

PL1/10 Infrastrata plc and eCORP Oil & Gas UK Ltd

Guidance for Licensees

The following guidance is issued by Minerals and Petroleum Branch (MAPB), DETI, to assist petroleum licensees in the planning and operation of exploration activities on their licence. Some of the guidance arises from the responses to a consultation exercise carried out by MAPB after the initial offer of the licence. It should not be considered to be exhaustive but indicates the main responsibilities of the Licensee when planning and undertaking work on their licence.

1. Licensees are advised to consult MAPB at their earliest convenience when planning field-based activities on the licence. DETI are obliged, under the Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995 as amended, to carry out screening of Licensees' plans to determine if they are likely to have a significant environmental effect on designated areas (Special Areas of Conservation, Special Protected Areas) and, if they are, carry out an assessment of these effects. Likewise, DETI must assess the likely effects of licence activities on Areas of Special Scientific Interest (ASSIs). DETI realises that this screening and assessment cannot take place until the Licensee has made, and submitted, firm plans for these activities, which may not be scheduled until the latter part of the Initial Term, and may be dependent on the results from preceding exploration studies/activities. However, both these processes will involve consultation with the Northern Ireland Environment Agency (NIEA) and other relevant bodies so Licensees should build adequate time for this into their work schedule. DETI may also ask Licensees to provide information to help enable this screening and, if necessary, appropriate assessment to be carried out.
2. Licensees are advised to consult with statutory bodies and other relevant organisations during the planning of field-based exploration activities on their licence areas to ensure that they obtain all the consents or permissions that they may need, and to minimise or mitigate any potential environmental, operational or health and safety risks. While it is expected that most exploration activities will be permitted in the licence area there may be restrictions with regard to operational procedures, location and/or timing.
3. Licensees are encouraged to be pro-active and open in their involvement with local communities, organisations and elected representatives from the licence area. Previous experience has shown that this approach generates trust and facilitates the smooth running of exploration programmes.

4. The Licence contains a two part 'Drill or Drop' work programme to be carried out during the initial term of the Licence. If the Licensees wish to apply to continue the Licence into the Second Term then they must commit to drill a well during the Initial Term, with the drilling commitment to be made before the Break Point at end of Year Three. If the Licensees decide not to drill, the Department still requires Part I of this work programme to be completed, to the satisfaction of the Department, for the Licensees to discharge their responsibility for the Initial Term.

The main actions arising from the responses to the consultation are summarised below, together with a list of contacts from the various bodies involved. Some of the responses apply to all the petroleum licence applications received whereas others are specific to individual applications. DETI's approach to issues raised is given, where appropriate. Copies of the actual responses will be supplied to Licensees separately.

1. **Northern Ireland Environment Agency (NIEA)**

- NIEA requires DETI to carry out screening and, if necessary, appropriate assessments with respect to Licensees' exploration plans and their potential environmental effects on SACs, SPAs, RAMSAR sites and ASSIs, as described above.
- NIEA have recommended that

'a precautionary approach be taken by attaching a condition to any licence issued that no petroleum production operations or activities should be undertaken within or in close proximity to an ASSI.'

DETI propose including the following clause:

The Licensee shall not carry out any work within or in close proximity to an Area of Special Scientific Interest (ASSI) without the prior written consent of the Department.

This would allow Licensees to submit their proposals to DETI and allow the Department to meet its obligations under Article 40 (public bodies: duties in relation to authorising operations) of the Environment (Northern Ireland) Order 2002.

- NIEA draws the Licensees' attention to the fact that the licence area may contain species protected by law [see the Wildlife (Northern Ireland) Order 1985 and the Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995 as amended]. NIEA recommend that appropriate surveys are undertaken prior to the commencement of any petroleum exploration activity or operation and that such surveys are undertaken by a suitably qualified surveyor.
- NIEA also observes that the Licence Application Area may contain habitats, species, earth science and landscape interests which are provided with a degree of protection via the Northern Ireland Planning

In addition habitat, species, earth science and landscape surveys could be carried out to identify areas and amenities which are likely to be of conservation value or are particularly vulnerable to impact from the proposed development. NIEA recommends that the surveys should be undertaken by a suitably qualified surveyor. The timing of habitat and species surveys is often critical and should therefore be carried out during appropriate times of year.

DETI supports the recommendation for Licensees to carry out appropriate surveys **where these are appropriate for the type, location and timing of licence activity being proposed**. In the first instance, Licensees are advised to contact NIEA, Planning Service, the RSPB and MAPB to discuss this.

Contact:

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Conservation, Designation & Protection
Northern Ireland Environment Agency
Klondyke Building
Cromac Avenue
Gasworks Business Park
Lower Ormeau Road
Belfast. BT72JA
Tel: 028 9056 9579
E-mail: mark.hammond@doeni.gov.uk

2. **RSPB**

- The RSPB 'believes that the challenge of climate change demands a revolution in the way we use and generate energy, ending our dependency on fossil fuels, massively reducing the amount of energy we use and delivering environmentally sustainable renewable energy. The RSPB want this revolution to take place in harmony with the natural environment' and has argued that the natural environment must not be sacrificed in pursuit of wider public policy objectives. This is the context for their response to the consultation.
- RSPB asserts that DETI is required to carry out an Article 6 assessment of the licence proposals under the terms of the Conservation (Natural Habitats, etc) Regulations (Northern Ireland) 1995 (as amended).

DETI agrees that Article 6 screening and, if necessary, assessment is required for the exploration activities planned under the proposed work programme. However, DETI avers that, as the proposed exploration activities are sequential and dependent on the results of preceding studies, it is appropriate that such screening and assessment be applied to the individual activities only after detailed plans are submitted to the Department. The petroleum licence awards exclusive rights to Licensees with regard to exploration, development and production of petroleum resources but additional departmental consents are required before field-based activities can be carried out. It is these consents to which DETI will apply the Article 6 screening and assessment.

- RSPB would welcome a statement from the Licensees that they do not intend to drill in any nationally or internationally designated wildlife sites and that they give a commitment that would rule out any drilling that would negatively affect designated sites.

DETI supports the sentiment of this recommendation and points out to the Licensees that, if significant potential adverse environmental effects from licence activities cannot be ruled out, mitigated, or alternative solutions identified, then the exploration and/or development and production plan could only proceed if there were found to be 'imperative reasons of overriding public interest'. Subject to the above, DETI believes, however, that drilling proposals should be treated on a 'case by case' basis.

- RSPB recommends that the licences contain conditions such that, at each new phase, the relevant environmental assessment takes place before any consents are given for work on the ground. RSPB also recommends that the need for other required consents should be made clear in the licence conditions.

DETI believes that it would be inappropriate to specify the different consents that may be required by different government departments in the licence because these may change during the term of the licence (e.g. the forthcoming Wildlife and Natural Environment Bill will impose new biodiversity duties on all public bodies). **DETI reiterates the requirement, outlined in the Guidance to Applicants, that it is the Licensee's responsibility to ensure that all necessary consents are obtained and that written evidence of this will be required before DETI will approve the licence activity in question.**

- RSPB urges Licensees to determine the social and economic impacts on local communities and economies and to provide appropriate information to all those potentially affected.

DETI actively encourages this approach as part of Licensees' involvement with local communities and their representatives.

- RSPB holds bird data which can be made available to Licensees on request and on receipt of a fee. RSPB landholdings are available to download from the RSPB website at

<http://www.rspb.org.uk/ourwork/science/datazone/reserves.aspx>

Contact:

Claire Ferry
Senior Conservation Officer
RSPB Northern Ireland
Belvoir Park Forest
Belfast BT8 7QT

E-mail: claire.ferry@rspb.org.uk

Tel: 028 9049 1547

3. **Planning Service**

- Prior to any exploratory works to include drilling of exploratory boreholes, Planning Service should be consulted in order to gain confirmation of permitted development rights or a full planning application should be submitted to Planning Service if permitted development rights are not applicable (please see the Planning (Northern Ireland) Order 1991 (“the 1991 Order”) and the Planning General Development (NI) Order 1993).

- Licensees should be made aware that the Planning (Control of Major-Accident Hazards) Regulations (Northern Ireland) 2009 came into operation on 31st December 2009. These Regulations amend the Planning (Hazardous Substances) Regulations (Northern Ireland) 1993 (“the Hazardous Substances Regulations”) (S.R 1993 No.275) to increase the range of dangerous substances for which consent must be obtained for storage or processing, the definitions of these substances, and the amounts allowed before consent must be obtained.

- Under the 1991 Order and the Hazardous Substances Regulations, consent for the storage and processing of hazardous substances must be obtained from the Department of the Environment as the authority for hazardous substances.

Contact:

Niall Marshall
Minerals Unit
Planning Service Headquarters
Millennium House
17-25 Great Victoria Street
Belfast BT2 7BN
Tel: 028 9041 6901
E-mail: niall.marshall@doeni.gov.uk

4. **Roads Service**

- Roads Service would want to be assured that the road infrastructure would not be adversely affected by any of the associated operations. Should Licensees wish to carry out any exploration along or adjacent to the public road network, then their attention should be drawn to Article 11 of the Roads (Northern Ireland) Order 1993, which provides for the recovery of expenses incurred by the Department [for Regional Development] in the repair of public roads damaged by excessive weights or extraordinary traffic.
- This licence area straddles both Northern Division and Eastern Division of Roads Service, and the respective Divisional Roads Managers must be informed beforehand of the prospecting locations to ensure that any extraordinary damage to the roads can be observed and repaired at the expense of Licensees. In the case of exploration methods which would cause a temporary reduction in carriageway width, it will be necessary to impose specific conditions which require Licensees to bear all costs relating to restricted working or road closure.
- It is important that, prior to the commencement of any operations, proper approvals are obtained from Roads Service regarding the access and trucking routes that are to be used.
- Licensees will be required to consult with the local roads Maintenance Engineer about any exploration activities on or adjacent to the public road network, and may be required to obtain a Road Opening Permit etc before carrying out any work on the public road.
- The Licensee is requested to contact the Divisional Roads Manager as a condition of the licence.

DETI have not inserted this as a condition of the licence but expect the Licensee to do this at an early stage in the planning of any field-based exploration activities.

Contacts:

Ms Deidre Mackle
Divisional Roads Manager
County Hall,
Castlerock Road,
Coleraine, BT51 3HS

Tel: 028 7034 1315

Mr Ken Hutton
Divisional Roads Manager
Hydebank
Belfast, BT9 9JL

Tel: 028 9025 3000

5. DARD

- Countryside Management Branch has commented:
 - Farmland habitats are important for flora and fauna and every precaution should be taken during the exploratory phase to minimise damage to habitat areas. Specific measures may be required to ensure minimum disturbance or suitable mitigation measures provided following disturbance.
 - Landowners must be consulted with regard to their participation in agri-environment schemes (Environmentally Sensitive Area Scheme, Countryside Management Scheme and NI Countryside Management Scheme). If any of the landowners, or lessees, holds management agreements under such schemes they should notify DARD prior to any developments on the land.
 - Every effort must be made to minimise the impact of soil compaction on agricultural land. All areas which suffer from compaction should be sub soiled to alleviate the risk of impeded crop growth.
 - Particular care must be paid to the disposal of spoil from excavations or borings etc. This can not be dumped on farmland without prior permission from relevant government organisations (DOE/DARD) and should not be disposed of on valuable habitat areas such as species rich grasslands, scrub, heather moorland and wetlands.
 - Scrub, hedge and woodland removal should not take place between 1 March and 31 August. Under DARD Cross Compliance farmers are not permitted to cut / coppice or lay a hedge during the bird nesting season (1 March to 31 August) unless there is a health and safety or animal welfare reason.
 - Field boundaries are an important component of the farmed landscape. Specific measures may be required to ensure minimum disturbance or suitable mitigation measures provided following disturbance. It is recommended that any reinstatement of hedges are of a traditional mix of species, such as that specified under agri-environment schemes, planting at a density of 9 plants per metre, with at least five native woody species throughout each 30 metre length of hedge, using a recommended mixture consisting of 75% hawthorn: 25% other species such as blackthorn, hazel, holly, dog rose, whin, beech, guelder rose and willow. Single species hedges, for example, beech or hawthorn, are not acceptable and no ornamental species should be planted in the open countryside.

Further information is available from

<http://www.dardni.gov.uk/index/environment/countryside-management-in-northern-ireland.htm>

- Quality Assurance Branch reported that the Licence area is in close proximity to an area which is infested with Potato Cyst Nematode (PCN). These areas are the subject of a Notice served relating to PCN, which prohibits the movement of soil or other material from these lands except

under licence. It is the responsibility of the Licensees to contact the inspector for these areas, Mr John Coulter on 02890547198 regarding the safe disposal or replacing of soil. The inspector will advise on the selection of suitable dumping sites and agree proposals prior to the issue of the necessary movement licence stipulating the conditions to be observed to prevent the spread of the pest. Even if soil is not moved off the infested area, the Licensees will still be responsible for ensuring that the conditions are observed to prevent the spread of the pest.

- Rivers Agency asks that the Licensees should be aware of their statutory obligations in respect of watercourses as prescribed in the Drainage (NI) Order 1973 and consult with Rivers Agency on any related matters.

Any proposals in connection with any type of development, either temporary or permanent, which involves interference with any watercourse:- such as diversion, culverting, bridging; or placing any form of structure in any watercourse, requires the written consent of Rivers Agency. Failure to obtain such consent prior to carrying out such proposals is an offence under the Drainage (NI) Order 1973 which may lead to prosecution or statutory action as provided for. Any such application should be made a minimum of 3 months before any proposed works commence.

- Rivers Agency have supplied a map of the Licence area marked with Designated watercourses, highlighted in red and blue. This map will be supplied to the Licensees with the original Rivers Agency response.

- Forest Service provided a map of grant-aided woodland and Forest Service land that lies within the licence area. Permission will be required before the Licensees can undertake any work in Forest Service land and the Forest Service is also required to give an opinion on proposed projects in respect of the Environmental Impact Assessment (Forestry) Regulations (Northern Ireland) 2006.

- Veterinary Service listed the following requirements:

- The boundary fences with surrounding fields, which contain livestock, remain stock proof during construction and operations.
- Livestock do not have access to any material being stored and/or processed.
- Construction and operations do not result in contamination of surrounding agricultural land and/or waterways by building materials, their by-products, leachate from the site or petroleum.
- Livestock do not have access to electricity cables or other live components.
- The Licence does not compromise any of the five essential welfare freedoms of livestock in the vicinity i.e. freedom from hunger, thirst or malnutrition, provision of shelter, freedom from injury or disease, freedom from fear, and freedom to express their normal behaviour.

Contacts:

Denise Mackle
Department of Agriculture and Rural Development
Countryside Management Development Branch
Loughry Campus

76 Dungannon Road
Loughry
Cookstown BT80 9AA
Tel: 028 86757550 ext 36550

Harry McCabe
Assistant Engineer
Rivers Agency
Eastern regional Office
Ravernet House
Altona Road
Largymore
Lisburn BT27 5QB

Tel: 028 9260 6100

Web: www.riversagencyni.gov.uk

6. **Department of Culture, Arts and Leisure (DCAL)**

- DCAL has a statutory responsibility for the conservation and protection of salmonid and inland fisheries within Northern Ireland it protect and administers stocks and enhances important stretches of rivers and reservoirs within the public angling estates. The licence area includes much of the Lagan, Lough Neagh and Larne Lough catchment areas.

- Within the boundaries are many important rivers and streams all of which ,in varying degrees support populations of, salmonids, brown/sea trout, eels, dollaghan and various course fish species, which hold a considerable nature conservation and biodiversity value and provide a valuable recreational resource in the form of angling and commercial opportunities. Lough Neagh itself supports a licensed commercial eel and scale fishery valued at 2.5 million pounds at first point of sale and provides local employment opportunities. There are also several commercially operated fish hatcheries and a number of put and take fisheries within the catchment areas.

- Exploration by borehole drilling and/or seismic could have an impact to salmonid and inland fisheries interests. The Licensee should be aware that aquatic ecology can be impacted not only in the immediate area of the work but also significant distances downstream unless comprehensive mitigation measures are applied. Fish populations are sensitive to reductions in water quality and salmonid habitat is particularly susceptible to siltation. The exploration might present a risk that pollution (e.g. chemicals, fuel, construction materials, high levels of suspended solids) from ground and preparation works may enter watercourses to the detriment of aquatic ecology and consequently fisheries interests. DCAL asks that these issues are taken into consideration and addressed to provide:

- A description of the mitigatory measures proposed to prevent, reduce or offset adverse impacts on fisheries.

and that it is agreed within the licence that

- No works will be carried out on the bed or banks of existing watercourses within the Licence area.
- No works will be carried out within ten metres of existing or discovered watercourses during preparation works until agreed with NIEA and DCAL.
- Any water discharge from works should be consented by Water Management Unit, NIEA, under the Water (Northern Ireland) Order 1999.
- All works near watercourses to be carried out in line with guidance as described in the Pollution Prevention Guidelines 5 (Works In, Near or Liable to Affect Watercourses).
- Storm water should **not** be discharged to nearby watercourses unless first passed through comprehensive pollution interception and flow attenuation measures in line with SUDS principles.

DETI has not specified these conditions within the Licence but would require the Licensee to comply with them in order to obtain the Department's consent to carry out field-based exploration activities.

- Licensees should also be aware that it is an offence under section 47 of the Fisheries (Northern Ireland) Act 1966 to cause pollution which is subsequently shown to have a deleterious effect on fish stocks and that they may be liable to criminal and civil court action for the cost of restocking/rehabilitating a watercourse should a fish kill occur.

Contact:

Tom Cowan
Fisheries Operations and Technical Support
DCAL Inland Fisheries group
Causeway Exchange
1-7 Bedford Street
Belfast BT2 7EG
Tel: 02890515122
E-mail: tom.cowan@dcalni.gov.uk

7. **BT**

- To protect any BT plant that is to be in the area, before any drilling or digging takes place, the contractor or sub contractor must **contact** BTNI on the following number ***“Freefone Dial Before You Dig”*** 0800 917 3933, choosing Option 1 – this call will be free. This will help to protect BT infrastructure in any areas programmed for excavation.

8. Invest NI

- Invest NI owns a number of properties within the proposed Licence area and reserves the right to prohibit access to these sites.

They are as follows:

Antrim:	Antrim Technology Park, Newpark Industrial Estate, Rathenraw Industrial Estate
Carrickfergus:	Trooperslane Industrial Estate
Newtownabbey:	Global Point Business Park, Hightown Industrial Estate, Monkstown Industrial Estate; Glenville.

And, adjacent to the Licence area, Larne at Millbrook Industrial Estate and Ballymena at Woodside Road East & West.

Invest NI has no objection to the Licence in principle, however it will not permit entry to its property without express prior permission which should be sought from Property Solutions Unit.

Works on the site which may affect existing properties may not be permitted.

Contact:

Graham Cardwell
Deputy Principal
Property Solutions Unit
Invest Northern Ireland
Bedford Square
Bedford Street
Belfast BT2 7ES.
Direct T: +44 (0) 28 9069 8091 Mobile T: 07796277174
Email: graham.cardwell@investni.com

9. NIE

- The Licensees should **contact** the Northern Ireland Electricity Distribution Service Centre at Carn Industrial Estate, Portadown BT63 5QJ before any site work commences to seek guidance on the location of Northern Ireland Electricity plc equipment and to ensure that the necessary safety proceedings are known and adhered to.
- Licensees should also be advised that they will be held responsible for damages to any equipment of Northern Ireland Electricity plc resulting from their operations and the cost of any alterations to or re-siting of any equipment necessitated by their operations.

10. **Larne Borough Council**

- Larne Borough Council (LBC) would be concerned if drilling activities were to be located in close proximity to neighbouring dwellings, particularly if drilling operations were to operate 24 hours per day. Larne Borough Council would welcome early dialogue with the Licensees to discuss noise impacts on local residents and applicable target noise levels to be achieved. Typical target noise and vibration levels would be derived from British Standards (listed in LBC's letter).
- LBC draw the Licensees' attention to the need to control dust and other potential fugitive emissions, with attention to be paid to storage methods and mitigation measures.
- LBC recommend that lighting at drilling sites should be optically controlled and directed in such a manner as to minimise light pollution from glare and spill.
- LBC expect these matters to be covered in any Application for Consent to Drill and subsequent approval. However, they welcome early dialogue with the Licensees to discuss all these issues.

Contact:

Geraldine McGahey
Chief Executive
Larne Borough Council
Smiley Buildings
Victoria Road
Larne BT40 1RU
Tel: 028 2827 2313
E-mail: admin@larne.gov.uk

11. **Antrim Borough Council**

- Antrim Borough Council supports economic development within the council area but asks DETI to consider the possible impact of the Licence on any future geothermal energy plans within the Borough.

DETI considers that exploration and development of both petroleum and deep geothermal energy resources could take place within the Petroleum Licence area. Indeed, the results from petroleum exploration, when released, may help to reduce the risks associated with poor knowledge of the subsurface geology that is a major barrier to investment in deep geothermal energy in Northern Ireland. Moreover, if hydrocarbons are discovered in Sherwood Sandstone or Enler Group reservoirs within the Licence then these units would be unsuitable as geothermal aquifers at those locations.

Contact:

Bronagh Doonan
Antrim Civic Centre
50 Stiles Way
Antrim BT41 2UB
Tel: 028 9446 3113
E-mail: info@antrim.gov.uk

12. **Health & Safety Executive**

• Licensees are advised that many petroleum-related operations are subject to control under Northern Ireland health and safety legislation, particularly exploration well drilling. In the first instance Licensees should contact HSENI to determine what consents are needed for different operations.

Contact:

HSENI Headquarters
83 Ladas Drive
Belfast
BT6 9FR
Tel: 028 9024 3249
Fax: 028 9023 5383
Email: hseini@detini.gov.uk

13. **NI Water**

NI Water expressed concern as to the impact of any work on their abstraction of surface water close to the area for Dunore Point WTW (Lough Neagh abstraction).

Contact:

Alison McMullan
E-mail: Allison.McMullan@niwater.com

14. **Department of Justice**

If the applicant company should wish to use explosives this Department and the Firearms & Explosives Branch of the Police Service of Northern Ireland should be informed and provided with a method statement outlining the company's proposals, explaining their requirements and addressing issues such as the security, transportation and storage of those explosives. The proposals can then be assessed.

Contact:

Richard Murphy
Firearms and Explosives Branch
Department of Justice
Castle Buildings
Stormont
Belfast BT4 3SG
Tel 028 90520760
Fax 028 9052 0194
E-mail: Richard.Murphy@dojni.x.gsi.gov.uk

15. National Trust

The national Trust had no comment other than to draw the Licensees' attention to their property at [Patterson's Spade Mill, Templepatrick](#).

Contact:

E-mail: [Helen Kirk@nationaltrust.org.uk](mailto:Helen.Kirk@nationaltrust.org.uk)

16. Geothermal Energy Ltd. (GT Energy)

GT energy are a company specialising in the exploitation of deep geothermal energy resources, who have two areas of specific interest in Northern Ireland and, as a result, have entered into strategic alliances with Ballymena Borough Council and Antrim Borough Council. They have requested that DETI include two 10km x 10km exclusion zones near Ballymena and Antrim to be included as part of the licence conditions, with a view to preserving a suitable buffer zone for the development and production of deep geothermal energy resources in the Lough Neagh Basin.

DETI's opinion, as expressed above in relation to Antrim Borough Council's letter, is that it is quite possible for exploration for both geothermal energy and oil & gas to take place in the same area (and at the same time, if necessary). DETI, therefore, does not intend to include any such exclusion zones in the licence area. The Department would, however, encourage the Licensees to release seismic data acquired over the licence, for those areas deemed non-prospective for oil or gas, at an early stage for use in future exploration for deep geothermal energy resources.

Contact:

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This version updated 30 June 2011.

For further information on this guidance Licensees should contact

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For technical or geoscience queries please contact:

**Geological Survey of Northern Ireland
Department of Enterprise, Trade and Investment
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