

Town and Country Planning (Environmental Impact Assessment) Regulations 2011

Screening Opinion

Code No: SCRM/4/116

File No: 4.2509.0

Proposal: To drill a vertical core well to explore for shale gas

Location: Land adjacent to Bramley Moor Lane, near Marsh Lane, Eckington
Derbyshire

Decision: The development would not be Environmental Impact Assessment development and an Environmental Statement would not be required.

Introduction

Under the provisions of Part 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011, as amended (the EIA Regulations) Turley, as planning agent for INEOS, has by a request submitted to Derbyshire County Council dated January 2017 required the Council, as the relevant planning authority, to provide a screening opinion as to the whether the proposed development described in the request (summarised below) would constitute 'EIA development'. The meanings of 'EIA development', 'screening opinion', and related terms are defined in the EIA Regulations.

The Site

The site proposed for the development is a rural location occupying part of an agricultural field and is within the administrative area of North East Derbyshire District Council. It is located south of the B6056 highway and Ten Acres Farm and Ten Acres Bungalow which sit at the junction with the B6056 and Bramley Moor Lane. To the north and north east lie the villages of Bramley Moor and Marsh Lane. To the west is Heatherlee Farm, to the east is Bramley Moor Lane with properties off Bramley Road and Ridge Road and Handley Rose Nursery lies further east. To the south are other agricultural fields before reaching Morton Lane and West Handley. The Moss Valley Conservation Area is located approximately 300 metres (m) to the north and West Handley Conservation Area lies approximately 495 m to the south. There are a number of listed buildings located in West Handley to the south. These are a collection of former agricultural buildings located to the east of Ash Lane Farmhouse which are all Grade II listed which are 490m to the south and the Grade II* Handley Hall which is approximately 735m to the south. Moortop Farmhouse, which is Grade II listed, is located approximately 860m to the west. There are public rights of way (PROW) nearby (but not across the site) and a network of rural roads. The site is not within any landscape or ecological designations but does lie within the North East Derbyshire Greenbelt. The closest residential properties are approximately 200 to 300m away. The proposed access route to the site would be off Bramley Moor Lane to the east of the site.

The Proposal

The proposal relates to a temporary development involving the drilling of a vertical core well to explore for shale gas. There would be a single point of access to the site which would be off Bramblemoor Lane. The site would be restored back to an agricultural use.

The proposed development would comprise five phases:

Phase 1 - Site Development and Establishment – approximately 3 months.

Phase 2 - Drilling and Coring – approximately 3 months.

Phase 3 - Establishment as a Listening Well and Suspension – approximately 1 week with the suspended well in place until restoration.

Phase 4 - Undertaking Listening Well Operations – up to 3 weeks as required.

Phase 5 - Abandonment and Restoration – approximately 1 month.

Phase 1 - Site Development and Establishment.

This would take approximately 3 months and would involve:

- Mobilisation– this would involve any necessary pre-commencement surveys, including geotechnical surveys, site investigation surveys, road construction surveys and environmental surveys. Any construction equipment would also be brought to site during mobilisation.
- Access Tracks – formal access construction including visibility splays and geotextile membrane to be covered with aggregate and on-site parking provision.
- Site Clearance – creation of a 99m by 91m compound, vegetation clearance and hedge trimming, topsoil/subsoil removal and storage in 2m bunds around perimeter of site and excavation of site hardstanding area approximately 25m by 17m.
- Site Development and Lining – impermeable site liner trench and subsequent appropriate infilling at foot of topsoil bund to be installed.
- Development of Drainage – perimeter water storage pipe installation to be fed into from across site.
- Development of Site Accommodation – cabins stacked (up to two high) on top of each other would be placed at the perimeter of the site.
- Installation of Monitoring Boreholes – groundwater monitoring boreholes installed, in liaison with the Environment Agency (EA), under permitted development rights.
- Construction of Well Cellar – a well cellar (2.5m diameter and 3m deep) would be excavated, from which the well would be drilled. A conductor installation rig up to 10m in height would be set in the top section of the well bore.

- Demobilisation – grass seeded geotextile membrane introduced to soil bunds and security measures and lighting installed around site. Demobilisation of construction equipment in preparation for mobilising main drilling rig and equipment.

Working hours for Phase 1 are stated as being 0700-1900 Monday to Friday and 0700 – 1300 on Saturdays with no working on Sunday or Bank/Public holidays unless in an emergency or agreed otherwise with the Mineral Planning Authority (MPA).

Phase 2 – Drilling and Coring would take up to 3 months and would involve;

- Mobilisation of drill rig and associated equipment including temporary mobile lighting (up to 9m in height).
- Drilling and Coring- well drilled to a depth of approximately 2,408m with a drill rig up to 60m in height. The well would be logged during drilling and cores would be sent off site for laboratory analysis. No flow testing would be undertaken.
- Demobilisation – drill rig and ancillary equipment would be removed from site including waste from drilling and coring process (drill cuttings and waste drill muds).

Working hours for Phase 2, with the exception of drilling, are stated as being 0700-1900 Monday to Friday and 0700 – 1300 on Saturdays with no working on Sunday or Bank/Public holidays unless in an emergency or agreed otherwise with the MPA. Drilling would be undertaken 24 hours a day.

Phase 3 - Establishment of Listening Well and Suspension would involve;

- Running and cementing the reservoir casing to surface using the drill rig (2-3 days).
- Fitting of flange and well monitoring gauge.
- Fitting of 2m cube steel protector cage over wellhead.
- Removal of remaining cabins from site.

Following well suspension, routine visits to the site would be undertaken to check the integrity of pipework, site surface, fencing and security arrangements, site drainage and containment, well head structure and pressure monitoring.

Activities during Phase 3 to suspend the well (once the rig is removed from site) and maintenance visits would take place 0700-1900 Monday to Friday and 0700 – 1300 on Saturdays with no working on Sunday or Bank/Public holidays unless in an emergency or agreed otherwise with the MPA.

Phase 4 – Undertaking Listening Well Operations

The screening request indicates that activities under Phase 4 would only take place when a well on a separate site is hydraulically fractured, subject to all relevant consents for that separate site being granted in such a timescale so as to coincide with any consent that may be granted for the development proposals at the site under consideration here.

Activities during Phase 4 would include:

- Mobilisation of wireline truck, mast, elevated work platform and temporary welfare facilities;
- Placement of a string of geophones on the wireline inside the reservoir casing for the duration of the listening operations; and
- Demobilisation.

If undertaken, Phase 4 operations would have a duration of up to three weeks. The screening report states that this phase would involve no introduction of chemicals into the well or a requirement to re-work the well using a drill rig. Hours of operation during this phase would be 0700 to 1900 hours Mondays to Fridays with no working at weekends, bank or other public holidays unless in emergency situations.

Phase 5 – Abandonment and Restoration would involve:

- Plugging and Abandoning the Well – removal of wellhead and casing/cement to below 3m to allow restoration to agriculture.
- Removal of Residual Site Equipment and Site Surfacing – removal of security/permanent fencing, concrete pad and cellar, aggregate, drainage, any potentially contaminated equipment, prior to removal of impermeable geotextile /HDPE lining.
- Restoration of Ground – reuse of soils stored in perimeter bunds to restore site surface. Redevelopment of field drainage, reseeded of site and prepared for aftercare as agricultural land. Access track restored or retained subject to any necessary further consent.
- Aftercare – in accordance with aftercare plan to be agreed.

The screening request also makes clear that the overall development would have a duration of five years (with each of the above phases being of limited duration band with periods when no activity would be taking place at the site) following which the site would be restored back to agriculture.

The EIA Regulations and Screening Opinion

The EIA Regulations provide that the relevant planning authority shall adopt a screening opinion [as to whether or not a proposal is 'EIA development'] if a person who is minded to carry out development requests it to do so. It is not

necessary for an application for planning permission to have been made in respect of the development before such a request is made. An application or submission for EIA development cannot be determined unless an Environmental Statement has been submitted by the applicant.

Under the EIA Regulations, 'EIA development' is development which is either-

- (a) Schedule 1 Development [i.e. development, other than exempt development, of a description mentioned in Schedule 1 of the EIA Regulations]; or
- (b) Schedule 2 Development [i.e. development, other than exempt development, of a description mentioned in Column 1 of the table in Schedule 2 where (a) any part of that development is carried out in a sensitive area; or (b) any applicable threshold or criterion in the corresponding part of Column 2 of that table is respectively exceeded or met in relation to that development] and likely to have significant effects on the environment by virtue of factors such as its nature, size or location.

The proposed development is not considered to be in any description category which is covered by Schedule 1. In particular, it does not involve extraction of gas and is therefore not considered to be within the description of development mentioned in Schedule 1 at, paragraph 14 ["Extraction of gas...for commercial purposes where the amount extracted exceeds 500,000 cubic metres per day in the case of gas..."].

The proposed development corresponds to a description mentioned in Column 1 of the Schedule 2 table: It appears to fall under "Extractive Industry" in Column 1, since it concerns, "deep drillings" (at 2(d)). It might also be regarded as falling under "surface industrial installations for the extraction of ...natural gas (at 2(e))". The proposed development site is not located in a "sensitive area" and therefore the indicative thresholds in Column 1, Category 2, Schedule 2 of the EIA Regulations are relevant.

The threshold for "deep drilling" is an area exceeding 1 hectare (ha) whilst that for a "surface industrial installation" is an area exceeding 0.5ha. The proposed development covers an area of more than 1ha and therefore exceeds both these thresholds.

The proposal is therefore found to be for Schedule 2 development which is required to be screened having regard to selection criteria in Schedule 3 of the EIA Regulations.

Accordingly due consideration has been given by the Council to the issue of any likelihood of significant effects on the environment being caused by the development, having regard to the selection criteria for Schedule 2 development in Schedule 3 of the EIA Regulations. The proposal would be EIA development if, in

the opinion of the MPA, it were likely to have 'significant effects on the environment by virtue of factors such as its nature, size or location'. The selection criteria relate to:

- Characteristics of the development;
- Location of the development;
- Characteristics of the potential impacts.

The National Planning Practice Guidance (NPPG) also provides guidance on establishing whether a proposed development requires an EIA, including indicative criteria and relevant thresholds and key issues to consider, which are intended to help determine whether significant effects are likely, however, when considering the thresholds, it is important to also consider the location of the proposed development.

The NPPG indicative criteria and threshold for development falling within category 2(d) of Schedule 2 indicates that significant effects are more likely for drilling operations involving development of a surface site of more than five hectares. [Exploratory deep drilling on its own is unlikely to require EIA]. Regard should be had to the likely wider impacts on surrounding hydrology and ecology.

For development falling within category 2(e) of Schedule 2 significant effects are more likely for development of a site of 10 ha or more or where production is expected to be more than 100,000 tonnes of petroleum per year. The scale of development, emissions to air, discharges to water, the risk of accident and the arrangements for transporting the fuel are key issues to be considered.

Characteristics of the development

This proposal is for a temporary planning permission on a new site to drill a vertical exploration core well to explore for shale gas. As has been described above in detail, the development would require material to be brought to the site by HGV and heavy plant and machinery would be used on site to develop the land to produce the perimeter bund and create the operational platforms. The development includes the erection of a drill rig.

In accordance with the EIA Regulations (Regulation 5(6)) the Council in deciding on the adoption of the opinion set out below as to whether Schedule 2 development is EIA Development has taken into account the selection criteria set out in Schedule 3 as are relevant to the development.

Size of the development – The application site covers an area of approximately 1 ha. The size of the development exceeds the relevant threshold for this type of development in Schedule 2 of the EIA Regulations but is below the indicative criteria and thresholds contained in the guidance in the NPPG.

The site is located in open countryside. In relation to size, it is notable that views into the site would be partially screened by a 2m high planted earth bund around the perimeter, although this bund in itself may create an incongruous feature in the wider landscape. Inside the earth bund would be located industrial cabins/containers stacked two high, which would be visible over the earth bund. Based on the information provided in the screening request, it is understood that such structures would be on site for the duration of the overall development (i.e. a maximum five years).

At up to 60 m in height, the scale of the proposed drill rig would not be of a natural scale within the area and would be visually prominent. However, this is stated to be for a limited period of up to 3 months which includes mobilisation, drilling and coring and demobilisation of the drill rig. Any such impacts should be therefore considered in the context of this timescale.

Overall the size of the proposed development is not considered to be significant in its effects in the context of the EIA Regulations.

Cumulation with other developments – This is dealt with in more detail below. The proposed development should be considered in terms of cumulation with other existing authorised development in the vicinity. At the time of writing, the MPA is not aware of any other developments of this type in the immediate area. Whilst the location of other exploration rigs has not been provided, the applicant has stated that they would be located a significant distance from the site under consideration here, and not within 10km, of other rigs.

It is noted that the site is located in an elevated position which enables long distance views across the wider landscape. Such views provide a high level of inter-visibility. It is noted that a number of similarly tall structures in the form of wind turbines/wind farms would be visible from the immediate area of the proposed development, however, in considering the limited timescale (3 months) that the drill rig would be present at the site, such potential cumulative impacts are not likely to be significant.

The use of natural resources – The proposed development would use large plant, machinery and HGVs in site development and operationally. Such plant and machinery would use fuel that would otherwise not be used if the development did not proceed. On site energy needs would be met by mobile diesel generators. Construction of the site would involve the importation by road of approximately 9,000 tonnes of aggregate which is to be removed on restoration and reused where permitted.

Overall it is not considered that the use of natural resources for the proposed development would be significant in the context of the EIA Regulations.

The production of waste –The proposed development would produce operational waste in the form of drilling mud, rock cuttings and waste water. The applicant has stated that the waste would be contained in tanks stored on a concrete pad prior to its removal from site by licensed waste carriers. This would also be the case with any naturally occurring radioactive material (NORM) which would be managed under permit through the EA.

Overall, it is not considered that the production of waste arising from the proposal is likely to be significant in the context of the EIA Regulations.

Pollution and nuisances – This type of development can be a source of noise, dust and air pollution from the day to day site operations, potentially impact on ecology and hydrology and may cause an adverse visual impact into the local setting and wider landscape. The storage of waste materials as well as oils/fuels etc at the site could potentially lead to pollution of surface water and soils although these impacts could be controlled through suitable containment and good working practice. HGV and other traffic movements can impact on the local amenity through emissions to air, noise and vibration. Localised pollution and nuisance could arise from vehicle movements, day to day site operations such as noise and dust, visual intrusion, ecology and hydrology. The potential pollution and nuisance impacts for this particular development are considered further in the characteristics of the potential impact section of this report below.

Risk of accidents, having regard in particular to substances or technologies used – There is a potential risk from the increase in traffic associated with the development. However, it is not considered the risk of accidents is likely to be significant in the context of the EIA Regulations.

The proposed development has the potential to lead to accidents associated with the construction and maintenance of the well as well as the storage of fuels associated with the operation of on-site generators/equipment etc. Section 50 of the Infrastructure Act 2015 sets out the responsibilities of other environmental regulators, including the Health and Safety Executive (HSE) and the EA, who would have direct responsibilities in respect of the proposed development. Such responsibilities would fall outside the remit of the MPA in the consideration of any planning application.

The HSE would regulate aspects of all phases of extraction and in particular would be responsible for ensuring the appropriate design and construction of the well casing for any borehole and well integrity during operation.

The EA would be responsible for the protection of water resources (including groundwater aquifers), ensuring appropriate treatment and disposal of mining waste, emissions to air, and suitable treatment and manage any naturally occurring radioactive materials

Location of the development

The site is located in open countryside close to the villages of Marsh Lane and West Handley. A description of the location of the site is provided above. There are a number of designated and non-designated heritage assets in the area including a late 18/19th century tramway the route of which ran across the site connecting the former collieries at Eckington to the Chesterfield Canal. There are sites of ecological importance in the vicinity and the site lies within an Impact Risk Zone (IRZ) of Sites of Special Scientific Interest (SSSIs). The site does not lie within flood risk area as indicated by the EA Flood Risk Mapping data. As indicated by the Coal Authority interactive map, the site lies within a Surface Coal Resource Area, Coal Mining Reporting Area, High Risk Coal Mining Area as well as having nearby Mine Entries.

There are no known environmentally sensitive sites and features in the vicinity that are likely to be significantly affected by the development or existing and historic mining features that cannot be addressed as part of the consideration of a formal planning application.

The site is not situated in a high risk area of flooding and there are no public rights of way in the direct vicinity of the site. The site does not lie within an area of important landscape designations and there are no national or international ecological or historic designations covering or immediately adjacent to the site.

Characteristics of the potential impacts

Schedule 3 of the EIA Regulations requires consideration to be given to the potential significant effects of the development having particular regard to:

- a) the extent of the impact (geographical area and size of the affected population);
- b) the transfrontier nature of the impact;
- c) the magnitude and complexity of the impact;
- d) the probability of the impact; and
- e) the duration, frequency and reversibility of the impact.

Visual and Landscape Impacts

The development would be located in open countryside. The landscape is defined as Wooded Hills and Valleys Landscape Character Type (LCT) in the 'Landscape Character of Derbyshire' document. There are no landscape designations directly affecting the site although land 300m to the north at Bramley Moor is recorded as being of primary sensitivity in the County's recent work to identify Areas of Multiple Environmental Sensitivity (AMES) and is also designated as Special Landscape Area (SLA) in the saved policies of the North East Derbyshire Local Plan (NEDLP). The same area is also located in the Moss Valley Conservation Area reflecting the overall quality of this landscape.

Soil and sub-soil stripping and 'screen mounds', as well as the introduction of site accommodation cabins, would introduce incongruous features into the rural scene and industrial activity into what is otherwise a rural setting. However, in considering the duration of the development and the size of the structures/landforms, such impacts would not be so significant as to warrant the production of an ES.

During the drilling and coring phase, a drill rig up to 60m in height, would be present on site and would potentially be visible over a wide area, day and night, because of ancillary lighting towers (themselves up to 9m in height). Whilst such impacts are noted, the presence of the drill rig on site for such a limited timescale (a maximum of 3 months), would ensure that any such impacts would not be significant.

The access proposals impact on the character of the landscape and local distinctiveness of rural lanes as a result of the proposed visibility improvements and road widening works, including passing place(s). Whilst such works would inevitably result in impacts, they would be localised in nature and would not be likely to lead to significant landscape and visual impacts.

The nearest visually sensitive properties are on Bramley Road and Ridge Road, (apart from Ten Acres farm and Ten Acres Bungalow which are nearer) and are located approximately 250-300m east of the site. There would also be views of the site from informal footpaths and PROW which are located also to the east between the Bramley Road and Ridge Road dwellings and Bramley Moor Lane.

The site of the proposed well is situated on elevated land which potentially affords long distance views across the landscape to similarly elevated landforms. There would be inter-visibility between the drill rig and other tall structures such as wind turbines which can be seen in the distance. The presence of woodland blocks and hedgerow trees would potentially assist in screening views of the drill rig from the surrounding area.

Whilst I am of the view that the landscape and visual impacts of this development would need to be considered in more detail through the production of a Landscape and Visual Impact Assessment (LVIA), at this stage and based on the information supplied in the screening request and consultation responses received it is not considered to be significant in the context of the EIA Regulations.

Ecology

Whilst the site is not located in a 'sensitive area' as specifically defined in regulation 2 (1) of the EIA Regulations, it is located within the IRZ and close to a 'sensitive area' which may also be of relevance in determining whether an EIA is required. The guidance contained in the NPPG states that special considerations apply to SSSIs. In practice, the likely environmental effects of Schedule 2

development will often be such as to require an EIA if it is to be located in or close to sensitive sites.

In consultation, Natural England (NE) identifies that the site is located within, adjacent to, or in close proximity to the Moss Valley, Moss Valley Meadows and Moss Valley Woods SSSIs and, based on the information provided, the development is considered not likely to significantly affect the interest features for which they are notified.

No part of the proposed development site is covered by any statutory or non-statutory nature conservation designations, nor are any such sites found in the immediate vicinity of the application site. It is recognised that the nearest statutorily designated site is Moss Valley Meadows SSSI which lies around 1.9km to the north/northwest, although several other SSSIs (Moss Valley and Moss Valley Woods SSSIs) can be found at around or beyond 2km from the application area. Given the nature of the proposals, it is considered unlikely that the proposed development would have a significant effect on these designated sites.

There are a number of non-statutorily designated sites of ecological interest within 2km of the application area; the nearest site (Wade Wood/Light Wood Local Wildlife Site (LWS) and Ancient Woodland) is located 450-500m from the application site. Given the nature of the activities proposed and the distances from the proposal site and the other non-statutory sites, significant effects are considered to be unlikely.

There are no records for protected or notable species within or adjacent to this site, nor any such records for non-designated habitats of potential ecological interest, although there are some records for bat roosts, reptiles, water vole, and notable plant species within 2km of the application area. There is no reason to predict that the proposal would be likely to have a significant effect on these populations. Similarly, aerial photographs suggest that the proposed site is currently under agricultural arable use, and is likely to therefore be of negligible innate ecological interest.

Whilst ecological impacts cannot be entirely ruled out, it is not considered that any such impacts would be so significant as to warrant the development being considered EIA development.

Noise, dust and air quality

This type of development would potentially be source of noise pollution and generate dust which can impact on air quality. Site operations, HGV movements, vehicles tipping and loading, the operation of plant and machinery during soil stripping and handling operations and the use of the drill rig would all generate noise. The operations have the potential to impact on air quality and create dust

which would need to be managed accordingly. I am of the view that these potential effects would require consideration with any forthcoming planning application.

The applicant was requested to provide further noise information as part of this screening request. The further information confirms that the site is in a rural location and that noise survey and assessment work is being undertaken. The applicant considers that the operational noise generated by the development is capable of being managed and mitigated in accordance with the thresholds contained in NPPG for both day and night operations, although it has not submitted a technical report.

The North East Derbyshire and Bolsover District Council's Joint Environmental Health Service (JEHS) has provided comments regarding noise impact and is of the view that there is no evidence to suggest that compliance with the thresholds could not be achieved. In the context of the EIA Regulations, any effect that is in compliance with the relevant guidance would not be considered as significant, particularly as the impacts are likely to be short in duration.

It is acknowledged that there would be noise generated by the development and that the drilling would take place over a 3 month temporary period and not for the 5 year temporary period being the timeframe for the planning application.

Regarding air quality, the construction phase and the operation of the drilling rig have the potential for a localised impact on air quality however the effects would not be likely to be considered significant given the temporary nature of the proposed works. Therefore at this stage for screening purposes, given the further noise information submitted and the temporary 3 month drilling period within the overall development, it is considered that the impact of noise, dust and air quality are not likely to be significant in the context of the EIA Regulations.

Traffic impacts

The proposal involves the movement of HGVs into and out of the site. Access to the site is proposed via a single point off Bramley Moor Lane. Vehicle movements to and from the site would include deliveries of water, cement, drilling materials and other supplies to the site and removal of fluids generated and waste for disposal. These are expected to take place during the day except for in exceptional circumstances for health and safety reasons.

A Traffic Management Plan (TMP) is proposed to accompany the planning application.

It is stated that during construction (Stage 1) there would be fewer than 10 HGVs movements per day for the majority of the time. On up to 20 days there would be more than 10 movements per day and for two weeks there would be up to 100

movements per day (up to 9 per hour over a 12 hour period) when aggregate is brought to the site.

During drilling (Stage 2) there would be fewer than 10 daily HGV movements for most of the period, with periods at the beginning and end of drilling stage of between 20 and 50 HGV movements daily (2-5 per hour over a 12 hour day). In addition there would be up to 16 movements greater than 32 tonnes at the start and end of the stage as the rig is mobilised and demobilised.

Stages 3 to 5 would have less associated traffic.

Overall the environmental impact of traffic on highway safety and capacity is not likely to be significant in the context of the EIA Regulations.

Vibration/land stability/subsidence

As referred to above the site lies within a Surface Coal Resource Area, Coal Mining Reporting Area, and High Risk Coal Mining Area as well as having nearby Mine Entries and as such detailed information would be required to be submitted as part of any planning application to be submitted. This would need to consider land stability issues regarding mine entries in the vicinity as well as any vibration and subsidence.

The use of the drill rig, heavy plant, machinery and HGV movements is a potential source of localised vibration. The applicant has stated that ground borne vibration is expected to be imperceptible at distances greater than 20m from the drill rig. Overall, it is considered unlikely that there would be a significant effect on the environment in terms of vibration, land stability or subsidence.

Hydrology and flood risk

The EA interactive mapping indicates that the site lies above a minor aquifer (high) regarding Ground Water Vulnerability Zone and a Secondary A aquifer British Geological Survey (BGS) Aquifer Maps Bedrock Designation. The site area is greater than 1 ha and any planning application would need to be supported by a FRA. The site is located in flood zone 1, a low flood risk area and there are no watercourses or drainage features in close proximity to the site.

Given the known mine entries in the vicinity there may be historic mining and hidden drainage features present on or near the site. Confirmation of these features would need to be established which may involve intrusive site investigations. However, given the nature of the proposals, it is not considered likely that the exploration well development would have a significant environmental impact on hydrology, flood risk or historic mining features.

Historic Environment and Archaeology

Moss Valley Conservation Area is located 300m to the north and West Handley Conservation Area lies approximately 500m to the south. A number of listed buildings, including the Grade II* listed Handley Hall, are also located in West Handley at distances of between 490m to 735m. A further listed building, Moortop Farmhouse, which is Grade II listed, is located approximately 860m to the west. Whilst the presence of these designated heritage assets in the vicinity of the site is noted, in considering the scale, nature and duration of the proposed development, it is not considered that any likely impacts to their setting would be so significant as to warrant the production of an ES. A heritage statement should be submitted with any planning application.

The site comprises an agricultural field and vehicular access on which there is a late 18/19th century former tramway which linked collieries in Eckington to Chesterfield Canal which is considered to be a non-designated heritage asset. Information relating to this tramway should be provided in a heritage statement, however in considering the scale, nature and duration of the development, it is not considered that impacts to this non-designated heritage asset would be significant and such impacts could be adequately controlled.

It is not considered that the development is likely to have any significant historic or archaeological impacts or that it would have a significant impact on the identified heritage assets.

In considering all of the above, it is considered that the potential impacts would remain localised to the proposed development site and the surrounding area. there would be no transfrontier impacts associated with the proposal.

Cumulative Effects

Consideration needs to be given to any cumulative effects of the potential environmental impacts associated with the development at the site.

The applicant states that no 'cumulative schemes' have been identified with existing development or development not yet begun which benefits from planning permission.

During the consideration of this request on behalf of the Council as MPA there has been no identification of either any ongoing development or any development not yet begun which benefits from planning permission which might have a significant cumulative environmental effect in association with the proposed existing development.

Consideration has also been given to whether or not this development proposal would be a singular project, or part of a larger development project which should also be considered in the screening process.

Associated or linked development

The applicant has expressed the view that this exploratory vertical well development should not be regarded as an integral part of a more substantial project since it is a discrete proposal that could proceed independently. Other similar proposals for vertical core wells are expected to be brought forward for planning applications across the East Midlands but are considered to be independent, discrete projects which it states should be assessed on their own merits.

The applicant has further stated that the purpose of the proposed vertical exploratory core well is to understand the geology in this specific locality. The evidential understanding derived from this well would contribute, alongside seismic data gathering and other prospective exploratory well sites, to a greater understanding of the overall 'basin' and its potential to support commercially-viable shale gas extraction. The applicant considers that this well would provide data for this localised area and as such is not considered to comprise part of a larger project in terms of the EIA Regulations. The applicant has confirmed that there are no other existing vertical exploratory wells or expected to be within 10km of this site.

It could be claimed that the proposed development represents preparatory works for a more substantial development and as such should not be considered in isolation. If considered as an integral part of a wider single development project then EIA might be required in respect of the whole project. However in this case, having regard to the exploratory purpose of the proposed vertical well, it would be possible for the well development to proceed without any extractive developments following from it. Therefore this does not appear to be a case of a proposal which for the purpose of screening is to be regarded as an integral part of an inevitably more substantial development.

It is considered that there must be clear evidence to support the inevitable substantial development referred to more than simply the potential of this development being screened leading onto a more substantial later development. In this case it is considered that whilst there is potential to lead to a more substantial future development it is not inevitably the case since the data obtained from the exploratory well may not support a more substantial later development. For this reason it is considered that the development is capable of being classed as a stand-alone development and should be screened in isolation in this case.

Screening the currently proposed development in this manner will not prejudice potential screening decision(s) on any subsequent proposals for a more substantial development(s). A future proposal may include an appraisal well, commercial shale gas extraction scheme or a combination scheme. Treating the current vertical exploration well proposal as stand-alone development will not affect the likelihood of these subsequent development(s) being considered to

constitute EIA development because of any subdivision of the overall scale of the development, its cumulative components and their potential impacts.

Conclusion

Having taken account of the selection criteria for screening Schedule 2 developments in the EIA Regulations, the guidance in the NPPG and having considered the potential impacts referred to above; the impacts from proposed development are found not to be likely to be so significant, either individually or collectively, such as to require EIA. The conclusion which is therefore reached on behalf of the Council is that the proposed development would not be likely to have significant effect on the environment, in terms of the EIA Regulations.

Decision: The development would not be Environmental Impact Assessment development and an Environmental Statement would not be required.

Approved:

A handwritten signature in black ink, appearing to be 'R. M.', written over a horizontal line.

Date: 28 February 2017