

## Planning Policy

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**From:** Peter Jaggar [REDACTED]  
**Sent:** 14 January 2018 23:53  
**To:** Planning Policy  
**Subject:** New Minerals Plan : Issues and Options Consultation  
**Attachments:** FFN Submission on Mln Plan Issues&Options 1-18.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Please find attached the representations in connection with the above Consultation that I have compiled on behalf of Frack-free Nottinghamshire.

Perhaps you could acknowledge receipt and keep us informed re. future stages of the Plan.

Regards, Peter Jaggar

PS. You will have my contact details from submissions for the previous Plan (and applications).

## **Submission from Frack-free Nottinghamshire: Comments upon New Nottinghamshire Minerals Plan – Issues & Options Consultation (Jan 2018)**

Thank you for the opportunity to comment on this additional review of the Minerals Plan (covering the period from 2020 to 2036). It is disappointing to note that so much previous work by council officers, mineral operators and other interested parties has been abandoned ahead of this repeat exercise - which it seems was solely at the whim of the incoming Council in 2017 and regardless of the considerable public expense.

These comments are written on behalf of Frack Free Nottinghamshire (FFN) which is part of a national movement that opposes unconventional hydrocarbon extraction by means of hydraulic fracking. It acts as an umbrella/support group for other more local frack-free campaign groups across the county. These comments are based on a briefing note presented to and approved by a meeting of FFN on 11<sup>th</sup> Dec 2017.

FFN took part in the previous consultation and will seek to repeat and enlarge upon its position as relayed in 2015-16. We regret that there was no reasonable attempt by the County Council to respond to our concerns raised then, and inadequate coverage of them in the Report of Consultation, resulting in no changes being made to the policy approach that became MP12.

The question in the Consultation most relevant to the control of fracking for hydrocarbons in Nottinghamshire is:

### **Q24: Are you aware of any issues relating to hydrocarbon extraction that should be considered through the Minerals Local Plan review?**

We urge the Plan to take into account the following points relating to unconventional hydrocarbons:

- Hydraulic fracturing (or fracking) of deep-lying shale rock to release gas is at odds with a legal requirement for Plan policies to reduce climate emissions (Planning & Compulsory Purchase Act 2004, s19(1A)). Methane is a fossil fuel whose use as an end product as well as its complex extraction process will inevitably generate carbon emissions and give rise to leakage of this most damaging of greenhouse gases.
- A separate policy is needed to highlight the wider uncertainties, especially the extent of community impacts, and the particular problems of scale associated with exploiting unconventional hydrocarbons. During the plan period, if companies such as Ineos and IGas are given permissions, it is conceivable that large parts of Notts could be turned into extensive gasfields – exploiting shale gas located in northern and south-west Notts and coal bed methane in eastern Notts.
- The risk of contamination of the Sherwood Sandstone Aquifer should lead to a precautionary or minimal tolerance approach in order to safeguard crucial groundwater supplies and affected water courses from leakages that can occur when deep-drilling and pumping, and from surface spillage.
- The risk of earthquakes, compounding existing seismic risks from previous coalmining activities. NB. Tremors are already widely recorded in central Nottinghamshire. The biggest threat from earthquakes is damage well linings that would allow the leakage of toxic fluids and gases.

- The potential for industrialisation of the countryside if test drilling and initial fracking is successful in exploiting economic reserves of shale gas should be fully recognised by the Minerals Planning Authority (MPA). The process will give rise to a very different landscapes than conventional exploration since it involves highly intensive activity with wellpads spread over a wide area - note Ineos' briefing in a tender document showing up to 420 wells in each 10km square licence area (30 wellpads with up to 14 horizontal wells(drills?) from each wellpad. See: <http://frackfreeryedale.org/wp-content/uploads/2016/05/INEOS-online-ad-for-Seismic-Survey-Contractor-06.05.16.pdf>). This will require extensive infrastructure, especially roadways, pipelines, telecommunications etc as well as the wellpads themselves.
- Shale is not porous so the gas (and perhaps oil) that it contains does not flow to the well. To drain an extensive area it is necessary for fracturing to create artificial porosity which can only be achieved by locating well pads every few miles. Thus the scale of development can grow exponentially and will become physically prominent as well as environmentally damaging –which FFN insists should prompt a separate or fuller policy to afford proper protection to Nottinghamshire's affected communities.
- The intense activity generated by even a few wellpads can lead to widespread atmospheric pollution and a gasfield haze –caused by a 'cocktail' of ozone, BTEX (benzene, toluene, ethylbenzene, xylene), and diesel fumes from heavy vehicles and generators which will include particulates and nitrogen dioxide. Clearly the venting of carcinogenic gases such as benzene and toluene, as well as radon which is radioactive, may be a direct threat to public health.
- Recent peer-reviewed studies in the USA and Australia have shown evidence of wide-ranging harm to the local environment and local health, most of which cannot be mitigated. See Background Information below.
- Large quantities of water will be required for fracking. Large quantities of toxic waste water will also be generated, possibly contaminated with 'naturally occurring radioactive material'. Both the source of such water and appropriate disposal facilities will need to be guaranteed – recognising the significant environmental harm that both will involve.
- There will be disruption to a number of employment sectors including farming and tourism – almost certainly more jobs will be lost than the few local jobs that might be created in the fracking industry in compensation.
- The planning authority has a responsibility to check that other regulators will be able to do their job. Planning Practice Guidance (Reference ID: 27-112-20140306) advises that : "before granting planning permission, MPAs will need to be satisfied that these issues can or will be adequately addressed by taking the advice from the relevant regulatory body: ...Mitigation of seismic risks...Well design and construction...Well integrity during operation...Operation of surface equipment on the well pad...Mining waste...Chemical content of hydraulic fracturing fluid...Flaring or venting...Final off-site disposal of water...Well decommissioning/abandonment..."  
Planning conditions should be used to ensure these issues are adequately addressed, particularly to protect ground and surface water and to minimise the impact on the causes of climate change for the lifetime of the development.
- The business risks involved in fracking are considerable. The MPA should not assume that companies will be viable enough to take responsibility for any long term problems which may be caused, recognising that:

- a) fracking companies all over the world have had difficulty making profits, including in the USA, and a history of losses and capital restructurings among the shale gas operators like IGas;
- b) the capital costs of fracking/developing unconventional gas fields are high and many of the companies involved are highly indebted - there being a doubt that they would be able to operate at all were it not for low interest rates/quantitative easing in the USA and the UK. Also, to avoid legal or planning enforcement action, companies have been known to sell their remaining assets (and with them their responsibilities for cleaning up sites) onto smaller companies that then go bankrupt;
- c) fracking companies in other countries have used a way of dumping their financial problems onto the public purse by abandoning sites, and there is every reason to suspect that this would occur in the UK and Nottinghamshire too;
- d) the size of companies is no guarantee of their future solidity - for example, although Ineos is a very big company, its bonds are rated "Ba3/BB" - "... a bond rate which is generally considered speculative in nature and not considered to be investment-grade bonds suited for people wishing to avoid the risk of losing their principal."

FFN believes that the County Council should be guided in its plan-making by the approach adopted in the North Yorkshire Minerals & Waste Joint Plan. In particular, we recommend that the North Yorks definition\* of 'hydraulic fracturing' and 'unconventional hydrocarbons' is used and that its more comprehensive policies covering hydrocarbon development be regarded as an exemplar. \*See <https://www.northyorks.gov.uk> Publication Draft para.5.119

Although this is an early stage of the planning process, FFN urges the MPA to challenge the English Government's highly supportive approach to the extraction of shale gas by unconventional methods. Instead it should develop a more independent policy which, mindful of the climate crisis and the severe adverse impacts that fracking can inflict upon the county, treats proposals for increasing fossil fuel dependency with extreme suspicion. It should bear in mind that, after comprehensive studies in Wales, Ireland, Scotland, Germany and New York State (to name a few), fracking has been banned or subject to indefinite moratoria. See Background Information below.

Thus we would recommend that the policy requires applicants to demonstrate beyond all reasonable scientific doubt that the risks of provoking seismic activity, disturbing the natural environment and causing damage to air/water/landscape quality as well as to human health and business viability, can all be eliminated. This should apply to exploratory operations as well as full scale extraction, and place a duty on the applicant to show that the proposal will not release significant emissions of greenhouse gases and can be supported by a sizeable public insurance bond in case of a major pollution incident or abandonment prior to the satisfactory completion of restoration measures.

**Q25: Do you agree with the proposed development management policy areas? Are there any others that should be covered?**

FFN believes it is important that criteria to define the 'acceptability of adverse impact' upon communities/ecosystems etc for many of the development management policy topics is set out in the Plan. This will allow some thresholds to be established and the interpretation of 'acceptability' by different regulatory bodies or committees or individual officers to be less variable. In addition, we propose another topic which should surely target 'the risk of releasing greenhouse gases' if the aim of tackling climate change effectively is to be met.

## Some Background information

- The State of New York's Department of Environmental Conservation considered the available information on potential environmental impacts of high-volume hydraulic fracturing and possible mitigation measures and concluded (in June 2015): "In the end, there are no feasible or prudent alternatives that would adequately avoid or minimize adverse environmental impacts and that address the scientific uncertainties and risks to public health from this activity. The Department's chosen alternative to prohibit high-volume hydraulic fracturing is the best alternative based on the balance between protection of the environment and public health and economic and social considerations." (2015 SEQR Findings Statement, page 42: [www.dec.ny.gov/energy/75370.html](http://www.dec.ny.gov/energy/75370.html) )
- UK government policy and guidance on high-volume hydraulic fracturing is based on out of date research, such as the Royal Society/Royal Academy of Engineering review (July 2012) and a report by Public Health England (although this was published in June 2014 it was not significantly changed from a 2013 draft which was based on evidence available upto 2012). This ignores more than 80% of the peer reviewed scientific literature on the environmental and health impacts of shale gas development which has been published since 2012: [www.psehealthyenergy.org/our-work/shale-gas-research-library/](http://www.psehealthyenergy.org/our-work/shale-gas-research-library/)
- And only one out of 10 recommendations of the RS/RAE review had been implemented in full after 2 years: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)60888-6/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)60888-6/fulltext)
- Definition of site boundary must include (in 3-D) the full extent of any horizontal drilling underground. (As required by Town & Country Planning Act 1990 s55(1) which defines "development" to include "... building, engineering, mining or other operations in, on, over or under land ...")
- The Water Framework Directive requires a precautionary approach, particularly to protect groundwater from all contamination ([http://ec.europa.eu/environment/water/water-framework/info/intro\\_en.htm](http://ec.europa.eu/environment/water/water-framework/info/intro_en.htm)). Particular care will be required to protect Sherwood sandstone aquifers used for drinking water and agriculture, and particularly in the former coal mining areas which are already subject to minor earthquakes.
- Regulatory failures include a failure by the Environment Agency(EA) to prevent Cuadrilla from dumping fracking wastewater from Preese Hall (containing radioactivity) into the Manchester Ship Canal. And Michael Hill, an engineer involved in Cuadrilla's fracking at Preese Hall, tells us that "the only well to have been fracked in the UK suffered an integrity failure that the HSE were not aware of for up to 3 years, suffered damage to the casing due to unpredicted induced seismicity caused by the fracking, which neither HSE nor the DECC were aware of for over 12 months, was never inspected once by the HSE for well integrity, which may or may not have leaked into the surrounding formations (we do not know because the EA have not checked) and which has now been abandoned." [http://media.wix.com/ugd/b0aabf\\_5902a55b06fd4338a56db38dd8687240.pdf](http://media.wix.com/ugd/b0aabf_5902a55b06fd4338a56db38dd8687240.pdf)
- A review of evidence on regulation by Watterson & Dinan of Stirling University (October

2016) concluded (<http://www.regulatingScotland.org/report/frackingandregulation.pdf>):

- (1) the evidence base for robust regulation and good industry practice is currently absent. There are multiple serious challenges surrounding location, scale, monitoring and data deficits facing regulators overseeing onshore UGE and fracking in the UK;
  - (2) the evidence from peer-reviewed papers suggests fracking in the UK will not be effectively regulated. It is highly likely that regulatory agencies may lack the staffing and resources necessary to monitor and enforce effective regulation of the industry;
  - (3) US and UK peer-reviewed analyses and EU law identify both the precautionary principle and prevention as keys to dealing with fracking. This is underpinned by findings from the peer-reviewed public health literature that already identifies significant hazards and major potential risks from the industry.
- A number of countries have banned fracking or introduced moratoriums, including Scotland: [www.parliament.scot/parliamentarybusiness/report.aspx?r=11127&i=101486](http://www.parliament.scot/parliamentarybusiness/report.aspx?r=11127&i=101486)
  - Underground coal gasification should not be permitted. This technology has been tried in the 1950s in the UK – prompting questions in Parliament about ‘noxious fumes over a wide area’: <http://hansard.millbanksystems.com/commons/1955/nov/28/underground-gasification-experiments> More recently a pilot facility operated in Queensland Australia by Cougar Energy was shut down due to potentially carcinogenic pollution including benzene and toluene emissions. Another UCG facility operated by Linc Energy was found to have contaminated hundreds of square kilometres of agricultural land in South East Queensland: [www.abc.net.au/news/2015-08-10/linc-energy-secret-report-reveals-toxic-chemical-risk/6681740](http://www.abc.net.au/news/2015-08-10/linc-energy-secret-report-reveals-toxic-chemical-risk/6681740) Gasification of coal is the process which used to be operated at gas works and coking works. In many cases the resulting contamination is still being cleared up.
  - The most comprehensive review of peer reviewed studies on the impacts of fracking has been produced by the Concerned Health Professionals of New York. The fourth edition dated November 2016 (<http://concernedhealthny.org>) lists the following emerging trends:
    - 1) regulations are not capable of preventing harm
    - 2) fracking threatens drinking water
    - 3) emissions contribute to toxic air pollution and smog (ground-level ozone)
    - 4) public health problems, including occupational health and safety, are increasingly well documented
    - 5) natural gas is a bigger threat to the climate than previously believed
    - 6) earthquakes are a consequence in many locations
    - 7) fracking infrastructure poses serious potential exposure risks for both workers and residents, including exposure to ‘naturally occurring radioactive materials’
    - 8) risks in California could be affecting food crops
    - 9) economic instabilities of fracking further exacerbate public health risks
    - 10) fracking raises issues of environmental justice
    - 11) health care professionals are increasingly calling for bans or moratoria until the full range of potential health hazards from fracking are understood.