

GUIDANCE ABOUT THE ENVIRONMENTAL ASPECTS OF ANY APPLICATION – LANDWARD

DECC is not an environmental regulator or planning authority for the landward areas, but it does expect Applicants to demonstrate their understanding of environmental sensitivities relevant to the area applied for and to set out their options for addressing these and their approach to establishing their eventual plan for operations.

ENVIRONMENTAL AWARENESS STATEMENT

- 1) Applicants should submit as part of their application an “Environmental Awareness Statement” (EAS).
- 2) This document should set out the Applicant’s
 - understanding of the United Kingdom’s onshore Environmental and Planning Legislation relevant to the exploration; development, production and decommissioning stages of a project;
 - understanding of the environmental sensitivities of the area they are applying for and their options for addressing these and their approach to establishing the eventual plan for operations;
 - options for addressing the SEA proposed Mitigation Measures and the Applicant’s approach to establishing the eventual plan for operations in the light of these.

The following sections of LARRY apply

Section 2: Environmental regulation and organisation

- 3) Applicants should demonstrate their understanding of the United Kingdom’s onshore environmental and planning legislation relevant to the exploration, development, production and decommissioning stages of a project.
- 4) In addition, Applicants should demonstrate that they have an Environmental Management System (EMS) or are committed to developing an EMS prior to undertaking any operations under the terms of the licence. For the avoidance of doubt, it remains the Applicant’s responsibility to discuss/liase with any applicable onshore regulatory body or authority and to meet the requirements of these bodies to ensure that all permits, authorisations and other requirements are addressed, progressed and adhered to.

Section 3: Environmental record

- 5) The Applicant should provide details of whether the Company:
 - Has failed to comply with any relevant environmental legislative standards or requirements to the satisfaction of the environmental regulator during the last five years (either in the UK or in other countries).

- Has had any criminal or civil action taken against it with respect to environmental issues during the last five years (either in the UK or in other countries);
- Has been convicted for breaching any environmental legislation during the last five years (either in the UK or in other countries); or
- Has any criminal or civil action pending against it with respect to environmental issues (either in the UK or in other countries).

Section 4: Environmental sensitivities and issues

6) Applicants should demonstrate their understanding of the environmental sensitivities and potential constraints within, or immediately adjacent to, the area of interest, and their awareness of the potential impacts that would have to be managed during the execution of a work programme.

7) Applicants should take fully into account the specific sensitivities of the areas applied for, in terms of the environment and cultural heritage. DECC will expect the EAS to contain a context analysis which identifies all areas or sites within the area applied for which are of local or wider significance to environmental protection - including the protection of biodiversity and landscape value - or of significance as historic or cultural assets. The analysis should also identify similar areas or sites which are sufficiently close to the areas applied for to make it appropriate to consider any potential for environmental or other detriment.

8) Where the Applicant is proposing to undertake unconventional hydrocarbon activities and the area applied for is in or adjacent to any National Park, or the Broads, or any Areas of Outstanding Natural Beauty or World Heritage Site, the EAS will need to be particularly comprehensive and detailed. In these cases the Applicant should demonstrate his understanding of the implications for unconventional hydrocarbon development of the following aspects of the planning guidance issued by DCLG on 28 July 2014 —

- that in National Parks, the Broads, and Areas of Outstanding Natural Beauty, mineral planning authorities should give great weight to conserving their landscape and scenic beauty, and to the conservation of wildlife and cultural heritage;
- that applications which represent major developments in those areas should be refused, except in exceptional circumstances and where it can be demonstrated that they are in the public interest;
- that where a proposed development would lead to substantial harm to or loss of a World Heritage Site, mineral planning authorities should refuse consent unless wholly exceptional circumstances apply.

9) The EAS should take account of recommendations arising from the SEA undertaken by DECC relating to the natural and wider environment, the SEA and its appendices are available and may help The Applicant compile this information. The Applicant can view these documents here: <https://www.gov.uk/government/consultations/environmental-report-for-further-onshore-oil-and-gas-licensing>

The references in these documents include other sources of relevant information.

Section 5: SEA Mitigation Measures

10) The SEA assessment identified a range of measures which could be implemented to avoid or minimise any potential negative effects. These measures are included within each of the topic-based assessments in **Appendix B** of the SEA Environmental Report and can be broadly categorised as those that are addressed to operators (e.g. measures related to site selection or design at the project level) and those that are to be considered by DECC.

11) Table 1 lists measures that are addressed to operators. The EAS should set out the Applicant's options for addressing the SEA mitigations and his approach to establishing the eventual plan for operations in the light of these. Table 2 sets out the stages referred to in Table 1.

TABLE 1: Proposed Mitigation Measures

Measure	Resource type	Stage (See Table 2 below)
During the site selection process, careful consideration should be given by the operator to the avoidance of carbon sinks (e.g. peats) in order to minimise loss of carbon sequestration.	Unconventional, Virgin Coalbed Methane	Stage 2, Stage 3
Where possible, measures should be taken to offset (at least in part) GHG emissions arising from construction and operational activities. These measures may include, for example, use of construction materials with low embodied carbon, limiting the volume of construction waste on site.	Unconventional, Virgin Coalbed Methane	Stage 2, Stage 3, Stage 4
Operators should adopt the principle of reducing emissions to as low a level as reasonably practicable (ALARP). In particular, "reduced emissions completions" (RECs) or "green completions" should be adopted.	Unconventional, Virgin Coalbed Methane	Stage 2, Stage 3, Stage 4
It is envisaged that the use of Best Available Techniques (BAT) will be adopted as part of a Waste Management Plan to transport and treat flowback (generated during hydraulic fracturing) and produced water to minimise negative effects from the significant volumes of wastewater produced following hydraulic fracturing. If treatment is required at a regional waste water treatment centre, early discussion should take place with the relevant water company to ensure there is adequate capacity to accommodate the additional demand.	Unconventional Virgin Coalbed Methane	Stage 2, Stage 3, Stage 4
Best practice construction techniques should be used in order to minimise visual effect. Techniques may include minimising the vertical height of drilling equipment and site screening through existing features or use of planting and landscaping.	Conventional Unconventional, Virgin Coalbed Methane	Stage 2, Stage 3
Light pollution effects should be mitigated by use of screening, shielding and down lighting and where practical minimising working practices that require lighting.	Conventional, Unconventional, Virgin Coalbed Methane	Stage 2, Stage 3
Careful consideration should be given during the site selection process to the avoidance of adverse impacts on sensitive land uses that may be affected by construction activity and drilling. Locational criteria should be used to avoid sensitive sites such as European designated conservation sites or Groundwater Source Protection Zone 1 locations.	Unconventional, Virgin Coalbed Methane	Stage 2, Stage 3
Options to consider the treatment and re-use of flowback back should be considered as part of an overall Water Management Plan.	Unconventional	Stage 2, Stage 3, Stage 4
Given the relatively high consumption of water during hydraulic fracturing, the timing of water consumption should be considered in light of local conditions so as to reduce the risk of abstractions occurring during low flow periods. Discussion should take place with the relevant water company regarding the effects on existing mains supply and consideration given to the future demands in the relevant water resource zone.	Unconventional	Stage 2, Stage 3, Stage 4
Measures should be taken to reduce the emissions from vehicles and machinery. For example: the use of transport plans, shut down engines when not in use, the use of low emissions vehicles and low sulphur fuels for electricity generators and fracturing equipment where possible.	Unconventional, Virgin Coalbed Methane	Stage 2, Stage 3
Careful consideration should be given to the effects of vehicle movements arising during well site construction and development on local communities adjacent to sites or on routes to sites. Mitigation could include, for example: the preparation of Transport Plans; the identification of alternative routes; the phasing and timing of movements; the optimisation of movements to/from the site.	Conventional, Unconventional, Virgin Coalbed Methane	Stage 2, Stage 3

TABLE 2: Oil and Gas Exploration and Production Lifecycle and Key Activities

Stage number	Activities: Conventional Oil and Gas	Activities: Unconventional Oil and Gas (Shale Gas and Virgin Coalbed Methane)
1.	Non-intrusive exploration , including: <ul style="list-style-type: none"> • Site identification, selection, characterisation; • Seismic surveys; • Securing of necessary development and operation permits. 	Non-intrusive exploration , including: <ul style="list-style-type: none"> • Site identification, selection, characterisation; • Seismic surveys; • Securing of necessary development and operation permits.
2.	Exploration drilling , including: <ul style="list-style-type: none"> • Pad preparation, road connections and baseline monitoring; • Well design construction and completion; • Well testing including flaring.* 	Exploration drilling and hydraulic fracturing , including: <ul style="list-style-type: none"> • Pad preparation road connections and baseline monitoring; • Well design and construction and completion; • Hydraulic fracturing; • Well testing including flaring.
3.	Production development , including: <ul style="list-style-type: none"> • Pad preparation, road connections and baseline monitoring; • Facility construction and installation; • Well design construction and completion; • Provision of pipeline connections; • Well testing, possibly including flaring.* 	Production development , including : <ul style="list-style-type: none"> • Pad preparation and baseline monitoring; • Facility construction and installation; • Well design construction and completion; • Hydraulic fracturing; • Well testing, possibly including flaring; • Provision of pipeline connections; • (Possibly) re-fracturing.
4.	Production/operation/maintenance , including: <ul style="list-style-type: none"> • Gas/oil production; • Production and disposal of wastes/emissions; • Power generation, chemical use and reservoir monitoring; • Environmental monitoring and well integrity monitoring.* 	Production/operation/maintenance , including: <ul style="list-style-type: none"> • Gas/oil production; • Production and disposal of wastes/emissions; • Power generation, chemical use and reservoir monitoring; • Environmental monitoring and well integrity monitoring.
5.	Decommissioning of wells , including: <ul style="list-style-type: none"> • Well plugging and testing; • Site equipment removal; • Environmental monitoring and well integrity monitoring. 	Decommissioning of wells , including: <ul style="list-style-type: none"> • Well plugging and testing; • Site equipment removal; • Environmental monitoring and well integrity monitoring.
6.	Site restoration and relinquishment , including: <ul style="list-style-type: none"> • Pre-relinquishment survey and inspection; • Site restoration and reclamation. 	Site restoration and relinquishment , including: <ul style="list-style-type: none"> • Pre-relinquishment survey and inspection; • Site restoration and reclamation.

General note on the provision of the above

12) In the provision of the above statement, DECC accepts that full analysis of the likely environmental sensitivities and options for addressing these will not be possible at the licence application stage, and that development of firm proposals will depend on further work after licence award and on the identification of specific sites and activities. Applicants are expected to provide a demonstration which is appropriate in depth and coverage to the knowledge available at the time of application.

13) DECC will assess all statements on the basis of the comprehensiveness of the issues addressed, the depth of understanding demonstrated of the relevant environmental sensitivities and heritage factors and the provision of options for addressing these; adherence to good analytical and assessment practice; and access to expertise. Unless DECC is satisfied on these matters, the application will be rejected.

14) For further guidance contact:

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