



The countryside charity  
North and East Yorkshire

PO Box 189  
York  
YO7 9BL

[www.cpreney.org.uk](http://www.cpreney.org.uk)

Tel: 07983 088120  
Email: [info@cpreney.org.uk](mailto:info@cpreney.org.uk)

Branch Chair  
Mrs Jan Arger

**Local Authority Area:** East Riding of Yorkshire

**Determining Authority:** The Environment Agency

**Type of consultation:** Environmental Permit Application

**Full details of application/consultation:** Rathlin Energy (UK) Limited, EPR/BB3001FT/V006: environmental permit consultation

**At land at:** West Newton A Well site, West Newton 'A' Well Site, Fosham Road, Marton, HU11 5DA,

**Type of response:** Objection

**Date of Submission:** 23<sup>rd</sup> January 2025

All responses or queries relating to this submission should be directed to the Secretary for the Trustees at the contact details shown above on this frontispiece.

All CPRE North and East Yorkshire comments are prepared by the charity using professional planners whose research and recommendations form the basis of this response in line with national CPRE policies.

External planning consultant used in this response:



KVA Planning Consultancy  
Katie Atkinson, BA (Hons), Dip TP, MA  
MRTPI  
[www.kvaplaning.co.uk](http://www.kvaplaning.co.uk)

## Comment

CPRE North and East Yorkshire 'The Countryside Charity' ('CPRENEY') welcomes the opportunity to submit comments on this environmental permit application submitted to the Environment Agency on behalf of Rathlin Energy UK Ltd. ('the Applicants').

CPRENEY recognise that the proposal for hydrocarbon extraction at the West Newton A Wellsite ('WNA') itself is not the subject of this application, therefore, will constrain comments to the principle of the variances of environmental permit in question.

The applicant constructed the wellsite in 2013 to enable the drilling and testing of up to two exploratory boreholes. To date, the applicant has drilled two boreholes from the WNA site. WNA-1 was drilled in 2013 and tested in 2014. WNA-2 was drilled in 2019 followed by testing in the same year.

The applicants have already received an environmental permit from the Environment Agency to allow the drilling of 'side-track wells' from WNA-1 and WNA-2, and drilling of up to six new additional wells. Additionally, the permit covers aspects of well clean up (a process used to remove debris, drilling fluids, and other materials from a well after drilling) and testing activities; hydrocarbon production; use of gas for electricity generation; flaring of gas; storage of crude oil; well plugging and decommissioning (permanently sealing the well) are also controlled by the permit.

The applicant has applied to carry out 'reservoir stimulation' on the existing WNA-2 well, which is a process used by the oil and gas industry, designed to improve the efficiency of the flow of oil or gas through the reservoir rock and into the well. The stimulation will be within the Kirkham Abbey Formation ('KAF') located at a depth of approximately 1710m below ground.

To achieve the above operations, the applicant proposes to undertake a number of additional activities, including changes to the wellsite construction to facilitate the platform extension, drilling operations, well design, geological logging, perforation, contingency side-tracks (in case of a 'sub-surface constraint') and lateral drilling, well testing, reservoir stimulation by proppant squeeze following acid washing – in the hope of proving viability and lead to full production activities.

The Environment Agency's 'overview' pages for the permit variation application sets out that

*'The application is not for high volume hydraulic fracturing.'*

*The Infrastructure Act 2015 ('IA') defines hydraulic fracturing as involving the injection of more than 1,000 cubic metres of fluid in any one stage, or more than 10,000 cubic metres of fluid in total. The proposal from Rathlin Energy (UK) Limited is below these thresholds.*

*The proposed reservoir stimulation is similar to hydraulic fracturing in that it involves injection of fluid into the rock (geological formation) at a pressure above the fracture pressure of the formation. However, it is not regarded as hydraulic fracturing due to the smaller quantity of fluid involved.'*

CPRENEY assert that this explanation and reliance on the IA definition for this proposal is fundamentally flawed.

The IA does indeed define hydraulic fracturing as set out above. The IA definition of hydraulic fracturing actually relates to High Volume Hydraulic Fracturing as it specifies the injection of specific volumes.

The applicant proposes to inject 60 to 70 cubic metres of oil-based fluid, with 12.5 tonnes of sand proppant into the rock formation, in a single stage. This will be done at a pressure of up to 9,000psi, exceeding the fracture pressure of the rock. After that, the fluid will be brought back to the surface.

This current application is a form of 'low volume' hydraulic fracturing.

This was confirmed by the Council's response to the applicant's pre-planning application enquiry (6<sup>th</sup> October 2020) which specifically stated that supporting documentation, submitted by the applicant, suggested that '*low volume hydraulic fracturing is proposed.*' The Council did not distinguish between low-volume and high-volume hydraulic fracturing in its Policy EM6. Further the Planning Practice Guidance for Minerals ('PPGM') defines hydraulic fracturing as '*the process of opening and/or extending existing narrow fractures or creating new ones (fractures are typically hairline in width) in gas or oil-bearing rock, which allows gas or oil to flow into wellbores to be captured.*' (PPGM paragraph: 129 Reference ID: 27-129-20140306). The UK Government did not differentiate between high or low volume hydraulic fracturing when publishing the PPGM and have not updated the definition since.

CPRENEY consider the environmental impacts of both high volume and low-volume to be effectively the same, subject to site specific considerations. Reservoir Stimulation by 'Proppant Squeeze' is undoubtedly a form of hydraulic fracturing regardless of the volume of fluid proposed to be injected.

The proposed pressure (9000psi) is greater than that which was proposed at Kirby Misperton in North Yorkshire ('KM8') which was to be undertaken at a pressure of 8000psi and was considered to be high volume hydraulic fracturing – or fracking as it is commonly known.

Since 2<sup>nd</sup> November 2019, the Government introduced a moratorium against 'fracking' (high-volume) for shale gas (an unconventional hydrocarbon) in the UK – ending all support for such activities. Whilst this is not an environmental permit application to explore for shale gas extraction, CPRENEY suggest in agreement with the Council opinion and as defined by the PPGM, proppant squeeze must be considered to be a form of hydraulic fracturing – **therefore the Environment Agency's sentence quoted above '*...However, it is not regarded as hydraulic fracturing due to the smaller quantity of fluid involved*' is blatantly flawed and misleading.**

The UK parliament declared an 'Environment and Climate Emergency' in May 2019 and the UK government committed to a legally binding target of net zero greenhouse gas ('GHG') emissions by 2050 via the Climate Change (2050 Target Amendment) Order 2019. This is a much more ambitious target than the previously set target of at least an 80% reduction of emissions from 1990 levels. The UK government is also a signatory of the Paris Agreement, the principal aim of which is to strengthen the global response to the threat of climate change by keeping the global temperature rise this century well below 2°C above pre-industrial levels and to limit the temperature increase even further to 1.5°C. Following on from this, Nations adopted the Glasgow Climate Pact 2021 at COP26, collectively agreeing to work to reduce the gap between existing emission reduction plans and what is required to reduce emissions, so that the rise in the global average temperature can remain limited to 1.5°C.

The Sixth Carbon Budget – 'the UK's path to net zero' (2020) was published by the Committee for Climate Change ('CCC') in December 2020. The pathway requires a 78% reduction in UK territorial emissions between 1990 and 2035. The economy is forecast to become more energy efficient with total energy falling around 33% between now and 2050 – demand for oil is forecast to fall by 85% to 360,000 barrels per day. Given that the UK is currently able to produce approximately 1.6 million barrels per day at existing sites both on and offshore and the rate of decline forecast by the CCC, **CPRENEY consider that this application should be refused as there is no longer any justifiable need for new oil extraction sites.** Indeed, the latest Government Statistical Release on Energy Trends, dated 21<sup>st</sup> December 2021 set out how the UK has been exporting UK sourced oil and gas – thereby reducing the

argument that home-grown oil is essential.

Further, the **CCC published in October 2024 that the UK's Nationally Determined Contribution should commit to reduce territorial greenhouse gas emissions by 81% from 1990 to 2035**. This is based on the CCC's advice on the UK's Seventh Carbon Budget, which due to be published in February 2025. It is informed by the latest science, technological developments, and the UK's national circumstances.

At the local level, the East Riding of Yorkshire Council declared a Climate Emergency as a result of accepting the recommendations of a Climate Change Review on 24<sup>th</sup> January 2021. The Report of the Review Panel set out accurately that in order to minimise the impact of climate change, the Local Plan has a set of objectives with the first being to *'Contribute to reducing emissions which cause climate change and ensure that the local impact of climate change, including rising sea levels, increased rates of coastal erosion and more frequent flooding events, are minimised, managed and adapted to.'*

The Environment Agency is a department of the UK Government whom issues permits and advises local authorities. **As such, permitting applications which allow new or extensions to existing wellsites for fossil fuel extraction is in complete contrast to these emergencies.**

Furthermore, the Parish of Aldbrough where the site is located relatively close to the Humber Estuary where carbon emissions are reported to be the highest per resident across the country measuring 13.9 tonnes per Humber resident – over twice the national average.

CPRENEY is aware from the Council's published response to the pre-application request dated 6<sup>th</sup> October 2020 that the applicant proposes *'up to 14 (6 at WNA and 8 at WNB) additional petroleum appraisal and production wells will be drilled followed by appraisal testing and subsequent production.'* It goes on to state that 9 phases have been identified for each site but that *'several phases will be carried out simultaneously, particularly the drilling and appraisal testing of wells.'*

**CPRENEY, therefore, strongly object to the current application to vary the content of the existing environmental permit to allow proppant squeeze activities to take place at the WNA-1 site which will inevitably detrimentally impact the environment locally but also adversely impact the ability of the UK Government to meet legal responsibilities towards mitigating climate change. The applicants stated intentions of 14 (or any number of) new wells (and variances to stimulation techniques) would be totally contrary to the East Riding of Council's aim to reduce carbon emissions and tackle the emergency.**

With regard to the specific application at WNA – CPRENEY are aware that the Environment Agency received correspondence from local community interest groups in 2021 including information commissioned by an independent firm JBA Consulting, who assessed the hydrological matters in connection with a planning application at the West Newton Site. The scope of the report covered the impacts on the hydrological and hydrogeological environment; the documents and assessments submitted in support of the application – including a review of the design of the wellpad and the flood risk assessment documents.

The JBA report found that information presented by the applicant was limited and inadequate, particularly with regard to the design of the liner for the site and the required supporting geotechnical information in the form of ground investigations, such information is required for the Environment Agency to scrutinize prior to revising a permit in order to protect the water environment, soils and biodiversity. CPRENEY therefore suggest that there is **insufficient information to show that the existing liner in its current state is suitable for new proposed operation**. CPRENEY are aware that issues with an unacceptable liner (regardless of the fact it was a tertiary containment system) caused a planning appeal to be dismissed in Northern Lincolnshire where the Environment Agency had not appreciated that the proposed type of liner was not suitable for the proposed operation by way

of their own best practice advice notes.

Furthermore, CPRENEY are aware that the Environment Agency have requested further information from the applicants in relation to the proposed use of Halliburton MO-IV Breaker HM003246 and Ecotoxicity. The environmental impact of this product has not been fully investigated and no data or identification of the chemical has been made available. CPRENEY is not aware that this information has been submitted and as such **request that the Environment Agency do not issue a revised permit until the risks of using this unknown chemical have been identified and considered in full including on surface water, ground water, air quality and human health.**

CPRENEY object to the applicants proposals to leave 50 - 70% of injected proppant chemicals underground in the KAF, which could potentially be putting thousands of local residents and visitors at risk from seismic activities and from the leaching of chemicals through formation fractures many kilometres away. **The proposal has the potential to contaminate a nearby aquifer which provides drinking water to residents of both East Yorkshire and North Yorkshire.** Seismic activity must be considered relevant to this permit proposal due to the proximity of groundwater and the heavily faulted geological environment surrounding the site. Fractures created through hydraulic fracturing techniques introduce further pathways for injected fluid to migrate through. Should the revised permit be granted, it is considered that detailed seismic monitoring should be required, as conditioned at the Egdon Resources extraction site at Wressle in North Lincolnshire, who proposed undertaking a proppant squeeze of very similar volume, depth and pressure.

In consideration of the applicants Environmental Risks Assessment, CPRENEY are concerned that the residual risk of all instances is recorded as '*not significant*' including, for example, where the exposure probability, impact severity and risk magnitude are all considered to be 'medium and high' e.g. containment failure and the risk to groundwater. Should chemicals leach into the groundwater system as a result of failure – there is likely to be a significant residual risk given the time taken for such issues to become known (often months after an event) and even longer for clean up of soils and the water environment to recover. **This appears to be a flawed result and once which should surely be scrutinized.** Furthermore, the applicant has relied on statements '*based on previous analysis*' which may not be relevant to this application given that the variance the permit is to allow for proppant squeeze and associated activities which are new to the site.

## Conclusion

CPRENEY welcomes the opportunity to comment on the Environment Agency's consultation relating to the WNA Environmental Permit Variation application.

CPRENEY strongly object to this proposal on the grounds that there has been a significant shift away from the reliance on fossil fuels for energy production since the original application was approved and permit granted. Political and public focus is now firmly on the requirement to reach the UK's legally binding agreement of not allowing the world's climate to increase beyond 1.5°C and to reach net-zero carbon emissions by 2050 or earlier to tackle climate change. East Riding of Yorkshire Council also declared a climate emergency and introduced a Climate and Carbon Energy Management Strategy, therefore, to approve this application would be entirely at odds with such an approach.

The CCC predict demand for oil to fall by 85% by 2050. There is, therefore, **no need** for any new fossil fuel extraction sites given the reduced quantity that the UK will need and that which is currently exported.

Within the Planning Statement accompanying the original application, the applicant confirmed that if the extraction of oil at West Newton is considered viable, the applicant will not restore the site but apply for full planning permission for oil production (lasting 20+ years), in which case the product could be used to manufacture single use plastics. CPRE actively campaign to end the use of such plastic which is so harmful to the natural world and therefore consider the proposal should be refused.

Notwithstanding the fact that CPRENEY strongly object to the principle of the proposal, CPRENEY consider there are fundamental flaws and inaccuracies with the information submitted by the applicant which the Environment Agency should scrutinise and request further information about. Should this not be forthcoming or still considered to be incorrect, then te permit should not be granted.

CPRENEY reserves the right to comment further should any additional information be submitted in support of the proposal.