Submission to MWJP EiP from Ryedale Liberals
Response to Draft Matters, Issues and Questions (MIQs). Q54-63

Matter 1. Minerals.
Hydrocarbons.

54. Briefly explain how the section of the Plan that deals with hydrocarbons is consistent with national policy.

1.1 Ref Ryedale Liberals 11. Your ref 3846/0971/5.121/LC.U.DTC
MWJP appears to still ignore national policy.

1.2 Ref Ryedale Liberals 5. Your ref 3846/0975/5.127/LC.U.DTC
In response to the MWJP, '….it may be acceptable to drill under the national park from outside it'. We don't remember the consultation with all those towns and villages just outside the NP asking how they felt about there being an industrial site to extract hydrocarbons from under the NP in their vicinity. This also disagrees with the NPPF about not harming one area to benefit another.

1.3 Ref Ryedale Liberals Appendix 3. Your ref 3846/0976/M16/LC.U.DTC
Our original submission still stands. Lack of harm does not enhance the environment.

55. Does the Plan set out a clear and readily understandable policy structure for hydrocarbons?

See Appendix 7.

2.1 No. With all other minerals there seems to be a 'where you can' or 'where you can't' approach. Hydrocarbons (particularly hydraulic fracturing) appears to be much more 'put in a planning application and we will consider it'. This may be appropriate for the first VERY FEW, but as soon as the impact of the fracking process, both singular and cumulative, can be assessed, then a policy structure must be put in place. For example, fracking may not occur more than x miles from an A road, y miles from a B road, less than z metres from a population of xx. Once ~~British~~ English experience is gained, a readily understandable policy structure should be possible.

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56. Taking account of the Written Ministerial Statement of 16 September 2015, does the hydrocarbon section of the Plan provide the right balance between supporting appropriate hydrocarbon development (taking account of economic and social benefits) and protecting the environment and sensitive receptors from its potential impacts?

3.1 Amber Rudd gave a strong voice to support shale gas exploration that was based on 7 of eleven reports involving DECC[1]. A further study was commissioned by the oil and gas industry and the Business and Enterprise Department of Government. None of the references involved peer review and thus could be considered 'grey literature'.
The NPPF requires sustainability in planning. That definition should have due regard to the report published in 2013[2], requested by DECC, which stated the global warming potential of methane and actual methane loss has been underestimated.
Protection for communities is expected because of the government claims that if fracking is well regulated it will be safe. This is an unconvincing argument that suggests the need to enact the Precautionary Principle advised by the Environmental Audit Committee[3].

3.2 The MWJP repeats the offer of money for affected communities, who would therefore be considered to be disadvantaged by the industry. There are reassurances but little evidence of protection for communities such as adequate setback distances or public health studies to assess impacts, for good or bad.

3.3 The NPPF is clear in its definition of sustainability – its golden thread running through the planning system. It involves using sound science responsibly. Much of the evidence offered to support the fracking industry fails to respect this principle[4].

1 https://questions-statements.parliament.uk/written-statements/detail/2015-09-16/HCWS202

2 gov.uk/government/uploads/system/uploads/attachment_data/file/237330/MacKay_Stone_shale_study_report_09092013.pdf

3 https://publications.parliament.uk/pa/cm201415/cmselect/cmenvaud/856/85607.htm

4 gov.uk/government/uploads/system/uploads/attachment_data/file/69412/pb10589-securing-the-future-050307.pdf

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57. Should there be specific policy provision within the hydrocarbon section of the Plan covering the potential impact on climate change? Are the policies consistent with NPPF paragraph 94 requiring local planning authorities to adopt proactive strategies to mitigate and adapt to climate change?

4.1 Yes there should be a specific policy.

4.2 The policies are not consistent with paragraphs 93 or 94 of the NPPF. The plan as it stands does not reduce or mitigate climate change. As presently drawn up it exacerbates climate change. There is now a clear need for evidence and for urgent attention to issues around climate change. As a completely new source of fossil fuel, fracked natural gas would have to contribute significantly less greenhouse gas than existing fossil fuels. The Committee on Climate Change assessed that three measures to mitigate climate change impacts of shale gas must be implemented[5]. Therefore, the planning authority MUST demand monitoring of methane leakage and require Green Completions[6]. The lifetime carbon footprint of fracking could be worse than coal.

4.3 Current MWJP strategies do not go far enough to minimise emissions and flaring. There should be flaring as a safety measure only, with Green Completions as the norm. NYCC must calculate the lifetime carbon footprint of fracking for each application. NYCC must be informed by peer reviewed literature on climate change and fracking. Evidence points to leaks from active and disused offshore wells venting methane into the sea and to the air[7]. Methane leakage from the oil and gas industry is also apparently much worse than previously thought[8].

4.4 Methane is 72 times or more potent as a greenhouse gas than CO2 over a 20 year period[9].
As UK engineering leaks methane from an offshore gas field, in UK geology, and under UK regulations, then onshore may be similarly polluting. This is a compelling reason to monitor methane escapes from all processes associated with hydraulic fracturing.

5 https://www.theccc.org.uk/wp-content/uploads/2016/07/CCC-Compatibility-of-onshore-petroleum-with-meeting-UK-carbon-budgets.pdf

6 gov.uk/government/uploads/system/uploads/attachment_data/file/237330/Mac Kay_Stone_shale_study_report_09092013.pdf section 5 a)

7 https://pubs.acs.org/doi/abs/10.1021/acs.est.7b02732

8 nasa.gov/feature/jpl/nasa-led-study-solves-a-methane-puzzle/ (URL no longer available)

9 https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter2-1.pdf

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58. Should there be a distinction in Policy between conventional and unconventional hydrocarbon extraction?

See Appendix 2

5.1 There should be distinction in Policy between unconventional and conventional gas extraction, with different spatial regulation and monitoring. High volume high pressure fracturing involves a more intense industrial practice than conventional. Large quantities of water are used at pressures up to 4.5 UK tons per square inch. Drilling is on a larger wellpad and can involve multiple wells and laterals. This leads to longer duration of activity which can be noisy, polluting and will therefore be accompanied by greater vehicle numbers and journeys, light pollution and community impacts. Risks of air pollution and challenges to the environment – water, wildlife and human health are of a different order of magnitude. The likelihood of wells leaking is much greater with more complex wells with a deviated track, deeper location, very high pressures during fracturing and multiple perforations[10].

5.2 In fracturing the shale layer, a wide range of compounds are disturbed and conveyed to the surface. These include Naturally Occurring Radioactive Materials (NORMs), heavy metals, complex organic compounds and previously unknown bacteria[11]. If this returned flowback fluid is to be reused and sent back down the well under intense pressure there will be further impacts on the linings, joints and valves encountered. Raised temperature and pressure speeds chemical reactions. These conditions are normal characteristics of a deep fracking well.

5.3 The requirement for fracking chemicals is that they should be Non-hazardous to Groundwater. Water that contains toxic heavy metals, novel organic compounds, unknown bacteria and a wide range of chemicals and NORMs is clearly not non-hazardous to groundwater. All of the above concerns are associated with unconventional hydraulic fracturing vastly more than conventional gas extraction. This is why there should be a clear distinction in policy between conventional and unconventional hydrocarbon extraction.

[10] pnas.org/doi/10.1073/pnas.1323422111 (URL no longer available)
[11] https://www.nature.com/articles/nmicrobiol2016146

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59. Should there be more flexibility in dealing with potential exploration, appraisal and production of unconventional hydrocarbons in the North York Moors National Park, particularly as some Petroleum Exploration and Development Licenses (PEDL) lie within the National Park?

See Appendix 4.

6.1 This is central to the NPPF and Sustainability. Should we frack in the remote areas of the National Park and upset the views and sheep, or should we frack outside the park where most people live? Do we impact people or the Park? It is an impossible choice that the Secretary of State clarified in discussion about sustainability[12]. In essence the view was that all three aspects of planning should be addressed and enhanced and that benefit in one area could not be allowed to disadvantage either of the other aspects – economy, social or environment[13]. On this logic it is totally wrong for the population around the outskirts of the Park to be close to the industry enabling fracking to take place under the Park. If fracking is to take place at all, then it should be (at least initially) as far away from people as possible.

60. With respect to Policy M16 (Key spatial principles for hydrocarbon development) briefly explain the reasons for choosing a distance of 3.5km for the AONB/National Park buffer zone in Part d) of the policy and how this is intended to work in practice. Is this the most appropriate distance for such a buffer?

7.1 The 3.5 km buffer has no sound scientific basis we have seen to date, we will comment if given sound science on which to base our views.

12 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf introduction by Greg Clark

13 https://publications.parliament.uk/pa/cm201012/cmselect/cmcomloc/1526/152607.htm

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61. With respect to Policy M17 (Other spatial and locational criteria applying to hydrocarbon development) part 4) and paragraph 5.146 does the 500m buffer around residential and other sensitive receptors strike the right balance between development and protection? Should there be more flexibility in separation distances and should this be dealt with on a site by site basis (PPG 27-018-20140306)?

See Appendix 8 and 13

8.1 This is a novel industry which only started to grow in 2004/5 in the USA. DECC recognised there had only ever been one onshore frack in the UK. We have no experience to draw on. We should therefore err on the side of caution. This is an experiment in UK regulation and engineering with the local geology. A cautious approach should be adopted until we know the risk and therefore the evidence base for setback distances. Initially the distance from people and institutions should be based on the risk of an explosion or significant unexpected leak. As evidence increases the distance may be reduced. We should measure the air quality, light, noise, vehicles, vibration, water and accidents to get an evidence base with our geology, population and engineering skill, regulators and regulations. As the NPPF suggests – by using sound science responsibly. That is evidence based, not aspirational or promotional. Evidence must be peer reviewed and not from the 'grey literature'. In the meantime, we should have plans and practice for the emergency services to prepare for a well pad emergency. This should include a system to warn local residents and to ensure a satisfactory emergency evacuation route and process.

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62. Is the possible requirement of a financial guarantee in Policy M18 (Other specific criteria applying to hydrocarbon development) part 2) iii) for unconventional hydrocarbon development justified due to its novel approach or techniques? (PPG 27-048-20140306)

See Appendix 9

9.1 In event that the company may not be able to pay, there is a need for a financial bond set aside to cover

1) Any mishap during exploration through to production
2) The cost of restoration at abandonment
3) Long-term monitoring/remediation after abandonment

9.2 The above bond does not remove the need to have comprehensive insurance cover. The insurance cover for the company must be sufficient to cover the estimated cost of accidents and adverse impacts. It must be part of the regulation of the company's financial status that adequate insurance cover is maintained.
The calculation of the bond and insurance cover is clearly complex and specialist and it should be outside the scope of the MWJP.
It would be entirely appropriate for UKOOG to establish a centrally funded bond in a secured independent account.

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63. Has sufficient consideration been given to the potential impact on the strategic road network from hydrocarbon development and are there any outstanding concerns from Highways England or the Highways Authority?

See Appendix 6

10.1 We have one traffic management plan in place. It does not appear to have been complied with or enforced. In future all our comments in relation to M17 1 i (a) need to be given further consideration. In addition, the planning, acceptance, delivery and enforcement of TMP's must be vastly improved.