and Bonny Barn Road. This is the shortest route to the A565 from the application site but passes through the settlements of Banks. There are other routes to the primary road network to the east of the site that would involve passing through either Becconsall and/ or Tarleton but, on balance, it was previously considered that the route through Banks would be the most desirable. The Transport Assessment provides details of a swept path analysis to show how abnormal loads will negotiate The Plough Roundabout on the A565, and details of the route that lorries would take to the site and the associated signage to direct them. A condition should require that lorry routing and signage be followed and provided in accordance with the Transport Assessment throughout the lifespan of the development.

The LCC Developer Support (Highways) has not objected to the proposal on highway grounds and commented that the highway conditions to planning permission 08/10/0973 are still appropriate and should be retained for this application. Subject to the imposition of conditions to ensure that material is not dragged onto the public highway and that no vehicles associated with the development shall park on Bonny Barn Lane or Marsh Road, it is considered that the vehicle movements that would be generated by the pressure monitoring testing and subsequent site restoration would not give rise to impacts on the local highway or amenities of the area any greater than have previously been assessed and are therefore considered acceptable.

Should planning permission be granted, the imposition of conditions relating to highway matters and other environmental issues, would ensure that the proposed development would comply with Policy DM2 of the LMWLP, Policy CS5 of the LMWDF, Policy GN3 of the West Lancashire Local Plan and the policies of the NPPF.

Seismic activity

The lack of use of fracking fluids in the proposed pressure monitoring process would not create fractures in the surrounding rock. It is therefore very unlikely that the proposed testing would result in any form of earth movement that would result in ground vibrations other than those which may be experienced with the perforation of the well casing with a small charge and which would be minor.

Representations

A number of representations have been received from individuals and groups objecting to the proposal and which are set out above.

The concerns about the proximity of the proposal to ecological designations are understandable as is the potential risks of pollution to such. However, given the nature of the proposal it is considered that the risk of pollution can be controlled and contained to acceptable levels and mitigation measures can be put in place to minimise the impacts on ecology and particularly wintering wild fowl and which could be achieved by condition. An assessment of the impact on ecology has been carried out and which concludes the proposal would not have any adverse impact and which is acceptable to Natural England. Sufficient technical detail has been provided to understand what is being proposed and which it is concluded will not cause unacceptable impacts. Only water and brine will continue to be used in the well and which is acceptable. No fracking is proposed and there is no flaring, flow testing exploitation of shale gas, merely pressure testing to establish the presence and pressure of any gas. There would be no unacceptable earth tremors given there would be no fracking. Minor tremors may be experienced associated with the perforation of the well but these are not expected to be significant and would be a matter for the HSE and DECC. Health and safety procedures on the site are a matter for the HSE. The proposal would be for a temporary period and would not have an unacceptable impact on the Green Belt. Any alleged damage to property would be a matter for the applicant to address. There would be no hazardous, toxic or radioactive waste associated with the operations that could not be adequately managed. The local highway network is capable of accommodating the proposed levels and types of vehicle movements.

The site remains the same size as that was initially granted planning permission at 0.99ha contrary to REAFs suggestion that the site has increased to 1.2ha.

With regards to the concerns of FOE, the proposal would be for a further temporary period and would not generate unacceptable impacts. It is considered there are sufficient details of the proposed operations to be able to assess the impacts of such and conclude that they would not be unacceptable. It is considered that the proposal is not EIA development, should not be accompanied by an EIA, is not inconsistent with the precautionary principle and EU Water Framework Directive, would not be inconsistent with the National Planning Policy Framework or the policies of the West Lancashire local plan and the Lancashire minerals and waste policies or would have an impact on climate change or be inconsistent with policy on climate change.

Conclusion

The proposed pressure monitoring testing of the Hodder Mudstone and Bowland Shale rock formations for a period of approximately 12 months is very unlikely to result in any seismic activity other than minor activity associated with the perforation of the well casing and which is considered acceptable. Due to the relatively isolated location of the site within the countryside there would be some landscape and visual impacts on the openness of the Green Belt, loss of agricultural land and a direct loss of bird foraging habitat within the Marsh Farm Fields; North Meols BHS during the bird wintering season that are used by bird species associated with the nearby Ribble and Alt Estuaries SPA. There would also be potential disturbance to bird species from the activities at the site. The application is for the site to be present for an additional 3 years. However, such a time period is not necessary as the site only has to be present for an additional 2 years. That should give ample time for the undertaking of the proposed pressure monitoring and the restoration of the site by the end of October 2016. It would ensure that the land would be restored back to agriculture at the earliest opportunity, would not permanently encroach on the countryside, would not result in the irreversible development of open, agricultural land and would not result in the permanent loss of the best and most versatile agricultural land. In relation to these and other potential impacts of the development from pollution of surface and ground water resources in the immediate and surrounding areas, and from traffic, light and noise, the proposed development is considered to be acceptable and can be addressed to negligible or acceptable levels by planning conditions provided that the site is restored by 31 October 2016.

In view of the scale, location and nature of the proposed development it is considered no Convention Rights as set out in the Human Rights Act 1998 would be affected.

##### Recommendation

That subject to the applicant first providing a unilateral undertaking in respect of the off site ecological mitigation measures to be provided throughout the wintering wildfowl seasons (31st October – 31st March) while the Becconsall Shale Gas exploration Site is present, planning permission be **granted** subject to the following conditions:

**Time Limits**

1. No works other than those associated with the pressure monitoring testing and plugging and abandonment of the borehole and for the restoration of the site shall be carried out on the site.

 The pressure monitoring testing equipment shall not be installed and no activity shall take place at the site, except for necessary routine site visits and inspections, during the wintering wildfowl season that takes place between the dates of 31 October - 31 March.

 If the pressure monitoring testing equipment is installed prior to the 01 November 2014, the site shall be restored in accordance with the conditions to this permission by not later than 31 October 2016.

 If the installation of the pressure monitoring testing equipment commences post 31 March 2015, then it will be installed by the end of May 2015 and, the site shall be restored in accordance with the conditions to this permission by not later than 31 October 2016.

 *Reason: To avoid disturbance to birds during the wintering wildfowl season and to provide for the completion and restoration of the site within a reasonable timescale in the interests of the visual amenities of the area and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN3 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

2. Written notification of the date of each of the following events shall be made to the County Planning Authority within 7 days of each event:

 a) The commencement and completion of the installation of the pressure monitoring testing equipment.

 b) The commencement and completion of the plugging and abandonment of the existing exploratory wells.

 c) The commencement and completion of the restoration of the shale gas exploratory site.

 *Reason: To enable the County Planning Authority to monitor the development to ensure compliance with this permission and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN1, GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Working Programme**

3. The development shall be carried out, except where modified by the conditions to this permission, in accordance with the following documents:

a) The planning application received by the County Planning Authority on 27 March 2014 as amended by the planning application forms received on the 17 April 2014, letter dated the 10 April 2014, emails from ARUP dated 08 and 30 April 2014, 09 May 2014 and the email of 27 June 2014 with the two attachments; Shadow Habitat Regulations Assessment - Screening and the Report of Winter Bird Surveys wintering bird mitigation area, and email from ARUP on the 15 July 2014 with attached Becconsall Wintering Birds mitigation plans Bird Area 1 2014/2015 and Bird Area 2 2014/2015.

 b) Submitted Plans received by the County Planning Authority on 27 March 2014:

 Drawing No. Figure 1 - Planning Application Boundary

 Drawing No. Figure 2 - Planning Application Boundary

 Becconsall Workover drawn 03/03/14

 Typical Workover Rig dated 16/01/14

 Submitted Plan received by the County Planning Authority on 09 May 2014:

 Geology cross-section

 c) All schemes and programmes approved in accordance with this permission.

 *Reason: For the avoidance of doubt and to enable the County Planning Authority to control the development and to minimise its impact on the amenities of the local area and to conform with Policies CS1 and CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policies NPPF 1 and DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies SP1, GN1, GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Ecology**

4. Throughout the wintering wildfowl seasons (31st October – 31st March) while the Becconsall Shale Gas exploration Site is present, the wintering bird mitigation area shown on approved plans Bird Area 1 2014/2015 and Bird Area 2 2014/2015 (or such alternative area of similar size as the Council may approve) shall be managed in accordance with the Recommendations set out in section 7.2 of the Report of Winter Bird Surveys submitted with the application, and all other measures set out in section 7.2 of that Report shall be complied with.

 *Reason: To provide mitigation to offset the loss of bird foraging habit that the exploration site occupies within the Marsh Farm Fields; North Meols Biological Heritage Site during the wintering wildfowl season and to conform with Policy EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

*5.* No development shall commence or be carried out during the bird-breeding season between 1 March and 31 July inclusive unless the site has been previously checked and found clear of nesting birds in accordance with Natural England’s guidance and if appropriate, an exclusion zone set up around the site to be protected. No work shall be undertaken within the exclusion zone until birds and any dependant young have vacated the area.

 *Reason: To provide mitigation to nesting birds and to conform with Policy EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Soils and Overburden**

6. No topsoils or subsoils shall be exported from the site. All such soils shall be retained for use in the restoration of the site.

 *Reason: To ensure the proper removal and storage of soils to ensure satisfactory restoration and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN1, GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

7. All topsoil and subsoil mounds shall be retained in a grassed, weed free condition prior to their use in the restoration of the site.

 *Reason: To ensure the effective restoration of the site in the interests of the visual amenity of the area and to comply with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN1, GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Hours of Working**

8. No delivery or removal of materials, plant or equipment, site development or site restoration works shall take place except between the hours of:

 07.30 to 18.30 hours Mondays to Fridays (except public holidays)

 07.30 to 13.00 hours on Saturdays (except Public Holidays)

 No delivery or removal of materials, plant or equipment, site development or site restoration works shall take place at any time on Sundays or public holidays.

 The hours of working 24 hours a day are only allowed for the period when rigging and setting up the pressure monitoring equipment, and during the plugging and abandonment of the well.

 This condition shall not apply to the carrying out of essential repairs to plant and equipment used on the site.

 *Reason: In the interests of the amenities of the area and to conform with Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One.*

**Highway Matters**

9. Heavy traffic to and from the site shall follow the route provided in accordance with the submitted Transport Assessment throughout the lifespan of the development.

 Works and routing signage shall be provided in accordance with the submitted Transport Assessment throughout the lifespan of the development.

 *Reason: In the interests of highway safety and local amenity and to conform with Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One.*

10. Measures shall be taken at all times during the site construction, operational and restoration phases of the development to ensure that no mud, dust or other deleterious material is tracked onto the public highway by vehicles leaving the site.

 *Reason : In the interests of highway safety and local amenity and to conform with Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One.*

11. All vehicles shall enter or leave the site in a forward direction.

 *Reason : In the interests of highway safety and local amenity and to conform with Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One.*

12. All vehicles associated with the development, operational or restoration phase of the development shall park in the site. No vehicles associated with the development shall park on Bonny Barn Lane or Marsh Road

 *Reason : In the interests of highway safety and local amenity and to conform with Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One.*

**Control of Noise**

13. All plant, equipment and machinery used in connection with the operation and maintenance of the site shall be equipped with effective silencing equipment or sound proofing equipment to the standard of design set out in the manufacturer's specification and shall be maintained in accordance with that specification at all times throughout the development.

 *Reason: To safeguard the amenity of local residents and adjacent properties/landowners and land users and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN3 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

14. Noise emitted from the site shall not exceed 42 dB Laeq(I hour) (free field), as defined in this permission, when measured at any point on the red edge application site boundary.

 *Reason: To safeguard the amenity of local residents and to prevent disturbance to birds and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN3 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Floodlighting**

15. No lighting shall be used at the site until a scheme and programme for the lighting of the site has been submitted to the County Planning Authority and approved in writing. The scheme and programme shall include details of:

 a) Type, number and intensity of lights including the height of any poles or structures upon which floodlighting would be attached.

 b) Direction, types of masking or baffle to reduce light pollution.

 c) Light spread diagrams showing lux levels at the site boundary and calculation of the impact of these on land within 100 metres of the site boundaries and on nearby residential properties

 The lighting shall be employed in accordance with the approved details at all times during the development.

 No lighting shall be used during the bird wintering wildfowl season that takes place between the dates of 31 October - 31 March.

 *Reason: To safeguard the amenity of local residents and adjacent properties/landowners and land users and to reduce light pollution in the countryside and to conform Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN3 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Safeguarding of Watercourses and Drainage**

16. Provision shall be made for the collection, treatment and disposal of all water entering or arising on the site to ensure that there shall be no discharge of contaminated or polluted drainage to ground or surface waters throughout the lifespan of the development.

 *Reason: To safeguard local watercourses and drainages and avoid the pollution of any watercourse or groundwater resource or adjacent land and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

17. All foul drainage shall be discharged to a public sewer or else to a sealed watertight tank fitted with a level warning device to indicate when the tank needs emptying. Upon emptying the contents of the tank shall be removed from the site completely.

 *Reason: To safeguard local watercourses and drainages and avoid the pollution of any watercourse or groundwater resource or adjacent land and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

18. Any chemical, oil or fuel storage containers on the site shall be sited on an impervious surface with bund walls; the bunded areas shall be capable of containing 110% of the container or containers’ total volume and shall enclose within their curtilage all fill and draw pipes, vents, gauges and sight glasses. There must be no drain through the bund floor or walls. Double skinned tanks may be used as an alternative only when the design and construction has first been approved, in writing, by the County Planning Authority (Director of Transport and Environment).

 *Reason: To safeguard local watercourses and drainages and avoid the pollution of any watercourse or groundwater resource or adjacent land and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

19. Buffer zones with a width of not less than 5 metres shall be maintained between the perimeter mounds or edge of the drilling compound and the ditches on the boundaries of the site within which there shall be no vehicle movements, storage of materials, excavation, or other construction activity.

 *Reason: To safeguard local watercourses and drainages and avoid the pollution of any watercourse or groundwater resource or adjacent land and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Restoration**

20. Site restoration shall take place in accordance with the following:-

 a) All plant, buildings, hardstandings, aggregates/ hardcore and lining systems shall be removed from the land.

 b) The upper layers of the subsoil material shall be subsoiled (rooted) to a depth of 600mm with a heavy-duty subsoiler (winged) prior to the replacement of topsoils to ensure the removal of material injurious to plant life and any rock, stone, boulder or other material capable of preventing or impeding normal agricultural land drainage operations, including mole ploughing and subsoiling.

 c) Following the treatment of the subsoil, topsoil shall be placed over the site to a minimum depth of 150mm and shall be ripped, cultivated and left in a state that will enable the land to be brought to a standard reasonably fit for agricultural use.

 d) Measures to relieve compaction or improve drainage

 e) The passing places on Bonny Barn and widened junction with Marsh Road shall be restored including removal of all surfacing materials, respreading of soil materials and seeding

 *Reason: To secure the proper restoration of the site and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN1, GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Aftercare**

21. Within 3 months of the certification in writing by the County Planning Authority of the completion of restoration, as defined in this permission, a scheme and programme for the aftercare of the site for a period of five years to promote the agricultural afteruse of the site shall be submitted to the County Planning Authority for approval in writing.

 The scheme and programme shall contain details of the following:

 a) Maintenance and management of the restored site to promote its agricultural use.

 b) Weed control where necessary.

 c) Measures to relieve compaction or improve drainage.

 d) An annual inspection to be undertaken in conjunction with representatives of the County Planning Authority to assess the aftercare works that are required in the following year.

 *Reason: To secure the proper restoration and aftercare of the site and to conform with Policy CS5 of the Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD, Policy DM2 of the Joint Lancashire Minerals and Waste Local Plan - Site Allocation and Development Management Policies - Part One and Policies GN1, GN3, EC2 and EN2 of the West Lancashire Local Plan 2012-2027 Development Plan Document.*

**Definitions**

Completion of Restoration: The date the County Planning Authority certifies in writing that the works of restoration in accordance with condition x have been completed satisfactorily.

**Notes**

If the abandonment process could lead to a discharge occurring then a groundwater activity permit may be required in line with Schedule 22 to the Environmental Permitting Regulations 2010.

The Environmental Permitting (England & Wales) Regulations 2010 (Regulation 38(1)) makes it an offence to cause or knowingly permit a groundwater activity (discharge of a pollutant that might lead to its direct or indirect input into groundwater) except under and to the extent authorised by an environmental permit or an exemption as provided for in the Regulations.

Any testing activities associated with the proposed development that generate waste may constitute mining waste operations and require a Permit under the Environmental Permitting (England and Wales) Regulations 2010.

**Local Government (Access to Information) Act 1985**

**List of Background Papers**

Paper Date Contact/Directorate/Ext

LCC/2014/0047 26 July 2010 Stuart Perigo/Environment/ Ext. 31948

Reason for Inclusion in Part II, if appropriate

N/A