From: Susan Howard
To: Planning Policy
Cc:

Subject: Nottinghamshire Minerals Local Plan - Responses and Argumentation from Frack Free Misson and Frack Free

Isle

Date:11 October 2019 12:29:37Attachments:Minerals Plan Submission Final.docx

## Dear NCC Planning,

Please find attached responses from Frack Free Misson and Frack Free Isle to Nottinghamshire Minerals Local Plan.

Numbers of those represented, together with the names of those who would attend any hearing sessions are detailed at the bottom of our submission.

Please could you acknowledge receipt of this submission, made prior to the deadline.

Yours faithfully, Susan Howard and Liz Harvey

# <u>Submission by Frack Free Misson and Frack Free Isle to Nottinghamshire County Council on proposed</u> Minerals Plan

Frack Free Misson's response to Nottinghamshire Country Council Minerals Local Plan Publication Version 30<sup>th</sup> August 2019 – 11<sup>th</sup> October 2019 is focussed on fracking. The extraction of all fossil fuels has huge environmental impact, and fracking brings additional environmental concerns. This is diametrically opposed to UK Policy on the reduction of carbon emissions. We believe that this plan is not "sound". We have listed our reasons below.

- Policy MP 12 Oil and Gas section 4.108 NCC has excluded consideration of a separate fracking
  policy and failed to comply with the current national policy on climate change. Shale gas is
  extracted by unconventional means and is very different from conventional oil and gas
  extraction. Therefore NCC should take a more precautionary approach and have a separate
  Policy within their Minerals Plan to cover fracking.
- 2. Nottinghamshire Minerals Local Plan Sustainability Appraisal Report May 2019 Policy MP12 Oil and Gas Pages 185-187. We have stated previously that fracking should be covered by a separate Policy. It is quite clear that reference the extraction of fossil fuels, it is impossible to mitigate or avoid areas of vulnerability to climate change.

#### **POLLUTION**

- 3. The potential to contaminate aquifers has been explored in the USA. The US Environmental Protection Agency (EPA) summarised that 'the co-location of hydraulic fracturing activities with drinking water resources increases the potential for these activities to affect the quality and quantity of current and future drinking water resources." The EPA study reviewed hundreds of confirmed water contamination cases from drilling and fracking. Any sign of drinking water contamination signals a public health crisis.
- CHEMTrust Briefing from July 2015 "Fracking Pollution: How toxic chemicals from fracking could affect wildlife and people in the UK and EU" lists the main potential pathways of water and land pollution from fracking –
  - accidental spillages during mixing and transportation of drilling and fracking chemicals
  - leaks from failure or inadequacies of well casings in the upper part of the well. A large number of pollution events have occurred this way in the USA, allowing methane and fracking chemicals to migrate into groundwater, drinking water and nearby properties, sometimes causing explosions, evacuations and necessitating the replacement of water supplies.
  - Escapes via fissures in the rocks
  - Leaks from storage, and during transportation of flowback water
  - Inadequate treatment of flowback water prior to discharge
- 5. CHEMTrust Briefing from July 2015 states that fracking presents greater cumulative risks to public health and the environment that conventional drilling due to
  - the chemicals required
  - the large volumes of water required
  - the additional contaminants in the flowback
  - the need for many transport movements
  - the larger number of wells needed to reach a similar level of production

- 6. CHEMTrust Briefing Fracking is a source of air pollution caused by
  - evaporation from fracking fluids including any stored flowback
  - emissions from the flaring and treatment of gas
  - diesel fumes from the constant running of pumps, generators, compressors, and from heavy vehicles transporting large volumes of water and wastewater to and from the fracking site
- 7. Ethane is a dangerous greenhouse gas. In 2010 a sensor in Europe picked up a surprise increase in ethane, when levels have been falling since 1980s. Fracking boom in the US was suspected and air testing over the Bakken oil and gas field in North Dakota was found to be emitting 250,000 tons (125,000 tonnes) of gas. This is from just one field. Ethane is used in plastics manufacturing. Full report in the Independent newspaper 29/4/2016.
- 8. Expert monitoring of the IGas Springs Road site on 12/2/2019 by ITC certified optical gas imaging thermographer using FLIR GF 320 camera clearly shows gas emissions from the site stack streaming over the countryside during the exploratory drilling phase. This is a major concern to us in North Nottinghamshire, and should be to NCC. Earthworks video may be viewed on YouTube https://youtu.be/VToXD\_-B2Kg
- 9. At the Westminster Forum in April 2019 concerning Unconventional Oil and Gas Market in the UK, IGas' Development Director Ross Glover set out company vision for back-to-back shale development. This is for 4 or 6 well pads, with 10 wells on each, with constant movement of construction and drilling equipment between sites. The scale of commercial fracking should not be underestimated. We believe that NCC should therefore consider North Yorkshire's Draft Minerals and Waste Plan and include protections for fracking proposals -
  - defining hydraulic fracking as any fracturing which allows gas to flow
  - a minimum separation distance of 500 metres from homes
  - setting a maximum density of well pads
  - requiring financial guarantees for damage to homes
  - requiring financial guarantees in case fracking companies go into liquidation prior to cleaning up a site, or if sold, obligations are passed to any new owners with no limit.
- 10. In January 2019 Nottingham City Council announced its commitment to become a "net-zero carbon" city by 2028, adding to existing policy that at least one fifth of energy procured across the area is sourced from low-carbon facilities by 2020. NCC proposed Minerals Plan does not follow this plan for the rest of the County.
- 11. The Cumbria Minerals and Waste Plan requires any commercial exploitation of hydrocarbons to contribute to "mitigation of climate change". The Kirklees Local Plan requires any production of hydrocarbons to have "net zero impact on climate change". We urge Nottinghamshire County Council to adopt a similar objective within the Minerals Plan.

#### **GEOLOGY**

12. Professor Peter Styles, expert on fracking seismology recommended 500 metres separation from former mine workings and 850 metres separation from any fault lines. This was supported by John Mann MP for Bassetlaw (EDM 1303 May 2018). This recommendation should be incorporated in the Minerals Plan.

- 13. Dr. Ian Fairlie, independent consultant on radiation in the environment, with degrees in Chemistry and Radiation Biology, and former consultant to the UK Government has emphasised the dangers of bringing highly radioactive materials to the surface during extraction of fossil fuels. This is already well known from North Sea Oil production, where the workforce is constantly screened. Materials there may be disposed of in the sea, many miles away from habitation. NCC Minerals Plan should ensure protection of the local area, humans and livestock, and for containment and safe disposal of radioactive waste. (Dr Ian Fairlie's lecture 'Radioactive Dangers of Fracking' 27.09.2018 may be found on YouTube.)
- 14. David K. Smythe, Emeritus Professor of Geophysics, University of Glasgow made an objection to the IGas Springs Road Misson application on the grounds of geology and hydrogeology. In his 58 page report he stated he had found 27 errors, omissions and misleading statements which he said suggested the Applicant was treating the planning system with contempt. To summarise this report lists boreholes, coalmines, geological faults, likely fluid flows and much more. Para 5.4 Conclusions "The geology of the UK shale basins is intrinsically unsuitable for fracking. No similar geology has been fracked before. Fracking poses a direct threat to groundwater resources, and there is a possibility that fugitive methane may reach the surface in days." He criticises the IGas geological model and says "there are many possible and likely flow pathways within the complex geology whereby fluids could escape upwards. This includes the possibility that the Principal Aquifers of the Sherwood Sandstone and the Magnesian Limestone lying directly above the fracking zone could be contaminated irreversibly. The risk, however small, of permanently contaminating one of England's main water resources should not be contemplated." NCC should adopt a precautionary approach here as the risks are too high.
- 15. NCC Minerals Plan makes no mention of seismic activity. There have been well publicised abnormal seismic events at Cuadrilla's fracking sites Preese Hall and Preston New Road near Blackpool, recorded by the British Geological Survey, and leading to the suspension of fracking at the sites. Misson area is on a fault line, and much of Nottinghamshire has been subject to coalmining, with associated instability and subsidence. There is an elevated risk of chemical contamination of aquifers should well casings move or crack through seismic events as a result of the extreme forces exerted during the fracking process. What is NCC's policy for dealing with such events?

### NATURE

- 16. Section 2.13 Nature highlights important SSSIs and Local Wildlife Centres around the County being restored and managed after historic declines have been halted. The area around Misson and Misson Springs is home to multiple SSSIs, one of which borders the Springs Road potential fracking site. These are home to a number of protected species such as great crested newts, long eared owls, bats, turtle doves, moths, marsh and hen harriers, rare orchids and grasses.
- 17. Following an investigation with other wildlife charities into the likely impacts of shale gas or oil development in the UK, the RSPB concluded that many aspects of fracking could negatively affect wildlife. The significant land required by a large number of wells, and the noise and other
  - disturbance created by fracking activities (24 hours at times) are both likely to have a negative impact on wildlife. (Report Are We Fit to Frack? RSPB, Angling Trust, National Trust, Salmon and Trout Association, Wildlife Trusts and Wildfowl and Wetlands Trust 2014).

- 18. The RSPB Website states they do not support fracking. "Fracking shale gas threatens to undermine the UK's commitment to fighting climate change and protecting nature. The RSPB does not support shale gas extraction in the UK because
  - the regulatory framework for the industry does not provide sufficient protection for the natural environment
  - there is evidence from the Committee on Climate Change that the exploitation of shale gas may not be compatible with the UK's emissions reduction targets.
- 19. Misson Springs and Misson are homes to the largest organic farm in the UK, an industrial scale organic dairy herd and milking parlour, and fishing ponds. What protections are NCC offering these and other businesses in the event water, air and land become polluted through fracking and therefore unusable for organic farming?
- 20. Section 2.20 Climate states that parts of Nottinghamshire have already experienced more frequent and heavier flooding and this pattern is expected to continue. The Flood Map for Planning (Environment Agency and UK Gov.) clearly shows Misson Springs and Misson are in an area at great risk of river flooding. Fracking therefore should not be allowed to take place within this area due to the risk of chemicals and radioactive materials being spread by flood waters and heavy rain over agricultural land and into water courses. Spillages on sites should also be taken into consideration.
- 21. Section 2.22 highlights the importance of sand and gravel extraction in the Trent and Idle valleys, and subsequent conversion to wetlands. Misson and Scrooby are surrounded by sand quarries with licences being extended in both areas. After extensive effort by Nottinghamshire Wildlife Trust and others, wildlife in the area is making a comeback. A precise approach should be adopted by NCC against further industrialisation of an already heavily industrialised area, and the destruction of hard work by locals and the Wildlife Trusts.
- 22. We believe that fracking will not bring the price of gas down. It will provide very few local jobs, whilst potentially destroying local businesses. It has ignored evidence of hazards to health, to destruction of agriculture, wildlife, and the local environment. And of course the massive impact on climate change. These are not things that can just be regulated away.

We hope that you will consider very carefully our researched and thought out submission.

Submission made jointly by

Frack Free Misson Susan Howard - representing 19 individuals
Frack Free Isle Liz Harvey - representing 27 individuals

Attendees for any hearing sessions will be

Frack Free Misson Susan Howard, Kathryn Williamson, Dawn Collier

Frack Free Isle Liz Harvey