

**TO:** PLANNING & REGULATORY COMMITTEE **DATE:** 23 September 2015

**BY:** PLANNING DEVELOPMENT TEAM MANAGER

**DISTRICT(S)** MOLE VALLEY DISTRICT COUNCIL **ELECTORAL DIVISION(S):**  
**Dorking Hills**  
**Mrs Watson**

**PURPOSE:** FOR DECISION

**GRID REF:** 515065 144026

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**TITLE:** MINERALS/WASTE MO/2014/1006/SCC

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### SUMMARY REPORT

**Land at Bury Hill Wood, off Coldharbour Lane, Holmwood, Surrey.**

**Underground drilling corridor of an exploratory hydrocarbon borehole.**

The underground drilling corridor would extend to some 8.5 hectares, allowing for deviation during drilling, spreading in a south-westerly direction from the associated drill-site at land at Bury Hill Wood to underneath Coldharbour Village. The application site is located within the Metropolitan Green Belt, the Surrey Hills Area of Outstanding Natural Beauty (AONB) and Area of Great Landscape Value (AGLV). Coldharbour Village is a conservation area, with the Anstiebury Camp Scheduled Ancient Monument to the east and Leith Hill Site of Special Scientific Interest to the west. The Coldharbour Village Conservation Area extends from the junction of Coldharbour Lane, Abinger Road and Anstie Lane in a band that includes the majority of the village properties and ends just short of The Landslip.

There are two important aquifers present in the Dorking area, the Chalk and the Lower Greensand. The primary aquifer, the Chalk, is not present in the proposed borehole location. The secondary aquifer, the Lower Greensand, is exposed at surface and would be penetrated by the upper part of the proposed exploratory borehole. The associated drill-site at land at Bury Hill Wood (allowed appeal ref: APP/B3600/A/11/2166561) is found some 3.5 km to the south west of Dorking, west of South Holmwood and 800 metres to the north of Coldharbour village. Access to the associated drill-site would be gained via Coldharbour Lane and utilise an existing Forestry Commission entrance and 250 metres of access track. Coldharbour Lane links to the A24 via Knoll Road to the south of Dorking and the A2003.

This application is Environmental Impact Assessment (EIA) development and as such, is accompanied by an Environmental Statement (ES). The application is concerned with the first stage of on-shore hydrocarbon development – exploration. It would involve the construction of a separately proposed above ground drill-site where following the drilling of an exploratory borehole, short term testing for hydrocarbons would take place to assess the prospect. That separate drill-site planning application (ref: MO09/0110) was refused by Surrey County Council (SCC) on 30 June 2011 and proposed the following: “*Construction of an exploratory drillsite to include plant, buildings and equipment; the use of the drillsite for the drilling of one exploratory borehole and the subsequent short term testing for hydrocarbons; the erection of security fencing and the carrying out of associated works to an existing access and track all on 0.79 ha, for a temporary period of up to 3 years, with restoration to forestry.*”

The applicant then made an appeal to the Secretary of State against the refusal. The appeal was subsequently dismissed by the Secretary of State’s Inspector on 26 September 2012.

However, the applicant Europa Oil and Gas Ltd then successfully challenged the Inspector's decision in the High Court, and on 25 July 2013 the judge quashed the earlier appeal decision. Leith Hill Action Group, which was a defendant to the proceedings in the High Court, then appealed against the judge's decision. This appeal was dismissed by the High Court on 19 June 2014 and the Secretary of State re-determined the appeal by Europa Oil and Gas Ltd against SCC's earlier refusal of planning permission (ref: MO09/0110).

The re-determined Public Inquiry commenced on 22 April 2015 and closed on 11 June 2015 (ref: APP/B3600/A/11/2166561). The Inspector issued his decision on 7 August 2015 and allowed the appeal (i.e. the Inspector approved the associated exploratory drill-site).

Following a request made by the County Planning Authority (CPA), the applicant has provided further information in respect of any cumulative environmental impacts caused by this current planning application for an underground drilling corridor and the associated exploratory drill-site. However, this Report focuses only on those matters judged by the CPA to be relevant to this current planning application for an underground drilling corridor, rather than the wider range of issues relating to the associated exploratory hydrocarbon drill-site. Officers have, however, documented all the responses received to consultation / notification on this current application (including its supporting Environmental Statement) from technical consultees, non statutory consultees and residents.

As this planning application facilitates that associated drill-site, Officers recommend that Members accept that the issue of need for hydrocarbon development has been separately decided by the appeal Inspector. Nevertheless, there are relevant environmental and amenity issues associated with this proposed underground drilling corridor. Officers judge that the relevant considerations in this case are hydrology and hydrogeology; noise and vibration; and archaeological impacts. As this particular proposal is entirely below ground, Officers have not considered above ground impacts on the AONB/AGLV or Metropolitan Green Belt.

Sutton and East Surrey Water object to this current application as they are concerned that the proposed mitigation measures would not guarantee the Lower Greensand aquifer's protection. Similar concerns were also raised by resident groups and their representatives at the recent Public Inquiry. However, the Inspector concluded on 7 August 2015 that:

*"The safeguarding of groundwater quality is always important, especially where it is used as a potable resource. However, the regime recently introduced by the EA would provide for more robust testing and checking for any leakage from the site operations into the underlying groundwater. This should reduce significantly the dangers of a loss at source travelling along pathways to sensitive receptors. With this monitoring in place, it should be much easier and quicker to introduce remediation. In the absence of any worries raised by the Regulator, objections could only have attracted more weight if they had relied on technical evidence and evaluation. As it is, they seem to be almost entirely precautionary and the management proposals for the site and EA's monitoring should answer any doubts."*

Officers recommend that Members attach considerable weight to the conclusions of the Inspector and note that no objections have been raised to this application by either the Environment Agency or the County Geotechnical Consultant. As such, and on the basis of all the technical responses in respect of those relevant environmental and amenity issues referred to above, Officers consider that planning permission for an underground drilling corridor should be granted.

The recommendation is to **PERMIT** subject to the imposition of planning conditions.

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**APPLICATION DETAILS**

***Applicant***

Europa Oil and Gas Ltd

***Date application valid***

14 May 2014

***Period for Determination***

3 September 2014 (extension agreed until 30 September 2015)

***Amending Documents***

- Figure 1.10a and 1.10b Well Construction Concept Cross-sections (these figures replace Figure 1.10 in Chapter 1 of the November 2014 ES);
- Revised Chapter 12 of the Environmental Statement: Hydrology & Hydrogeology (this chapter replaces Chapter 12 of the November 2014 ES);
- Appendix to Chapter 12: Hydrogeological Risk Assessment;
- Landscape & Visual ES Chapter Addendum (to Chapter 9 of the November 2014 ES);
- Appendices to Landscape & Visual ES Chapter Addendum.
- Letter from WSP regarding proposed site lighting.

**SUMMARY OF PLANNING ISSUES**

This section identifies and summarises the main planning issues in the report. The full text should be considered before the meeting.

	<b>Is this aspect of the proposal in accordance with the development plan?</b>	<b>Paragraphs in the report where this has been discussed</b>
Need for Hydrocarbons	Appeal Inspector decided: Yes	68-74
Hydrology & Hydrogeology	Yes	75-107
Noise & Vibration	Yes	108-122
Archaeology	Yes	123-126
AONB/AGLV & Visual Impact	Yes	127
Metropolitan Green Belt	Yes	128-130
Highways & Transportation	Yes	131-133
Other issues	Yes	134-136

**ILLUSTRATIVE MATERIAL**

Aerial 1 – Associated Drill-Site at Bury Hill Wood

**Site Plan**

Plan 1 - Site of Application (Drawing Ref EUR HO 10 Revision D)

Plan 2 - Well Construction Concept (Figure 5a)

Plan 3 - Well Construction Concept (Figure 5b)

**Appendices**

Appendix 1 – Schedule of 23 Conditions from the associated exploratory hydrocarbon (appeal ref: APP/B3600/A/11/2166561, decision dated 7 August 2015)

## BACKGROUND

### *Site Description*

1. The underground drilling corridor would extend to some 8.5 hectares, allowing for deviation during drilling, spreading in a south-westerly direction from the associated drill-site at land at Bury Hill Wood to underneath Coldharbour Village. The application site is located within the Metropolitan Green Belt, the Surrey Hills Area of Outstanding Natural Beauty and Area of Great Landscape Value. Coldharbour Village is a conservation area, with the Anstiebury Camp Scheduled Ancient Monument to the east and Leith Hill Site of Special Scientific Interest to the west. The Coldharbour Village Conservation Area extends from the junction of Coldharbour Lane, Abinger Road and Anstie Lane in a band that includes the majority of the village properties and ends just short of The Landslip.
2. There are two important aquifers present in the Dorking area, the Chalk and the Lower Greensand. The primary aquifer, the Chalk, is not present in the proposed borehole location. The secondary aquifer, the Lower Greensand, is exposed at surface and would be penetrated by the upper part of the proposed exploratory borehole.
3. The associated drill-site at land at Bury Hill Wood is found some 3.5 km to the south west of Dorking, west of South Holmwood and 800 metres to the north of the Village of Coldharbour. Access to the associated drill-site would be gained via Coldharbour Lane and utilise an existing Forestry Commission entrance and 250 metres of access track. Coldharbour Lane links to the A24 via Knoll Road to the south of Dorking and the A2003.

### *Planning History*

4. Planning application ref: MO09/0110 was refused by Surrey County Council (SCC) on 30 June 2011 for the following development: "Construction of an exploratory drillsite to include plant, buildings and equipment; the use of the drillsite for the drilling of one exploratory borehole and the subsequent short term testing for hydrocarbons; the erection of security fencing and the carrying out of associated works to an existing access and track all on 0.79 ha, for a temporary period of up to 3 years, with restoration to forestry." At the Planning & Regulatory Committee on 25 May 2011, Members had earlier resolved to refuse the application for the following reasons:

- (1) *The proposed exploratory drilling development will have a significant adverse impact on the Area of Outstanding Natural Beauty (AONB) in the setting of Leith Hill which cannot be mitigated and where exceptional circumstances including the public interest have not been demonstrated to justify the grant of planning permission. The proposal is therefore contrary to Government Planning Policy as set out in Minerals Policy Statement 1 (Planning and Minerals) November 2006 and Planning Policy Statement 7 (Sustainable Development in Rural Areas) August 2004, The South East Plan May 2009 Policy C3 (Areas of Outstanding Natural Beauty); the Surrey Minerals Plan 1993 Policy 1 (Environmental and Amenity Protection) and the Mole Valley Local Development Framework Core Strategy 2009 Policy CS13 (Area of Outstanding Natural Beauty and Area of Great Landscape Value).*
- (2) *There is insufficient evidence to demonstrate why the proposed exploratory drilling development cannot be located beyond the boundary of the Area of Outstanding Natural Beauty (AONB) designation. The proposal is therefore contrary to Government Planning Policy as set out in Minerals Policy Statement 1 (Planning and Minerals) November 2006 and Planning Policy Statement 7 (Sustainable Development in Rural Areas) August 2004 and Surrey Minerals Local Plan 1993 Policy 15 (Environmental & Ecological Impact of Hydrocarbon Development).*

- (3) *It has not been demonstrated to the satisfaction of the County Planning Authority that the proposed traffic management measures are adequate to protect the character of Coldharbour Lane; where the nature of the traffic activity would have the potential to irreversibly damage the historic banks and trees and lead to the industrialisation of the character of a quiet rural road; or adequate to protect the amenity of highway users and residents in Knoll Road, Coldharbour Lane and the broader vicinity; contrary to the Mole Valley Local Plan 2000 Policy MOV2 (The Movement Implications of Development) and Surrey Minerals Local Plan 1993 Policy 1 (Environmental and Amenity Protection).'*
5. The applicant then made an appeal to the Secretary of State against the refusal. The above reasons for refusal were subsequently amended by Surrey County Council in the run up to the first appeal Public Inquiry, with the second reason for refusal withdrawn and the third amended to read as follows: *'It has not been demonstrated to the satisfaction of the County Planning Authority that the proposed traffic management measures are adequate to protect the character of Coldharbour Lane; where the nature of the traffic activity would lead to the industrialisation of the character of a quiet rural road; or adequate to protect the amenity of highway users and residents in Knoll Road, Coldharbour Lane and the broader vicinity; contrary to the Mole Valley Local Plan 2000 Policy MOV2 (The Movement Implications of Development) and Surrey Minerals local Plan 1993 Policy 1 (Environmental and Amenity Protection).'*
  6. The appeal was subsequently dismissed by the Secretary of State's Inspector on 26 September 2012. However, Europa Oil and Gas Ltd then successfully challenged the Inspector's decision in the High Court, and on 25 July 2013 the judge quashed the earlier appeal decision. Leith Hill Action Group, which was a defendant to the proceedings in the High Court, then appealed against the judge's decision. This appeal was dismissed by the High Court on 19 June 2014 and the Secretary of State has now re-determined the appeal by Europa Oil and Gas Ltd against SCC's earlier refusal of planning permission (see below). The question determined by the High Court and Court of Appeal was whether or not the exploration for minerals (including hydrocarbons) fell within the term "mineral extraction" as used in paragraph 90 of the NPPF (and policy MC3 of the Surrey Minerals Local Plan (1993)). If it does, then exploration for minerals is not inappropriate development in the Green Belt per se. Whether or not a proposal for exploration for minerals is inappropriate development in the Green Belt will depend on whether the particular development proposed preserves the openness and does not conflict with the purposes of Green Belt. If it does not fall within the phrase "mineral extraction" then exploration for minerals in the Green Belt would be inappropriate development per se. The Inspector found that it did not fall within the meaning of the phrase "mineral extraction." The High Court and the unanimous Court of Appeal held that he was wrong to do so. That position is now reflected in policy. Paragraph 092 of the NPPG states that there are three phases of hydrocarbon extraction: exploration, appraisal and production.
  7. Planning application ref MO09/0110 (allowed at appeal on 7 August 2015, ref: APP/B3600/A/11/2166561) proposed to construct a temporary drill-site within an enclosed compound together with mobilising drilling and ancillary equipment/welfare accommodation to drill an exploratory borehole. Should hydrocarbons be encountered preliminary short term (no longer than 4 days) "drill stem" testing would be undertaken to assess economic viability. Should no hydrocarbons be encountered or upon completion of the drill stem testing, all structures, buildings and enclosures would be removed and the site restored. A temporary drill-site is used solely for exploratory purposes only to establish the presence or not of hydrocarbons. If economic reserves are encountered a suitably located permanent facility may be sought through a separate planning application and considered on its merits at that time. The duration of the temporary development is programmed to last approximately 18 weeks and can be summarised in 4 Phases: Phase 1 Site clearance and preparation - 6 weeks; Phase 2 Equipment

assembly and drilling operations - 5 weeks; Phase 3 Testing and evaluation (if applicable) - 2 days (oil) or 4 day (gas); and Phase 4 Reinstatement of site - 6 weeks

8. The Public Inquiry into the second appeal (ref: APP/B3600/A/11/2166561) closed on 11 June 2015. The Inspector issued his decision on 7 August 2015 and allowed the appeal with the following formal decision reason: *'Having regard to the evidence presented to the inquiry, the written representations and visits to the appeal site and surroundings, I am convinced that the short-term harm to the identified interests of acknowledged importance would be clearly and demonstrably outweighed by the fully reversible nature and the benefits of the scheme in national and local terms...Accordingly, and having taken into account all other matters raised, this appeal succeeds.'*

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## THE PROPOSAL

9. The applicant proposes an underground drilling corridor of an exploratory hydrocarbon borehole to be drilled from land at Bury Hill Wood, off Coldharbour Lane, Holmwood to land under Coldharbour Village. The borehole would be drilled to an anticipated total depth of 1,450m true vertical measured depth in order to target the Downdip Portland Target, with a 'deviation tolerance zone' of 8.5 hectares. The underground route of the drilling operation was not included within the earlier planning application refused by SCC (see above, ref: MO09/0110 – allowed at appeal), which sought planning permission for the over ground exploratory drill-site operations.
10. The application site comprises the underground drilling corridor in which the path of the directional drilling would take place. The applicant states that the well direction would be monitored continuously while drilling and would be directionally controlled in order to hit the targets selected. On completion of the well, a true and final surface location of the well path would be recorded on final borehole surveying.

## Drilling Operations

11. The applicant sets out that following construction of the associated drill-site, drilling and associated operations would operate on a 24 hours per day basis over a period of approximately 4 – 5 weeks. The applicant states that the drilling and casing programmes would be designed in accordance with standard petroleum industry practice, taking into account the anticipated geology, pressures and objectives of the borehole. The applicant states that 24 hour drilling is necessary to ensure the stability of open hole sections of the well, and general safety of operations.
12. The applicant plans to drill as fast as possible to the target sections, log and test the borehole, set production casing and, if required, run a short-term drill stem production test. The applicant sets out that well casing is an important part of the drilling and completion process, consists of a series of metal tubes installed in the freshly drilled hole. Casing strengthens the sides of the well hole, ensures that no oil or natural gas seeps out of the well hole as it is brought to the surface, and keeps other fluids or gases from seeping into the formation through the well.
13. The applicant sets out that water would be required for the drilling fluids whilst drilling the borehole for dealing with the possible loss of fluids to formation in the early drilling stage and for emergency fire-fighting contingencies. The applicant states that the well has been designed to avoid any contamination of the Atherfield Clay and Hythe Beds, and that to isolate and protect the Lower Greensand, the drilling programme would include the following:
- Installation of a 508mm Outer Diameter (OD) Surface Conductor Pipe down to 20m prior to the drilling rig coming on site.

- Installation of 339.73mm OD casing pipe down to 450m following the drilling of a 444.5mm hole using water based drilling mud.
  - The 339.73mm OD casing cemented in place, inside of the 20" conductor pipe.
  - A 311.15mm hole drilled with a fresh water mud system, taken down to a depth of about 750m.
  - This hole would then be lined with 244.48mm OD casing and cemented to surface. This 244.48mm OD casing set from surface down to 750m would further isolate the Lower Greensand.
14. The applicant sets out that there would be no impact on the approximate drilling operation length and rig size as proposed in the associated drill-site. Lastly, the applicant sets out that the programme would be subject to Health and Safety Executive (HSE) notification and central Government (Department for Business, Innovation and Skills) approval prior to the commencement of operation.

## CONSULTATIONS AND PUBLICITY

### *District Council*

15. Mole Valley District Council: *"Mole Valley Council has no comment on the technical issues relating to Planning Application MO/14/1006 but wishes to state that it considers that it has no effect upon the issues relating to the objection previously raised regarding MO/2009/0110 which is under appeal. For avoidance of doubt Mole Valley maintains the following:*

*That Mole Valley District Council OBJECTS to the proposed exploratory oil drilling in this sensitive landscape that is recognised as having national importance. The proposal represents a short term, highly intensive and intrusive, development which would impact upon environmental interests of acknowledge importance, both nationally and locally. In the absence of any overriding national need the development must fail against the clear national and local planning policies in place to protect this national asset. Even with evidence of need the District Council is not convinced that the harm is overcome if appropriate weight is given to the conservation of the natural beauty of this part of the Surrey Hills Area of Outstanding Natural Beauty."*

16. Mole Valley District Council (Environmental Health): No response.

### **Consultees (Statutory and Non-Statutory)**

17. Environment Agency (EA): No objection confirmed on 10 April 2015, following the EA's review of further information submitted under Regulation 22 of the EIA Regs 2011.
18. County Geotechnical Consultant (CGC): No objection.
19. Sutton and East Surrey Water Plc: (letter dated 17 December 2014) *"The proposed exploratory well will penetrate the lower greensand aquifer in relatively close proximity to our Dorking abstraction source. We are concerned that, in the event of a leak or a spill, the proposed mitigation measures will not guarantee the aquifer's protection. We therefore wish to formally register our objection to the proposed application."*

#### Applicant's response to Sutton and East Surrey Water objection

The applicant submits that: *"Sutton and East Surrey Water are mistaken in their belief that the Lower Greensands underlying the suite are hydraulically linked to the water abstraction boreholes in Dorking. The water company has previously made the same objection to the original planning application for the drilling site (currently the subject of a new public inquiry) that was over ruled by the Environment Agency. The EA wrote at the*

*(Letter of 18 August 2009) to Surrey county council to confirm that there were ‘...no feasible pathways (for liquids from the site) to the Dorking abstraction boreholes...’*

*Examination of the Groundwater and surface water risk maps published by the EA show that the proposed site is outside any areas at risk. Where the borehole approaches the down-hole target, it is 100m below the Lower Greensands and therefore does not pose a risk to the groundwater aquifers located in that strata...the safeguards we have proposed are robust and safe, as proven by their use over the last 20 years...In this particular instance, the site is located well outside the Source Protection Zone for the Dorking Aquifers and is hydraulically isolated by the topography. There is therefore no risk to the water abstraction boreholes in Dorking arising from this proposed development.”*

#### CGC’s response to Sutton and East Surrey Water objection

The CGC advises that the geology and groundwater catchment for the Sutton and East Surrey wells is such that there is no direct groundwater pathway in the same aquifer between the wells and the drill-site. The most direct pathway from the Hythe Formation alongside the well location to the supply wells is via the springs to the north and west of the site and into watercourses such as the Pipp Brook that eventually join the River Mole at Dorking. Where these watercourses leave the outcrops of the Weald and Atherfield Clays they then flow on the Hythe Formation and Folkestone Beds, with which there would be hydraulic continuity. The Hythe Formation and the Folkestone Beds is the aquifer exploited by the public water supply wells in Dorking. With no direct groundwater flow path between the drill-site and the public water supply wells, and the relatively long alternative ground and surface water pathway, the CGC considers that there is very little risk to the Sutton and East Surrey wells, though they note that it is essential that the surface water receptors are protected.

20. County Environmental Assessment: The ES is compliant with the minimum information requirements set out in Part II of Schedule 4 of the EIA Regulations 2011. As submitted, the ES also provides much of the information listed under Part I of Schedule 4 of the EIA Regulations 2011, as could be reasonably required for the proposed development.
21. County Noise Consultant: The noise and vibration levels likely to arise from this development should not exceed appropriate limits. On this basis, the development should be acceptable in terms of noise and vibration.
22. County Archaeological Officer: No objection.
23. County Highway Authority: As this application is only to consider the underground drilling corridor, it has no transportation impact on its own, and therefore no comment to make.
24. Health and Safety Executive: Does not advise, on safety grounds, against the granting of planning permission in this case.
25. Surrey Fire & Rescue: The Fire Authority has no observations to the proposal. However, should any drilling operation be undertaken the following points are to be observed:
  - The Fire Authority should be notified of the location of any operations to ensure correct addressing of incidents on site;
  - Adequate Fire Service access it to be provided
  - Any ancillary buildings that used for such purposes as offices etc should comply with requirements of the Regulatory Reform (Fire Safety) Order 2005
26. Department of Energy and Climate Change (DECC): No response.

27. County Air Quality Consultant:

*'There is no odour issue associated with the proposed exploratory drilling. With respect to dust, it is understood that there will be no significant operational effects associated with proposed activities on the site. In our view, the dust control during construction and restoration phase proposed is sufficient. With regards to air quality, the application proposes that Clean Enclosed Burners (CEBs) are to be installed as part of an exploratory borehole and production testing. As the CEBs are not expected to operate for more than 36 hours in total, NOx emissions are not likely to have significant effects on local vegetation at annual timescales. This is below the limit that would require an air quality assessment as stipulated in Environmental Protection UK guidance. We therefore would not expect significant operational effects associated with the application with respect to air quality.'*

*The application also proposes to generate an average of about 20 HGV movements per day during its busiest phase, the site construction phase. This is not expected to be significant. We therefore would not expect significant construction effects associated with the application with respect to air quality. Based on the information provided, we envisage no further implications of the proposal with respect to air quality and dust.'*

28. Southern Water: No comment to make.

29. Forestry Commission: No response.

30. Woodland Trust: Objects on the basis that the potential impacts (from noise, lighting and potential for accidental contamination from spillage) may cause irreversible deterioration to the ancient woodland that surrounds the site. Also concerned that deciding two connected applications independently will mean a strategic approach to managing environmental risk cannot be taken – therefore, this application should be deferred until a decision has been made on the appeal. Concerned that allowing exploratory well in an AONB and adjacent to ancient woodland will set a precedent leading to direct loss of irreplaceable habitat.

31. National Trust: *'Although the current application is only for the underground drilling corridor, the application acknowledges that the proposal is essentially linked to the earlier application. Effectively, they form part of the same development proposal. Furthermore, it is noted that the proposed drilling corridor would pass under the Trust's land at Coldharbour Common. The Trust therefore objects to the current planning application for the same reasons as set out above, and urges the County Council to refuse permission for this inappropriate development.'*

32. Gatwick Safeguarding: As this application is for an underground drilling corridor only and does not include above ground works including the rig, no aerodrome safeguarding objections to the proposed amendments/additional information. Should these proposals go ahead and a drilling rig is required, an obstacle light will be required of a specification to be agreed with the Gatwick Airport Safeguarding Officer.

33. County Ecologist: No objection.

34. County Lighting Consultant:

“Additional information was submitted to me with regards to more realistic effects the conifers would have on screening light sources to sensitive receptors. Indeed applying a more accurate factor for screening results in a significant drop in the source intensity figures from the circa 840 candela (cd) to 202 cd, with the limit for pre-curfew for Environmental Zone E1 being 2500cd, the calculation figures indicate the designer is endeavouring to reduce impacts as far as possible.

Unfortunately due to Health & Safety reasons requiring illumination throughout the hours of darkness, the high level lighting (above the tree line) would inevitably result in receptors experiencing sight of the lit development and therefore not complying with the requirement of zero cd post-curfew. However the temporary nature of the works may provide the planning authority with mitigation for this and the effects of light presence.

The paragraph written by the applicant's Consultants (WSP) stating: '*Such lighting shall be implemented with due consideration for the use of best practicable means to prevent, or to counteract the effects of the artificial light on the surrounding area. The lighting shall be designed by competent designers and be assessed against the guidance documentation mentioned within the planning submissions using the latest technology*' does afford the Planning Authority some additional comfort that the applicant would use the best practicable means to prevent, or to counteract the effects of the artificial light on the surrounding area.

It is clear that this development would be unable to adhere to guidance for the reduction of obtrusive light, however it is clear the applicant has/would endeavour to limit the effects of this temporary lighting."

35. County Landscape Officer: There is an adverse landscape and visual effect on the landscape which increases in significance due to the location within the designated landscape of the AONB. Mitigation for this installation is limited only to its temporary nature.

*Comment on Regulation 22 information:*

'The assessment acknowledges that the upper parts of the drilling rig will be visible from a wider area but maintains that the contrast will not be so great as the plantation woodland has a strong vertical characteristic. This would seem to ignore the organic and undeveloped nature of the woodland and skyline which would be in direct contrast to an industrial installation. This would also have to be lit in accordance with operational health and safety requirements exceeding the sky glow requirements in a dark sky area.

I cannot agree with the conclusions drawn from this assessment on the level of harm on the Surrey Hills AONB...I would consider that the industrial nature of this development will be an uncharacteristic and alien feature in direct contrast to the predominantly organic character of the woodland landscape with an undeveloped skyline. As such the impact on landscape character would be of major significance only being reduced by its temporary nature.'

36. Natural England: No objection.
37. Surrey Wildlife Trust: No response.
38. Surrey Hill AONB Board:

*'This application is directly related to the main exploratory drilling proposal (MO/2009/0110) subject of a second public inquiry in April and the harmful impact on the AONB is the same. Therefore the Surrey Hills AONB Board's concerns submitted to SCC in determining that application, the case it presented to the July 2012 public inquiry, and the Inspector's conclusion that material harm would be caused to the AONB all still apply to this current application. The Board is presenting further evidence at the forthcoming second public inquiry this April. SCC is asked therefore to take into account the AONB concerns previously set out in connection with the above application and appeal and the Inspector's AONB conclusion that material harm would be caused to the AONB.*

*Since the Inspector's decision the then Surrey Hills AONB Management Plan has been superseded by the Surrey Hills AONB Management Plan 2014 – 2019. The land use planning policies are similar and the proposal is contrary to Management Plan policies LU1 and LU2 and indeed the supporting text at section 2.9. The proposal is also considered to be a "major development" for the purposes of NPPF paragraph 116. Consequently, the proposal is contrary to NPPF policy set out at both paragraphs 115 and 116. Furthermore the application is contrary to the AONB aspects of Mole Valley Core Strategy policy CS13 and Surrey Minerals Plan Core Strategy Policy MC2.'*

39. Ramblers Association: No response.

40. CPRE:

*Objects owing to unacceptable impacts on the landscape and harm to the Green Belt, including other environmental harm, also: 'The proposals to explore for oil and gas, with only a one in three chance of success, cannot be justified on any rational basis of overriding need or strategic significance. If there is oil it is unlikely to fulfil more than the tiniest fraction (0.01%) our national energy requirements over the next quarter of a century. Therefore it cannot be sensible or practical to give planning consent just because our economy is currently dependent on hydro-carbons for the majority of its energy needs. This project would not alter that position one way or the other, and on a simple cost-benefit analysis, simply does not stack up.*

*Given the basic suppositions underlying these applications are fundamentally flawed, there is no case to be made for saying that drilling in this site is essential (and in the national interest) rather than merely commercially convenient. Why this site over and above other ones in less sensitive areas? The consideration of alternative sites is one of the main objectives of an environmental impact assessment. Yet, as with the previous application, no satisfactory evaluation of alternative sites, outside the AONB and with better access for HGVs, have been made available for consideration.*

*Then there is the considerable volume and strength of local objection. If 'localism' is truly about local people deciding local issues then, in the absence of overriding national interest or exceptional circumstances to justify the harm, their voices should prevail. Moreover, Mole Valley District Council has continued to oppose exploratory oil drilling in this very sensitive landscape of national importance. The council has stated that in the absence of any overriding national need the development must fail against the clear national and local planning policies that have been put in place to protect this national asset.*

*Not only is a national asset diminished by this development, but a vital natural resource is threatened. The 'pan handle' application poses the risk of contamination of the aquifers and pollution of the water supply for the area. This resource is of far greater importance to the public, in both the short and longer term, than the limited energy supplies that may be found and extracted by Europa Oil & Gas Limited. The risks posed to our water supplies must be evaluated and eliminated before any drilling can even be considered. Independent expert advice must be sought.'*

CPRE state that previous objections to the development remain material and relevant to this wholly connected application:

- Traffic implications, access via the historic sunken Coldharbour Lane, is totally unsuitable for HGVs; and the increase in traffic represents an unacceptable level of intrusion, adverse impact on the safety and rural character of the road.

- The proposals would have an obtrusive visual and noise impact, to the detriment of the peace and tranquillity of an important area, which provides recreation and peaceful enjoyment for many thousands of visitors and local residents.

CPRE sceptical that the company has the ability to restore the landscape and guarantee that there would be no risk to our future water supply.

### ***Parish/Town Council and Amenity Groups***

41. Capel Parish Council (CPC): Objects on the following grounds:

#### *Financial Considerations*

Based upon the Europa accounts ending on the 31<sup>st</sup> July, 2014 the following information was provided: 1) The applicants only have a 40% interest in the Holmwood PEDL143 Exploration Licence; 2) The revenue of £4.5 million is a 14% reduction on the previous year's revenue; 3) Compared to the previous year the apparent liquidity was dependent upon a Share Issue; & 4) It would appear that they have a retained deficit based upon an accumulated loss on the previous year end of £13.2 million.

Given the significant costs of implementing any form of exploration CPC is concerned as to their ability to meet all of its environmental obligations in the event of planning permission being granted. The applicants have a Lease from the Forestry Commission for the exploration now proposed. National Planning Guidance requires the owners (Forestry Commission) to undertake all remedial obligations contained within any Conditions or Planning Agreements to restore the land in the event of default. Given the financial risks which CPC consider may prevail the Commission would need to be party to any agreement. As the applicants only have a 40% (minority) interest, CPC would seek the assurance that all interested parties would be signatories to any planning agreement. CPC considers this prospect to be 'high risk' having regard to (a) the prospect of an application to vary the conditions of any permission which may be granted within 5 years and (b) the prospect of enforceability.

#### *Green Belt (GB)*

The previous Bury Hill Wood Appeal Inspector stated that there were no other considerations which "would clearly outweigh the harm to the Green Belt." The position adopted in relation to the Judicial Review and the Court of Appeal has subsequently changed. Firstly, the Secretary of State has had further regard to Green Belt considerations. Secondly, following the separate Redhill Aerodrome appeal, the Court of Appeal supported the decision of that separate Inspector who refused planning permission on ground of 'other harm' to the GB. The protection of the GB is one of the core planning principles in the NPPF and its emphasis is consistent with the balance addressed by the previous Bury Hill Wood Appeal Inspector, which now accords with the Court of Appeal Redhill decision. Planning permission should be refused by reason of inappropriateness and the harm it would cause to the GB. There have been no changes to what are considered to be the essential characteristics of the GB's and the five purposes they serve all remain unchanged. What remains a significant consideration in the view of CPC is that very special circumstances should justify an exception to GB policy which were not demonstrated in 2012 and cannot be demonstrated now.

## AONB.

The area of high landscape and biological value is very popular with visitors. The protection of the natural beauty of the landscape is a priority in the AONB and while it is acknowledged that an AONB designation does not preclude development in tandem with its Green Belt designation and its unique setting where the corner stone is tranquillity any intrusion must be seen as one to have an adverse and potential irreversible impact upon the locality, this being reinforced in the NPPF. The CPC notes a consistent pattern in respect of recent central Government decisions in relation to the importance of, and protection of A.O.N.B's. The decisions may not relate to oil exploration but do show a consistent regard in respect of the great weight and importance to be afforded to such areas of national importance and designation.

### *Highways*

The applicant confirmed that a holding location at a transport depot away from Dorking/Coldharbour would be implemented and that they would put in place measures to improve what is, at present, poor reception for mobile phones in the Coldharbour area. CPC wish to see the securing of these safeguards incorporated into a Planning Agreement. It has also been agreed in principle that in the event of planning permission being granted a condition survey would be undertaken along the entire length of Coldharbour Lane up to the site to enable protective/ remedial measures to be taken in the event of damage being caused by vehicles serving the proposed development. CPC would also wish to see these measures being secured by way of a Planning Agreement with movements suspended while remedial works are undertaken.

### *Light and Noise*

Given the previously environmental condition some impact in relation to noise and light would prevail. Notwithstanding the applicant's intentions to minimise that impact, they are conditions which would be better absent from the vicinity

42. Holmwood Parish Council: Concerned about the impact of substantial traffic and link between Coldharbour Lane and Horsham Road, in addition to knock-on effects in Dorking area. There would be damage to the sunken narrow lane, as it is unsuitable for large vehicles, and local people/business/tourism would be inconvenienced by the proposal. Concern that exploration would take place in AONB and Green Belt; unacceptable views of the rig, visibility of flares, risk of fire in wooded area and light pollution. How long would this area take to recover if exploration allowed.
43. Wotton Parish Council: Concerned about the effect of the traffic and heavy vehicles that would be employed in the construction of the site on the surrounding roads and countryside.
44. Leith Hill Action Group:

*'The application referenced above is not a stand-alone application (as the applicant clearly states); it simply adds more detail to MO/2008/0169 which was refused by the County Council as Minerals Planning Authority in 2011 and is the subject of a second Public Inquiry (APP/B3600/A/11/2166561) scheduled for April 2015. It does not change the proposed development. The County Council has required the applicant to submit a consolidated revised Environmental Statement covering the whole proposed development, which suggests to us that the Council takes the same view. This being the case, permission has already been refused. The only conceivable decision remaining for the Planning & Regulatory Committee to take is whether it wishes to add to its reasons for refusal.'*

*Sutton and East Surrey Water has formally objected to the additional proposal because of the potential for the contamination of groundwater. Unless the County Council has expert opinion to the contrary (from a source independent of the applicant) then it is our view that this should be an additional reason for refusal and should be added to the County Council's Statement of Case at the forthcoming Public Inquiry.*

*Any suggestion that this aspect of the proposed development (implications for groundwater) is separable from the rest and so might be approved separately falls when the letter of December 8<sup>th</sup> 2014 from the Environment Agency to the Planning Inspectorate is taken into consideration. That letter makes clear that changes to the proposed development would be required, e.g. an additional drilling phase and changes to the number and diameter of well casings, with implications for project duration and for quantity of waste production (and therefore traffic movements) from the site. However, none of these changes is currently defined.'*

45. Dorking & District Preservation Society: No response.
46. Coldharbour Village Society: No response.
47. The Surrey Hills Society: No response.
48. Rudgwick Preservation Society: No response.
49. Westcott Village Association:

Objects on basis that adverse traffic effects would be felt widely, certainly in Westcott. Traffic management problems would not be containable and we are very concerned about threats to road safety. Congestion, particularly in the Coldharbour Lane area, would be severe. Concerned about the impact on motorists, cyclists and pedestrians. The number of cyclists using this area has risen dramatically in the past three years. Use by schoolchildren is considerable. Do not need or want an increase in HGV use of the magnitude envisaged. Do not consider this to be an appropriate development in the Green Belt.

The damage to the quality of the AONB is likely to be severe. This very major development should be refused on the ground that there are no exceptional circumstances to warrant it. Concern in Westcott about threats to the AONB are widespread and there is a strong feeling that this scheme is not in the public interest. Alarmed at the prospect of damage to the water supply, a supply which extends very widely. There would be significant risk of puncture and other damage to major aquifers in this area. Consider the public benefit arguments to be specious. Any so-called public benefit is likely to be slight and could undoubtedly be achieved elsewhere without such damage to the environment, to the quality of life of local residents and visitors and to the integrity of the AONB.

50. Frack Free and Fossil Free Surrey:

Objects on the basis that the AONB should be protected and this development could set a precedent, with 35 metre high rig and flare units. There are also lots of visitors to Leith Hill. The drilling corridor would have adverse effects on Coldharbour from noise and vibration. Not sure what the company plans to do with the borehole once they have finished drilling, though they stated in the original planning application that it would 'regenerate' under Forestry Commission care. HGVs using Coldharbour Lane would cause damage to historic sunken lanes and use of traffic lights would cause huge traffic jams and gridlock in Dorking, which would affect the quality of life for local villagers and the surrounding areas. Underground aquifers would be contaminated in the event of oil spillage; too much risk for short term gain. The proposed rig's lighting would adversely affect owls and bats at night, with flora and fauna affected by dust and fumes from

drilling and lorries. Against further drilling for hydrocarbons because of CO2 effects on climate change and note the UK Government are committed to cutting carbon emissions to 20% below 1990 levels by 2020.

### **Summary of publicity undertaken and key issues raised by public**

51. The application was publicised by the posting of a site notice and an advert was placed in the local newspaper. A total of 1492 owner/occupiers of neighbouring properties were directly notified by letter. As at 10 September 2015, the CPA has received some 220 representations. Officers note that a considerable volume of the representations refer to concerns about the associated drill-site allowed at appeal, rather than this application purely for an underground drilling corridor.
52. Where points are raised in representations that are not strictly relevant to this particular application for an underground drilling corridor (e.g. on the visual impact of the above-ground drill-site), Officers have not considered/responded to those points later in this report. The case made by SCC to the appeal Inspector was, however, unchanged that planning permission should have been refused for that associated development. For completeness, Officers have included the main issues raised in the representations below, although noting that not all are strictly relevant to this current planning application. Officers also note that residents and their representatives attended the recent appeal public inquiry and raised similar concerns directly to the Government's Inspector. The main points of public objection are grouped together below:

#### **Traffic and Highway Safety**

- The proposal would lead to an increase in traffic in the locality and would affect all of the Dorking area. The one-way system in Dorking already causes congestion.
- The country lanes are totally unsuited to use by HGVs and are in poor condition already. The roads are narrow, steep and it is difficult to pass. There are blind bends. The impact of over a thousand HGV movements on Coldharbour Lane and Knoll Road and the surrounding roads does not bear thinking about. It would cause great damage to the environment and inconvenience. It is also likely to endanger residents who may need emergency services.
- There are no pavements or street lighting on Coldharbour Lane. The proposal could lead to accidents.
- Coldharbour Lane is well used by cyclists and walkers and the proposal would bring HGVs into conflict with cyclists. The applicants are lying about the amount of HGV traffic on Coldharbour Lane.
- Knoll Road is unsuitable for the proposed use. It is a residential road and the route used to The Prior School and Powell Corderoy School. It is a designated route for school transport. The junction with Coldharbour Lane and Ridgeway Road is dangerous. The proposal would result in severe disruption to residents of Knoll Road. It would be awful having HGVs outside houses, with all the associated fumes and noise.
- The traffic management and road closures are unacceptable and not feasible. The unmanned traffic lights round the blind and very narrow bend would lead to traffic backing up to the north and south.
- The proposal would lead to increase in usage of other single track lanes such as Anstie Lane, Broomhill Lane and Logmore Lane. This would inevitably cause damage to these lanes too and has safety issues.

- Would cause major disruption to the Village of Coldharbour. Coldharbour is a village of 300 people. Coldharbour Lane is the main access road to the village and disruption to it would cause unacceptable loss of amenity and could cause life-threatening delay if emergency vehicles cannot use the lane. Residents do not want to see, hear or be aware of this disruption, noise and pollution 24/7. There would be severe loss of amenity for residents.
- The development would cause major disruption to residents living along the access route. Access to properties must be maintained at all times particularly in terms of emergency vehicles, deliveries and services. Some residents rely on care workers. Milk deliveries, postal deliveries and rubbish collection would undoubtedly be interrupted. Missing a train from Dorking to London or elsewhere could be damaging to people's income.
- Final HGV deliveries would be 3.15pm, but school buses start arriving at 2.50pm – this would cause traffic chaos
- The traffic survey fails to properly consider cyclist, which are frequent road users

### ***AONB / Area of Great Landscape Value (AGLV)***

- The AONB is of national importance and should be protected. The development is contrary to AONB policy. Every weekend there are hundreds of families, ramblers, cross country bikes enjoying this location of Outstanding Natural Beauty. How could an oil rig be contemplated it is outrageous. There is a finite number of AONBs in the UK. Extracting hydrocarbon in an AONB is simply too great an impact and wholly unnecessary. Leith Hill is one of the last untouched AONBs in the South East and should be protected at all costs.
- The development should take place elsewhere. An alternative site should be used. There is no need to use this site in the AONB. The applicant's assessment of the others sites is simply not correct. They have compared the various sites inconsistently. The sites to the east are dismissed but they have much easier access to the A24 and A29, which are much better routes to the site with less disruption – Old Moorhurst Lane would be ideal.
- The alternative site assessment was poor, which contrasts with that done for the Albury Appraisal Well which was extremely thorough. SCC should request an up-to-date assessment.
- Such a unique area should be protected not exploited for commercial gain, industrial development wholly inappropriate in this setting.
- The AGLV should be protected. The development is contrary to AGLV policy.
- The development would be visually intrusive over a wide area. The visual impact of the drilling rig would blight the landscape not only during drilling and construction works but would leave a large scar on the landscape for many years. The view from the junction of Anstie Lane and Coldharbour Lane looking north is one of the finest landscapes in the south east of England, it would be ruined.

### ***National Policy and the Development Plan***

- The site is within the Metropolitan GB, which should be protected. The development is contrary to GB policy and no very special circumstances have been demonstrated. It is unacceptable to spoil the Green Belt when there are so few of these areas left for people to enjoy.
- The development is contrary to the Mole Valley Local Plan.
- The development is contrary to National Policy.
- The Government recently banned fracking in the AONB so this application should be refused.
- The proposal is against the commitment to tackle climate change/global warming and renewable energy policy. Would encourage the use of fossil fuels. Should not be looking to further exploit non-renewable resources. The proposal is a classic case of short-termism – a short term financial gain at the expense of permanent damage to an environment that has taken over 1,000 years to evolve and it would make an unwelcome contribution to the global problem of rapid temperature rise. To allow development in an AONB it has to be in the national interest, but national policy is for renewables.
- The development would set a precedent and would not be temporary. If hydrocarbons were found it would become a long term development. To permit exploration would set a precedent and result in industrialisation of the area. Production on Leith Hill would blight the area for years to come. The applicants have already lost at Public Inquiry, this is just about money.
- The development is small and is not of national importance. This can only be a minor pool of hydrocarbon, the importance to the nation of any discovery can only be miniscule at best.

### ***Cultural and Heritage impacts***

- Ancient woodland is irreplaceable and should be protected. Habitat translocation is unsuitable for ancient woodland. The proposed trackways should be planned in detail to ensure that tree roots are protected. Also need to ensure full emergency planning and decontamination plan in place.
- Coldharbour Lane is a historic sunken lane that has inadequate capacity to accommodate the traffic generated by this development. There would be damage to the road surface and the steep banks and vegetation. The HGVs would cause the banks to become unstable and the historic trees would be damaged. Coldharbour Lane is forever being affected by landslips and falling branches from trees. The banks are fragile and would erode significantly as a result of the volume of traffic proposed. This type of attractive rural lane with its overhanging tree canopy is typical of lanes in the AONB. Many trees would have to be cut down and this would be a dreadful destruction of a unique eco-system. Widening the lane may be easy but replacing the trees that sit on the banks of the road would be impossible and therefore the beauty of this lane would be damaged forever.
- The Conservation Area at Coldharbour Village would be compromised, including by vibration, with older properties having no foundations.
- The area is important historically. The development would impact on the Anstie Scheduled Ancient Monument.

- Leith Hill is a popular destination for tourists and recreational users, which would be affected by visual impact and traffic congestion. The development would certainly affect the flora and fauna on Leith Hill. Leith Hill is a special place that deserves and needs preserving and protecting.
- The development would impact on tourism and leisure activities and cause loss of amenity/seriously detract from the enjoyment of visitors to the Coldharbour area.
- Walkers/Cyclists frequent and enjoy the area, especially since the 2012 Olympics. Would impact on the rights of way and ability to roam and the noise levels at the footpaths/bridleways would adversely affect users.

### ***Ecological impacts***

- Would have a profound effect on the nature and character of the area, including Leith Hill SSSI. It is part of a fragile and unique ecology.
- Would adversely impact on the wildlife and wildlife rich habitats in the locality, including the woodland and heathland. We believe this area includes 0.8% of the UK's remaining firecrest wrens and 12% of the local population. The area is home to lots of animals and birds. Badgers and bats use the area and there are several RSPB 'Red List' (endangered) creatures currently residing in the vicinity of Bury Hill Woods. This includes red kites, cuckoos, long-tail mice. There are also several endangered flora species.
- Would permanently damage a protected area, disturbance of landscape, wildlife and natural serenity. This development could affect much further afield than Coldharbour; it could be extremely detrimental to other parts of Surrey.
- Noise and light would adversely affect bats and owls
- The peace and tranquillity of the area would be destroyed and these are important attributes of the AONB.

### ***Other environmental impacts***

- The overlying rock is porous and there is some faulting of the underlying strata. There is a risk that drilling would cause oil to leak into the surrounding rock and pollute Kit Brook, Tillingbourne (which provides water for agriculture and fishing lakes) and Pipp Brook and that it could cause landslides. The stream close to the equestrian centre could become polluted. Sheep graze in these fields. Leith Hill's aquifers provide a major source of water for 3 rivers the Mole, Arun and Tillingbourne.
- Sutton and East Surrey Water have objected, any drilling could mean hose-pipe bans and reduced water pressure
- No permission should be given unless the EA give an absolute assurance that there would be no interrupted ground water flow or pollution
- By drilling into complex geological faults, a pathway could be created for contaminants (from the proposal) into aquifers with serious implications for abstractors downstream. Fracking uses a cocktail of chemicals with dramatic human health impacts.

- There have been many examples when puncturing aquifers in the search for oil and gas has resulted in contamination of underground water and dried up aquifers. The drilling could have an effect on the landslip area. There is an ongoing problem of landslips and during the last major landslip the area the road was closed for months.
- An application to extend the A29 through Coldharbour was refused because of unstable geology.
- Would give rise to noise and unacceptable noise levels. It is unacceptable to have noise night and day. Vibration of traffic would shake properties and cause damage. There was a recent tremor in Hampshire related to drilling. The magnitude of the noise impact has been underestimated in the ES.
- Would give rise to dust and dirt. The large number of lorries required to construct and de-construct the site would throw up dust all along the approach route. The magnitude of the dust impact has been underestimated in the ES.
- Could cause atmospheric pollution and the emissions could impact on air quality in the area. Drilling can involve releasing dangerous gases. The magnitude of the air quality impact has been underestimated in the ES.
- The proposal to have the site floodlit would cause light pollution and would be seen for miles around. The proposed site is intrinsically dark and the lighting would be out of keeping.
- The applicant states that water from well testing will be held in tanks in bunded areas though there is insufficient information on this.

#### ***Other issues***

- There is concern that if the applicant company ceased trading, obligations to restore the site would not be met. The consortia putting forward this application are not exactly financially stable; although not a material planning consideration environmental responsibilities should be taken seriously.
- Who would pay/be responsible for damage to the water source if issues only arise much further in the future?
- The EA does not have the resource to properly monitor the exploratory drilling operation proposed.
- The EA state that a permit would be required for longer than the 18 weeks stated; this increase in traffic and time needs to be taken into account by SCC
- There is no profit to be made with current crude oil prices
- Residents should be told what benefits would arise to them as a result of the proposal – SCC are failing to do this
- Protest camps would be set up, which would be hard to police, and would have an unfair and detrimental effect on local residents
- Would have no positive effect on the residents and regular users of the area. It would have a detrimental impact on the village. The application would have a severe impact on the number of visitors to the area and therefore a negative impact on the local economic climate. Access to local businesses would be adversely affected, particularly the Plough Inn which depends on its weekend 'walker and mountain biker' trade. They would go somewhere else.

- There would be an influx of workers to the area
- The applicants have not undertaken any consultation with residents, unacceptable for residents to have to visit District Council during working hours.
- Misleading address - the site area is not called Bury Hill Wood locally.
- The proposal would affect house prices.
- SCC previously refused the original application so should refuse this application; no decision should be made until after the linked appeal public inquiry
- Object in principle but no specific grounds cited, 2000+ people objected last time.
- Would withhold permission for drilling under property, the law states that landowners own the land under their properties to the centre of the earth and therefore no permission equal trespass.
- Letter of objection from the EA not available/removed, which is unacceptable, as is the cost of £50 for a copy of the Regulation 22 response from the applicant.

### **Support**

- Given the history of appeals on this site, permission with all conditions available to impose would now be preferable to a permission gained on appeal with no real safeguards for the environment.

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## **PLANNING CONSIDERATIONS**

53. Oil and gas developments fall within the definition of 'mineral development' and as such, the County Council as Minerals Planning Authority (MPA) has a duty under Section 38 (6) of the Planning and Compulsory Purchase Act 2004 to determine this application in accordance with the Development Plan unless material considerations indicate otherwise. The activity associated with the exploitation of gas reserves can be considered in three phases: exploration, appraisal and development. This application is concerned with the exploration stage. Government planning policy for land-based exploration, appraisal, development and extraction of oil and gas and the underground storage of natural gas are covered in the National Planning Policy Framework 2012 and National Planning Practice Guidance 2014. Government energy policy makes it clear that energy supplies should come from a variety of sources and that minerals can only be worked (i.e. extracted) where they naturally occur.
54. Since planning application MO09/0110 was considered by the Planning & Regulatory Committee in 2011, the National Planning Policy Framework (NPPF) (2012) and the National Planning Practice Guidance (NPPG) have been published. The NPPF sets out the government's objectives for the planning system and has superseded the Planning Policy Statements (PPS's). The NPPG consolidates national planning guidance in an online resource. The NPPF and NPPG are therefore now material considerations in the determination of this appeal. The Surrey Minerals Plan, Core Strategy Development Plan Document, was adopted by Surrey County Council on 19 July 2011, and therefore now forms part of the development plan for the area. It replaces the Surrey Minerals Local Plan (1993). Accordingly, the Development Plan now comprises: Surrey Minerals Plan, Core Strategy, Development Plan Document (2011); Mole Valley Core Strategy Development Plan Document (2009); and the Saved policies from the Mole Valley Local Plan (2000).

55. The Surrey Minerals Plan 2011 Core Strategy Development Plan Document gives information on hydrocarbon development in Surrey and sets out the Authority's policy in terms of such development. In this case, Policy MC12 is relevant, where the County Council must be '*satisfied that, in the context of the geological structure being investigated, the proposed site has been selected to minimise adverse impacts on the environment.*' Consideration would need to be given to the potential impacts arising from the development proposed in this application, in terms of the local environment and amenities. It would be necessary for the CPA to be satisfied that this application proposal would not give rise to unacceptable environmental impacts. The views of specialist consultees have been sought as set out above.

### **Legal / Procedural matters**

56. When this application was first received, Legal Counsel was sought by the County Council on the relationship of the development proposed under this current planning application and that proposed under application MO/09/0110 (i.e. that determined on 7 August 2015 by the government's Inspector following the Public Inquiry).
57. Counsel advised that there were two options open to the County Council. Firstly, the Council could treat the current planning application straightforwardly as an application for part of one project and so assess the whole project against relevant national and development plan policies, which would allow a full assessment of the cumulative effects of the joint project. However, the disadvantage of this approach is that in relation to section 38(6) of the 2004 Act there would be a degree of artificiality. Secondly, the Council could assess the impacts first of the current planning application alone and assess this application for compliance with national and development plan policy. The cumulative effect of both the below ground proposal and above ground appeal proposal would then fall to be considered as other material considerations in striking the overall planning balance and applying section 38(6) of the 2004 Act (and s70 of the 1990 Act). This would allow the Council to make clear its view on the particular impacts of the current planning application itself, whilst equally setting out its view on the overall acceptability of the wider project; this second approach was viewed as preferable.
58. Should planning permission be granted for this application, the development could not proceed without the linked appeal proposal also being permitted by the government's Planning Inspector. As set out below, following a request made by the CPA, the applicant has provided further information in respect of any cumulative environmental impacts caused by this current planning application for an underground drilling corridor and the associated exploratory hydrocarbon drill-site. However, this Report focuses only on those matters judged by the CPA to be relevant to this current planning application for an underground drilling corridor, rather than the wider range of issues relating to the associated exploratory drill-site.
59. Officers have, however, documented all the responses received to consultation / notification on this current application (including its supporting Environmental Statement) from technical consultees, non statutory consultees and residents. Officers also confirm that a complete pack of technical responses was sent to the Planning Inspector, the appellant and LHAG, in advance of the Public Inquiry commencing on 22 April 2014.
60. Throughout this report, Officers have therefore not discussed matters associated with the separate appeal proposals if they are not directly relevant to this underground drilling corridor application. This is because the County Council's view of the acceptability of the associated appeal proposal was made publically clear through the case presented to the recent Public Inquiry and it would therefore be contradictory for the County Council to make a different resolution on the above ground drill-site, notwithstanding the fact that the Inspector has now allowed that appeal. This is not to diminish the stance taken by the County Council on the impact of the associated above ground drill-site. In light of the 'second approach' view as preferable by Counsel, the Council's view on the overall

acceptability of the wider project and the above ground drill-site is clear from the case defended at the recent Public Inquiry, namely the two refusal reasons referred to above:

1. *'The proposed exploratory drilling development will have a significant adverse impact on the Area of Outstanding Natural Beauty (AONB) in the setting of Leith Hill which cannot be mitigated and where exceptional circumstances including the public interest have not been demonstrated to justify the grant of planning permission. The proposal is therefore contrary to Government Planning Policy as set out in Minerals Policy Statement 1(Planning and Minerals) November 2006 and Planning Policy Statement 7 (Sustainable Development in Rural Areas) August 2004, The South East Plan May 2009 Policy C3 (Areas of Outstanding Natural Beauty); the Surrey Minerals Plan 1993 Policy 1 (Environmental and Amenity Protection) and the Mole Valley Local Development Framework Core Strategy 2009 Policy CS13 (Area of Outstanding Natural Beauty and Area of Great Landscape Value).*
2. *'It has not been demonstrated to the satisfaction of the County Planning Authority that the proposed traffic management measures are adequate to protect the character of Coldharbour Lane; where the nature of the traffic activity would lead to the industrialisation of the character of a quiet rural road; or adequate to protect the amenity of highway users and residents in Knoll Road, Coldharbour Lane and the broader vicinity; contrary to the Mole Valley Local Plan 2000 Policy MOV2 (The Movement Implications of Development) and Surrey Minerals local Plan 1993 Policy 1 (Environmental and Amenity Protection).'*

61. The purpose of this report is to consider only those issues associated with the current planning application and therefore not to revisit all the matters addressed when application ref MO09/0110 was considered by the P&RC on 25 May 2011. This is because the Inspector allowed appeal ref APP/B3600/A/11/2166561), which is a material planning consideration of significant weight and Officers do not consider that there have been any changes since the Inspector's decision.

## **ENVIRONMENTAL IMPACT ASSESSMENT (EIA)**

62. The Town & Country Planning (Environmental Impact Assessment) (England & Wales) Regulations 2011 (referred to here as the EIA Regulations) implement the European Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment which was adopted in 1985 and amended in 1997. Schedule 2 of the EIA Regulations identifies the types of development for which EIA may be required. Consideration of whether a project triggers the need for EIA includes thresholds and criteria and other circumstances such as location within or very close to a 'sensitive area' as defined in the Regulations. In each case the key question is whether or not the project would be likely to give rise to significant effects on the environment of the location concerned.
63. This planning application was accompanied by an Environmental Statement (ES), which the County Environmental Assessment Officer considered when the application was first submitted in May 2014. The ES advised that the only topic for which new assessment work would be required was that of hydrogeology. Consequently, the ES submitted with this application addressed only the likely impacts of the drilling pathway on the hydrogeology of the affected area. The question of cumulative impact, of the directional drilling in combination with the development of the surface well-site, was briefly addressed in the ES as follows:

*"The cumulative impacts of the over ground exploratory site together with the underground drilling operation were assessed in the ES that accompanied the earlier planning application (reference: 2008/0169/PS), therefore the current ES only considers the hydrogeological effects of the subterranean route of the drilling operation..."*

64. However, through the above-mentioned legal Counsel sought by the CPA, advice was received that the nature of the relationship of the development proposed under the current planning application, and that proposed under application MO/09/0110, was such that they should be considered to be a single project for the purposes of the EIA Regulations. Consequently, it was advised that any ES relating to the two applications should address the impacts of the project as a whole (i.e. any 'cumulative effects').
65. In order to provide the complete overarching ES that Counsel recommended was required for the project, the CPA requested on 24 June 2014 (via Regulation 22 of the EIA Regs 2011) that the applicant review the adequacy of the information set out in the ES for application MO/09/0110 (i.e. the 2008 ES and the 2009 Regulation 19 Addendum), in light of the period of time that has elapsed since the surveys and studies that informed that assessment were carried out. Where it was identified that information needed to be updated or otherwise amended, the CPA requested such work was carried out. Once the ES for application MO/09/0110 had been updated, the CPA requested that it should be combined with that provided in 2014 in respect of this application for the drilling pathway to provide an ES that covered the project in its entirety.
66. Additionally in January 2015, the County Planning Authority requested that further information be submitted in order to complete the ES provided in support of planning application MO/2014/0082/SCC and appeal case APP/B3600/A/11/2166561. In March 2015, the Barton Willmore Partnership submitted the requested further information, which comprised of the following reports and documents:
- Figure 1.10a and 1.10b Well Construction Concept Cross-sections (these figures replace Figure 1.10 in Chapter 1 of the November 2014 ES);
  - Revised Chapter 12 of the Environmental Statement: Hydrology & Hydrogeology (this chapter replaces Chapter 12 of the November 2014 ES);
  - Appendix to Chapter 12: Hydrogeological Risk Assessment;
  - Landscape & Visual Environmental Statement Chapter Addendum (Addendum to Chapter 9 of the November 2014 ES);
  - Appendices to Landscape & Visual ES Chapter Addendum.
  - Letter from WSP regarding proposed site lighting.
67. The Environmental Assessment team provided their final comment on this application in April 2015 and they consider that the ES is considered to be compliant with the minimum information requirements set out in Part II of Schedule 4 of the EIA Regulations 2011. As submitted, the ES also provides much of the information listed under Part I of Schedule 4 of the EIA Regulations 2011, as could be reasonably required for the proposed development.

## **NEED FOR HYDROCARBON DEVELOPMENT**

### ***Surrey Minerals Plan Core Strategy Development Plan Document 2011 (SMP 2011)***

Policy MC12 Oil and Gas Development

Policy MC14 – Reducing the Adverse Impacts of Mineral Development

68. The applicant has obtained (via an allowed appeal to the Secretary of State) a temporary consent for exploration of the Holmwood Prospect, which has been identified through seismic survey. Exploration would establish the presence, extent and viability of any hydrocarbon reserves. This current application proposes an underground drilling corridor of a hydrocarbon borehole to facilitate that exploration.

69. The SMP 2011 recognises the difficulties in balancing meeting the need for mineral development and ensuring the impact from mineral working does not result in unacceptable impacts on local communities and the environment. SMP 2011 Policy MC12 on 'Oil and Gas Development' states the following: "*Planning applications for drilling to appraise potential oil or gas fields will only be permitted where the need to confirm the nature and extent of the resource, and potential means of its recovery, has been established.*" Additionally, SMP 2011 Policy MC14 states that proposals for mineral working will only be permitted where a need has been demonstrated and sufficient information has been submitted to enable the authority to be satisfied that there would be no significant adverse impacts arising from the development.

#### **Officer's assessment**

70. One of the County Council's refusal reasons for the associated drill-site (allowed at appeal) states that: "*The proposed exploratory drilling development will have a significant adverse impact on the Area of Outstanding Natural Beauty (AONB) in the setting of Leith Hill which cannot be mitigated and where exceptional circumstances including the public interest have not been demonstrated to justify the grant of planning permission.*" In the circumstances, it could be contradictory for the County Council to not accept that *exceptional circumstances including the public interest* exist for the above ground drill-site yet find that a need exists for this associated drilling corridor to facilitate the exploration for hydrocarbons.
71. However, the second refusal reason for planning application MO09/0110 (though later withdrawn as part of the County Council's case to the Secretary of State) stated that: "*There is insufficient evidence to demonstrate why the proposed exploratory drilling development cannot be located beyond the boundary of the Area of Outstanding Natural Beauty (AONB) designation.*" The corollary of this second refusal reason is that location of that proposed exploratory drilling development beyond the boundary of the AONB *would* be acceptable to the County Council, meaning that directional drilling *per se* would be acceptable. This complicates matters for the Planning & Regulatory Committee since this current planning application proposes only an underground drilling corridor rather than the separately proposed above ground drill-site with its associated impact on the AONB.
72. The need for this current planning application is dependent on the associated drill-site, as it facilitates the exploration for hydrocarbons. The drill-site has been accepted by the government's Planning Inspector and he has allowed the appeal with permission granted subject to 23 conditions (see Appendix 1 for Schedule of Conditions).
73. Were Members minded to refuse this current application on the basis of a lack of exceptional circumstances including the public interest for hydrocarbon exploration, and given the associated drill-site appeal has been allowed, the applicant would likely appeal such a SCC refusal. Officer's judge that the applicant's chances of success at appeal would be very high in such a scenario and highlight that the County Council could then face a costs claim from the appellant on the basis of SCC's unreasonable grounds for refusal.
74. Officers recommend that Members accept that the issue of need has been separately decided by the government's Planning Inspector and advise against refusal of this application on grounds of a lack of exceptional circumstances including the public interest for hydrocarbon exploration. Notwithstanding the issue of need for hydrocarbon development, there are nevertheless other relevant environmental and amenity issues associated with this proposed underground drilling corridor, which may reasonably be grounds for a refusal. These other issues are discussed in the section below.

## ENVIRONMENT & AMENITY

### **The Surrey Minerals Plan, Core Strategy Development Plan Document 2011 (SMP 2011)**

Policy MC12 – Oil and Gas Development

Policy MC14 – Reducing the Adverse Impacts of Mineral Development

### **The Mole Valley Core Strategy Development Plan Document (DPD) (2009)**

Policy CS14 Townscape, Urban Design and the Historic Environment

Policy CS15 – Biodiversity and Geological Conservation

Policy CS20 – Flood Risk Management

### **Mole Valley Local Plan 2000 (Saved Policies) (MVLP 2000)**

Policy ENV22 General Development Control Criteria

Policy ENV50 Unidentified Archaeological Sites

Policy ENV51 - Archaeological Discoveries During Development

Policy ENV67 – Groundwater Quality

## HYDROLOGY and HYDROGEOLOGY

75. The NPPF and NPPG expect mineral planning authorities to ensure that mineral proposals do not have an unacceptable adverse effect on the natural or historic environment or human health. The NPPF states authorities should also take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality. Guidance in relation to implementation of policy in the NPPF on development in areas at risk of flooding and in relation to mineral extraction is provided in the NPPG.
76. SMP 2011 Policy MC12 states that planning applications for drilling boreholes for the exploration, appraisal or production of oil or gas will be permitted only where the mineral planning authority is satisfied that, in the context of the geological structure being investigated, the proposed site has been selected to minimise adverse impacts on the environment, and that drill-site should be located such that there are no significant adverse impacts.
77. SMP 2011 Core Strategy DPD Policy MC14 states that proposals for mineral working will only be permitted where a need has been demonstrated and sufficient information has been submitted to enable the authority to be satisfied that there would be no significant adverse impacts arising from the development and sets out matters to be addressed in planning applications, including flood risk and effect on the flow and quality of groundwater, surface water, land drainage (of the site and adjoining land).
78. The second criterion in Policy ENV22 (General Development Control Criteria) in the MVLP 2000 seeks to ensure that the adverse effects of noise do not significantly harm the amenities of the occupiers of neighbouring properties. Policy ENV67 of the MVLP 2000 (Groundwater Quality) states that development would not be permitted where, following consultation with the Environment Agency, it is concluded that the development may have an adverse impact on the quality of groundwater. The Mole Valley Core Strategy 2009 Policy CS20 (Flood Risk Management) sets out requirements in terms of drainage and surface water flooding.

### **Applicant's submission**

#### *Flood Risk Assessment*

79. The applicant explains that the closest surface water feature to the drill-site is Pipp Brook, located approximately 250m west of the site, with the drill-site situated within the Pipp Brook hydrological catchment at an elevation of approximately 220m above ordnance datum (AOD). Pipp Brook issues approximately 0.6km south-west of the drill-site and flows north past the drill-site at an elevation of approximately 175m AOD, passing through Westcott and on towards Dorking where it drains into the River Mole.

Other major watercourses, Tilingbourne and Leigh Brook, exist approximately 1.5km west and 1km east, respectively from the drill-site. Both watercourses are situated within separate hydrological catchments and flow away from the wellsite. Several springs are indicated on the Ordnance Survey map to be present in the valleys to the east and west of the drill-site. The majority of baseflow to Pipp Brook originates from groundwater issuing from springs along the valley west of the drill-site.

80. The applicant submits that the application site is not in an indicative floodplain of any water body and lies within Flood Zone 1 'low probability', where the annual probability of flooding is considered to be <0.1%. Under technical guidelines laid out in the Planning Practice Guidance 2014, the drill-site is therefore considered appropriate for Flood Zone 1. The applicant sets out that the site would be constructed within an enclosed compound, with a Bentomat (low permeability) geomembrane, earth bunds and perimeter ditches, meaning any incident rainfall would be held on site and either used in the drilling process or removed from site in a sealed tanker. The applicant argues that no runoff would be generated from the self-contained site and there would be no flood risk associated with the drill-site development.

*Geology of the Drill-site and Drilling Corridor*

81. The geology through which the directional borehole would pass is described by the applicant in the order that the strata would be encountered during the drilling process. The bedrock geology comprises Cretaceous age strata overlying Jurassic age strata. The top of the sequence is marked by the Lower Greensand Group, which includes the Folkstone Formation, Sandgate Formation, Hythe Formation and the Atherfield Clay Formation. The Folkstone and Sandgate Formations comprise predominantly loose sands and sandstone with subordinate amounts of siltstones, mudstones and limestones, whilst the intervening Sandgate Formation consists of glauconitic sands and silt. The Hythe Formation comprises mainly fine to medium-grained sands, sandstones and silts, locally pebbly, with calcareous or siliceous cement in beds or lenses. The Atherfield Clay Formation marks the base of the Lower Greensand and comprises mudstone. The applicant notes that the uppermost formations of the Lower Greensand Group are not present at the site and the top of the geological sequence starts with the Hythe Formation. The Hythe Formation is expected to be between 30 - 35m thick beneath the drill-site. Plan 2, attached to this Report, provides a section view through hydrostratigraphic layers along the well trajectory.
82. The Atherfield Clay Formation marks the base of the Lower Greensand Group and comprises brown to dark grey silty mudstone. The Atherfield Clay Formation is predicted to be approximately 12m thick and up to 45m true vertical depth (TVD) to the base of the Atherfield Clay Formation. Underlying the Lower Greensand is the Cretaceous age Wealden Group, which comprises the Weald Clay Formation (a thick sequence of mudstones) and the Hastings Beds Formation (interbedded mudstones and sandstones). The Weald Clay Formation is predicted to be approximately 400m thick and the Hastings Beds Formation approximately 300m thick. Below this, interbedded mudstones, limestones and evaporites of the Purbeck Group (around 110m thick) are present. The Purbeck Group passes conformably up into the Hastings Bed Formation and comprises the Durlston Formation (Cretaceous in age) overlying the Lulworth Formation (Jurassic in age). The remaining Jurassic sequence comprises limestones of the Portland Group approximately 140m in thickness underlain by a thick succession of mudstones of the Kimmeridge Clay (around 360m thick), interbedded limestones, marls and sandstones of the Corallian Group (approximately 140m thick) and mudstones of the Oxford Clay Group and Kellaways Formation.

83. The applicant explains that the borehole is expected to intersect the top of the Corallian beds and that the geological maps for the region record the presence of two minor faults along the proposed drilling corridor. A minor fault present on the eastern boundary of the site displaces strata down towards the west. 200m from the site south west along the drilling corridor a minor fault downthrows strata towards the north. The applicant notes that data indicates the presence of deeper, subsurface faults within the Jurassic age strata, although there is no information on the exact orientation of the geological strata beneath the site. The general dip of the Cretaceous and Jurassic strata is expected by the applicant to be at a shallow angle towards the northwest.

### ***Hydrogeology***

84. The applicant submits that in respect of the Cretaceous - Lower Greensand Group, this is classified by the EA as a principal aquifer on a regional scale, is present at the drill-site and the upper section of the underground drilling corridor. The Lower Greensand does not behave as a single aquifer unit and can be split into two distinct aquifers: the Folkstone Formation and the Hythe Formation. The Sandgate Formation, which separates the two aquifers, can be considered an inconsistent aquitard. Neither the Folkstone Formation nor the Sandgate Formation are present at the drill-site but can be found approximately 3.5 to 4km to the northwest near Westcott, west of Dorking. The Hythe Formation at the drill-site is unconfined and is underlain by mudstones of the Atherfield Clay Formation, which based on the description provided by the British Geological Society (BGS) is considered as Unproductive strata on a regional scale.
85. The Hythe Formation is highlighted by the applicant as the most important aquifer unit locally to the drill-site and drilling corridor, and contains groundwater with a resource value. Groundwater in the Hythe Formation is targeted by public supply boreholes at Dorking. The Hythe Formation is also abstracted for industrial and domestic (private supply) uses. The Hythe Formation in very close proximity to the site is not targeted for public or private water supply, however, groundwater within the formation would support spring flow. The springs are most likely issuing at the intersection between the Hythe Formation and the underlying Atherfield Clay Formation. Whilst there are no mapped springs in close proximity to the wellsite, the applicant states that it is reasonable to assume that a spring line may be present along this intersection and springs may be present in closer proximity to the site in addition to those indicated on the Ordnance Survey map.
86. With reference to one of the concerns raised by residents to both this application and at the recent Public Inquiry, the applicant sets out that the above-mentioned springs provide baseflow to Pipp Brook, which has eroded the Hythe Formation and exposed the Atherfield Clay Formation at surface. The applicant submits that the Hythe Formation at the site is therefore effectively disconnected from the Hythe Formation northwest of Pipp Brook, although it is hydraulically possible that some of the groundwater issuing from springs and flowing into Pipp Brook could infiltrate into the Hythe Formation northwest of Pipp Brook, where it is targeted for public water supply downstream of the drill-site. However, the applicant highlights that there is limited published information available on groundwater levels within the Hythe Formation, though based on a review of the location of relevant springs and streamlines within the area, their topography and underlying geology, groundwater levels are expected to be approximately 25 metres below ground level. The regional groundwater flow direction is expected to be northwards and locally, flow direction is expected to be variable on account of topography and surface water features. Groundwater flow directions in the Hythe Formation in the vicinity of site are likely to be westwards towards Pipp Brook.

87. In respect of the Cretaceous - Wealdon Group, the applicant notes that this is present beneath the Lower Greensand comprises the Wealdon Clay Formation and underlying Hastings Bed Formation. The Wealdon Clay Formation is predominantly argillaceous (rocks or sediment consisting of or containing clay) and can be considered Unproductive strata, separating groundwater present in the Lower Greensand from deeper, water bearing formations. The Hastings Beds Formation comprises the Tunbridge Wells Formation and the Ashdown Formations, both of which are classed as Secondary aquifers at a regional scale and are separated by the poorly permeable Wadhurst Clay Formation. Since the formations are located at a depth of approximately 445 to 745m at the site, the applicant reasons that the permeability of the formation and ability to yield water is likely to be limited.
88. The applicant submits that the Weald Clay acts as a confining layer above the Hastings Beds and therefore the primary recharge mechanism is direct infiltration at the outcrop areas, approximately 12km to the south. Given the distance of the outcrop from the site, the depth of the formation and reduced permeability, the applicant reasons that any water present within the Hastings Beds at the site is likely to be old and therefore of a poor quality, with minimal resource value (as defined by the UK Technical Advisory Group (UKTAG) on the Water Framework Directive). The applicant highlights that this is consistent with data presented in their submission, which shows there are no abstractions within 5km of the site that are targeting the Hastings Beds. Information from the BGS suggests that the Hastings Beds may contain relatively high concentrations of natural gas (developed by thermogenesis) even where the formation is present at shallow depth.
89. In respect of the Cretaceous / Jurassic Conformity - Purbeck Group, the applicant notes that this passes conformably up into the Hastings Bed Formation and comprises the Durlston Formation (Cretaceous in age) overlying the Lulworth Formation (Jurassic in age). Limestones of the Lulworth Formation are classed as Secondary aquifers on a regional scale containing water of limited importance for supply due to their very limited outcrop. Whilst fractured limestones within the Lulworth Formation have been recorded as high yielding close to outcrop, the formation at the site is confined beneath over 800m of overlying formations. In the same way as the overlying Hastings Beds Formation, the applicant submits that any water present within the Lulworth Formation at the site is likely to be very old and therefore of a poor quality, with minimal or no resource value.
90. Lastly, in respect of the Jurassic Strata, the applicant sets out that this sequence comprises permeable limestones and sandstones separated by thick successions of mudstones. On a regional scale, the permeable horizons are classed as Principal and Secondary aquifers, however, on account of their depth at this location they do not constitute viable sources of groundwater with a resource value. The Portland Sandstone and the Corallian Sandstone are proposed to be targeted for exploration on account of the presence of hydrocarbons. Therefore any water present in the formation can be considered formation water and would be of extremely poor quality and no resource value; with elevated salinity and hydrocarbons present.

#### *Source Protection Zones (SPZ)*

91. The applicant submits that the drill-site is not located within any mapped SPZ, with data obtained from the EA indicating that the drill-site lies approximately 0.7km east of an SPZ 3 zone (Total Catchment) and less than 2km from an SPZ 2 (outer zone). An SPZ 1 (Inner Zone) is situated approximately 4.8km north of the drill-site associated with the public water abstraction undertaken by Sutton & East Surrey Water PLC at Dorking. Further, the applicant sets out that there are no groundwater dependent Sites of Special Scientific Interest (SSSI) within a 5km radius of the drill-site centre, with no Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Ramsar designated sites within a 5km radius of the drill-site. Details of private water supplies, licensed and deregulated abstractions within 5km of the drill-site centre were included in the

applicant's submission, though they note that there are no abstractions within the immediate vicinity of the drill-site.

### *Conceptual Model*

92. The applicant has developed a hydrogeological conceptual model for the drill-site and underground drilling corridor, which was based on the four hydrostratigraphic units beneath the well, namely: the Hythe Formation (Layer 1); the Atherfield Clay & Weald Clay Formations (Layer 2); the Hastings Beds Formation & Purbeck Group (Layer 3); and the Jurassic strata (Layer 4). The hydraulic properties are described below:
- Layer 1 has hydraulic conductivity and storage, and contains groundwater with a very high resource value that is used for drinking water and other supplies.
  - Layer 2 has very low hydraulic conductivity and is considered Unproductive strata. Layer 2 effectively hydraulically separates Layers 1 and 3.
  - Layer 3 has limited hydraulic conductivity and limited storage. Any water in these formations has minimal resource value. The Purbeck Group would become increasingly impermeable with depth and would act primarily as Unproductive strata.
  - Layer 4 has limited hydraulic conductivity and limited storage. Some formations contain hydrocarbons and formation water with no resource value. Poorly permeable clay and mudstone horizons effectively hydraulically separating the hydrocarbon bearing strata from overlying water bearing formations.
  - There is no material vertical movement of water between Layers 1 and 3. Natural recharge to the formations in Layer 1 and 3 is limited to the outcrop. There is no active recharge to the formation waters in Layer 4.

### **Potential Effects**

93. In respect of construction effects, there is potential for spillage of fuel and lubricants, used by equipment such as excavators and bulldozers constructing the temporary drill-site, to occur at surface and to runoff or infiltrate downwards potentially altering the quality of the Pipp Brook or underlying Hythe Formation. There is also potential for affected groundwater issuing from springs flowing towards the Pipp Brook, to infiltrate into the Hythe Formation aquifer northwest of Pipp Brook and to alter the quality of the Dorking Public Water Supply (SPZ 2 aquifer). Excavation and laying of the site sub base could also increase localised flushing of silt or fine particles during rainfall events potentially causing increased erosion and sediment deposition in the Pipp Brook, in the underlying aquifer and in the downgradient SPZ 2 aquifer. Spillage of drilling muds, additives and grout used in the installation of conductor casing could lead to deterioration in quality of the Pipp Brook or in quality of the Hythe Formation aquifer (encompassing the immediate underlying aquifer and the downgradient SPZ 2 aquifer) by runoff and leakage into groundwater or by direct infiltration from the well bore.
94. In respect of exploratory drilling effects, drilling muds, additives and grout would be used during exploratory drilling and there is therefore the potential that these materials could lead to deterioration in quality of the underlying aquifer, the SPZ 2 aquifer and Pipp Brook via leakage of spilt materials at surface into groundwater and via surface runoff. Although the applicant states that there is no direct pathway between the exploratory drilling activities inside the well bore and the shallow groundwater system following the installation of conductor casing into the Weald Clay, drilling fluids could still migrate vertically through geological faults to the aquifer beneath the site, affecting its quality and that of the Pipp Brook and the potentially hydraulically connected SPZ 2 aquifer. There is also potential that formation water and hydrocarbons present in deep geological formations could infiltrate directly from the well borehole and indirectly through geological faults into groundwater that may be present in the Jurassic Hastings Beds Formations and Purbeck Group, altering its quality.

95. In respect of temporary well testing effects, the applicant highlights that this would generate natural gases, hydrocarbons and produced waters from deep geological formations which would be stored in tanks at the drill-site. A flare pit would be constructed outside of the drill-site and would store hydrocarbons during the flaring process. However, spillages of such stored materials at surface could occur, which may runoff into the Pipp Brook or leak through the base of site / flare pit infiltrating groundwater causing a deterioration in quality of the brook, the underlying aquifer or SPZ 2 aquifer further downstream. There is also potential that water quality in Pipp Brook and the shallow groundwater system is also affected by leakage of hydrocarbons and produced waters via well casing and / or grout failure into surrounding groundwater. Groundwater if present in the deep Jurassic Hastings Beds Formations and Purbeck Group could also be affected in this way. Lastly, in respect of decommissioning effects, this would include removal of the Bentomat liner laid during the construction phase potentially mobilising contaminated soils which could runoff to Pipp Brook or leak into the shallow groundwater system, impacting on their quality.

### ***Proposed Mitigation Measures***

96. Owing to the above potential effects, the applicant proposes mitigation measures during the construction, drilling, well testing and decommissioning phases. The proposed construction mitigation measures would include the fact that the exploratory well would be constructed in accordance with The Offshore Installations and Wells Regulations 1996, best practice and regulatory requirements. Earth bunds and a perimeter ditch would also be constructed around the well pad to prevent surface water runoff entering or leaving the drill-site. The surface of the drill-site would be constructed using a Bentomat geotextile membrane, laid over the earth bunds and perimeter ditch to prevent surface water at the drill-site infiltrating to groundwater. This would be incorporated into the drilling cellar and mousehole features to ensure integrity of the membrane. A conductor casing would be set in the Weald Clay using a standard water well rig and grouted through the full thickness of the Hythe Formation. This would prevent direct migration of fluids and gases from the wellbore during exploratory drilling and testing phases to the shallow groundwater system.
97. In respect of proposed drilling mitigation measures, the applicant submits that the well has been designed to avoid any contamination of the Hythe Formation. To isolate and protect the Hythe Formation, the drilling programme would also include the following:
- a) Drilling would commence through the full thickness of the Hythe Formation, Atherfield Clay and the top of the Weald Clay to a depth of ~50m TVD. A 20" diameter conductor casing would be set (grouted) into the top of the Weald Clay.
  - b) Drilling would commence through the full thickness of the Weald Clay Formation to ~460m TVD at which point a 133/8" diameter surface casing would be set. Drilling would then continue through the underlying Hastings Beds Formation to a depth of ~750m TVD into the top of the Purbeck Group, where a 95/8" diameter surface casing would be set.
  - c) Beneath the 95/8" casing, drilling would continue using either a water-based or an oil-based mud to a target depth of ~1450m TVD. The well would remain open hole to allow testing.
98. The well direction would be monitored continuously while drilling and would be controlled in order to hit the target horizons. The applicant identifies that groundwater may be encountered when drilling through the Hastings Beds Formation, and they set out that the weight of the muds would be carefully monitored and controlled to prevent loss of fluids or entry of groundwater to the well bore. The applicant explains that additives would be used to prevent losses, with each string of casing and cement would be pressure tested to confirm its integrity and to ensure fluids cannot transfer between the well bore and the surrounding strata. The applicant explains that the grout would comprise neat cement, mixed at a 50:50 water/cement ratio.

99. In respect of temporary well testing, the applicant proposes that water produced during well testing would be held in tanks in specially-banded areas prior to disposal at a specialist facility for further processing. Exact details of produced water storage would be provided and agreed with the regulatory authorities as part of the environmental permitting process, prior to the development commencing. The flare pit storing hydrocarbons for flaring would be constructed using a similar technique to the drill-site. The applicant highlights that the well has been designed to avoid any contamination of groundwater that could be present in the deep Jurassic Hastings Beds Formations and Purbeck Group. Lastly, the applicant sets out that decommissioning would follow best practice and that, following drill stem tests, the well would be plugged and abandoned in accordance with Oil & Gas UK guidelines for the suspension and abandonment of wells.

#### **Officer's assessment**

100. In respect of hydrogeology, the County Geotechnical Consultant (CGC) notes that the site and proposed underground drilling corridor are not located within a groundwater source protection zone, although part of the wider Hythe Formation located to the west of the site and moving northwards, is indicated to be within a groundwater source protection zone (transitioning from total catchment through outer zone to inner zone) for the public water supply boreholes in Dorking. However, the outcrop of the Hythe Formation that underlies both the Bury Hill Wood site and part of the drilling corridor is predominantly truncated/isolated from the larger outcrop of Hythe Formation that is present to the west of the site and to the west of Coldharbour. This has occurred as a result of localised erosion and removal of the Hythe Formation by the stream (Pipp Brook) that lies within the valley bottom to the west of the site, between Coldharbour Lane and Wolvens Lane. The stream bed and valley has cut down to the underlying Atherfield Clay, a non-aquifer. The two outcrops of Hythe Formation are connected by a small area at Coldharbour that is up hydraulic gradient of the majority of the isolated outcrop on which the site is located.
101. The CGC notes that there are numerous springs indicated to be present in the valley sides to the east and west of the site location, and these are indicated to issue at the junction between the Hythe Formation and the underlying relatively impermeable Atherfield Clay. Based on the geological and hydrogeological setting, the CGC considers it unlikely that any groundwater present within the outcrop of Hythe Formation at the site is directly significantly connected to the wider Principal aquifer, or therefore poses a significant risk to the Dorking public water supply boreholes. However, there is potential for groundwater that issues from the springs, to connect to local surface water features (e.g. Pipp Brook), and then flow through areas (North West of the site) where the surface water can infiltrate via the river bed directly into the wider Principal aquifer.
102. The CGC considered that the HRA provided in the Regulation 22 submission was not sufficiently site specific and was still missing much of the information that both PBA and the EA have requested. For example, the CGC noted that the HRA as submitted still does not indicate that the risks to groundwater, surface water and other receptors has been fully understood, assessed and mitigation measures considered. Predominantly the HRA states that mitigation measures would be provided by 'best practice in wellsite construction'. This is not adequate information for us to determine whether the proposals are sufficient. As in any EIA, actual mitigation measures need to be identified so that any significant effects can be assessed. However, as groundwater protection is within the EA's remit, and if they accept the Regulation 22 information as being sufficient to demonstrate adequate groundwater protection, then the CGC advises that the CPA could defer to the EA for determining this application.

103. The EA provided a final response to the CPA on 10 April 2015 (after earlier raising an objection) and also attended the Public Inquiry in April 2015, in order to answer questions from both the government Inspector and residents who attended the proceedings. The EA identified in their April 2015 response that the information provided in the revised submission demonstrated that the applicant now has an improved understanding of the hydrogeological environment in the vicinity of the site. The EA note that the applicant has identified the potential risks posed to groundwater environment from the proposed activity and have identified the likely receptors in the area. As a result, the EA notes that the applicant has revised their original design, specification and ways of working to incorporate mitigation measures to protect groundwater environment, particularly groundwater quality.
104. However, the EA highlight that while the supplementary information had answered the majority of their concerns, one issued that needs further consideration is the perimeter drainage ditch capacity. They noted that this can be addressed at the permit application stage. The perimeter drainage ditch does not have adequate capacity to deal with a 1 in 100 year rainfall event and it is likely that such an event would impact on the site itself. The perimeter bund arrangement would prevent any losses to the ground around the site but the site might have to propose some extra contingency plans for dealing with the extra water in that event. The EA also advise that although the applicant has provided a baseline study of the site in relationship to the wider area, plans for a site-specific assessment (including soil chemistry and water quality etc) and details of the final restoration plan do not appear to be included. The EA note that such an assessment along with the associated groundwater monitoring on and off-site would need further consideration, although these aspects could be covered by planning conditions(s) or through the environmental permits.
105. The EA's position following the receipt of regulation 22 information (including a Hydrological Risk Assessment) is therefore that the applicant has demonstrated an improved understanding of the risks to the groundwater environment, in both near surface aquifers and deeper groundwater bearing strata, in comparison to the initial submission. As a result, the EA state that the applicants have now submitted improved details of proposed mitigation measures; they therefore removed their earlier objection. The EA noted in their April 2015 response that the applicant would be required to provide further technical details and clarifications on several aspects if they proceed to the environmental permit application stage. These aspects include borehole integrity testing, details of substances in drilling fluids, waste types and movements, noise, odour, air quality, site containment and associated Construction Quality Assurance of the membrane. The applicant would also need to apply to the EA for further permits and consents.
106. Although Sutton and East Surrey Water continue to object to this application, as was discussed at the recent Public Inquiry during April 2015, the EA are satisfied that the separate Permitting Regime would adequately deal with any risks to water supply. The CGC has also responded to the objection raised, as noted earlier. The Inspector also concluded on 7 August 2015 that:

*“The safeguarding of groundwater quality is always important, especially where it is used as a potable resource. However, the regime recently introduced by the EA would provide for more robust testing and checking for any leakage from the site operations into the underlying groundwater. This should reduce significantly the dangers of a loss at source travelling along pathways to sensitive receptors. With this monitoring in place, it should be much easier and quicker to introduce remediation. In the absence of any worries raised by the Regulator, objections could only have attracted more weight if they had relied on technical evidence and evaluation. As it is, they seem to be almost entirely precautionary and the management proposals for the site and EA's monitoring should answer any doubts.”*

107. Officers recommend that Members attach considerable weight to the conclusions of the Inspector and, taking into account the views of the EA and CGC, and that the HSE does not advise against the granting of planning permission in this case, Officers do not consider that the development proposed in this application would pose any significant risk of pollution to the surrounding environment. Officers therefore consider that the proposal satisfies the requirements of the NPPF and NPPG, Surrey Minerals Plan 2011 Policy MC12 and Policy MC14, and relevant policies of the Mole Valley Core Strategy 2009.

## NOISE & VIBRATION

108. As this planning application involves an underground drilling corridor, Officers consider it reasonable to assess whether any vibration and noise impacts would occur above ground (i.e. experienced by residents and visitors to the area above ground). The application is for temporary works which would not exceed 18 weeks in duration with: six weeks of site clearance and preparation (daytimes and Saturday mornings); five weeks of equipment assembly and drilling (the latter on a 24/7 basis); one week of testing and evaluation, if applicable, i.e. if hydrocarbons are detected; and six weeks of site reinstatement (daytimes and Saturday morning). The area of the drill-site is very rural in nature with mostly isolated receptors remote from the site with the closest being over 500 m distance. However, due to the remote nature of the site without any nearby major transportation or other noise sources, the area is relatively quiet.
109. NPPF paragraph 123 states that planning policies and decisions should avoid noise giving rise to significant adverse impacts on quality of life and mitigate the adverse impacts through the use of conditions, but recognise that development will often create some noise. NPPF paragraph 143 says that when developing noise limits local planning authorities should recognise that some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction. NPPF paragraph 144 then states that when determining applications local planning authorities should ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source.
110. Surrey County Council produced its own Noise Guidelines in 1994, and this provides guidance on acceptable levels of noise from oil and gas related development. However, the 1994 SCC limits have largely been superseded by those contained in the Planning Practice Guidance for Minerals (PPGM) released in March 2014. PPGM contains limits for normal and short-term operations, which are the same as promoted for many years through MPG 11, MPS 2 and the Technical Guidance to the National Planning Policy Framework. PPGM states that for normal operations, for core daytime working hours (07:00 to 19:00), the noise level should not exceed the LA90, 1h by more than 10 dB(A) but this is to a maximum of 55 dB(A) LAeq, 1hr, which is very similar to the SCC guidelines. For evening periods, defined as 19:00 to 22:00 hours, the limits are the same as the daytime but for night-time, defined as 22:00 to 07:00 hours, the limit is 42 dB(A) LAeq, 1hr. These are all free-field values, i.e. at least 3.5 m away from any façade. For particularly noisy short-term works, which include soil-stripping, the construction and removal of baffle mounds, soil storage mounds and spoil heaps, construction of new permanent landforms and aspects of site road construction and maintenance, the limit is 70 dB LAeq, 1 h (free field) for up to eight weeks in a year at specified noise sensitive properties.
111. SMP 2011 Core Strategy DPD Policy MC14 states that proposals for mineral working will only be permitted where a need has been demonstrated and sufficient information has been submitted to enable the authority to be satisfied that there would be no significant adverse impacts arising from the development, including noise and vibration. The second criterion in Policy ENV22 (General Development Control Criteria) in the MVLP 2000 seeks to ensure that the adverse effects of noise do not significantly harm the amenities of the occupiers of neighbouring properties.

## Submitted assessment

112. Surveys of ambient noise levels were undertaken during the daytime and at night in the area surrounding the application site, which was noted by the applicant to be a considerable distance from any residential property. Additional 'spot' measurements were made at various locations in order to verify that the main location was truly representative of background sound, and these were at publicly accessible locations by the roadside near dwellings.

### *Vibration*

113. In terms of vibration, the applicant submits that this depends not only on the input excitation, but also on the ground conditions close to the surface (in the unconsolidated layer) and the nature of the property in which vibration might be detected. None of these can be predicted other than in terms of the order of magnitude. Vibration arising at the drill bit, hundreds of metres below ground level, can occasionally be detectable on the drill floor because of direct transmission up the drill string. None of this vibration passes through the ground to areas beyond the rig itself, and no ground vibration during rig operations would be detectable inside neighbouring properties. The applicant sets out that the levels of vibration inside these properties would be several orders of magnitude lower than the architectural damage criteria given in British Standard 7385-2:1993, and at least two orders of magnitude below the levels perceptible to a human observer.
114. The applicant sets out that shale shakers located next to the drilling rig itself, and forming part of the solids control equipment, are significant sources of vibrational energy since their operation, as the name implies, depends on passing the returned drilling fluids through a set of reciprocating (vibrating) screens. Shale shakers are components of drilling equipment used in many industries, such as coal cleaning, mining, oil and gas drilling. They are the first phase of a solids control system on a drilling rig, and are used to remove large solids (cuttings) from the drilling fluid. This vibration is detectable on the solids control structure itself, and can sometimes just be detected by an observer standing on the ground next to the machinery. This ground vibration is dissipated within a matter of a few metres and is undetectable beyond the confines of the site. The applicant acknowledges that some older types of solids control equipment can emit tonal noise at low frequencies but on the latest types of equipment this tendency has been largely eliminated.

### *Noise*

115. The applicant submits that given that the separation distances between the application site and the nearest residential properties, noise effects would not be perceptible. The drilling operations proposed are temporary in nature, and the daytime and night time noise limits proposed by the applicant are significantly in excess of the ambient sound levels measured. It is the applicant's intention to use a rotary drilling rig of which the British Drilling and Freezing (BDF) Rig 28 and Edeco Rig 10 are typical examples. The BDF 28 is the noisiest under most conditions and was used for the purposes of their assessment thus representing the worst case. Drilling rigs have directional characteristics, so the actual value measured at a particular point would vary according to the actual rig used, and its orientation.

116. Since drilling would continue 24 hours a day, seven days a week, noise is generally more likely to be noticed at night than during the daytime, not least because daytime background noise may be considerably greater. Given the relatively short-term nature of drilling operations (maximum five weeks) these levels of noise are of moderate adverse significance. Noise emissions arising during the erection of the drilling rig (up to one week) and drill stem testing (Phase 3, four days) would not exceed those from the drilling phase and were therefore not considered further in the applicant's assessment. The applicant submits that although the landform in the area of the proposed development is gently undulating, there are few natural barriers to sound propagation towards noise-sensitive locations, and no hollows or large areas of open water which might reduce the expected degree of ground-borne attenuation. However, as there are several hundreds of metres of intervening woodland between the noise sources and any of the closest receptors, the applicant argues that this would reduce considerably the levels reaching these receptors.

#### *Mitigation Measures*

117. Given the above, the applicant has proposed mitigation measures for noise for the associated drill-site. Noise from construction would be controlled primarily by the restriction of working hours and it would be usual practice to allow potentially noisy activities only during the normal working week and on Saturday mornings, subject to local practice. Quiet working methods would be adopted including the use of the most suitable plant and reasonable hours of working for noisy operations. Noise would be controlled at source and on-site noise levels monitored regularly. Mitigation measures that would be implemented to reduce noise levels at source include the avoidance of unnecessary revving of engines, switching off equipment when it is not required, minimising the drop height of materials, and starting up plant and vehicles sequentially rather than all together. Audible reversing alarms would be of types that have a minimum noise effect on persons outside the site.
118. In respect of mobilisation and drilling, there would be additional screening effects on drilling rig noise as a result of the intervening topsoil bund to the north side of the site. The applicant sets out that the volume of topsoil and subsoil available for the construction of bunds may vary owing to site conditions, which might affect the overall length and height of a bund. Moreover, different drilling rigs have slightly different configurations when mobilised on site, so that a particular noise source that would be screened by a bund for one rig might just be visible for a different rig. The identity of the rig to be contracted for the drilling phase is not yet known to the applicant, as it depends on the suitability and availability of the drilling rigs on the market at a future time.
119. As the predicted background noise levels at nearby residential properties are acceptably low, the applicant submits that further noise mitigation measures are not expected to be required, but that any decrease in noise level is regarded as beneficial and further noise control measures may be practicable. It would be necessary in any event to confirm that the noise control measures on the individual rig, including diesel exhaust silencers, attenuators allowing cooling air into and out of acoustically-enclosed machinery, and the enclosures themselves, are all kept in good repair in order to ensure that the overall sound power levels used for the acoustical modelling are valid. When the rig is fully mobilised on site, access doors to all noisy equipment would be kept closed at all times. Good site management practice would maintain acceptably low drilling rig noise throughout the life of the proposed development. In respect of testing, the applicant sets out that no further noise mitigation measures are necessary during testing and that finally, similar to the construction phase, noise from site restoration can also be controlled by the restriction of working hours. The applicant therefore submits that subject to the above mitigation measures, residual noise effects as a result of construction activities would be negligible, with residual noise effects of rig mobilisation and drilling negligible or minor. The applicant further submits that residual noise effects of well testing, site restoration and site retention would also be negligible.

### Officer's assessment

120. Seismic hazard maps for the UK have been produced by the British Geological Society as part of the work involved with the introduction of the 'Eurocode 8' building regulations. These give guidance on the levels of peak ground acceleration to be expected in different parts of the country. Seismic hazard is the potential for, or probability of, dangerous earthquake-related phenomena. Most often, this is ground shaking but it could also be liquefaction or fault rupture at the ground surface. The 2008 map shows that the application site and the surrounding area are located in the part of the UK with the lowest seismic hazard.
121. The County Noise Consultant (CNC) has reviewed the information provided in connection with this planning application, as relating to noise and vibration. The CNC agrees that the noise and vibration levels likely to arise from this development should not exceed appropriate limits. On this basis, the development should be acceptable in terms of noise and vibration. However, due to the very low baseline environment in the area where receptors are located, it is quite likely that noise from the 24/7 drilling would be audible and some public concern/possible complaints could arise. The CNC notes that conditions have been suggested separately to the government's appeal Inspector (i.e. relating to the above ground drill-site), which the CNC advises should ensure protection of residential amenity with reference to SCC guidelines and relevant national policy.
122. The predicted noise and vibration levels arising from this development have been shown to be below the limits set out in the Surrey Noise Guidelines and thus would fall within acceptable limits that would not give rise to noise levels which would adversely affect local amenity and/or the environment. Noise limits would be set by condition and the noisier temporary construction and restoration phases would be time limited. The County Noise Consultant considers that the noise and vibration levels likely to arise from this development should not exceed appropriate limits. On this basis, the development should be acceptable in terms of vibration and noise and it is considered that the proposal would not be in conflict with the NPPF, NPPG, or SMP 2011 Policy MC14.

### ARCHAEOLOGY

123. As this planning application involves an underground drilling corridor, Officers consider it reasonable to assess whether any archaeological impacts would occur. NPPF paragraph 128 states that planning decisions should be based on the significance of a heritage asset and that level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset. SMP 2011 Core Strategy DPD Policy MC14 requires that the impacts in relation to the historic landscape, sites or structure of architectural and historic interest and their settings, and sites of existing or potential archaeological interest or their settings are considered.
124. The MVLP 2000 has Policy ENV50 (Unidentified Archaeological Sites) which covers the requirements where sites of larger than 0.4 ha are located outside Areas of High Archaeological Potential and Policy ENV51 (Archaeological Discoveries During Development) which deals with finds made during the development process. The Mole Valley Local Development Framework Core Strategy 2009 recognises that the District's historic environment is an asset to both the District and the Region. Policy CS14 (Townscape, Urban Design and the Historic Environment) states that areas and sites of historic or architectural importance will be protected and where appropriate enhanced.

### Submitted assessment

125. The focus of the applicant's investigation was Anstiebury Camp to the south of the site and one other excavation focussed at the Roman Road. Due to the lack of investigation within the area generally, the applicant submits that it was difficult to determine the potential for archaeological remains to exist within the site as comparative sites are rare. The wooded nature of the area has meant that there has been very little opportunity for archaeological investigation and as a result the potential for remains within the area is largely unknown. The applicant acknowledges that the development has the potential to damage or remove any archaeological deposits that may be present within the site during the construction phase, through the implementation of the borehole rig, compound, topsoil stripping and other associated works. The applicant proposes that this could be mitigated by a programme of archaeological works to preserve the remains by record. The applicant does not expect there to be any additional mitigation required for the 19th century clay extraction pits, as these have been recorded previously.

### Officer's assessment

126. The County Archaeological Officer raises no objection to this application or to the associated drill-site. Taking account of the scale, location and temporary nature of the development, Officers do not consider that the character or setting of nearby listed buildings, the Coldharbour Conservation Area nor the Scheduled Monument, would be significantly adversely affected by this development. Given the existing ground disturbance at the drill-site, it is not considered that the proposal would give rise to any archaeological impact. Accordingly, Officers are of the view that in terms of heritage the underground proposal would not conflict with the relevant national guidance in the NPPF and NPPG and development plan policies in the SMP 2011, Mole Valley Local Plan 2000 (saved policies) and Mole Valley Local Development Framework Core Strategy 2009.

### AONB/AGLV & VISUAL IMPACT

127. As this planning application involves an underground drilling corridor it would have no visual impact. This application is to be determined separately from the proposal for an exploratory drill-site, which was allowed at appeal. As noted above, the County Council refused that separate proposal owing to the conclusion that the proposed exploratory drilling development would have a significant adverse impact on the Area of Outstanding Natural Beauty (AONB) in the setting of Leith Hill which could not be mitigated and where exceptional circumstances including the public interest had not been demonstrated to justify the grant of planning permission. Officers have considered this application on its individual merits, whilst acknowledging the County Council's case made at the recent Public Inquiry. Officers do not recommend that this application is refused because of its visual and landscape impact in the AONB/AGLV. Officers consider that it would be unreasonable to refuse an entirely underground proposal on the basis of its above ground visual impact, and would advise Members that any such refusal in this case would risk a successful appeal by the applicant and an award of costs against the County Council.

### METROPOLITAN GREEN BELT

128. The application site is located in the Metropolitan Green Belt. NPPF paragraph 87 states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. NPPF paragraph sets out the basis for considering planning applications relating to Green Belt land and advises that when considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt, and that 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

129. NPPF paragraph 90 notes that mineral extraction is a form of development which is not inappropriate in Green Belt provided that it preserves the openness of the Green Belt and does not conflict with the purposes of including land in the Green Belt. In the High Court and Appeal Court cases relating to the associated drill-site, it was held that the proposed exploration for hydrocarbons does fall within the meaning of the phrase 'mineral extraction' for the purposes of paragraph 90 of the NPPF. Therefore exploration for minerals is not inappropriate development in the Green Belt per se provided that it preserves the openness of the Green Belt and does not conflict with its purposes.
130. This application would have no impact on Green Belt openness, relating purely to an underground directional drilling corridor. In terms of 'any other harm' to the Green Belt, on the basis of the technical responses provided above on hydrology/hydrogeology, noise/vibration and archaeological impacts, Officers do not consider that such harm arises. The case presented by the County Council to the planning Inspector in respect of the separate appeal proposals made no reference to conflict with Green Belt policy, and Officers do not consider that this current planning application could reasonably be refused on those grounds either.

## **HIGHWAYS AND TRANSPORTATION**

131. As this planning application involves solely an underground drilling corridor it would have no highway and transportation impact. During the recent appeal Public Inquiry, the applicant explained to the Inspector that, notwithstanding further detail provided on exploratory well design and borehole casing, which was included in the Regulation 22 information, there would be no increase in associated traffic numbers or an extension of time to complete exploration (i.e. still 18 weeks including restoration).
132. This application is to be determined separately from the proposal for an exploratory drill-site, which was allowed at an appeal. As noted above, the County Council refused that separate proposal owing to the conclusion that it had not been demonstrated to the satisfaction of the County Planning Authority that the proposed traffic management measures were adequate to protect the character of Coldharbour Lane; where the nature of the traffic activity would lead to the industrialisation of the character of a quiet rural road; or adequate to protect the amenity of highway users and residents in Knoll Road, Coldharbour Lane and the broader vicinity.
133. Officers have considered this application on its individual merits, whilst acknowledging the County Council's case made at the recent Public Inquiry (including the defended highway refusal reason). Officers do not recommend that this application is similarly refused on the grounds of its highway or transportation impact. Officers consider that it would be unreasonable to refuse an entirely underground proposal on the basis of its above ground highway and transportation impact, as that is properly to be assessed by the appeal Inspector. Officers would advise Members that any such highway refusal in this case could risk a successful appeal by the applicant and an award of costs against the County Council.

## **OTHER ISSUES**

134. Local residents and other objectors have expressed a large numbers of concerns, including on lighting, air quality, ecology, damage to the local economy, disturbance to local residents in their day-to-day activities, finances of the applicant and the overall chances of success of finding hydrocarbons at this site. Many of these concerns were raised at the public inquiry and considered by the Inspector before he issued his decision last month.

135. The applicant undertook an environmental assessment and has provided further information where necessary. Some of the concerns raised by objectors relate to issues controlled under other regulatory regimes. Paragraph 122 of the NPPF states that planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes; and that planning authorities should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.
136. Several representations have raised doubt concerning whether the applicants are sufficiently competent or financially secure to undertake the proposed operations, arguing that the CPA must satisfy itself that an appropriate level of indemnity can be obtained/raised. However, Officers note that issues of competence are correctly dealt with through the Environmental Permitting regime and the EA's role is to adequately monitor and regulate the site's operation to ensure that the managers and operators are adequately competent regarding aspects that impact upon the public and the environment. With reference to concerns that the proposed development would devalue property, this is not considered to be a material planning consideration. Having taken into account all the information provided by the applicant and the responses of technical consultees, Officers do not consider there are any grounds for refusal in this case.

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## **HUMAN RIGHTS IMPLICATIONS**

137. The Human Rights Act Guidance for Interpretation, contained in the Preamble to the Agenda is expressly incorporated into this report and must be read in conjunction with the following paragraph.
138. In this case of this application it is recognised that there would be impacts in respect of hydrology and hydrogeology, plus noise and vibration, and these are acknowledged and have been assessed in the body of the report and mitigation provided; however the scale of such impacts is not considered sufficient to engage Article 8 or Article 1 of Protocol 1 and, if planning permission were to be granted, any impact is capable of being mitigated by the measures incorporated into the application proposal, possible planning conditions and the mitigation measures and controls available through the Environmental Permitting regime. As such, this proposal is not considered to interfere with any Convention right.

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## **CONCLUSION**

139. Officers recommend that Members accept that the need for hydrocarbon development at this site, in addition matters concerning safeguarding of groundwater quality, have been dealt with by the Inspector's decision letter dated 7 August 2015. The views of technical consultees have been reported under individual relevant issues earlier in this report. As set out above, following a request made by the CPA, the applicant has provided further information in respect of any cumulative environmental impacts caused by this current planning application for an underground drilling corridor and the associated exploratory hydrocarbon drill-site. However, this report focused only on those matters judged by the CPA to be relevant to this current planning application for an underground drilling corridor and Officers consider that planning permission should be granted.

## RECOMMENDATION

The recommendation is to **GRANT** subject to the following conditions:

### CONDITIONS

#### Approved Documents

1. The development hereby permitted shall be carried out and completed in all respects strictly in accordance with the terms of this permission: the following approved plans are contained in the application:
  - Drawing No. EUR HO 10 Revision D - Site of Application, dated March 2014
  - Figure 1.6 – Holmwood Prospect Location, contained in Chapter 1 of the Environmental Statement dated November 2014
  - Figure 1.10 – Proposed Well Trajectory for Holmwood-1, contained in Chapter 1 of the Environmental Statement dated November 2014
  - Figure 5a – Well Construction Concept, dated 27 February 2015, contained in the March 2015 Hydrogeological Risk Assessment prepared by Envireau Water
  - Figure 5b - Well Construction Concept, dated 27 February 2015, contained in the March 2015 Hydrogeological Risk Assessment prepared by Envireau Water
2. A copy of this decision notice together with the approved plans and any schemes and/or details subsequently approved pursuant to this permission shall be kept at the site office at all times and the terms and contents therefore shall be made known to supervising staff on the site.
3. This planning permission shall be limited to a period of 3 years from the date of the decision notice. The applicant shall notify the County Planning Authority in writing within seven working days of the commencement of the implementation of the planning permission.
4. Apart from exceptions allowed via the exploratory hydrocarbon drill-site (appeal ref: APP/B3600/A/11/2166561, decision dated 7 August 2015), no operations or activities authorised or required by this permission shall take place other than during the hours of:
 

0700 to 1800 hours on Monday to Friday  
0700 to 1300 hours on Saturday

There shall be no working at any time on Sundays, Bank Holidays or National Holidays.

### INFORMATIVES

1. The planning permission granted on 7 August 2015 for the associated exploratory hydrocarbon drill-site (appeal ref: APP/B3600/A/11/2166561) has 23 conditions. On the basis that they are not relevant to the development hereby permitted, those conditions have not been attached to this permission (i.e. duplicated). Nevertheless, the list of the 23 conditions was shared with Members of the Planning & Regulatory Committee before their resolution to grant. The County Planning Authority confirms that the 4 conditions attached to this planning permission comply with paragraph 206 of the National Planning Policy Framework 2012. Non-compliance with any of the 23 conditions attached to the planning permission for the associated exploratory hydrocarbon drill-site (appeal ref: APP/B3600/A/11/2166561) could lead to proportionate enforcement action by the County Planning Authority.

2. The applicant / developer will be required to obtain Environmental Permits from the Environment Agency, in order to carry out drilling and testing of any exploration borehole. The applicant /developer must notify the Environment Agency of their intention to drill any borehole(s) in accordance with section 199 (1) Notice etc. of mining operations (Water Resources Act 1991), which may affect water conservation. In the event that the applicant /developer decides to abstract groundwater from any designated well or borehole on the site, and the required volume of water is in excess of 20m<sup>3</sup>/day, the developer will also need an Abstraction Licence from the Environment Agency.
3. The applicant / developer is reminded that under Section 14 of the Wildlife & Countryside Act (as amended), it is illegal to plant or otherwise cause the spread of Japanese knotweed into the wild.
4. The installation of the Bentomat lining for the associated exploratory hydrocarbon drill-site should be carried out in accordance with the manufacturer's guidelines and particular attention given to the sealing of seams, penetrations and punctures, and any pre-hydration that may be required. The applicant / developer should also aim to meet vehicle emission standards such as Euro III or Euro IV to reduce potential local air quality impacts.
5. The County Planning Authority confirms that in assessing this planning application it has worked with the applicant in a positive and proactive way, in line with the requirements of paragraph 186-187 of the National Planning Policy Framework 2012.

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#### **CONTACT**

Mark O'Hare

#### **TEL. NO.**

020 8541 7534

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#### **BACKGROUND PAPERS**

The deposited application documents and plans, including those amending or clarifying the proposal, responses to consultations and representations received as referred to in the report and included in the application file and the following:

#### **Government Guidance**

National Planning Policy Framework 2012

National Planning Practice Guidance (NPPG) 2014 and NPPG for Minerals 2014

#### **The Development Plan**

Surrey Minerals Plan 2011 Core Strategy

Mole Valley Core Strategy 2009 Development Plan Document

Mole Valley Local Plan 2000 (saved policies)

#### **Other documents**

Planning application ref: MO09/0110, refused on 30 June 2011

Appeal ref: APP/B3600/A/11/2166561, Inspector's decision 7 August 2015

The Town & Country Planning (Environmental Impact Assessment) Regulations 2011

European Directive 85/337/EEC 1985 (amended 1997)

Regulatory Reform (Fire Safety) Order 2005

Environmental Protection UK guidance 2010 Update

Surrey Hills AONB Management Plan 2014 – 2019.

Redhill Aerodrome High Court Decision 24/10/2014 (Ref: C1/2014/2773, 2756 and 2874)

Letter dated 8 December 2014 from the Environment Agency

Planning and Compulsory Purchase Act 2004

Town and Country Planning Act 1990

UK Technical Advisory Group Report on the Water Framework Directive 2008.

The Offshore Installations and Wells Regulations 1996

Oil & Gas UK guidelines for the suspension and abandonment of wells 2012.  
Surrey County Council Noise Guidelines 1994  
British Standard 7385-2:1993  
Eurocode 8' Building Regulations, European Union 2012.