

Appendix 2

Representations:

Objections

Friends of the Earth (FOE):

FOE submitted a further objection to the proposal with regard to the precautionary principle and the Water Framework Directive; inconsistency within national and local planning policy, inconsistency with government policy; evidence of adverse environmental impacts and inadequate consideration of adverse socio-economic and public health impacts.

The grounds for objection are summarised as follows.

Precautionary Principle

- The development should not go ahead unless it can be proven that there will be no groundwater contamination over the short and long term.
- The development is an unconventional activity where the full impacts are unknown and where the risks can be clearly identified.
- Fracking poses a higher risk of well failure (and leaks) due to injection of wells and drilling wells horizontally as well as vertically.
- Fracking at Preese Hall resulted in harmful consequences.
- The current regulatory framework for the shale gas industry is inadequate, flawed or ineffectively applied and enforced.
- Regulators appear to have failed to assess the risks and determine the standards necessary to enable the development to go ahead, e.g. water recycling standards.

Groundwater, Flooding and Water Resource

- Potential groundwater contamination as a result of mechanical failure of equipment, well integrity issues, membrane defects, well degradation, geological faults, and increased run off leaving the site.
- Watercourses could be conduits transferring contamination to other areas.
- Where there is a risk of significant adverse impact on surface water quality then the development is only acceptable in terms of the Water Development Framework in the circumstances set out in the River Basin Management Plan for the North West.
- Risk of flooding to an area 700m to west of the site and 300m to the east across Roseacre Road is within Flood Zone 3.
- The EIA does not consider impacts on water circulation from polluted water and the unsustainable use of water, given the large amounts of water required
- Risks to the availability of water supplies and water pressure problems for nearby residents.

Climate Change

- The assessment of the potential for greenhouse gas (GHG) emissions is incorrect, with regard to impact of leakage, global warming potential (GWP) of methane and scales of emissions.
- The EIA findings that the impact on climate change is 'n/a' does not enable the local planning authority to make an informed decision.
- The mitigation measures proposed for possible sources of fugitive methane emissions are basic and may be ineffective based on US research.
- The figure used in the application for GWP is inaccurate and asks for clarity regarding the carbon footprint calculations.
- The comparison of the sites GHG emissions to the UK carbon budget is wholly inappropriate. Cuadrilla does not appear to know how much GHG will be emitted and therefore the precautionary principle should apply.
- Utilising shale gas resources is contrary to Policy DM2, to reduce carbon emissions and is contrary to the Lancashire Climate Change.
- Planning decisions must take account of the need to reduce GHG emissions and this application will increase the emissions.

Energy

- Need for the mineral resource has not been demonstrated.
- Local planning authorities should consider all energy sources and as per the European Renewable Directive 2009, including renewable energy sources.
- Impact of shale gas on UK security of energy supply is highly contested.
- Shale gas recovery is incompatible with the UK meeting the climate change target and could lock the UK into fossil fuel use for decades.
- Exploitation of unconventional gas and oil are a dangerous distraction to investing in energy efficiency and renewable energy.

Waste

- Insufficient information on how overflow water and wastewater discharges, and pollutants, will affect the local environment and protected sites.
- Management of contaminated wastewater is wholly inadequate. There is a lack of treatment centres, resulting in potential capacity issues, especially if flow back rates are higher than estimated. This is not an adequate solution.
- Contrary to Planning Policy (Statement 10) as the application produces huge quantities of waste.
- It is unclear what waste quality standards would be applied by the applicant to ensure that concentration of pollutants in the wastewater did not accumulate beyond safe levels as a result of re-use for fracking and how risks to the environment and health and safety would be mitigated.
- Further investigation is required before the Council can lawfully grant an application to drill.
- Legacy of underground waste which will be present is denied, not a temporary development as it will create permanent contaminated wastewater.
- Risks from flow back fluid and waste water.

- Risks of storage of waste to protected ecological areas.

Chemical Composition

- No detail has been given on the drilling and hydraulic fracturing chemicals, including the additives in the friction reducer.
- Polymers may leach or decompose into toxic monomers.
- The classification of polyarylamide as non hazardous is disputed.
- The classification of oil based muds as non toxic is disputed.
- The classification of flow back fluid as radioactive waste with non-hazardous composition is disputed.
- The chemical content of jetting fluid is unclear.
- Will surfactant, gelling agent, defoamers, corrosion inhibitors, weighing agents and additional biocides not be needed?
- A list of actual products to be used and in what quantities, with a Material Safety Data Sheet for each chemical should be available for public viewing.
- Total quantities of friction reducer are significant and the use of hydrochloric acid as a contingency is a concern.
- Environmental permit information should be part of the planning application. The list of potential additives includes 14 that are presumed hazardous.
- The use of toxic chemicals is contrary to the aim of the North West River Basin Management Plan which aims to reduce the release of toxic pollutants.

Air quality

- People including children will be exposed to pollutants from traffic.
- The planning authority should check the baseline air quality and assess whether the development will significantly add to air quality issues and whether significant people will be affected.
- The air quality assessment does not identify vulnerable groups e.g. Inskip pre-school, a nursery in Elswick and residents of Wharles who will experience notable changes in traffic. Residents of Roseacre, Wharles and Elswick could be receptors of emissions. Impacts on Kirkham and Wesham not considered.
- Emissions from generators, engines and site equipment for drilling have been scoped out of the air quality assessment despite the potential for emissions.
- All possible sources of emissions should be included with cumulative impacts assessed, including increased NO₂ levels.
- There will be air quality impacts and mitigation is required, with reference to the Air Quality Directive.

Traffic

- Concern at number of vehicle movements, particularly HGVs on rural single land carriageways (including Inskip Road and Roseacre Road) which have cycle and pedestrian usage.
- Contrary to Policy DM2, due to unacceptable adverse transport impacts from length and number of transport journeys.

- Generation of approximately 23,610 two way vehicle movements of which 11,670 HGV movements, over the lifetime of the project will emit greenhouse gas emissions and air pollution.
- Rural network impacts due to requiring new or widened junctions and access.
- Peak vehicle movements are to be spread throughout the day, but at Balcombe and Barton Moss there was a convoy of vehicles.
- The assessment of cumulative effects of operations at Roseacre Wood and in combination with Preston New Road does not account for operational delay.
- Traffic generated could breach statutory thresholds for noise and air quality.
- HGVs travelling on rural roads with hazardous chemicals or wastewater.

Ecology

- Potential adverse impacts on the migratory path for wintering birds utilising the Morecambe Bay and Ribble Estuary Ramsar/ SPA sites.
- Agricultural drainage ditches surrounding the site discharge north-westwards to the Wyre Estuary via Lords Brook.
- Impacts on internationally designated sites, Morecambe Bay SPA and Ramsar, Wyre Estuary SSSI, Newton Marsh SSSI.
- Medlar Ditch and Wesham Marsh Biological Heritage Sites have not been considered in relation to site operations and potential disturbance.
- The development would result in the loss of 0.06ha of Roseacre Wood, UK BAP habitat lowland deciduous woodland. New woodland planting will not compensate for the loss of mature woodland with habitat value.
- Impacts on protected and notable species including bats, otters, brown hare, great crested newts and nesting birds.
- Impacts on SPA qualifying bird species, wintering and breeding birds.
- Impacts on the functional link with the Ribble and Alt Estuaries SPA/Ramsar, require that a full Habitat Regulation Assessment must be carried out.
- Impacts of the flare (noise, heat, emissions) and 24hour lighting on wildlife.
- There will be 14 instances of significant impacts including disturbance and loss of habitat for bats, brown hare, nesting birds and great crested newts, with limited mitigation measures proposed. Conditions are inadequate as the applicant will disregard them as per experience at Beconsall site.

Seismicity

- The ES contains too little information for the Council to understand and evaluate the risks around induced seismicity from drilling and fracking.
- The Fylde is highly faulted geologically and there are a number of faults in the vicinity of the site including one which will be encountered by drilling.
- Potential effects on induced seismicity during the hydraulic fracturing stage of the project, associated with ground motion hazard, well integrity, liquefaction, slope instability, and cumulative effects of settlement and fluid migration. The scale of impact is disputed; it is not insignificant / negligible.
- The relevant authorities lack a full understanding of the geology of the local area and the causes of the tremors from fracking last undertaken in the area.

Socio economic

- The analysis of socio-economic impacts is probably unlawful because it takes account of economic impacts which are not related to environmental consequences of drilling and fracking.
- Strongly disagree that shale gas will make a positive contribution to economic growth at a local and national scale.
- There is no explanation of local expenditure and its calculation.
- Job creation effects are highly limited. There will be low job creation with no guarantee of jobs for local people given the specialist nature of the jobs.
- Strongly disagree that there will be no significant effects for wider economic effects as potential adverse effects have been disregarded. Economic costs of the development will be detrimental to the local economy.
- There is no assessment of impacts to residents in the immediate vicinity and impacts on tourism and agriculture.
- No assessment of impacts of community infrastructure (schools/village halls) within 2-3km of the site.
- Several years of disruption to the local community with 14 months of drilling 24hours a day, 8 months of hydraulic fracturing and 12 months of flaring with dust, light and noise emissions.
- Unprecedented levels of public opposition / concern about the impacts.
- Previous sites yet to be restored, a concerning precedent to communities.

Public Health

- The ES does not review the evidence of known and unknown adverse public health impacts of unconventional gas. The industry is evolving quicker than the research into health impacts.
- Occupational health not addressed despite US evidence of harmful effects to workers from air quality, waste, wastewater, fracking fluid.
- Fracking fluid information is vague and there are no details of chemicals in the drilling fluids.
- The community profile does not include vulnerable communities in the immediate vicinity of the site.
- Relevant data on demographics and deprivation in Blackpool is excluded.
- Impacts on physical activity have not been considered. HGVs carrying drilling and fracking chemicals and hazardous wastewater may deter cyclists and pedestrians using local roads.
- Air quality assessment should include fixed point sources of air emissions (e.g. generators).
- Cuadrilla has overstated safety claims, through misleading advertising, exaggeration and subjective claims.
- US evidence of negative health impacts of shale gas development.
- US evidence of heart and neural defects in newborns within 10mile radius of maternal residence to shale gas developments.
- Dangerous levels of human exposure to benzene.
- Exposure to silica as a health hazard to workers.

- Breast Cancer UK expressed strong concerns about the potential adverse. Health effects from exposure to harmful chemicals as a result of fracking.
- Germany environment agency has stated that there is a lack of information to assess risks and how they can be controlled.
- Operator has a poor track record in running operations properly.

Consultation

- Very low participation in consultation tools and techniques, compared to high numbers of people submitting representations. Public exhibition events managed to separate stakeholders, elected members from residents.
- The LPA need to take account of the legitimacy of high local and national interest and opposition, due to the international importance of the area for wildlife, national importance for food production and tourism and the precedent of the decision regarding shale gas development in the UK.
- Levels of risk to area have been mi-advertised and characterised.

Planning Policy

- Not conform to LWMLP Policies CS5 and DM2 regarding sustainable minerals development and development management.
- Not conform with FBLP Policies SP2, EP10, EP15, EP16, EP17, EP22, EP23, EP24, EP26 regarding countryside development, habitats, protected sites, SSSIs, BHS, agricultural land, water resources, groundwater and air pollution.
- Application must be judged on all relevant national and local planning policy, especially climate change, waste, transport and unacceptable adverse environmental impacts.
- Not sustainable development – as leave legacy for future generations of mining waste, climate change emissions, risk of groundwater contamination.
- Significant problems with the assessment of impacts in the ES including waste, waste mitigation, seismicity, chemicals, health and air quality.
- Adverse impacts of application cannot be mitigated through conditions in terms of climate change emissions, wastewater production, lighting or noise because of the scale of the activity proposed.
- Production scale shale gas disguised as exploration and appraisal, given 4 wells, continuous nature of the drilling and hydraulic fracturing proposed, total period of the development, extended flow test over 2 years, installation of pipes connecting to the national transmission network, the installation of equipment to treat and regulate gas on-site, and the proposal to pump gas during EFT into the grid.
- Not temporary as implications are permanent – creation of contaminated waste that remains in situ.
- No margin for rigorous testing, monitoring or evaluation between stages.

Roseacre Awareness Group (RAG):

Representations received on behalf Roseacre Awareness Group object to the proposal on the following grounds:

Need for development

- Shale gas is not economically viable. Would need thousands of wells and hundreds of well pad to produce a small percentage of UK energy.
- Economic benefits exaggerated only benefit the company and government.
- Application is not temporary, could take 6 years, and the connection to the gas grid and associated works is to effectively produce gas.
- Once at full production, all impacts will be tenfold and LCC need to consider this when determining the application.

Climate Change

- Investment in shale gas diverts resources from cost effective, less damaging renewable energy solutions – tidal, wind and solar.
- Contrary to Lancashire Climate Change Policy and Climate Change Act as use of fossil fuels not meet low carbon objectives. Shale gas methane emissions are more detrimental than from coal.

Countryside Location

- Contrary to Policy SP2 Development in the countryside, site is totally suitable for industrial development with potential for serious long-lasting and damaging impacts to the landscape and character of the area.
- Applicant has not considered alternative locations apart from own sites. Could operate from an SP1 location using horizontal drilling technology.

Health and Socio- Economic Impacts

- Not addressed harm to residents living near to fracking sites, do not want to be guinea pigs to fracking industry. No reference to US health findings.
- Impacts on residents at Roseacre, Wharles and Stanley Mews residents need to be considered, including stress and anxiety.
- No consideration of impacts on rural character, community cohesion and community infrastructure - primary school, church, Women's Institute, recreational fields, footpaths, bridleways, pubs, tearooms, farm shop, caravan parks, livery yards and social events.
- Development will split the communities of Roseacre and Wharles in half.
- No consideration of impacts on visitors to the community for sporting and leisure activities e.g. ramblers, birds potters.
- Impacts of daily drilling, fracking, flaring, HGVs and hazardous waste will make it an undesirable area to live and visit.
- House prices will be affected and people will not be able to sell.

- Adverse impacts on agriculture from harmful effects of noise, air, water and light pollution on livestock as reported in the US. Reputation for food production and supplies to supermarkets could be destroyed.
- Contrary to Policy DM2 as economic and environmental impacts cause demonstrable harm.
- A local caravan site has already lost business this year.
- Huge number of objections with Lancashire and UK opposition.
- Consultation process has been flawed.

Traffic

- Significant danger/conflicts from increased volume and size of vehicles.
- Additional 49,000 vehicle movements in a quiet rural area.
- Existing countryside unsuitable for significant increase in traffic volumes.
- No assessment of impacts on vehicles passing hundreds of residences in Medlar, Wesham, Kirkham, Newton, Clifton, Salwick and Wharles.
- Narrow country lanes have blind bends, limited visibility, and no footpaths and are used by farm vehicles, cars, motorbikes, caravans, cyclists, horse riders and pedestrians. Too narrow for HGVs and impossible for safe vehicle passing.
- Potential road safety issues at Clifton children's playing field; Hand & Dagger pub Salwick and Treales Primary School.
- LCC will need to repair the roads as maintenance requirements will increase
- Roads can be hazardous from mud from farm vehicles/livestock so will become more hazardous with site vehicles.
- Roads can be subject to flooding from heavy rain, the development will reduce drainage making the situation worse.
- Impacts of HGV vibrations on old buildings have not been taken into account.
- Proposed mitigation measures of altering roads, verges, hedgerows and installing passing places will damage the rural character and deter use of roads for recreation and tourism with knock on economic effects.
- Inskip route option will not stop traffic going through Wharles village.
- Inskip route will involve crossing Roseacre Road for entry and exit posing a danger to users of Roseacre Road.
- Additional traffic will increase air and noise pollution with health impacts.
- No detail on how emergency services would access the site.

Landscape

- The site infrastructure including the 53m high rig will be a major blight on the landscape and damage the rural character and affect tourism.
- The site will be visible from several houses, to road users and from local natural landmarks e.g. Beacon Fell, Longridge Fells, Carr Hill.
- Contrary to Policy EP16 as EP28 as light pollution will cause harm to both local residents and wildlife and will distract passing road users.
- The light pollution will transform an idyllic countryside area into an industrial zone with loss of social amenity. Detrimental to tourism and property prices.

Noise

- Contrary to SP2, SP9 and EP27 due to harm from drilling noise pollution. It will seriously affect residents living close to the site, affecting quality of life resulting in health issues. Noise levels cannot be mitigated.
- Elswick site operations are not representative of a live fracking site.
- No consideration of cumulative effects of onsite machinery (generators, separators, compressors) with noise from drilling, fracking, flaring and HGVs
- Noise assessment should have used BS4142 and not BS5228, to be relevant to a quiet rural area and not a construction site.
- Actual increase in noise level should be no more than 5db, proposal higher.
- No adequate baseline surveys or assessment of sensitive local receptors (Stanley Farm mews) No information to demonstrate that residential amenity will not be significantly affected.

Air Quality

- Information is inadequate to assess real impacts of development and whether standards of the Air Quality Directive will be met.
- Assessment should recognise that the area is rural and not urban, with existing higher air quality as a baseline.
- Potential impacts on Roseacre Hall and Stanley Farm and Old Orchard Farm
- Emissions from site and traffic will affect resident's health and wellbeing including children and elderly residents. Evidence from the US, Breast Cancer UK and the media of health impacts.

Water Resources

- Information is inaccurate and ambiguous making assessment difficult.
- When compared to Preese Hall data, the information seems inaccurate.
- Development will need more water than supplied by United Utilities so further supplies will be required by tanker, with impacts on local community.
- Existing water pressure issues, water supply to residents may be restricted.
- If goes to full production, where will additional water come from?

Waste Management

- Surface water drainage into Nigget Brook could contaminate Thistleton Brook which flows into River Wyre and Morecambe Bay.
- Accidental spillages from the site or vehicles could impact on water and land. with impacts on local wells used by livestock and groundwater contamination
- Storm impacts have not been taken into account, with risk of flooding.
- Insufficient evidence that fracking fluid will not leak into local water sources through existing faults. Flow back fluid estimates do not cover worst scenario.
- Wastewater treatment sites do not have capacity to treat all the flow back fluid, including radioactive waste resulting in storage concerns.
- Concern regarding content and quantity of chemicals in fracking fluid.

- Huge amounts of waste will be produced and could lead to significant traffic removing hazardous and toxic waste products.
- Applicant not demonstrated how they would reuse/recycle/treat flowback fluid.

Ecology

- Potential impacts on protected species, some of which have not been surveyed or surveys have limitations and missing data. Need a full habitats survey.
- No information on impacts on Holmes Wood, Carr Wood, Nigget Wood and Medlar Brook and impacts on Roseacre Wood, a possible ancient woodland.
- Ecological organisations have not been consulted and Lancashire Wildlife Trust has raised numerous objections.
- Contrary to Policies DM2, EP15, EP19 and NPPF.
- Hedgerows should be protected and not removed to install passing places.

Safety

- Contrary to policy EMP5 as local people at risk of accidents from the industrial site and fracking activities including well blow out.
- US fracking sites have had serious accidents - chemicals and pollution. Other countries and states have banned or imposed moratoriums on fracking.
- Contrary to NPPF paragraph 15 as cannot ensure industry is safe and sustainable.
- Industry leaves serious legacy issues, all wells leak over time and a significant percentage fail. LCC will have to pay for the cleanup.
- Current regulations are inadequate with no independent body to oversee and monitor operations. HSE and EA have not dealt with a high volume fracking site so query ability to evaluate, monitor and manage the industry.
- Applicants' competence and trustworthiness is questioned as previously breached planning permissions and not safely abandoned any wells to date.
- Application documents have ambiguities, inaccuracies and inconsistencies.

Seismology

- Fylde is heavily faulted, so extremely risky for applicant to frack through local faults especially given earthquake at Preese Hall.
- Other countries have banned fracking in highly faulted areas. Significant earthquakes in US and Poland associated with fracking activities.
- Seismic monitoring will only detect an event happening so may be too late to stop fluids leaking into faults. 3D surveys are inadequate as faults are complex and unpredictable.
- Contrary to Policy and the precautionary principle should apply. Faults could leak fracking fluid and methane into the groundwater and atmosphere and pollute aquifers and drinking water supplies.

Up to the end of December 2014 a total of 8924 representations objecting to the proposal had been received. Of these 822 were individual letters; 4212 were template objections submitted by Friends of the Earth; 3890 template objections, many of which

were collected and submitted by 'Frack Free Lancashire'. Representations have continued to be received mostly in a variety of template forms, the final number of which will be reported when the application is presented for determination.

The reasons for objecting to the proposal are summarised under the following headings:

Need for Development

- Fracking not needed in Lancashire.
- Extraction is for profit for a minority.
- Amount of gas to be produced is overestimated.
- No guarantees of any gas being found.
- No guarantee it will result in cheaper gas prices.
- Risks are too great for a short term energy fix.
- Fracking under Lancashire would take until 2030 to produce a meaningful volume of gas by which time emissions commitments would mean the gas cannot be extracted or burnt, so no national interest is served.
- Need thousands of wells for commercial production so no real benefit from this development?

Climate Change

- Extraction of shale gas will further add to the burning of fossil fuels and exacerbate climate change.
- Immoral to pollute the environment by increased use of carbon-based fuels.
- More fossil fuels are not the answer. Need to reduce carbon emissions.
- International Energy Agency warn that most of gas should stay in ground to avoid catastrophic climate change
- Shale production will have a negative effect on meeting UK targets relating to greenhouse gas emissions Climate Change Act 2008.
- Contrary to NPPF Para 93 reductions in greenhouse gas emissions.
- LCC has a responsibility to help reduce emissions.

Alternatives for energy production

- Central government failed to plan ahead for nuclear energy.
- Need to produce cleaner nuclear energy.
- Reliance on fossil fuels will stifle innovation for clean sources of energy.
- Should use natural renewable sources of energy from sun, wind, water.
- Should invest in wind farms given the powerful winds from the Irish Sea.
- Should harness tidal water from Morecambe Bay.
- LCC should promote renewable energy in line with the Renewables Directive.
- Contrary to Policy CL2 to stop money being invested in renewable energy.
- Need to support solar farms.
- Do not need to rely on fossil fuels, Germany runs on 90% renewable energy.
- Renewable energy has potential for greater economic success.
- Should invest in renewable energy.

- Should be removing our dependence on gas - use wood and other materials.
- Safer ways to extract gas and oil without contaminating land.
- There is enough North Sea oil and gas to cover our transition to renewables.
- Should insist on fitting wind turbines/solar panels to every new building.
- Should encourage highly renewable self sustaining / insulated housing.
- Need to be energy saving.

Environmental Impact

- Fracking will destroy the planet and people's lives.
- Local and global level implications to natural environment.
- Should not allow companies to exploit the environment at our expense.
- Fracking is seriously destructive and polluting and will leave the environment in a degraded and contaminated state; it is the dirtiest energy source.
- Widespread pollution is inevitable in the immediate and long term.
- Need to preserve not destroy planet for future generations.
- Potential harm to the environment.
- Should not be allowed in Lancashire or anywhere else.
- Full environmental effects are unknown and need further research.
- Other countries banned fracking.
- Growing evidence that shale gas extractions pose serious risks to human health and the environment, precautionary principle should be applied to protect residents from unavoidable impacts of shale gas development.
- Why is fracking being considered here next to towns – Blackpool, Preston, Lancaster and Southport?
- No other country will frack so close to populated areas.
- Fracking is an irresponsible / reckless idea.
- Risks outweigh the benefits.
- Fracking is a boom and bust industry.
- Only people seeking monetary gain are in favour.
- Contrary to NPPF as not sustainable development due to the need to keep drilling new wells as production rates steeply decline.

Exploration or Production Stage

- Application is for a production facility not exploration.
- By creating a well pad, the development will scale up to enable full production.
- Construction of a pipeline and connection to a gas grid network constitutes development and production.
- Exploratory boreholes by definition are not temporary.
- The application should be withdrawn and resubmitted as a pilot development pad which will be scaled up to full development.
- Francis Egan at the Winter Gardens Shale Gas conference said becoming a supplier was a long term investment /relationship for 20-50 years, so definitely not a temporary development.
- Contrary to SP2, if production is viable, production permission will be sought so not a temporary development. If approved it will set a precedent.
- Why two new sites are needed in addition to the existing 3 test sites?

- Why are these sites needed when the applicant has access to other sites with the geology to carry out initial flow testing?
- Existing Cuadrilla sites for temporary works have become permanent sites with permanent impacts due to recurrent time extensions.
- Like Annas Road, the development will not be undertaken in the proposed timescale so cannot be considered as temporary works.

Regulatory Framework

- Need specific regulations / legislation.
- Need strict enforcement/ fracking industry inspectorate.
- Need to inform regulators and industry about what is important and to ensure risks are as low as reasonably practicable.
- Lack of regulation for on-shore gas extraction.
- Regulation by the industry itself has not been tested, will be ineffective and wrong. Need independent monitoring.
- No amount of regulation is enough.
- No amount of regulation can prevent human error or equipment failure.
- Government inspectors cannot inspect what they don't know about.
- DECC, Environment Agency and Health & Safety Executive are not in a position to protect us, due to staff cutbacks, lack of expertise, disorganisation, apathy and relying on each other to ensure that no disasters happen.
- Environment Agency has no experience of other wells.
- Contrary to Policy EMP5 for Cuadrilla to police their own Health & Safety.
- What measures are in place to continue monitoring and rectifying any damage in the event the company goes into liquidation?
- Cuadrilla have breached planning permissions in Lancashire (and Balcombe) demonstrating a dangerous gap in regulatory enforcement.
- Cuadrilla does not have a good reputation for following regulations and keeping its promises. The applicant needs to demonstrate competence before new sites are approved.
- Cuadrilla failed to recognise the significance of earthquake damage from Preese Hall site and was reprimanded for not reporting it for 6 months.
- Applicants definition of timelines for initial flow and extended flow testing conflict with DECC guidance.

Safety Risks

- How can fracking be safe in the UK and not in other countries?
- If no risks why have other countries banned fracking?
- Unproven safety record of onshore sites.
- Safety concerns, unconventional gas are a high risk activity
- Overwhelming evidence that the process is not safe.
- Shortage of energy does not justify the risks.
- Pollution risks from human error and lack of care on site.
- Fracking technology is not a safe, unproven technology, risks cannot adequately be determined.
- Onshore accidents could be tempting lives and untold damage.

- Potential for major accidents (and comparison made to Abbeystead).
- Risk of explosion.
- Reports state that all wells fail eventually, either immediately or later on.
- Capping and plugging does not prevent failure of cement bonds, steel cages or well casings.
- Well failure will lead to a toxic legacy for current and future generations.
- Frightening risk if fracking occurs within a few miles of potential natural gas storage development.
- Huge potential for disaster from any impacts to local nuclear sites.
- Contrary to Policy EMP5 as the development is a hazardous installation.
- Not all risks are adequately addressed in the Environmental Risk Assessment, e.g. noise from drilling rig; visible plumes, vandalism and the assessment conclusion is disputed.
- Have CAA been consulted regarding risk to aircraft from vents or flare gas?
- Cuadrilla's Annas Road site and Preese Hall had well failures.
- Cuadrilla pulled out of Preese Hall due to stricter monitoring, this demonstrates the previous application did not adhere to Policy EMP5.
- Cuadrilla is not fracking at current sites due to technical failures which should be fully investigated before approving new sites.
- Does Cuadrilla have an emergency plan in place?
- What are LCC's Emergency Planning team's views?
- There is no specialist emergency response vehicle capable of dealing with an incident in the local vicinity; the nearest one is in Morecambe.
- Roseacre, Wharles, Salwick, Clifton, Elswick, Singleton, Greenhalgh, Wesham and Kirkham to name a few, are all at risk from onsite operations.

Geology / Seismicity

- Previous earthquake at Elswick / Fylde area.
- Fracking site caused an earthquake.
- Experienced shockwaves from Grange Road (Singleton) - terrified.
- Do not want tremors again.
- The earthquake in 2011 has been downplayed as no greater magnitude than a heavy lorry driving past your home but it was sufficient to damage property (cracked plaster) and has unnerved residents.
- Contrary to Policy DM2. Experienced previous tremor which was frightening and house shook. Concerned about future drilling.
- Contrary to Policy DM2 due to earth tremor/earthquake risk.
- Academics say that Lancashire's faulted geology is unsuitable for fracking and it will lead to induced seismic activity and risks to communities.
- Interfering with Lancashire's complex geology will be hazardous. The development will irrevocably damage our structure structures and lubricated and slipped rocks will increase earthquake risks.
- Fracking will destabilise fault lines.
- There are large faults in the region near Roseacre and Elswick.
- Risk of earth tremors, earthquakes and sinkholes.
- Inadequate baseline monitoring of background seismic activity.

- Need a condition for independent baseline monitoring of seismic activity before the works start.
- Traffic light system is only a warning system and cannot stop seismic activity once it's started. Not reassured by monitoring by Cuadrilla or Arup.
- Only 8 of the surface arrays will monitor induced seismic events as part of the traffic light monitoring system.
- Impact on BNFL nuclear plant from earthquake.
- Impact on Blackpool Tower, tremors could cause it to collapse.
- Impact on gas pipeline at Inskip from earthquake.
- Area already has moving sand with subsidence risk to local properties.
- Comparisons with US are invalid as the geology and percentage populations are different.

Air Pollution

- Proposal is contrary to Policy EP26 due to flaring and air quality impacts.
- Unacceptable levels of greenhouse gas emissions / toxic air pollution from flaring and health impacts to residents including children.
- Impact of flaring, burning gas between 30days to 2 years.
- Flared methane emissions.
- Methane flaring will lead to over 250 pollutants.
- Green completion should be used instead of flaring.
- Lethal emissions of methane and radon gas will damage the environment.
- Fracking will unleash radon, methane, toxic gases, particulate matter and carcinogenic toxins into the atmosphere with associated health risks to people, wildlife and the land.
- Possibility of pollution and methane escape.
- No evidence that no gas will escape once drilling has been completed.
- Not acceptable for Roseacre to receive polluted air from flared gas.
- Inskip School is directly across from Roseacre Wood and will receive toxic fumes affecting the schoolchildren.
- Ozone and emissions from traffic/ tankers. Where is LCC's green policy?
- Application does not provide enough baseline data for monitoring impacts and the outcomes of the Environmental Risk Assessment is disputed.
- Comments from the Public Health England review need to be considered.
- There are no safe limits for PM2.5 small particulate matter.
- No consideration of dust at passing places - Wharles and Dagger Lane.
- Need a condition for independent baseline monitoring of air and ground gas including methane before the works start.
- Approach for air quality monitoring will not mitigate local community concerns.

Noise Pollution

- Contrary to FBLP Policy EP27 as constant noise will be detrimental to health.
- There will be noise pollution.
- Noise assessment results and analysis is disputed.
- The noise assessment should have used BS4142 (nuisance on local receptors) instead of BS5228 for construction sites.

- Receptors at Stanley Mews have not been considered.
- The noise levels will severely and adversely affect people's right of a quiet enjoyment of their homes.
- Area around Roseacre Wood is extremely quiet; development will be loud and intrusive in the rural area.
- Predicted noise levels may be ok in an urban area with ambient noise but will be loud and intrusive in a rural area.
- Moved to area to enjoy the peace and quiet, but this will be disrupted by HGV passing in front of house.
- Peace and quiet will be shattered by noise from fracking, day and night.
- Not acceptable to have drilling 24 hours a day, 7 days a week, 365 days a year, it will destroy the peaceful fabric of the villages and affect people's physical and mental health.
- Concerned about fracking noise from 7am to 7pm during the week and from 7am at weekends for 365 days of the year.
- Noise from HGV, heavy drilling and fracking will destroy communities.
- Impact of constant noise to migraine sufferer, significantly affect quality of life.
- Intrusive noise - will be able to hear from Inskip and Elswick.
- Will affect pets and horses, including livery yards in Elswick and Wharles.
- Cuadrilla exceeded set noise levels at Balcombe.

Light Pollution

- Contrary to Policy EP28 as it will not minimise harm relating to loss of local character, amenity or reduction in highway safety.
- Impact of light pollution and disturbance from floodlighting every night, 7 days a week, 365 days a year. Blight to the countryside.
- Little light pollution now so development will significantly affect local residents.
- The site will look like a football pitch with floodlighting in contrast to the beautiful rolling countryside.
- Visual impact of gas flaring and site lighting, in the setting of a rural locality, the light pollution will be greater than any agricultural development and will have an adverse effect on the community and tourism.
- Floodlights will ruin the night sky. The sky glow level is too high so nighttime operation should not be permitted.
- Will be visible from Roseacre and Inskip. Not acceptable.
- Concern regarding impact of lighting on road safety with regard to threshold increment (loss of visibility) and veiling luminance (disability glare).
- Detrimental impact on wildlife including resident bird population.

Soil and Groundwater Contamination

- Contrary to Policy EP24, from loss of well integrity from leaking wells toxic legacy for current and future generations.
- Contrary to Policy EP24, as proven damage to the groundwater and our water supply from fracking and leaking wells.
- Contrary to Policy EP15 if contaminated water enters watercourses and affects livestock, crops and wildlife. Rivers will become toxic soups.

- No guarantees that fracking chemicals and previously latent chemicals, radioactive materials, noxious/toxic/carcinogenic gases will not find their way through fractured shale or other pathway to water aquifers, groundwater and land and seriously pollute water, land, people, livestock, agricultural land and wildlife for years to come.
- Water pollution.
- Object unless 100% certain that in 10, 50 or 100 years time the toxins produced will not contaminate the groundwater.
- Contamination of nearby Thistleton Brook could pollute local water sources used by local farmers and the Wyre Estuary.
- Roseacre site is close to an aquifer and serious risk of groundwater contamination.
- Contamination/pollution from fracking process to aquifers.
- Cannot be guaranteed that there will be no contamination of the Sherwood Sandstone layer, principal aquifer.
- No right to poison the water table, affecting children's future.
- Risk of uncontrolled contamination/poisoning of groundwater.
- The Water Framework Directive requires that a development should not go ahead unless it is proven that there is no risk to groundwater.
- No thought has been given to how the fluids will migrate over time into the water supply as the well casing fails.
- Huge risk from broken wells leaking into the land and water supplies.
- Hazard from toxic spillage at the exploration/drilling heads.
- Wells will leak; flowback liquid will have 90times the permitted nuclear content and over 1400 times the permitted lead content.
- Contamination of Thistleton Brook could result in pollution of local water courses used by local farmers for their livestock.
- Soil pollution.
- The loss of land is permanent; a hole that cannot be effectively sealed is a permanent conduit for gas, flowback fluid and contamination. It may take years for the contamination to reach the surface.
- Soil cannot be cleaned; radium 226 has a half life of 1600 years.
- 48 million gallons of flowback liquid will be left in the ground at Roseacre site.
- Risk of chemicals into food chain/water supply is too high.
- Why inject 2.8M hydrochloric acid into the ground?
- Risk of contamination from, hydrochloric acid and polyacrylamide.
- Need full disclosure about the dangerous chemicals in fracking.
- No information on whether fracking fluid includes a chemical tracer.
- Radioactive materials will be released.
- Chemicals used in the process are harmful.
- No proper evidence that their proposals will not cause pollution.
- Need a condition for independent baseline monitoring of groundwater and ground gas before the works start.

Waste Disposal

- Creation of toxic wastewater.
- Each well will produce 2.5million gallons of flow back.

- Lack of information and research on how the massive amounts of waste water will be disposed of and treated.
- Inadequate measures are in place to treat and dispose of vast quantities of waste water. No adequate disposal solution has been presented
- There is no adequate treatment facilities that have insufficient capacity for huge volumes of hazardous and wastewater waste.
- Insufficient information in the Waste Management Plan regarding drill cuttings storage and disposal and dust implications.
- What will happen to flowback water and its treatment?
- No guarantee of safe disposal of chemical waste and drilling muds.
- Manchester Ship Canal cannot take anymore waste.
- Cuadrilla have dumped two million/thousands of gallons of radioactive/contaminated waste water into Manchester Ship Canal (from Barton Moss) and were allowed to get away with it. The EA cannot guarantee that this will not happen again.

Water Resource Sustainability

- Contrary to CL1, vast quantities of water out of the hydrological cycle forever.
- Unsustainable use of water.
- Not enough water available for this use, where will it come from?
- Public drinking water must be preserved at all costs.
- Vast amounts of water should not be utilized / wasted for gas drilling, especially given water shortages in recent years.
- Recent droughts have resulted in water shortages and severely affected pressure and fracking will make the impact worse.
- United Utilities may not have adequate resources to protect drinking water.

Development in the Countryside / Landscape Impacts

- Need 30,000 wells to extract the gas.
- If goes into full production, farmland and rural spaces will be lost to hundreds of pads, gas processing sites, pipelines, compressor stations and new roads.
- Industrialisation of the rural environment and Lancashire countryside.
- Others sites on brownfield land should have been considered.
- Contrary to NPPF paragraph 112 and Policy CS4, as applicant has not demonstrated that the development could not be undertaken elsewhere due to any viable alternatives.
- Contrary to Policy DM2 as the development does not take account of the deviation from the baseline environmental conditions of a quiet rural area.
- Contrary to Policies SP2, SP5 and SP9 as it is not appropriate in a rural area and will prejudice the rural and undeveloped character and appearance of the countryside and impact rural communities.
- The proposal will destroy /change the beautiful Lancashire/Fylde countryside.
- Totally unsuitable in the heart of rural Fylde.
- Destruction of the rural habitat. The countryside should be preserved and cherished now and for future generations.
- Need to preserve the idyll rural landscape and rural heritage.

- Contrary to objectives to limit development in open countryside to that appropriate to a rural area, due to physical size, drilling rig height, fracking structure and security fencing.
- The development will visually split the two villages of Roseacre and Wharles.
- Need to examine sites for evidence of early settlements before it is lost.
- Environmental damage from construction and operation.
- The development will be an eyesore in pleasant fields.
- The size and scale of the development will be far greater than any agricultural development and will have an adverse effect.
- Visual nightmare with 53m high rig and site the size of a floodlit football pitch.
- Contrary to Fylde Borough Council's objective 1.50, no.2 - visually intrusive due to 53m high rig, the scale and size and distraction to motorists.
- A 53m high rig, comparable to Nelson's Column, grotesque in a country field.
- How is a 53m high rig and ugly noisy intrusive monstrosity allowed when planning refused for smaller structures/buildings in the area?
- How can wind farms and turbines be rejected as eyesores whilst this hideous drilling may be allowed?
- Impact of 4m high security fence.

Ecology / Wildlife

- Contrary to Policies EP15 and EP16 as the proposal will affect a European Site and SSSI site.
- Poses an adverse threat to wildlife and wildlife sites and watercourses including, including Ribble Estuary and Morecambe Bay RAMSAR sites, SSSI, Wyre Estuary SSSI, Marton Mere SSSI, Medlar Meadows, Medlar Woods and Medlar Ditch BHS sites, River Wyre, Thistleton Brook and Wyre Estuary Country Park.
- Object to access road at Roseacre Wood, the oldest wood in the parish. To remove trees from this wood would be environmental vandalism.
- Hedgerows will be ripped out to widen roads and canopy of TPO trees at Ladies Row could be affected by passing HGVs.
- Negative impacts on protected species including bats, brown hare, barn owls, great crested newts and birds.
- Adverse effect on wildlife throughout the day on local ecology / biodiversity.
- Fracking - huge adverse effect / harmful impact on wildlife, flora and fauna.
- Impacts from noise, lighting, air pollution (toxic fumes), surface water pollution into field drainage ditches onto wildlife including bird wildlife sites and habitats, resident bird populations, wintering wildfowl, barn owls, pink footed geese and ducks.
- Impact on pink footed geese and other bird species at Holmes Wood.
- RSPB do not support fracking.
- Impacts on fishing lakes and local pits with a variety of fish.
- Ecological surveys are incomplete and without them the Biodiversity Mitigation Strategy will be based on incomplete information.

Economy

- Boom and bust industry.
- Creation of thousands of jobs is utter nonsense.
- Potential benefits from full production not justify the development.
- Limited job creation, with only jobs for outside specialists, so no local benefit.
- Impact on tourism economy and subsequent unemployment.
- Adverse effect on Blackpool tourism despite some business support.
- Ribby Hall Holiday village would be vulnerable if Fylde is a gas field.
- Proposal is already affecting bookings to a local caravan site. If approved, the noise and light pollution, traffic and fracking underneath will result in lost trade and the site will close with impacts to local shops, pubs and restaurants.
- Contrary to Policy SP5 due to a negative impact on the leisure industry. Existing visitors (walkers, horse riders and cyclists) visit local shops, cafes and pubs and use livery yards, stables, campsites and B&Bs. Trade will decline as these pastimes will become dangerous and no-one will want to visit an area blighted by fracking nuisances and traffic.
- Resurgence for Lancashire food and tourism will be adversely affected.
- Put agricultural economic sector at risk.
- Industrialisation of land which could be used for food production.
- Prime farming land should be used for safe food production.
- Destruction of the fertile farmland / valuable farmland for dairy and arable use.
- Fylde has largest number of small farms per hectare in the whole of England.
- Primary area for dairy farming/grazing with cheese makers in the area, the development could jeopardise this industry and jobs.
- Food manufacturers and processors will not buy for fear of contamination of agricultural land putting agricultural sector at risk.
- Toxic fumes cause harm to farm animals.
- Need to maintain the farming heritage started hundreds of years ago.
- Any spillage on the land will render useless, resulting in a permanent loss.
- Adverse impacts on stables in the parish as people will keep horses elsewhere, with a significant impact to local businesses.
- The land around Roseacre Hall Farm and New Hall Farm is used for a shoot and should not be considered suitable for the well pad location.
- Impact of protestors on business and area.

Traffic

- Contrary to Policy SP7 as 200 vehicle journeys a day cannot be safely served proposed means of transport. It will be dangerous. Existing roads are not designed to cope with such traffic.
- Traffic will increase by 100% and will ruin the countryside.
- Significant increase in HGV traffic using roads that were not built for that use.
- One HGV every 3-4 minutes for 12 hours per day with associated air pollution.
- Contrary to Policies SP7 and SP9 as 6 axle HGVs will not be able to turn into Roseacre Wood without the whole vehicle on the wrong side of the road.
- Contrary to Policies SP7 and SP9, as HGVs on village roads / narrow country lanes will impact negatively on daily lives and residents amenity.

- Contrary to Policy SP7 as the development cannot safely be served by the proposed means of access and local road network.
- The roads will not safely serve Cuadrilla's operational needs with regard to size, quantity and nature of vehicles.
- Unacceptable/ Inappropriate use of small narrow rural bumpy lanes around villages of Roseacre, Wharles, Elswick and Treales by HGVs.
- Twisting roads in Roseacre, Wharles and Treales are already used by large and small agricultural vehicles, buses, school buses, delivery vehicles and commuter traffic to Springfields at Salwick and walkers, cyclists, horse riders.
- HGV use of Wharles narrow winding road would be detrimental to Wharles residents through noise, fumes and road disruption.
- The second preferred route along Inskip Road, through the busy centre of Catforth village, along Catforth Road and over the narrow and inadequate canal bridge at Swillbrook is totally unacceptable and ridiculous.
- Unsuitable for Lorries to use narrow rural (B) roads as the access route to the site, especially Dagger Road and Roseacre Road, HGVs will not be able to pass safely and will endanger other road users.
- No sight lines for oncoming traffic on Dagger Road making it particularly dangerous. A HGV could not overtake a cyclist or horse rider.
- In Bucks Wood, Station Road has a significant hazard from poor sight lines when elevated, with a steep fall-off into the canal below.
- New Rail Bridge at Salwick is only 5.5m wide with steel barriers, so potential for accidents if a tanker meets a car and caravan going to a caravan site.
- HGV traffic from Clifton to Wharles will result in increased traffic along Inskip Road to Treales, which will impact the school and Salwick commuters.
- Clifton village is a 20mph zone, will suffer road vibration from heavy Lorries.
- Contrary to SP7. Elswick village will have up to 50 HGVs thundering through the village each day, with noise and air pollution and posing danger to children as there are no safe road crossings in the village.
- Traffic management plan controlling flow of traffic through Wharles will severely impact on our local amenity.
- Appalled that Treales will be turned into a glorified layby.
- DHFCS Inskip route would greatly reduce traffic and noise problems.
- There is no guarantee of use of DHFCS Inskip and residents have previously be warned about site dangers so is it a feasible option for site traffic.
- Object to the use of the A585 to junction 3 of the M55 for 75% of all HGV movements as it is seriously overloaded and has to take traffic from new housing at Wesham, Kirkham, Wrea Green and Warton, with serious existing problems from access, noise and pollution.
- Increased traffic on M55, A585 and A583. 'A' roads are extremely busy and dangerous roads already.
- Contrary to NPPF as there will be conflict between HGVs and other road users including pedestrians and cyclists.
- Contrary to Policies SP5 and SP9 as the local roads are used by hundreds of cyclists, horse riders, runners and pedestrians including children who will be at serious risk of injury and will lose an important social amenity.
- HGV traffic will make villages and country lanes a no-go area for cyclists, horse riders, runners, walkers, dog walkers and vulnerable road users.

- Risks to children travelling on school buses to local schools, from site accidents, road accidents and disruption from travel delays.
- Concerned for safety of children given increased traffic.
- Concern for walking on roads where there are no paths making it dangerous to walk between villages.
- Lack of pavements/narrow pavements will lead to intimidation of pedestrians.
- Danger of being pushed into dykes.
- Road safety risks from collision, skidding, failure to manage manoeuvres, weather and intimidation to other road users have not been addressed.
- Roads are not wide enough for 2 HGV's.
- Passing places on single track roads will not solve the problem and could cause accidents and deaths.
- Fatalities in recent years on country lanes will be increased by HGV traffic.
- It will cause disruption on narrow local roads, especially in summer months when the roads are used by visitors and tourists.
- Horse riders will not be able to ride down quiet lanes around Wharles as HGVs will be using them for 12 hours a day.
- Will cause major problems from confrontations between HGV and road users when unable to manoeuvre.
- Existing roads already have poor road surfaces with potholes and fractures which will be made worse by HGV usage, creating more danger for all.
- Vibrations and verge degradation has not been addressed.
- Cuadrilla traffic figures are incorrect, volumes are understated.
- Cuadrilla traffic assessment done in winter months so does not reflect higher traffic usage in summer including cyclists and horse riders.
- Lots of people use these roads already, major holdups in summer months.
- Who will monitor and enforce that the HGVs use a certain route?
- Traffic management system will cause great inconvenience.
- Improvements to road infrastructure through new roads and/or widening are not an acceptable solution, as following works (for profit) they will be abandoned for the ratepayer to maintain.
- Dangers of transporting toxic waste on roads where families live/travel
- Risk of spillage of hazardous material from HGVs in accidents on narrow road and/or with other motorists.
- Potential hazard from toxic spillage from use of narrow roads.
- Cyclists will be affected by spillages from vehicles leaving the site if inadequate washing down of vehicles.
- Application is contrary to Lancashire Local Transport Plan aims and goals.
- The sites should be located with access directly onto a main road.

Health and Well being

- Irresponsible to consider fracking in the UK until prospective studies have been completed and the cumulative health impacts of fracking have been determined, need proof of no adverse health impacts.
- Proven adverse impact on human health, leading to other countries banning it

- Contrary to NPPF which states that local authorities should ensure that mineral development does not have unacceptable adverse impacts on human health.
- Contrary to Policy EMP5 due to the potential for 120 fracking sites in the Fylde meaning many people will fall into high risk category for health impacts.
- The applicant has failed to acknowledge the sensitive residential receptors located less than 400m from the centre of the well pad.
- We do not want to be human guinea pigs. Unacceptable to risks to health.
- Health impacts to family from living in the vicinity of the site.
- People have a human right to remain safe, if allowed it's a violation.
- Fracking is very scary/ terrifying. People are fearful.
- Toxic fumes will cause illness to people.
- Concerned about health impacts especially to children and people with existing health issues e.g. asthma.
- Frightened by possible health risks to children. What damage will be done to children's health growing up with fracking; legacy for future generations?
- The development will affect health and happiness of children.
- Adverse impacts on children at Inskip, Catforth, Woodplumpton and Roseacre schools and nurseries from emissions, noise and pollution. How can the Government and LCC allow this to happen?
- American reports have linked air pollution/gas flaring, contamination and groundwater contamination from shale gas developments with health impacts in individuals within a radius of 10 miles.
- Lancet, British Medical Journal and the Medical Journal of Australia have linked the proximity of shale gas sites with increased health risks.
- Contrary to Policy EMP5 as US studies show an increase in cancer caused by chemicals produced during the fracking process.
- Reported health risks from living in the vicinity of fracking sites include neurological conditions, cancer, lung cancer, heart disease, respiratory problems asthma, stillbirths, low birth weights dermalogical conditions (skin rashes) and weight loss,
- Constant noise impacts on people's physical and mental health.
- Cumulative health impacts have not been addressed.
- Risk of exposure to carcinogenic gases (benzene) neurotoxins (toluene) and central nervous system impacts (xylene) and other chemicals including ethylbenzine, heptanes, octane and diethylbenzine.
- Impacts of reduced physical activity e.g. walking, cycling due to traffic. Impacts will affect general health.
- Health impacts will cause a strain on the NHS.
- Who will compensate us for health and well being impacts?
- Impact on leisure pursuits, fracking will remove the enjoyment of a rural life, impacting on cycling and walking activities.
- Contrary to NPPF paragraph 171 as impacts on the Lancashire Cycle Way through the use of Roseacre Road and other roads and lanes in the parish and constitutes a barrier to improving health and wellbeing.
- Residents are worried that if the application is approved, the works will slip like at Preese Hall and the development and disruption will be long term and result in significant health impacts on the community.

- Contrary to NPPF paragraph 144 and Policy SP5 as traffic management mitigations will disperse activity and prejudice village vitality.
- Quality of life will be undermined by threat or reality of earthquakes, contaminants, unsafe drinking water, health impacts, excessive traffic and property damage.

Community

- Contrary to NPPF core planning principles to support the intrinsic character and beauty of the countryside and thriving rural communities.
- Rapid industrialisation of small isolated rural communities.
- Negative impact on a rural community, damage will be immense.
- Fylde residents have not chosen to live in a fracking area, but are having it thrust upon them.
- Need to listen to local people not big business.
- Why frack here and not in London?
- Roseacre, Wharles and Treales are one community not three separate units.
- Development will industrialise Roseacre and Wharles.
- The site is too close to Roseacre and Wharles.
- Significant impact on the rural character of the area with the site situated between two hamlets which form a single community. The development will divide the community in half.
- Close proximity to 18 residential properties and 3 working dairy farms, nearest property is only 200m away.
- Development will cause major disruption and decrease quality of life.
- Contrary to Policy SP9 as it would adversely affect the amenity of nearby residents in terms of fumes, toxic spillage, noise, vibration and landscape character. Outcome for our villages should not be understated.
- Size and scale of the development will impact on the local community.
- Traffic will impact on daily life.
- Contrary to Policy SP9 due to loss of social amenity and social disruption, not able to sit in garden, enjoy BBQs, walk up the road to visit friends, walk the dog, leave windows open on a warm day, listen to birdsong, due to air and noise pollution and HGVs.
- People choose to live in a peaceful beautiful rural community for own and children's benefits.
- Area is popular with visitors, walkers, horse riders, cycle clubs and tourists so unsuitable for this development.
- Charity events held in the area could be at risk, e.g. sponsored sports.
- Development will undermine the work of the Villages in Bloom participants to make the villages a wonderful place to live.
- Significant impacts on rights of way, including noise, emissions, visual impact.
- Why should rights of way be taken away for private profit?
- Development facilitating community tensions.
- The application has caused inequality between the landowners agreeing to works on their land and the community opposing the development.
- Applicant's security team has monitored villagers, impinging our civil liberties.
- People will leave the area.

- If less people live in parish due to movement out and no people moving in, it could result in the loss of local primary schools and will destroy the currently strong and vibrant community that provides health and wellbeing.
- Horrified at impacts of fracking in other communities in America and Australia where it has been allowed.
- In Australia, fracking is not allowed in close proximity to residents.
- Stress on local services and infrastructure.
- Increased building of rental units.
- Cramped space from influx of trucks and equipment.
- Impact from protests

Property

- Moved to house to enjoy surrounding countryside.
- Moved here to be away from built up areas.
- Purchased house for quiet natural beauty which will be lost with excess transport and drilling noise.
- People have a right to good pleasant surroundings and a quality environment.
- Not happy to have a well site on my doorstep for the next 30 years.
- Against our human rights to destroy peace and quiet and our way of life.
- Privacy of residents will be destroyed.
- Fracking under home without consent is contrary to human rights.
- A list of landowners under whose land they intend to drill has not been provided so no permission has been given, this is a legal requirement as the trespass law has not yet been revised.
- House will be uninsurable. Will LCC compensate?
- Insurance companies are refusing to cover for fracking damage.
- Inskip village has running sand underneath making subsistence an issue, fracking will make this worse, creating high insurance premiums.
- People putting homes up for sale to escape the consequences of fracking.
- Disgraceful that the effect on private property values is not a ground to object.
- House equity was to support us in old age, but devaluation will stop this.
- Home will become worthless.
- Houses are becoming unsalable now. Will LCC compensate if unable to sell?
- A number of properties within 2km of the site do not have any foundations.
- More drilling will cause structural instability to many homes.
- Who will compensate us for property damage?
- What indemnity will LCC be given if damage occurs to my property from seismic activity?
- No hope of compensation.

Damage and Compensation

- No assurance that Cuadrilla will accept liability for any damage to properties and the environment. The local authority and the community will have to pay for any damage caused by Cuadrilla.
- Will local authorities be left to clean up the mess when the company has fled and filed for bankruptcy?

- Applications are from subsidiary companies and should be scrutinised by a forensic accountant. No reassurance that the applicant has the financial means to meet their obligations to reimburse residents or the council in the event of an accident.

Abandonment

- No evidence that Cuadrilla have expertise, experience or knowledge of abandonment / restoration works given the wrong timescales applied to previous applications. Need to restore a single well at Preese Hall first.
- No reference in the ES regarding hazards and risk mitigation when lifting and removing the impermeable membrane off site.
- No guarantee that the countryside will be returned to its former state when fracking ceases.
- The site can never be restored to the same condition.
- Contrary to Policy EP24, as wells will just be capped and left forever and 60% fail eventually.
- Who will be responsible for the abandoned wells?
- Lack of maintenance and responsibility for abandoned wells.

Applicant / Application

- Cuadrilla is greedy.
- Cuadrilla previous attempts at fracking failed, this application is madness.
- Cuadrilla have breached previous planning permissions here and at Balcombe
- £100,000 per community is equivalent to £53.00 per household, a small compensation for ruining our lives.
- Trying to bribe with monetary gifts and sponsorship.
- Councillors have been offered money to look at their land.
- Business community in Blackpool has succumbed to a charm offensive.
- Cuadrilla has not provided information when requested by local residents.
- Cuadrilla has not consulted residents of Inskip.
- Cuadrilla has not consulted residents of Catforth about the second preferred transport route.
- Application will have to be split or rejected as PEDL165 has expired and it only permits 1 well to be drilled.
- Cuadrilla community brochure was banned by the Advertising Standards Agency for misleading and unsubstantiated information. Can Cuadrilla tell the truth and be honest at the planning stage?
- The planning application documents including the ES are unreliable as they are full of inaccuracies, incorrect data, discrepancies in calculations and methodology and no constraints plan or mitigation of some impacts.
- No assessment undertaken of cumulative impacts for Roseacre and Little Plumpton

Government

- Government has not provided full information about the shale gas industry to the public.
- Permission should be rejected until fracking is properly debated in Parliament and by the British public in the run up to the 2015 General Election.
- Unacceptable to impose fracking on us by changes to planning and mineral rights laws and publishing reports with redactions, not the actions of a democratic or responsible government.
- Immoral and a corruption of a democratic government to increase use of carbon based fuels.
- Government fiercely oppose shale regulations.
- Government latest fad.
- Financial gain for ministers from mistreatment of the land.
- Do not bow to the wishes of central government.
- Do not accept government bribes.
- Why does Cuadrilla's Lord Browne have so much influence?
- Would David Cameron be so supportive if this was on his doorstep?
- Drill at Downing Street where there is plenty of gas.
- Government not bothered about the north of England and what happens here.
- What right has the government got to subject us to toxic pollution causing ill health and shortening of life expectancy?

Lancashire County Council / Decision making / Policy

- Are LCC for local people or money, profit and big business?
- Is LCC willing to put the lives and health of Lancashire residents at risk for a paltry financial gain?
- Any councillor who votes in favour of this bears the responsibility of the devastation to the local resident's lives and loss of value to the area.
- LCC Councillors should put the health and safety of Lancashire people above everything else.
- Will hold LCC individuals responsible for any health issues or deaths remotely connected to fracking if they allow it to take place in Lancashire.
- Once grant this application, it will set a precedent and lead to more intensive gas drilling in rural Lancashire for many years.
- If approved could lead to over 100 sites across the Fylde, need to carefully consider all implications.
- Any decision on Roseacre should be held until works at Preese Hall have been completed. Cuadrilla have shown complete disregard to the planning system and authority through the need for time extensions for restoration.
- Councillors should be aware that the Elswick -1 site has major differences in size and scale to this application so no comparisons should be made in the decision making process.
- Committee members should not be seduced by the notion of 'exploring' for gas when the works are production and the industry is unsustainable. They cannot allow Lancastrians to be guinea pigs in a cruel experiment.
- Will the planning board include people that actually live here?

- Fylde and Wyre Borough Councils and local people are against fracking.
- Decision should accord with NPPF. The proposal is contrary to NPPF Paragraphs 30,32,36,61,93,97,109,120,123,144,162,171,
- The proposal is contrary to Policies EC5, E5, GD1, EP10, EP11, EP12, EP15, EP16, EP17, EP18, EP22, EP23, EP24, EP26, EP27, EP28, CS4, CS9, DM2, SP2, SP5, SP7, SP9, EMP5
- The application is contrary to the JLMWDF Core Strategy as the activity will not be best practice.

Support

North and Western Chamber of Commerce

- Support shale gas development subject to conclusive evidence that the proposals are unsafe and will cause irreparable damage to the local environment.
- Welcome investment in Lancashire which could create thousands of jobs in the local economy directly through the supply chain and spread beyond that, through inward investment and spin off technologies.
- Help create well paid jobs in Lancashire and help rebalance the local economy and generate wealth.
- The National Transmission System for gas has spare capacity and runs through the county which has excellent road, rail, and air and port infrastructure.
- UCLAN and Lancaster University have considerable energy expertise across a range of disciplines which could benefit from the shale gas development.
- Lancashire is already a leading centre for the nuclear industry and advanced technology and manufacturing and with shale gas opportunities could regain its role as a national economic powerhouse, with Lancashire a centre of expertise for shale gas operations.
- Huge opportunity for Lancashire to use to generate economic growth.
- Following a review of Government, Royal Society, Royal Academy of Engineering, International Energy Agency, Energy and Climate Change Select Committee and Public Health England findings, concluded that if properly and effectively regulated, fracking is no more dangerous than any other form of energy extraction.
- Shale gas extraction would be at low risk to the environment and public health
- Confident that shale gas extraction will be properly regulated and take place safely and responsibly.
- Shale gas in Lancashire would strengthen the UK's energy supply as well as providing a bridge fuel towards a low-carbon future.
- Shale gas in Lancashire would establish Lancashire at the heart of a successful UK and European industry.
- Lancashire's Strategic Economic Plan, prepared by Lancashire Enterprise Partnership (LEP) and endorsed by Lancashire County Council, acknowledged that shale gas sector may play an important economic role in Lancashire within the timeframe of the Growth Deal and the locating of an elite institution in Lancashire for shale gas would be important in establishing the sector both locally and nationally.

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- Important to the local and national economies and for international competitiveness to have energy supply, security, price and supply chain opportunities
- Assurance of energy supply will be a strategic consideration to would-be inward investors.
- Shale gas fills the gap between decommissioning coal and nuclear plants and the ideal of a no-carbon solution
- Shale gas will be a significant buffer against volatile imports
- Lancashire's manufacturing sector could gain from careful use of shale gas resources
- Lancashire's wellbeing and prosperity can benefit

Up to the end of December 2014 a total of 173 representations had been received supporting the proposals both in principle and in respect of the specific impacts that the proposals will generate in the locale. Representations have continued to be received in support of the proposal, the final number of which will be reported when the application is presented for determination.

The reasons for supporting the proposal have been summarised under the following headings:

Energy Security – need, supply and pricing

- UK needs to secure energy reserves as global energy demands increase and reserves decrease.
- Need to reduce reliance on expensive imported gas and associated impacts of supply disruption (due to political unrest) and fluctuating gas prices.
- Need to have a predictable, sustainable source of energy to ensure our energy supply and to stabilise prices.
- Shale gas is critical for future energy strategy.
- Bowland could supply the UK with gas for 23-169 years.
- US shale gas has reduced energy prices.
- If priced correctly shale gas would force competition in the energy market.
- Everybody wants cheaper energy; gas is the cheapest source of energy.
- Shale gas will be potentially vast resource of clean sustainable energy for the UK which could help deliver climate change commitments by substituting for coal in electricity production and thereby reducing emissions of CO₂.
- Need to explore all future energy sources, renewable, nuclear and huge store of natural energy from shale.
- Shale could bridge the gap until we build up renewable and/or nuclear capacity to deliver the quantities we need.
- UK cannot be sustained on renewable energy such as wind or solar power.
- A wind farm requires 200 times as much land as a fracking well site for the same energy output and residents are anti wind farms.
- Prefer to have shale gas than nuclear energy.

Economic benefits

- Need to determine whether or not the gas is in commercial quantities.
- Shale gas development will bring economic growth, wealth, prosperity and jobs to the UK, Northwest and Lancashire economies.
- It's vital to the country's prosperity to exploit our natural reserves and to benefit future generations.
- Energy from a local source will be good for the local economy and could attract high gas consuming businesses to relocate in the region.
- SME business failure may be avoided by stabilising energy costs and by providing new business opportunities as part of the supply chain - energy services, components, education/training, hospitality, property.
- Federation of Small Businesses support the proposal as an economic driver for the region, creating jobs and wealth and securing future energy needs. Rising energy costs are a concern so shale gas could help tackle that.
- Shale gas exploration will provide increased potential for local business growth and revenues and provide employment for local people.
- Shale gas could be a catalyst bringing in inward investment and regenerating Lancashire and Blackpool.
- This opportunity should be welcomed and not lost to other counties and countries. Shale gas could transform Lancashire like North Sea oil/gas has done for Aberdeen.
- Fylde Borough Council and Lancashire County Council will benefit from tax revenues, which could help pay for public services and infrastructure.
- Investigation works have already provided significant business to the accommodation sector in and around Blackpool with knock on impacts.
- This is an opportunity to change the region from high unemployment and no industry, to an innovative area that supports new industry and is a leader of new technology within the energy sector.
- Without shale gas, what is the economic future for Lancashire and Blackpool, Blackpool has high levels of deprivation, child poverty, poor health, benefits dependency and youth unemployment.
- Fylde coast has an over dependence on declining agriculture and tourism sectors with a transient, seasonal, low paid, unskilled, migrant workforce.
- Shale gas provides economic diversity through new industrial activity, generating skilled permanent jobs and youth employment opportunities, directly or indirectly through the supply chain including engineers, apprentices.
- If shale gas development is not allowed in Lancashire, but develops elsewhere, Lancashire will miss out on revenue and employment generated by supply chain businesses.
- New jobs essential for Fylde coast.
- The energy industry creates jobs and prosperity on a grand scale.
- Job prospects for future generations will help stop them having to move away.
- Every aspect of the community will benefit, including people struggling to pay gas bills through cheaper gas prices.

Minimal Environmental Risks

- Environmental impact of shale gas is less than any other energy source, mineral and coal extraction has a far larger impact on our environment.
- Shale operations are sustainable, non-polluting and can be undertaken with minimal risk to the environment.
- Shale gas development has been safely undertaken in America for 10 years.
- The process of rock fracturing and its waste products have been intensely investigated and proven to be totally safe.
- Reports by the Royal Society, the Royal Academy of Engineers and other academics have concluded that shale gas is safe.
- Out of approximately 8,500 wells in the UK none are leaking. Repairs can be made by squeezing methods. There have been internal leaks in well called well barrier leaks but these are not integrity issues.
- The exploration site will not have a measurable difference on impacts to designated ecological sites. They will be at no greater risk than from general risks from other industry and infrastructure.
- Cuadrilla's breach of planning permission at Balcombe was due to a slight noise excess of 6dB which is not dangerous and immediate action was taken.
- Flaring will be done in a fully enclosed, high efficiency, low light and noise burners which will have minimum impact, and will be temporary in nature. Once pipework is installed, green completions with no flaring will be used. The Elswick gas well is not flared and virtually invisible.
- The drainage, required by the Environment Agency, from the chemical and waterproof well pad is of rainwater and will contain any spills. Runoff is disposed of under licence from the EA after testing that it is not polluted.
- Comments that the geology of Lancashire is not suitable for fracking have been provided by a professor who retired 18 years ago and is now living in France running a B&B. Evidence in the US and UK is to the contrary.
- The Traffic Light System for seismic monitoring has been devised after much research by expert geologists and the British Geological Society and with the agreement of DECC.
- Shale will not generate large earthquakes as it is a soft rock. After over 1 million shale frack jobs, only 3 have resulted in detectable earthquakes. Cuadrilla's well was one of the unlucky ones. None have caused proven damage.
- Many claim that fracking causes serious quakes in the USA. However these are not fracking, but waste water injection, which is banned in the UK.
- Reports linking fracking and health impacts are not published medical papers and the results are dismissed by local health authorities. These studies cite chemicals that are not permitted anywhere in the EU. The fluid storage methods used in the US are also not permitted here. Open pits can split or flood and volatile materials and gas can escape. That's why they are banned in the EU/UK. Even if the studies were valid, they would not be relevant to the UK.
- The predicted well spacing in Lancashire in full production would be 1 x 4 acre pad every 5km. horizontal drilling and 24 wells per pad mean very little visual impact. The pictures produced by RAFF are not representative.

- Treatment of waste is covered by the EA by licence and they are minded to approve the plans. A local company has a cleaning technique that will ensure this will happen. Much of the flowback fluid may be reused.
- The water required even for a fully developed industry is a tiny fraction of one percent of the water produced in the UK. Farming and industry are much bigger users. It's all covered by agreements with Water UK and in a drought water would not be supplied. This is not an issue for the drillers. They don't have to frack a well as soon as it's drilled. They can drill another one and wait till the rains all start again. This is a non-issue.
- Sites are fairly remote, once infrastructure is in and the rigs etc have gone there will be no visual issues so why should they affect property values.
- The Infrastructure bill, currently being debated in Parliament, will require a fund to cover any damage or problems that occur if the company goes bust so locals do not have to pay.
- Long term impacts for the area are minor, buried pipes and some fenced off areas in a wood, will help heat thousands of homes with UK produced gas and provide feedstock for chemical and pharmaceutical companies. These are major industries in the UK that are being squeezed by high energy costs.
- Security of energy, economic benefits and job creation far outweigh any supposed environmental risks, minimum disruption or inconvenience.
- Environmental costs will be imperceptible and of no significance to health and wellbeing of communities in and around the proposed developments.
- Lancashire experiences natural geological processes/earth tremors; shale gas will not significantly increase the incidence.
- The possibility of any localised pollution is the same as any other industrial or agricultural business.
- The development footprint of a producing gas well is minimal.
- Drilling rigs will be no more visually intrusive than large electric pylons and site lighting will be no more visually intrusive than airport approach lights.
- The noise of drilling will be low compared with noise of jet aircraft at Warton.
- Vehicle movements are less than to quarries/waste disposal sites and vehicle sizes are no greater than large farm equipment used by local farmers.
- Routing of traffic will be controlled by planning conditions and the use of byways for cycling will not be impaired.
- Environmental concerns raised by professional protesters have been overstated / inaccurate, to scaremonger local communities to oppose.
- Opposition viewpoint over-emotional, ill informed and nimbyism. Adverse factors identified by objectors have no scientific credibility.
- Silent majority support the proposal, cannot let activists jeopardise new jobs.

Robust Regulatory framework

- Exploitation of shale gas in Lancashire is safe and will avoid environmental impacts if environmental protection measures are implemented to best practice standard and monitored and controlled by regulatory bodies.
- Regulations, enforced by Lancashire County Council, the Environment Agency, the Health & Safety Executive and DECC/Government will ensure that the process is safe and safeguards protect the environment.

- The Environment Agency is convinced that shale gas activities can be carried out safely and will monitor the development in the short and long term.
- The UK has 60 years of regulating onshore and offshore oil and gas industries
- The UK has some of the toughest and most stringent health and safety, environmental and drilling regulations and the gas industry prioritises safety, environmental protection and competence.
- Scientists/engineers located in Lancashire are confident with the process, regulations and limited risks to the environment.
- Public scrutiny and implementation of regulations will ensure the safe and responsible extraction of shale gas.
- Cuadrilla is open and informative about their development and is aware of its responsibilities with regard to safety, environmental management and working with local communities.
- At Annas Road site, Cuadrilla kept residents well informed, noise was minimal (similar to light aircraft /farm vehicles), increased traffic was negligible and there was no noticeable smells or gases.
- Small generation plant at Singleton has been running reliability for over 20 years off shale gas without people being aware of its existence.