

Case Officer: Ms Natalie Chillcot

South Downs National Park Authority

18 October 2016

Dear Ms Chillcott,

REPRESENTATION submitted for and on behalf of CPRE Sussex to application:

SDNP/16/04679/CM

Markwell's Wood-I Well Site, South Holt Farm, Dean Lane End, Forestside, Rowlands Castle West Sussex.

Appraisal and production of oil incorporating the drilling of one side track well from the existing well (for appraisal), three new hydrocarbon wells and one water injection well, and to allow the production of hydrocarbons from all four wells for a 20 year period

CPRE Sussex objects to this application, which we believe has the potential to cause considerable environmental harm, which would outweigh any possible benefit. Our reasons for objecting are explained below under the headings:

1. Reliance on a previous permission by West Sussex County Council.
2. Innovative approach claimed but not explained.
3. Reducing “*visual, noise, traffic and infrastructure impacts in order to respect the countryside and the well being and way of life of local residents*” is not a nice-to-have option at the discretion of the applicant.
4. Applicant’s caveat “*where possible and practicable*” to their commitment “*to respect the countryside and the well being and way of life of local residents*” needs to be explained.
5. Insufficient information is given about the acidisation process and its potential to cause environmental harm. This information should be provided.
6. Information about the chemicals that would be stored and used on site is lacking and should be provided.
7. Details and appraisal of water usage is lacking and should be provided.
8. Insufficient information about waste and its disposal and its potential to harm the environment.
9. Transport Statement issues.
10. Statement that “low numbers of bat species were recorded foraging and commuting within the survey area” (paragraph 6.2) is potentially misleading.
11. How predictions given in the Planning Statement that “Non-significant adverse residual effects on bats are predicted for Phases 1 and 2. No other significant effects were predicted” were arrived at is unclear.
12. Desk-top survey does not obviate the need for in-field surveys of birds.

CPRE Sussex’s comments on the Environmental Statement Appendix 9.1 Groundwater RiskAssessment by Hydrock Consultants Ltd on behalf of UKOG (GB) is the subject of a separate representation by CPRE Sussex.

Reliance on a previous permission by West Sussex County Council.

1. The applicant's selection of this particular site for the proposed scheme is, quote, *"mainly due to the fact that the Site contains existing infrastructure, including a well pad and suitable access and would make best use of previously developed land"* (Environmental Statement Non-Technical Summary, paragraph 4.5).

1.1 As is explained in the applicant's 'Planning Statement' (paragraph 6.1) and Site and Development Description (paragraph 3.8), permission for an exploration-well site at Markwell's Wood was originally granted by West Sussex County Council, in January 2009 - that is two years before the formal establishment of the South Downs National Park Authority in 2011 (paragraph 6.1), when the status of the countryside within the boundaries of the newly established National Park changed substantially because:

"Within the diversity of the English countryside, the Parks are recognised as landscapes of exceptional beauty, fashioned by nature and the communities which live in them. The National Parks and Access to the Countryside Act 1949 ("the 1949 Act") enabled the creation of the National Parks, and ensures that our most beautiful and unique landscapes have been, and will continue to be, protected in the future. It makes provision for everyone to enjoy them" ('English National Parks and the Broads, UK Government Vision and Circular 2010'. DEFRA, March 2010).

Innovative approach claimed but in what respects the approach is innovative is not explained.

2. According to the applicant's Planning Statement the applicant intends to take *"an innovative approach to reducing visual, noise, traffic and infrastructure impacts in order to respect the countryside and the well being and way of life of local residents"*, *"where possible and practicable"* (paragraph 1.4).

2.1 Unfortunately, in what way the intended approach is innovative, e.g. new and not previously employed by the industry, is not explained in the application.

2.2 Although the applicant intends to use a *"process known as acidisation"*, the applicant advises that this process is *"commonly performed on new wells"* (Planning Statement, paragraph 4.2). Accordingly, the process is not 'innovative'.

Reducing *"visual, noise, traffic and infrastructure impacts in order to respect the countryside and the well being and way of life of local residents"* is not a nice-to-have option at the discretion of the applicant.

3 As for *"reducing visual, noise, traffic and infrastructure impacts in order to respect the countryside and the well being and way of life of local residents"* – this is not a nice-to-have option at the discretion of the applicant, because planning regulations and policy require that the application, which is for oil extraction inside the South Downs National Park, 'respects the countryside and the well being and way of life of local residents' and much more besides, not least because:

"Within the diversity of the English countryside, the Parks are recognised as landscapes of exceptional beauty, fashioned by nature and the communities which live in them. The

National Parks and Access to the Countryside Act 1949 ("the 1949 Act") enabled the creation of the National Parks, and ensures that our most beautiful and unique landscapes have been, and will continue to be, protected in the future. It makes provision for everyone to enjoy them". ('English National Parks and the Broads, UK Government Vision and Circular 2010'. DEFRA, March 2010).

3.1 In what ways the application is innovative needs therefore to be explained by the applicant.

Applicant's caveat "where possible and practicable" to their commitment "to respect the countryside and the well being and way of life of local residents" needs to be explained.

4. We note, too, with considerable concern the applicant's caveat "where possible and practicable" - to their commitment "to respect the countryside and the well being and way of life of local residents".

4.1 In what ways would it not be 'possible and practicable' to respect the countryside and the well being and way of life of local residents inside the National Park is not explained by the application.

4.2 Full details are required - and should be provided for the consideration of decision takers. Residents, too, need to be informed.

Insufficient information is given about the acidisation process and its potential to cause environmental harm. This information should be provided.

5. The applicant advises that "*For the avoidance of doubt, the planning application is for conventional drilling and hydrocarbon production and does not seek permission for, or require the use of, hydraulic fracturing*" (Planning Statement, paragraph 4.2).

5.0.1 Instead, quote, "*A process known as acidisation will then take place, using a coiled tubing unit. The purpose of acidisation is to improve the efficiency of the well and it is commonly performed on new wells in limestone reservoirs to maximise their initial productivity*" (Planning Statement, paragraph 4.12).

5.1 Unfortunately, too little information is given in the application about the acidisation process and how would it be used to extract oil at Markwell's Wood, other than that

"Acidisation involves pumping acid (15% hydrochloric acid in the case of the Proposed Development) into the well which dissolves rock such as calcium carbonate which would restrict flow in the well. The spent acid will then be brought back to the surface and waste arisings will be collected and disposed of as appropriate and in accordance with any associated permits" and that "acidisation operations is typically 4 days including mobilisation, set-up, and in-hole operations" (Planning Statement, paragraph 4.12). .

5.2. The Planning Statement also advises that "*Approximately a year after EWT starts at the MW-1 well, in the event of a successful EWT, three new production wells and a water injection well would be drilled. These activities will use the same methodology as those for drilling of the MW-1 sidetrack well, including acisising the well*" (Planning Statement, paragraph 4.21).

5.3. The methodology that would be employed to extract oil at Markwells' Wood site is a fundamental issue, which should be explained in the detail in terms that can be readily understood by decision takers and consultees who may not be familiar with the 'acidisation' process' and all that it would entail.

5.4. At the very least, the quantities of hydrochloric acid that would be pumped into each of the four wells should be declared and environmental risks explained.

5.5 Details of how the hydrochloric acid would be stored on site and in what quantities, the number of tanker-truck movements that would be required to transport the acid to the site, and from whence it would be transported, should also be provided. After all, the site lies within the National Park and *"Within the diversity of the English countryside, the Parks are recognised as landscapes of exceptional beauty, fashioned by nature and the communities which live in them"*.

5.6 The harm to the environment that could or would result from any spillage or leakage should also be explained.

Information about the chemicals that would be stored and used on site is lacking and should be provided.

6. Facilities that would be constructed on site include a 'Chemical dosing and storage skid' (Planning Statement, paragraph 4.14, 9th bullet). Nowhere in the application are the chemicals that would be used for 'dosing' identified either in the Planning Statement or elsewhere in the application, though the Environmental Statement Part 8: 'Water Resources and Flood Risk' refers to *"the use and storage of materials, some of which are potentially contaminative"*, (paragraph 8.68); likewise, the quantities that would be used for dosing, and stored on site, and transported through the Park to the site.

6.1 Given that the site is located in countryside inside the National Park, this information should be provided.

Details and appraisal of water usage is lacking and should be provided.

7. It is explained in the applicant's Environmental Statement part 8: Water Resources and Flood Risk that water will be used in both the Phase 1 and Phase 2 operations.

7.1 During the Phase 1 operation:

"The abandonment of the bottom section of the well, the sidetrack drilling, and the acidizing, each involves activities at the surface and the subsurface and are likely to require water though the volumes needed will be limited by recirculating and treatment on site as and where practicable. The predicted magnitude of the impact is therefore negligible whilst the sensitivity of the PW supply is Low and so the effect is of negligible significance" (paragraph 8.67).

7.2 During the Phase 2 operation:

"As for Phase 1, the rig mobilisation and rig demobilisation of Phase 2 are both four-day activities and, by the nature of these activities, will not impact on water supply. Construction of the new wells will in each case necessitate drilling through the Chalk using water as the circulation fluid with occasional bentonite sweeps. Based on previous

experience, loss of circulation fluid into the Chalk aquifer is likely to occur during drilling (see Chapter 9). There is therefore a potential demand for water during the construction of the new wells notwithstanding the recirculation and treatment of drilling water on site. Based on there being water available (though subject to restrictions), the predicted magnitude of the impact is therefore negligible whilst the sensitivity of the receptor is low and so the effect is of negligible significance” (paragraph 8.73).

7.3 We note that for both phases the predicted magnitude of the impact of water usage and consumption is assessed as low. However, these assessments omit any quantification of the amounts of water that would be used/consumed, or might be used/consumed during either Phase. Neither is the source of the water stated.

7.4 The quantities of water that would be used/consumed and from whence it would be obtained should be advised.

Insufficient information about waste and its disposal and its potential to harm the environment.

8. We note with considerable concern the applicant's statement that: *“It is not considered that waste generated as part of the development will result in significant effects on the environment and therefore it has been scoped out of the ES”*. (Environmental Statement Non-Technical Summary, paragraph 2.10).

8.1 Whilst we are told at paragraph 2.9 of the Non-Technical Summary, that *“any waste generated by the Development will be stored on the site, within labelled skips or steel storage tanks, on top of an impermeable membrane, before being taken off Site”*, the specifics of this waste are not given in the detail, other than a reference to *“spent acid”* and *“waste arisings”* in the applicant's Planning Statement (paragraph 4.12), and to *“drilling mud and rock cuttings”* (Planning Statement, paragraph 4.9) and *“foul sewage associated with the staff accommodation and services”* (Site and Development Description, paragraph 3.24).

8.2 We note, too, that the amount of waste that would be generated is not quantified.

8.3 Would any leakage or spillage of ‘waste’ and/or membrane failure on site or leakage whilst being transported off-site for treatment and/or disposal elsewhere result in environmental harm? This needs to be explained and the risks considered.

8.4 Accordingly, the applicant's statement that *“It is not considered that waste generated as part of the development will result in significant effects on the environment and therefore it has been scoped out of the ES”* is a significant presumption that should be questioned.

8.5 After all, the site lies within the South Downs National Park.

Transport Statement issues.

9. The Transport Statement submitted by the applicant advises that *“In conclusion, the Proposed Development provides an opportunity to extract oil at a location which can be safely accessed by construction and operational vehicles and at which the temporary traffic impacts during construction would be de minimus”* (paragraph 5.8).

9.1 However, according to the Transport Statement's 'Table 4.1: Assessment of Construction Traffic Volumes', which *“sets out the forecast construction traffic associated with*

the Proposed Development together with an assessment of the change in traffic volumes on Finchdean Road and Broad Walk (paragraph 4.4), there would be a 7.84% increase in 'heavy vehicles' using Finchdean Road and a 10.67% increase in 'heavy vehicles' using 'Broad walk'.

9.2 Whether the impacts of these not insignificant forecast increases in the use of Finchdean Road and Broad Walk by "heavy vehicles" would really be "de minimus" is to be doubted, not least because they are within the National Park.

9.3 It is noteworthy that the Transport Statement does not acknowledge that the roads in question are located inside the South Downs National Park and no account is taken of the impact that the increased traffic could or would have on the Park's tranquility. This is a most unfortunate omission.

9.4 It will be the local authorities, and thus council tax payers who will have to pay for the damage to roads resulting from the resulting increase in road usage.

Statement that "*low numbers of bat species were recorded foraging and commuting within the survey area*" (paragraph 6.2) is potentially misleading.

10. According to the applicant's Environmental Statement Non-Technical Summary: 'Ecology & Nature Conservation', "*low numbers of bat species were recorded foraging and commuting within the survey area*" (paragraph 6.2). As is explained below, this statement is incorrect and potentially misleading.

10.1. It is reported in the Environmental Statement Appendix 6.2: 'Markwell's Wood Protected Species Survey Report', that nine species of bat was identified during the bat surveys conducted on the site (paragraphs 3.1.2 and 3.1.3), including the rare Bechstein's bat. In addition, the desk study undertaken by the consultant ecologists returned records of the also rare Barbastelle bat (paragraph 2.1.2 and 4.1), therefore 10 species of bat in total.

10.2. Since there are 17 species of bat that are known to breed in Britain (Bat Conservation Trust: http://www.bats.org.uk/pages/uk_bats), the nine species detected and identified, during the bat surveys conducted by the consultant ecologists at Markwell's Wood, equate to 53% of the bat species in the United Kingdom and 59%, when Barbastelle is included.

10.3 Relative to the number of bat species in the United Kingdom, the number of bat species recorded and identified by surveys at Markwell's Wood hardly constitutes a 'low number'.

How predictions given in the Planning Statement that "*Non-significant adverse residual effects on bats are predicted for Phases 1 and 2. No other significant effects were predicted*" were arrived at is unclear.

11. How the proposed development would impact on bats and the measures needed to be taken to mitigate potential harm is an important planning matter.

11.1 According to the applicant's Planning Statement (paragraph 8.45): "*Non-significant adverse residual effects on bats are predicted for Phases 1 and 2. No other significant effects were predicted*" (paragraph 8.45).

11.2 This advice, however, is potentially misleading because the 'Markwell's Wood Protected Species Survey Report' doesn't include an assessment of how the scheme, including noise

emissions from the scheme, would impact on the bat species recorded and identified by the surveys, whether roosting, foraging or commuting across all habitats that would be effected by the scheme.

11.3 Consequently, how the emphatic predictions given in the Planning Statement that *“Non-significant adverse residual effects on bats are predicted for Phases 1 and 2. No other significant effects were predicted”* (paragraph 8.45) were arrived at is unclear.

Desk-top survey does not obviate the need for in-field surveys of birds.

12. The information about birds given in the Preliminary Ecological Appraisal (paragraph 3.1.3 ‘Rare, Notable and Protected Species’) was obtained by means of a desk-top survey using HBIC and SxBRC records (Environmental Statement: Appendix 6.1 Preliminary Ecological Appraisal, paragraph 3.1.3), not by means of actual field surveys – unlike bats, great crested newt, dormouse and badger for which surveys were undertaken and reported in the ‘Markwell’s Wood Protected Species Survey Report’.

12.1 It is CPRE Sussex’s view that surveys of birds that use the site and its environs including adjoining fields, and how they use the site and its environs over all four seasons should be undertaken to enable the determination of appropriate and effective measures to mitigate ‘any negative effects to protected species’. This would comply with Natural England’s Standing Advice for local planning authorities to assess the impacts of development on wild birds and Circular 06/2005: ‘Biodiversity and Geological Conservation-Statutory Obligations and their impact within the planning system’.

12.2 Natural England’s ‘Standing advice for local planning authorities to assess the impacts of development on wild birds’ states that

“Survey reports and mitigation plans are required for development projects that could affect protected species, as part of getting planning permission. Surveys need to show whether protected species are present in the area or nearby, and how they use the site. Mitigation plans show how you’ll avoid, reduce or manage any negative effects to protected species”

12.3 The National Planning Policy Framework (NPPF) advises that *“Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system”* (NPPF Paragraph 115, footnote 24).

12.4 As is clearly stated by Government Circular 06/2005: ‘Biodiversity and Geological Conservation-Statutory Obligations and their impact within the planning system’, at:

Paragraph 98: “The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat”. And at:

Paragraph 99: “It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted” (my underlining).

To conclude, CPRE Sussex asks that the application be refused.

Yours faithfully,

R F Smith DPhil, BA (Hons), FRGS
Trustee CPRE Sussex

Copy to Director CPRE Sussex