From: <u>John Butcher</u>

To: <u>PL Planning Applications</u>

Subject: OBJECTION to reference number, WSCC/045/20

**Date:** 28 September 2020 15:09:41

I object to the application WSCC/045/20, Remove drilling fluids and carry out an extended well test at Lower Stumble Exploration Site, off London Road, Balcombe, Haywards Heath RH17 6JH.

UK parliament declared an environmental and climate change emergency in May 2019. This recognises the urgency needed to combat the climate crisis. We cannot continue to extract and burn more fossil fuels if we are to limit global warming and the environmental devastation that would follow. This flow test and subsequent planned production would lead to more fugitive emissions including quantities of methane which are far more potent than CO2 for global warming. Additionally, the eventual burning of the oil itself, if recovered of course, contributes also to climate catastrophe and makes it harder to hit our CO2 reduction targets and hopes of achieving net zero carbon emissions 2050. We should be investing in cleaner more renewable sources of energy that can also contribute to sustained economic environmental and social development, i.e. wind and solar electricity generation. Use our land assets a different way, leaving the minerals in the ground.

This application is also not in accordance with the West Sussex Joint Minerals Local Plan (July 2018): because it is not in the public interest to flow test this tiny quantity of oil:

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 <!--[endif]-->The Strategic objective and vision sates "minerals resources will be safeguarded and exploited in a manner which only sees minerals development ..... take place in exceptional circumstances and where it is in the public interest." It is not in the public interest to flow test this well. The majority of Balcombe residents when polled are against this. The majority of the public are also against this type of onshore fossil fuel extraction. This site is mostly expecting oil, which is not gas and certainly not part of any temporary transition to a low carbon then zero carbon emission future. The volume of oil projected would also not provide any significant security of energy supply compared to the nation's current usage. The previous flow test produced an equivalent of 1600 barrels / day, which is more likely to settle at 500 – 700 barrels a day during production 1st phase then reduce to more like 200 barrel of oil per day after the 1<sup>st</sup> year because production rates never sustain the initial burst. Angus expect the site to produce just 0.005% of the amount of Wytch farm, so this is hardly a game changer nor significant in supply volume. Angus stated in a community liaison meeting this October 2019 that the production at Balcombe would be comparable with Brockham volumes that produces only 0.00064997 mb/d, which is a tiny compared the UK's main onshore site at Wytch farm that pumps out 13.748 md/d. The negative local and global environmental effects far outweigh the miniscule positive contribution of energy supply capacity.

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 <!--[endif]-->Section 2 (Achieving sustainable development) states that the purpose of the planning system is to contribute to the achievement of sustainable development. This application puts us into reverse against that aim. It absolutely does *not* contribute to a new achievable sustainable development. To achieve sustainable development means that the planning system has three overarching objectives: an economic; a social and an environmental. This application goes against the social and environmental goals of sustainable development, while only possibly making a small contribution economically to the shareholders or Angus Energy. Locally, it harms residents economically too because of the depression in house prices this activity causes. This was forecast in government reports (redacted) and statistically proven when comparing house price trends in Balcombe with regional and national trends from 2012 when Cuadrilla first started its exploration activity in Balcombe.

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 <!--[endif]-->Paragraph 205 in section 17 also states in considering proposals for mineral extraction, minerals planning authorities should

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o <!--[endif]-->Ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality; and

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o <!--[endif]-->Provide for restoration and aftercare at the earliest opportunity, to be carried out to high environmental standards, through the application of appropriate conditions Bonds or other financial grants guaranteed to underpin planning conditions should only be sought in exceptional circumstances"

This application does not include a provision of a bond, which it certainly should, if allowed to proceed on any basis, to cover the normal restoration and environmental damage restoration in case of disaster such as a container spillage or well casing fracture that leads to local environmental pollution. Human health will also be risked for local residents (many of whom are young children and elderly) who will have the fumes blown onto them by the prevailing winds.

Hydrogeological risk is also woefully considered in the application. There has been insufficient baseline monitoring of groundwater and the application RSK risk study claims a "lack of local connection to surface recharge mechanisms. However, there was only 1 sample taken, which is hardly representative and indeed the trace elements found in the sample were dismissed as an irregular peak that showed transmission was occurring. The application also suggests that the Ashdown Beds aquifer "may be saline" without baseline groundwater quality evidence to substantiate the claim, which should be considered poor science, speculative, not evidence based and contrary to a general understanding the Ashdown Beds aquifer in the High Weald part of Sussex (where groundwater is abstracted from the Ashdown Beds elsewhere for public water supply.

Regarding interpretation of Cement Bond Logs for well casing, the application's subjective and selective conclusions in viewing previous reports and its own cannot be considered wholly objective and robust in their representation of the observed data. RSK (2019) HRA for the application stated that "The quality of the cement in the well has been verified by a CBL (Cement Bond Log) tool to ensure that all casing strings are cemented properly and provide sufficient isolation to the surrounding formations." The interpretation of the cement bond log report by Weatherford (dated 31 August 2013) described much of the cement bonding along the length of the well as "moderate to poor". This indicated that there are possible breaches in the cement seal and cavities along part of the outside of the casing and as such some of the potentially connected conduits are also not fully sealed. This poses a concern and increases risk to groundwater quality should there be any leak within the well column. Notably, the drilling logs show that the Ashdown Beds aquifer lies between 46.6 metres (135 ft) and 253 metres (830 ft). Page 9 of Weatherford (2013) Cement Bond Log report finds that the cement bond through the depths corresponding with the depth of the Ashdown Beds aquifer is rated as mostly "moderate to poor casing to cement bond and cement to formation"; and furthermore, through the section between 182.9 metres (600ft)and 215.8 m (708 ft ) depth, the cement bond is rated in the Weatherford (2013) as "poor casing to cement bond and cement to formation."4.20To support their conclusions that "risks to groundwater from failed well integrity are considered to be very low," and that "all casing strings are cemented properly and provide sufficient isolation to the surrounding formations," RSK (2019) HRA refer to the findings of the Cement Bond Logs (CBL) as reported by Weatherford in Summer 2013. However, as stated above, Weatherford (2013) established that the cement bonding along the length of the well was "moderate to poor" in 2013. Therefore, for RSK (2019) HRA to state "due to the mitigation from the well design (steel casing and cement sheaths), which have been proven to have good integrity from the results of CBL testing" is considered misleading and grossly inadequate as RSK (2019) HRA ignores the principal finding from Weatherford (2013) notably through the Ashdown Beds aquifer section. RSK (2019) HRA is subjective and selective in this respect and, therefore, cannot be considered wholly objective and robust in their representation of the observed data.

Land on top of the drill spur is on the top of a ridge or fault line. Streams and ditches run from here all the way down the Ouse at the bottom, sometimes underground and chased by drains, sometimes open water over the top. Livestock graze on these fields and are very likely to drink from the ditches. Some of the farms may likely use ground water along here and not realise the contamination risk. As this report points out, you can't assume that water in the area will not be used for anything else as RSK does, so contamination of it would matter. If the ground water here is contaminated it could have an appalling effect of on the farming going on above it, the livestock grazing and on the Ouse itself.

I am also concerned about the flawed calculations in traffic and missing due diligence required as a result expected HGV movements. The movements actually involve 2 moments of passing traffic, whereas the highways agency baseline counts a single sighting as a movement. Therefore uplifts of HGV traffic averages should be considered 20%, not 10%. Anything over 20 HGV's on the road daily invokes the need for a full Traffic Impact Assessment, which has never been done, even though the forecast levels take this application above 20 HGVS in several weeks and hit the 20% increase threshold. I also question the accuracy of all other calculations in their application and working processes given their misleading attempt of classifying 2 vehicle movements as 1 – how wrong might they be and what are the consequences of that, when they cannot even get basics like traffic flow counts correct?

This thus does not meet the permittable conditions and reasons for approval and progression. It contains misleading calculations, is missing impact assessments, is against the climate emergency action required, is in breach or core principles of the National Planning Policy Framework (February 2019) and West Sussex Joint Minerals Local Plan (July 2018). I firmly object therefore.

John Butcher