Dear Environment Agency

YO13 0DB, EUROPA OIL & GAS LIMITED, EPR/YP3623LC/A001: environmental permit draft decision

This response is a second submission from Frack Free Coastal Communities. All the points raised in our first response (#865927103 - Executive Summary - plus follow up email dated 19/10/2026 attaching the full response) still stand. This second response is based on the revised decision document and permit posted online on 07/10/2026. We have, separately, emailed the Environment Agency requesting a further extension of the consultation period given the extensive nature of the revisions, some of which add to rather than mitigate the inconsistencies and terminological confusion that beset the original versions.

The revised decision document and your explanatory note on the consultation website make clear that you have made a conscious decision to align your language and terminology with those of the applicant rather than with those of science and commonly accepted parlance. Given the internal inconsistencies in the applicant's terminology and data, this makes your assertion that the revisions do not affect the technical assessment of the application untenable, as we make clear below.

1. Your language around 'proppant squeeze' mirrors efforts by the applicant to minimise the potential scale and impact of their proposed hydraulic fracturing. Your decision to remove the word 'fracking' from the decision document belies the legal and scientific consensus that 'fracking' is simply a shorthand for 'hydraulic fracturing' and, specifically, that 'proppant squeeze' falls firmly within the definition of 'fracking'.
2. Your definition of 'proppant squeeze' in the glossary is misleading and mirrors language used by the applicant to make it seem benign and harmless. You do not define 'small' as in 'small volume of stimulation fluid'. In the specific case of the proposed Cloughton-2 well, the volume will be between 300 and 500 cubic metres for each of several stages or phases (see below) which is not 'small' by any definition and is larger than the volume that triggered seismicity in Cuadrilla's operation in Lancashire that led to the moratorium on fracking. The glossary does not make clear that the purpose of the proppant squeeze is not simply to 'keep the pathways open' in the target formation but to create those pathways by using pressure high enough to crack the rocks over 250 metres from the wellbore.
3. Your assertion that the 'reduced scale of these operations allows potential environmental risks to be more readily identified, managed, and mitigated' (p.22) is inconsistent with the available scientific evidence. The OGA/NSTA's own research on the Cuadrilla earthquakes concluded that the seismic risk had not (and indeed could not have) been anticipated. This conclusion is supported by

Professor Stuart Haszeldine's recent paper[1] summarising the scientific research on induced seismicity from hydraulic fracturing in the UK.

4. You adopt the applicant's implicit assertion that 'proppant squeeze' has been used for many years – despite the term being used for the first time only in 2017 in the industry's attempt to massage the language around hydraulic fracturing / fracking.
5. You conflate two uses of 'proppant squeeze' - well stimulation and reservoir stimulation. The introductory note to the draft permit says it allows 'well stimulation via a proppant squeeze' whereas the decision document makes it clear that the proppant squeeze is designed to stimulate the reservoir (i.e. the sandstone formations) up to 263m from the wellbore. This is inconsistent with the statement (p.19, para. 3) that the purpose of the proppant squeeze is 'to improve well performance by creating small fractures near the wellbore'.
6. You say on page 31 of the decision document that you do not categorise the 'gas reservoir' as conventional or unconventional. Yet you use the distinction to imply that the formations here are 'conventional' (p.25, para. 1; p26, para. 6) whereas the scientific distinction between the two (based on precise quantification of permeability) puts the Cloughton 'reservoir' firmly in the 'unconventional' category. Scientific consensus is that seismic risk from hydraulic fracturing is heightened in unconventional formations.
7. There is inconsistency in the decision document on the number of separate hydraulic fracturing events that form the basis of your technical assessment. This mirrors confusion in the applicant's documentation. We would have expected the EA to seek clarification rather than simply perpetuate the confusion. Without this clarification, the public cannot have confidence in your technical assessment because it is not clear what potential volumes of waste you considered in that assessment.
8. This confusion is exacerbated by the inconsistent use of 'stages' and 'phases' (pp.22 – 25 and elsewhere) when referring to proppant squeeze operations:
    a. up to four proppant squeeze **stages**, each targeting a different sandstone reservoir, to improve well performance by creating small fractures near the wellbore and increasing permeability. This process uses 300–500 m^3 per **stage** of water-based hydraulic fracture fluid mixed with proppant, pumped into the target reservoir. (p. 19)
    b. between 300 and 500 cubic metres, across up to four injection **stages** targeting different target horizons (p. 22 para.1)

[1] 'Hydraulic Fracturing and Seismicity Risks in the UK', March 2026. https://policy.friendsoftheearth.uk/sites/default/files/documents/2026-03/Professor%20Stuart%20Haszeldine%20Statement%20-%20FoE%20FINAL%2020.03.26.pdf

c. The hydraulic fracturing at Cloughton 2 will be undertaken in up to four **phases** each targeting a single horizon (p. 25 para. 1)
d. The proppant squeeze will be undertaken as a **multistage** treatment with up to **4 stages** being undertaken. It will consist of approximately 60 to 80 tonnes of resin-coated ceramic beads and approximately 300m^3 to 500m^3 of hydraulic fracture fluid (p. 25 para. 5)

9. This confusion in the applicant's documentation was pointed out in our response to the planning application and in our response to the 2025 EA consultation on the permit application. We were hoping for some clarity in the EA's decision document but the revised document simply perpetuates the confusion. Possible interpretations of Europa's intentions based on the various wordings above range from:
    a. 300 – 500 cubic metres total, split between four hydraulic fracturing events; to
    b. four phases (one in each of four target sandstone formations), each comprising up to four stages with each stage using 300 – 500 cubic metres of fluid (a total of 16 hydraulic fracturing events using a total of up to 8,000 cubic metres of fluid).
10. This range makes it impossible to know what volume of flow back fluid the EA is expecting the applicant to have to handle in the waste operation (see p. 26 section 4.2.4) or the volume of fluid to be retained in the formation(s) (p. 26 section 4.2.5).
11. We note that the non-technical summary *(Application Bespoke A001 - 03 - Non Technical Summary 250425.pdf)* does not mention four distinct target formations and says only that: 'The proppant squeeze will involve pumping of 300m^3 to 500m^3 of carrier fluid (predominantly water) and proppant into the target reservoir followed by a short period of flowback (proppant carrier fluid recovery) and well clean up.' The same text is in the Waste Gas Management Plan (pp.14, 18).
12. The applicant's Waste Management Plan *(Application Bespoke - RFI response - 05 - Waste Management Plan 20012026.pdf)* in Tables 12 and 13 estimates 600m^3 of proppant carrier fluid will flow back through the wellbore and 600m^3 will remain in 'the formation' (singular, not formations plural). This is consistent with 1200m^3 total -i.e. 4 x 300m^3 but not 4 x 500m^3. It is not consistent with repeating this in four different target formations (up to 8,000m^3).

For these reasons, we ask that the current draft decision document and permit be withdrawn, that the applicant is asked to provide clarification on the above points and that your technical assessment is re-done based on the applicant's response and an objective consideration of the evidence taking into account scientific and legal consensus on these matters.

Yours faithfully,

Chris Garforth

Chair of the Steering Group, Frack Free Coastal Communities