

Mrs J Barnes, Case Officer

Head Of Service For Planning And Environment Development Management

PO Box 100

County Hall

Preston

Lancashire PR1 OLD

By Email: <u>DevCon@lancashire.gov.uk</u>

Acres Brook, Sabden Road Higham, Lancashire, BB12 9BL

Telephone: 07718070750 jackie.copley@cprelancashire.org.uk www.cprelancashire.org.uk

Patron Her Majesty the Queen President Emma Bridgewater Chair Debra McConnell

Dear Mrs J Barnes,

Representation of CPRE Lancashire, Liverpool City Region and Greater Manchester to Lancashire County Council concerning the planning application (ref. LCC/2019/0037) of Aurora Energy Resources Ltd to explore for shale gas/oil at their well site at Sutton's Lane, Great Altcar. Aughton and Downholland Wards, West Lancashire. Applicant: Aurora Exploration (UK) Ltd

I am writing on behalf of CPRE Lancashire, Liverpool City Region and Greater Manchester (CPRE) to object to the abovementioned application for the following reasons:

Climate emergency

- 1. In May 2019, the UK parliament approved a motion to declare an environment and climate emergency. In the same month, the UK government enacted legislation to commit the UK to a legally binding target of net zero greenhouse gas (GHG) emissions by 2050. This target replaced the much less demanding target of at least 80% reduction of emissions from 1990 levels. Although the new target is to be welcomed, it is a not a solution even if the target is achieved, because the metric that counts is the *total* burden of GHGs in the atmosphere, not the *rate* of emission of GHGs at any given time; so the pathway to net zero is important as well as the destination.
- 2. The UK government is also a signatory of the Paris Agreement, the central aim of which is to strengthen the global response to the threat of climate change by keeping the global temperature rise this century well to below 2 °C above pre-industrial levels, and to endeavour to limit the temperature increase even further to 1.5 °C. The Intergovernmental Panel on Climate Change (IPCC), an international consortium

of hundreds of climate researchers convened by the United Nations, states that carbon emissions would have to be cut by 45% by 2030 (compared to a 20% cut under the 2 °C pathway), and come down to zero by 2050 (compared to 2075 for 2 °C). The IPCC report states that to achieve these targets, urgent and unprecedented changes would be needed in every aspect of energy generation and consumption. At present, there are no indications that the necessary changes will be made in time. Lord Deben, Chair of the independent Climate Change Committee which reports directly to parliament, has written to Prime Minister Johnson urging his administration to take without delay the many actions indicated as necessary by the IPCC. Lord Deben has also used several other forums to voice the need for action now, the most recent being the House of Lords debate on 7 February.

- 3. The case for hydraulic fracturing (HF) in general and the Aurora Energy Resources (AER) proposal in particular has to be assessed in the first instance in this context. The production of natural gas at scale by HF and its eventual combustion would result in a significant increase of carbon dioxide in the atmosphere and very probably of fugitive methane which is a very powerful GHG. It is reasonable to assume, based on the experience of Cuadrilla Bowland Ltd (Cuadrilla) and other companies in the field, that no useful production of natural gas at scale will take place for several years, even were the Moratorium currently in place to be ended soon. Production of natural gas by HF at scale is not compatible with the remaining ten years of the 12-year window for action identified by the IPCC in 2018. Further, technologies required to mitigate the consequences of failing to follow the pathway identified by the IPCC are expensive and many (e.g. carbon capture and storage and direct carbon dioxide removal from the atmosphere) have yet to be developed.
- 4. Tim Eggar, Chair of the Oil and Gas Authority (OGA), in a speech to a meeting of MER <u>UK Steering Group</u> [Continental Shelf Maximum Economic Recovery] on 15 January 2020 said that the OGA's 'social licence to operate' requires the oil and gas industry to respond effectively to the Climate Emergency and that he believes it is possible for the industry to be carbon negative by 2050. However, to achieve that goal, Mr Eggar emphasised that a comprehensive review of the industry's activities will be necessary and that the OGA will use its regulatory powers to contribute to achieving that objective; he specifically referred to scrutiny of flaring and venting when issuing consents (see below).
- 5. CPRE believes that these considerations alone are sufficient to justify refusal of the AER application.

The regulatory powers of Lancashire County Council (LCC) as the Local Planning Authority (LPA) and as the Minerals Planning Authority (MPA)

6. The LPA is responsible for regulating all aspects of land use in keeping with the local plans of its component Borough Councils and the National Planning Policy Framework (NPPF), and for determining mineral applications in keeping with the LCC's Joint Minerals & Waste Policy. The regulation of subsurface processes is the responsibility of the Environment Agency (EA), the Health and Safety Executive (HSE), and the OGA both separately and collectively as the Shale Environmental Regulator Group (SERG). However, this does not mean that the LCC does not have an interest in subsurface processes in its capacity as the MPA, because subsurface processes can impact on land-use at the surface. The National Planning Practice Guidance (NPPG) for the NPPF caters for this interest in the following terms:

There exist a number of issues which are covered by other regulatory regimes and mineral planning authorities should assume that these regimes will operate effectively. Whilst these issues may be put before mineral planning authorities, they should not need to carry out their own assessment as they can

rely on the assessment of other regulatory bodies. However, before granting planning permission they will need to be satisfied that these issues can or will be adequately addressed by taking the advice from the relevant regulatory body (added emphasis).

(Paragraph: 112, Reference ID: 27-112-20140306)

7. CPRE has had several intense interactions with the EA and the OGA in relation to the activities of Cuadrilla at its Preston New Road (PNR) site, and has identified worrying shortcomings in the exercise of their regulatory function (see below). Accordingly, should the LCC approve the AER application, CPRE asks that the Decision Statement makes it clear that the LCC intends to make representations to the EA and the OGA at appropriate intervals to ensure that these bodies are carrying out their regulatory function effectively.

Seismicity - serious harm can result from HF operations

8. HF operations are potentially hazardous because they involve large pressures, the storage of dangerous chemicals at harmful concentrations and potentially large volumes of flowback fluid, and escape of flammable gas. Despite the oversight of HF operations by the SERG, the possibility of substantial harm remains, as acknowledged in the following extract from the application to the LCC (reference LCC/2014/0096) of Cuadrilla in respect of their PNR site

Paragraph 48, Section K3.2, Environmental Statement, Volume 2, Appendix K, p. 17

A blowout is a rare event where the uncontrolled release of formation fluids (oil, gas and/or water) from the well results from failure of all pressure control systems, i.e. well barriers. Since multiple barriers (mud density, casing and well head blow-out preventers) are used that are collectively designed to withstand significantly more pressure than anticipated, blowouts are usually related to human error and/or multiple equipment failure. This can occur as a result of a series of failures in observation, to properly react, or properly maintain and test equipment. If a blowout occurs, fluids and solids from within the well are released and could be dispersed over an area extending beyond the site containment system. Blowouts may take hours to days to contain, depending on the size of the reservoir that contained the high-pressure. Blowouts can only occur as a result of a series of failures and cannot occur due to a single event of failure, hence their rarity.

9. The AER's Sutton's Lane site is relatively isolated; however, it is surrounded by best and most versatile agricultural land class 1 (excellent, 3% of farmland in England) and class 2 (very good, 16% % of farmland in England) which would become contaminated by heavy metal compounds, some of them radioactive, which would render the land unfit for agricultural purposes. Although the risk of such an event is low, the harm could be great. Accordingly, CPRE asks that the possibility of such an event should be attributed appreciable weight when the LCC assesses the potential harms which accompany the AER proposal.

The importance of the hydraulic fracture plan (HFP)

10. The HFP for Cuadrilla's PNR well site provides for high resolution 3D of the geology of the relevant formations prior to HF and for the monitoring of the penetration of HF fluid in real-time during the HF process, so that known faults can be avoided (the HF process would be stopped in the event of the HF front approaching a fault or a boundary of the target formation, taking account of the resolution/uncertainty of the monitoring technology). The HFP for the AER well site would provide similarly (see section 17.8 of the AER Environmental Statement). Implementation of the HFP, supported by the Traffic Light System (TLS), would ensure no untoward degree of seismicity during HF.

Failure of the OGA to adequately regulate the HF of the PNR-1z well

- 11. During Cuadrilla's attempts to HF their first horizontal well, the red threshold of the Traffic Light System (TLS) was exceeded on several occasions. The most intense surface tremor, which registered a TLS response of 1.5 ML, occurred on 11 December 2018; this tremor, and an earlier one registering 1.1 ML, were sufficiently intense to be felt by local residents. At the time, the OGA gave assurances that these tremors were not a matter of concern and that they were consistent with the OGA-approved HFP. However, CPRE regards these assurances as unwarranted because, at the time they were given, the microseismic data on which Cuadrilla were relying had not been disclosed even to the OGA on the grounds of commercial confidentiality. Further, no attempt was made to explain why these seismic events had occurred, nor to address the potential for harm to the borehole at depth, where the energy responsible for the surface tremors had been released. At the time, CPRE vigorously (including making a Freedom of Information Act enquiry), but ultimately unsuccessfully, endeavoured to bring this situation into the public domain. Had the LCC called the OGA to account (see par.6 above), the outcome might have been different.
- 12. There are unaccountable differences between the various descriptions of the boundaries of the relevant strata which Cuadrilla had reported for their PNR site, the latest and most serious being that the Millstone Grit formation does not extend all the way over the Upper Bowland Shale formation so that both the PNR-1z and PNR-2 wells enter directly into that formation and pass through a major fault and some lesser, but still significant, faults. This configuration renders the integrity of the wells vulnerable in the event of movement of one or more of these implicated faults. In addition, it seems very probable that Cuadrilla had failed to locate the many significant faults distributed throughout the target formation. Thus, there is reason to believe that Cuadrilla had failed to satisfy the first condition for the implementation of the HFP, viz. a reliable understanding of the geology of the target formation. Likewise, there is no reason to believe that Cuadrilla was any more successful in reliably locating the position of the HF fluid front during the HF process. That these inadequacies should have prevailed represents a major failure of the OGA in exercising its regulatory role.
- 13. Only after Cuadrilla's attempts to HF the PNR-1z well had been concluded were the seismic data disclosed to the OGA which then made them available to the British Geological Survey, and the specialist groups at Liverpool, Durham and Newcastle Universities so they could benefit from more expert analysis than they were given by Cuadrilla. The Moratorium now in force is the outcome of the resulting independent analyses.

Issues with the implementation of the AER HFP

14. After a lengthy review of all its elements, AER in Section 17 of its Environmental Statement comes to the conclusion that its understanding of the factors involved is sufficient to warrant the conclusion that it can implement the HFP and so avoid any unacceptable seismic events. CPRE believes this optimistic conclusion must be rejected given that the OGA has reported to the government that it is not possible with current technology to accurately predict the probability of tremors associated with HF and the government has responded by ordering the Moratorium.

Conclusion relating to seismicity.-

15. Both the OGA report to the government and the resulting government Moratorium are material considerations of very great significance and, in determining the AER application as required by the government despite the Moratorium, it would be irrational and perverse, and therefore unlawful of the LCC not to attribute overwhelming weight to both considerations, warranting refusal of an application which depends on a technology causing unpredictable and possibly harmful outcomes.

Transport - Limitations of the route between the well site and the A565

- 16. At present, cars and LGVs constitute 96% of all traffic on Lord Sefton way (ref. table 4, appendix H, Environmental Statement). The activities of AER will significantly increase the proportion of HGVs and AILVs with the result that although the carriageway always exceeds 15.5 m the clearances are not generous. Accordingly, CPRE recommends that the entire route should be subject to a 30 mph speed limit.
- 17. The Heras fencing deemed necessary for security reasons during the construction phase will prevent the staff occupying the cabin positioned at the point at which the access road diverges from Sutton's Lane from exercising an effective supervisory role, especially in ensuring that no vehicles turn left. Although the fencing would be temporary, the construction phase is important and CPRE asks that a see-through design of fencing is used so as to ensure that vehicles leave the site via the obligatory route, with properly secured loads (covered as necessary) and clean wheels.
- 18. The bridge over Downholland Brook presents a hazard because its hump back puts at risk both drivers approaching the bridge from the East, and drivers joining the main road from side roads on the West side of the bridge who get very short notice of vehicles approaching from the West; at times there is a



good deal of such activity arising from patrons of the businesses on the north side of the road and, on the south side, from visitors to the football ground and the refuse facility. The problem is exacerbated at night by poor lighting and during daylight by vehicles parked on the stretch of road between Formby Cycles and Formby Tool Hire as illustrated by the photograph. The drivers of the parked cars are put at

additional risk by the narrowness of the footpath at some parts of the main road. CPRE asks that measures are put in place to remedy this situation.

Management of a flowback fluid surge

19. CPRE asks LCC to require AER to demonstrate they have the capacity to deal with a surge of flowback fluid, which is an entirely possible event. It requires round-the-clock deployment of tanker HGVs (even at rush hours) and adequate reserve storage capacity at the well site.

Greenhouse Gases

20. Comparison with national GHG emissions is inappropriate (see AER Environmental Statement, table 12.2, p. 180). What matters is the extent of fugitive natural gas in relation to the total amount of usable natural gas produced by the well. Should the former exceed 3.2% of the latter, the impact on global warming would be equivalent to coal-fired generation. Such an outcome would frustrate the whole purpose of the HF process.

In estimating GHG emissions, AER make the assumption that GHG production by flaring is equivalent to that produced by the combustion of diesel fuel and that no gas leakages occur from piping, valves, etc. CPRE believes these assumptions are unacceptable. CPRE urges that continuous infrared monitoring of the site is carried out so as to detect leakages from pipework and the venting of natural gas when filling containers. This precautionary monitoring is made necessary by empirical evidence that the amount of atmospheric GHG resulting from the petroleum industry is in fact much greater than originally estimated by the industry using bottom-up methodology.

The first use of large-scale top-down methodology for estimating the amount of atmospheric GHG and its distribution was carried out by S.M. Miller et al and published in the Proceedings of the National Academy of Sciences of the United States in 2013. It found that emissions in the South-central United States was, at the time of the study, 2.7 times greater than expected from the bottom-up data and correlated strongly with fossil fuel extraction. Since then, there have been other confirmatory studies, most recently by B. Hmeil et al, published in Nature 2020, v578,pp.408-412, which used measurements made on Greenland preindustrial-era ice cores.

Flaring is a potential source of fugitive GHG emissions. It can be the result of incomplete combustion caused by too low a flame temperature. For this reason, CPRE believes that flare flame temperature should be continuously monitored and ideally should be available for public scrutiny through access to a dedicated website.

Failure to maintain flare ignition, as experience by Cuadrilla at its PNR well site (even when propane was used to boost the natural gas flow), results in venting of powerful GHG gases direct to the atmosphere. AER acknowledges that it will be dealing with a target formation very similar to that at the PNR well site and, should AER experienced similar difficulties in maintaining flare ignition, CPRE urges that HFP should require the gas flow to the flare to be stopped immediately.

The EA required two flares to be installed at the PNR well site, whereas it is AER's intention to have only one. CPRE asks the LCC to join it in asking the EA and the OGA to address this issue.

As a technology, flaring is primitive and wasteful and there is a growing recognition that more sustainable alternatives, which are available, should be implemented in preference. CPRE hopes that the OGA, as indicated by its Chair (see par. 4), will cause AER to adopt an alternative procedure to flaring.

Evidently, there is an urgent need to bear down on fugitive GHG emissions. While CPRE is strongly opposed to HF technology, it believes that, if the AER application is approved, operations at the AER well site should be exemplary in setting the standard for HF operations.

Site Specific Issues

- 21. The Site is located to land at the north-eastern end of Suttons Lane, Great Altcar, L37 5AA:
 - Easting = 332312
 - Northing = 407166
 - Grid Ref = SD32310716

Site description

22. The application site comprises worked farmland to the northwest of Sutton's Lane, Great Altcar. The site is accessed via the Formby Bypass, Lord Sefton Way and Sutton's Lane. The application site measures approximately 1.72 hectares, including the access track. The site lies within Flood Zone 3. Downholland Moss Site of Special Scientific Interest (SSSI) is located approximately 100m north of the application site.

Proposed Development

23. There would be 8 phases to the planned process, covering access and site preparation, drilling, hydraulic fracturing, flow testing, extended well test, decommissioning and restoration, lasting for a duration of between one and two years, subject to delays.

West Lancashire Planning

- 24. The application was called in for consideration by West Lancashire Planning Committee by Councillor Westley to consider the impact of the development on the openness of the Green Belt and the potential loss of amenity to nearby residents. West Lancashire raised objections on Green Belt and visual impact grounds. The development is considered to be inappropriate development in the Green Belt and no case for very special circumstances has been put forward as part of the application other than the relevant licence, viz. PEDL 164, lies entirely within the Green Belt, a circumstance which in CPRE's planning judgement is not sufficient to outweigh the harms to the Green Belt which would result from the AER proposal. In addition, the Council and CPRE consider that the proposed development would be detrimental to visual amenity and the landscape character.
- 25. In addition to Green Belt, residential amenity and Landscape Character, we shall also consider the impact on ecology arising from the proposal.

National Planning Policy Framework

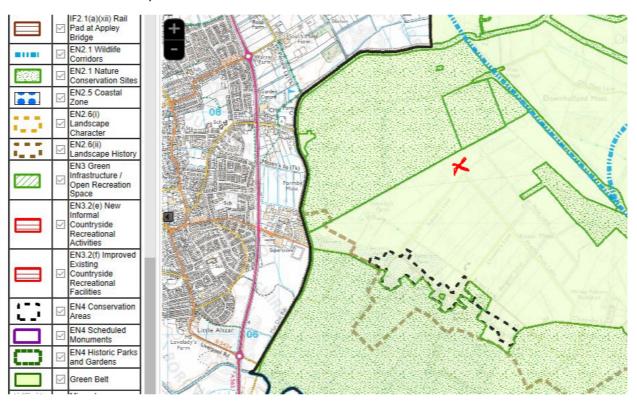
- 26. In relation to the application the Committee Report identified the following policies in the NPPF are material considerations:
 - achieving sustainable development;
 - building a strong competitive economy ;
 - promoting healthy and safe communities;
 - making effective use of land;
 - protecting Green Belt land;
 - meeting the challenge of climate change, flooding and coastal change;

- conserving and enhancing the natural environment; and,
- Facilitating the use of minerals.

West Lancashire Local Plan (2012-2027 DPD)

- 27. The application should be decided in the context of the following Local Plan policies:
 - SP1 A sustainable development framework for West Lancashire
 - GN1 Settlement boundaries
 - GN3 Criteria for sustainable development
 - EN2 Preserving and enhancing West Lancashire's Natural Environment
 - IF3 Service accessibility and infrastructure for growth

Extract from the Local Plan, the red cross shows the site location



- 28. In addition CPRE believes these Local Plan policies are relevant:
 - EN1 Low Carbon Development and Energy Infrastructure; and,
 - EN4 Preserving and Enhancing West Lancashire's Cultural and Heritage Assets.
- 29. Also a material consideration when taking the decision is the Supplementary Planning Guidance Natural Areas and Areas of Landscape of History Importance (August 2007).
- 30. The negative impacts identified by CPRE are set out in more detail below under sub-headed topics

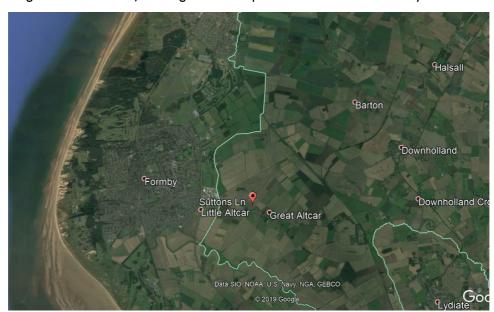
Green Belt

31. Local Plan Policy GN1 of the Local Plan states that planning applications for development in the Green Belt outside of settlement boundaries are to be assessed against both national policy (the NPPF) and any relevant local plan policies. The extent of Green Belt is shown on the Local Plan map.

32. NPPF Paragraph 133 retains great importance to Green Belt policy that has the fundamental aim of preventing urban sprawl by keeping land permanently open. An essential characteristic of Green Belt is the openness and permanence. Paragraph 143 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. And Paragraph 146 states that 'certain other forms of development are not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it'. These include mineral extraction and engineering operations. West Lancashire Council considers that the proposed development would compromise the openness of the Green Belt, and therefore it does constitute inappropriate development. The development would encroach into the open undeveloped area, contrary to one of the purposes of Green Belt, as set out in paragraph 134. CPRE Lancshire agrees with the Council's view as the drilling rig, access track and 3m high fencing would be very prominent in an otherwise unbuilt flat landscape. In this location there are no visible boundary treatments such as hedgerows as field boundaries are marked by ditches.

Very Special Circumstances

33. In the Planning Statement the applicant wrongly relies on the licence, viz. PEDL 164, lying entirely within the Green Belt, makes a very special circumstance, but we do not agree that a planning judgement could find very special circumstance as the benefits would not outweigh the harms. The Council and CPRE consider that the proposed development would be detrimental to visual amenity and the landscape character. NPPF does not make exception for temporary development within the Green Belt.



GoogleEarth view of site, showing arable field pattern on all sides and Formby to the West.

Landscape Character

- 34. Local Plan Policy GN3 requires new development to protect and enhance the existing landscape. Policy EN2 requires development to maintain or enhance the distinctive character and visual quality of the Landscape Area. The NPPF supports this approach. The application includes an Environmental Statement with a Landscape and Visual Impact Assessment.
- 35. The site is located within Natural England's Natural Character Area Profile: 32 Lancashire and Amounderness Plain (NE512). The Lancashire and Amounderness Plain is an area of high-grade agricultural land, bounded by Liverpool in the south. The plain is made up of a series of low-lying

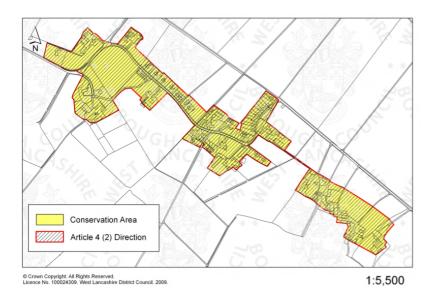
landscape types: in the west, the former mosslands and their remnant sites, and the coastal marshes and dunes.

- 36. The Altcar area is predominantly highly productive arable land with large fields. Agricultural drainage systems, including steep-sided ditches with localised reedbeds and steep embankments, are a dominant feature, and are responsible for the area's dramatic transformation from marshland to a rich and ordered landscape of rectilinear fields. As the topography is very flat at the location and its surrounding and there are no visible boundary treatments such as hedgerows, or fences, as field boundaries are traditionally marked by irrigation ditches, it is therefore a 'Highly Sensitive' landscape. Both short and long range views would be significantly harmed by the proposed development.
- 37. The applicant's Landscape and Visual Impact Assessment which has been submitted with the application classifies the current landscape as being of 'Medium Sensitivity'. The LVIA finds that the proposed development would introduce large 'industrial' type structures, lighting and activity into a relatively attractive landscape, reducing the semi-rural qualities of Altcar Moss, and CPRE believes the landscape impact to be significant and severe, albeit temporary. However, the LVIA concludes that no significant landscape effects are identified because the development is temporary and includes reinstatement of the wellsite and access track.
- 38. The Natural Areas and Areas of Landscape History Importance (August 2007) SPD finds the site is within 'the South Western Mosses', with the general characteristics being low lying, flat and open moss land, where tall, columnar constructions are inappropriate. The Council considers that the installation of a test well and the associated infrastructure would introduce industrialisation into this area which would have a significant impact on visual amenity and the landscape character of the local area, contrary to Local Plan policies GN3 and EN2. CPRE agrees with the Council on this important landscape character point.
- 39. CPRE considers that the proposed development is contrary to Local Plan polices EN2.6(i) Landscape Character and EN2.6(ii) Landscape History as both have designations within, or near proximity, to the site boundary.

Heritage

40. The Great Altcar Conservation Area is located to the south consequently Local Plan policy EN2.1 Conservation Areas should be considered as the site is within the setting of the Conservation Area.

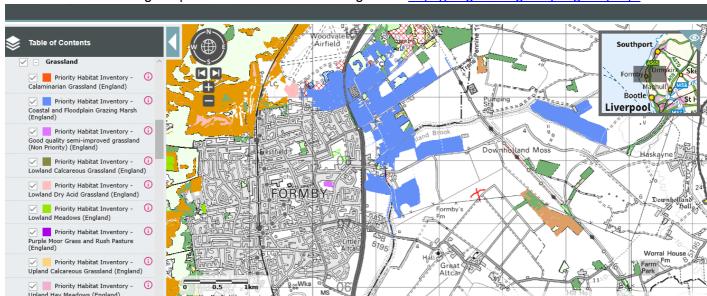
West Lancashire Borough Council Great Altcar Conservation Area Map



- 41. There is a rich rural heritage in the area. Natural England NCA Profile says 'the history of the landscape is evident in its transformation from an area of extensive lowland raised mires to productive reclaimed farmland, beginning in the 18th and 19th centuries and reflected in the regular drainage ditches and dykes, canals, windmills and isolated red brick farm buildings.'
- 42. 'Little evidence remains of the area's former landscape aside from small areas of remnant mosses or fen carr that provide indications of strip cultivation on boundaries of ancient enclosure between the rivers Wyre and Ribble, and place names which refer to "moss" or "mere".'
- 43. In summary, the applicant has not properly assessed the impact of the proposed development on the area's heritage.

Ecology

- 44. The application includes am Environmental Statement with a Habitat Survey. It shows that from an ecological perspective the site is located in an area that is rich with Priority Habitat. Large flocks of migratory wildfowl and wading birds take up residence on the coast during the winter months. These birds feed and roost not only on the mudflats and salt marshes of the estuaries, but also on the farmland along the coastal plain, using wet pastures, areas of open water, improved pasture and arable fields. These wintering flocks include internationally important numbers of Bewick's swan, whooper swan, lapwing, wigeon and pink-footed goose, as well as nationally significant numbers of golden plover. The presence of these birds has led to large areas of the National Character Area (NCA) being designated as Ramsar sites and Special Protection Areas.
- 45. According to Natural England's NCA Profile, the threat of water-borne pollutants from some of the major industrial premises is ongoing. Such contamination could have a severe impact on vulnerable ecosystems such as the open coastal marsh.



Extract from the Defra Magic map that details environmental designations. https://magic.defra.gov.uk/MagicMap.aspx

The Blue shading to the north and west shows Priority Habitat Inventory - Coastal and Floodplain Grazing Marsh (England). The Orange to the West shows Priority Habitat Inventory - Coastal Sand Dunes (England). The Buff colour shows Priority Species for CS Targeting – Snipe, and the sage green to the east is Priority Habitat Inventory - Deciduous Woodland (England).

- 46. Local Plan policy EN2 Preserving and enhancing West Lancashire's Natural Environment is of relevance, specifically EN2.1 Wildlife Corridors identified in proximity to the east; and EN2.1 Nature Conservation Sites almost entirely surround the site. There is a Local Plan policy EN2.1 Wildlife Corridor located near to the site's north east boundary and Downholland Moss Site of Special Scientific Interest (SSSI) is only about 100m north of the application site.
- 47. The Local Plan ENS states 'The Council is committed to ensuring the protection and enhancement of West Lancashire's biodiversity and geological assets and interests.' It goes on to state 'In the case of SSSI's consideration will be given to the likely impact of the development and the features of the site that make it of scientific interest.
- 48. CPRE is concerned about the impact on the Downholland Moss SSSI. We are aware from our work in Fylde that birds are very flighty, will avoid noisy activity and will not land near to prominent structures such as drilling rigs. The height and colouration of development component parts are also factors to be considered. At Preston New Road, Cuadrilla did reduce the rig height and painted the rig in a more muted grey as opposed to brilliant white in an attempt to conceal the intrusive structure and so as not to frighten away the Pink Footed Geese, a Protected Species.

Residential Amenity

49. According to Natural England's NCA Profile, 'Tranquillity and intrusion levels have declined significantly in the past 50 years, with the total 'undisturbed' area of the NCA having decreased from 50 per cent in the 1960s to 18 per cent in 2007.' The largest 'undisturbed' areas remain on either side of the A59 around Hesketh Bank, Rufford and Halsall, and to the east of the A59 around Mawdesley, as well as to the north of the NCA on either side of the River Wyre.'

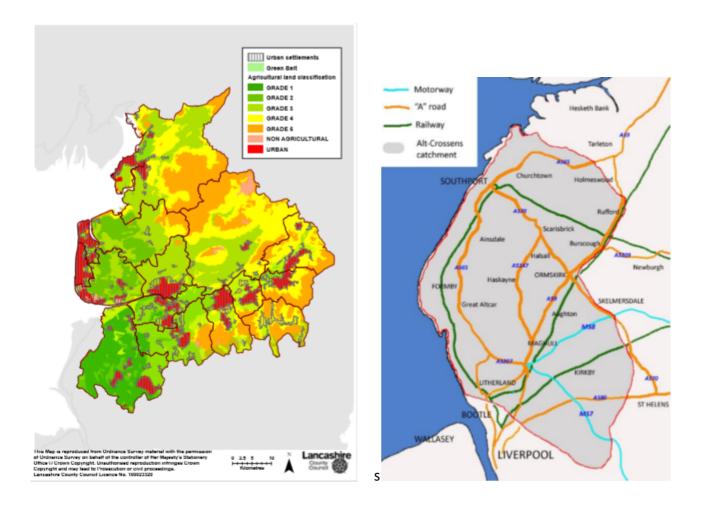
- 50. Currently the area around Altcar is relatively tranquil and this is an asset that ought to be fully valued. Local residents can walk and cycle the local lanes. They can listen to birdsong and see nature all around them. There is a network of public rights of way, including a cycle track to the east of the site. This area currently has a predominately rural feel and the development will impose a built structure into it that will require servicing by many HGV movements on carriageways that are narrow country lanes. The movement of AlLVs require mitigation
- 51. Any development proposal would have to be considered in terms of its sensitivity, respecting long and open viewpoints and strong rural character of the area.
- 52. The operations will be noisy in an area that is relatively undisturbed by noise.
- 53. The development in rural tranquil areas such as where the site is proposed ought to protect tranquillity and should carefully ensure that light spill is minimised through lighting design in new developments to minimise the impact on dark skies. CPRE is concerned that the ability to view the stars in the night sky will be impaired due to 24 hour security lighting in an otherwise dark area. Light pollution also impacts on wildlife and biodiversity, adversely affecting natural rhythms and cycles.

Agricultural Land Classification

- 54. According to Defra's Magic map the soil is classified as 21 Loamy and clayey soils of coastal flats with naturally high groundwater. The land benefited from Higher Level Stewardship Themes (England) under the Countryside Stewardship Agreement Management Areas. The site is within an area that is classified as part of the Nitrate Vulnerable Zones 2017 Designations (England).
- 55. According to the Agricultural Land Classification the farmland is the highest grade of Best and Most Versatile grade 1. (see LCC's ALC map to the right, dark green shading is shown at Altcar).
- 56. The NPPF states that local planning authorities ought to avoid the development of highest grade farm land. CPRE thinks that grade 1 land should be prohibited from development due to it being a nationally significant asset. Future generations must be able to grow their own food. We should not sacrifice our best, most fertile and versatile agricultural soils for activity, and certainty a use that has such inherent environmental risks. As we are no longer a member of the European Union food security is a potential issue.

Drainage

- 57. Local Plan policies GN3 and IF3 require proposals to ensure flood risk is avoided/mitigated through development and that new development can be appropriately accommodated by existing water and drainage infrastructure. NPPF Paragraph 165 requires priority to be given to sustainable drainage systems.
- 58. The site is predominantly within Flood Zone 3 and LCC is the Lead Local Flood Authority, together with the Environment Agency, however, it is understood the site is in the catchment area that may be subject to increased flooding due to the Environment Agency ceasing the water pumping at Alt Crossens (see map showing the Alt Crossen catchment area in grey shading). It is vital a full assessment of the impact of this is considered by LCC. There is a pumping station to the north of the site.



Summary

59. For the reasons set out above, in the context of national and local planning policies, CPRE recommends that the application be refused.

Yours sincerely

Jackie Copley MRTPI MA BA(Hons) PgCERT

Planning Manager

Registered with FUNDRAISING REGULATOR

A company limited by guarantee, Registered number: 5291461, Registered charity number: 1107376