

Our ref: PCS/119234
Your ref: 12/00140/FUL

Jack McGowan
Stirling Council
Environmental Services
Planning & Env. Strategy
Viewforth
Stirling
FK8 2ET

If telephoning ask for:
Fraser Blackwood

By email only to: planningconsultations@stirling.gov.uk

4 April 2012

Dear Mr McGowan

**Town and Country Planning (Scotland) Acts
Planning application: 12/00140/FUL**

Exploration and pilot test development of coal bed methane, including drilling, production equipment, operation specification and inter site connection services, development within Stirling Council area comprises an underground borehole (approx 200 m in length and 15 cm diameter at 700-1000m depth) with no surface workings.

Land Some 800 Metres South East of Rosehill, Rosehill Road, Tower Plean.

Thank you for your consultation letter of 14 March 2012. We ask that the planning **condition** in section 1 be attached to any approved consent. If this is not applied, please consider this representation as an **objection**. Please also note the advice provided below.

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, which may take into account factors not considered at the planning stage.

Advice for the planning authority

1. Impact on groundwater

- 1.1 One of our major concerns with this type of development is the potential for cross contamination between different aquifer units, either by leakage through, or movement behind the borehole casing. Monitoring will therefore be required to demonstrate that no impacts are occurring to receptors as a result of construction and operations.
- 1.2 As limited information has been submitted regarding proposed borehole construction and monitoring, we request that a **condition** is attached to any approved consent to ensure that prior to any works commencing, full details of borehole construction and monitoring are approved by SEPA. To assist, the following wording is suggested:
 - That prior to any works commencing on site, full details regarding borehole construction including casing and cement programmes should be agreed with the planning authority in consultation with SEPA. This information should be supported by a detailed Monitoring Plan which should be developed in consultation with SEPA.

- 1.3 It is considered that groundwater monitoring boreholes may be required to be installed as part of this Monitoring Plan and the applicant should discuss the requirements with us at the earliest opportunity.
- 1.4 Upon completion of site activities, boreholes that are no longer required should be correctly decommissioned in accordance with current guidance (Good practice for decommissioning redundant boreholes and wells, SEPA, 2010).

2. Buffer strip

- 2.1 We note from the information submitted that both construction compounds are located in close proximity to the Pow Burn. In order to ensure protection of the water environment, we would recommend that an adequate buffer strip is maintained between site infrastructure and this watercourse.
- 2.2 Buffer strips alongside water bodies are important in protecting and promoting biodiversity and in improving water quality and run-off. The effectiveness of a buffer strip will be influenced by the width of the buffer, its characteristics (slope, vegetation and soil type), and how it is managed.
- 2.3 Further information is available in Appendix 5 of SEPA's 'Planning guidance on the Water Framework Directive including river basin planning' which is available on our [website](#).

3. Flood risk

- 3.1 We have no objection to the proposed development on flood risk grounds. Notwithstanding this we would expect Stirling Council to undertake their responsibilities as the Flood Prevention Authority.
- 3.2 Review of the Indicative River and Coastal Flood Map (Scotland) shows that parts of the development site may be at risk of flooding.
- 3.3 We understand that a bund will be created on the west side of the development site, constructed from top soil which will be removed to enable the creation of a concrete platform. If the Pow Burn was to overtop its left bank, this bund would interfere with flood flows however, it is unlikely to have a significant impact on local flood risk. No further landraising is proposed. After the lifetime of the development the bund will be removed and the site changed back to agricultural land.
- 3.4 While we have no objection to the proposal in flood risk terms, it should be highlight that there may be a risk of flooding to the development site. We are of the opinion that this is a commercial risk that should be considered by the applicant. We would highlight that any pollutant materials should be stored above ground levels to prevent any risk of pollution if the site was to be affected by flood water.

Detailed advice for the applicant



Chairman
David Sigsworth
Chief Executive
James Curran

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Broxden Business Park,
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4. Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR)

- 4.1 We note from section 3.46 of the Planning Statement that water generated under the dewatering process is either taken from the site by tractor to the water treatment site east of Letham Moss or, treated directly at the site. From here, it is discharged into the Firth of Forth at Dart's outflow point. This discharge of abstracted groundwater to the Forth Estuary is currently licensed by SEPA under CAR. The proposals do not indicate that the abstracted volumes will exceed the licence limits and it is therefore likely that no alteration will be required to the existing licence.
- 4.2 Any additional water abstraction at these sites will be authorised by CAR, with the level of authorisation dependent on the nature and scale of the activities. We would recommend that the applicant discuss this matter further with our local operations team as detailed below under section 6. A water features survey is likely to be required in support of the application for an abstraction licence. The area of the survey will be determined by the proposed abstraction rate.
- 4.3 It is not clear whether the developer intends to undertake any fracturing of the coal seams to enable the extraction of the coal bed methane. It should be noted that the injection of any fracture fluids would also require authorisation under CAR.

5. Content of flood risk information

- 5.1 The Indicative River & Coastal Flood Map (Scotland) has been produced following a consistent, nationally-applied methodology for catchment areas equal to or greater than 3km² using a Digital Terrain Model (DTM) to define river cross-sections and low-lying coastal land. The outlines do not account for flooding arising from sources such as surface water runoff, surcharged culverts or drainage systems. The methodology was not designed to quantify the impacts of factors such as flood alleviation measures, buildings and transport infrastructure on flood conveyance & storage. The Indicative River & Coastal Flood Map (Scotland) is designed to be used as a national strategic assessment of flood risk to support planning policy in Scotland. For further information please visit www.sepa.org.uk/flooding/flood_map.aspx.
- 5.2 Please note that we are reliant on the accuracy and completeness of any information supplied by the applicant in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.
- 5.3 The advice contained in this letter is supplied to you by SEPA in terms of Section 72 (1) of the Flood Risk Management (Scotland) Act 2009 on the basis of information held by SEPA as at the date hereof. It is intended as advice solely to Falkirk Council as Planning Authority in terms of the said Section 72 (1). Our briefing note entitled: "*Flood Risk Management (Scotland) Act 2009: Flood risk advice to planning authorities*" outlines the transitional changes to the basis of our advice inline with the phases of this legislation and can be downloaded from www.sepa.org.uk/flooding/flood_risk/planning_flooding.aspx.

Regulatory advice



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6. Regulatory requirements

- 6.1 Details of regulatory requirements and good practice advice for the applicant can be found on our website at www.sepa.org.uk/planning.aspx. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the operations team in your local SEPA office at:

Stirling Office, Bremner House, Castle Business Park, Stirlingshire, FK9 4TF.
Tel - 01786 452595

If you have any queries relating to this letter, please contact me by telephone on 0131-273-7332 or e-mail at planning.se@sepa.org.uk.

Yours sincerely

Fraser Blackwood
Planning Officer
Planning Service

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