Application No:	15/00971/CPO
Parish:	Kirby Misperton Parish Council
Appn. Type:	Consultation with County Planning
Applicant:	Third Energy UK Gas Ltd
Proposal:	To hydraulically stimulate and test the various geological formations previously identified during the 2013 KM8 drilling operation, followed by the production of gas from one or more of these formations into the existing production facilities, followed by wellsite restoration. Plant and machinery to be used includes a workover rig (maximum height 37m) hydraulic fracture equipment, coil tubing unit, wireline unit, well testing equipment, high pressure flowline, temporary flowline pipe supports, permanent high pressure flowline and permanent pipe supports
Location:	Land At Alma Farm Kirby Misperton Malton North Yorkshire
Registration Date:	
8/13 Wk Expiry Date:	9 September 2015
Overall Expiry Date:	
Case Officer:	Gary Housden **Ext:** 307

Neighbour responses: Mr Simon Sweeney,

INTRODUCTION

This application is submitted for Members to consider their consultation response to North Yorkshire County Council in respect of the application submitted by Third Energy UK Gas Ltd, at land at Alma Farm, Kirby Misperton.

Members will recall that Ryedale District Council met on 8th October and considered a Moratorium Resolution on Fracking. The Council's Solicitor has considered the resolution and the legal position insofar as it affect the consultation response of the Planning Committee is set out below.

The legal position is that no fracking, or drilling for oil or gas, can take place without:

(a) Planning Permission, from the Minerals Planning Authority (in this case North Yorkshire County Council or the North York Moors National Park Authority); and

(b) Planning Permission for any ancillary related development which is a District matter from Ryedale District Council.

As the Mineral Planning Authority, North Yorkshire County Council must consult Ryedale District Council under Article 22 of the Town and Country Planning (Development Management Procedure)(England) Order 2010.

In relation to the District Council exercising its discretion to make a consultation response in relation to a fracking application, the decisions of the District Council and its Committees are subject to the normal public law principles. These principles include the requirement that power should not be exercised in an arbitrary way.

The District Council is also subject to the common law principles which apply to all decision-making by local authorities, including the requirement to take a reasoned decision based upon all material information. When the District Council exercises its discretion it abuses its discretion if it takes into account irrelevant considerations or failing to take into account relevant considerations.

The National Planning Policy Framework gives the following advice on the determination of planning applications at Paragraphs: 001 and 004 :

"Determining a planning application
What are the time periods for determining a planning application?

> Once a planning application has been validated, the local planning authority should make a decision on the proposal as quickly as possible, and in any event within the statutory time limit unless a longer period is agreed in writing with the applicant.
> The statutory time limits are usually 13 weeks for applications for major development and eight weeks for all other types of development (unless an application is subject to an Environmental Impact Assessment, in which case a 16 week limit applies).
> Paragraph: 004 Reference ID: 21b-004-20140306
> What happens if an application is not dealt with on time?
> Where a valid application has not been determined within the relevant statutory period (or such other period as has been agreed in writing between the local planning authority and the applicant), the applicant has a right to appeal to the Secretary of State against non-determination."

In this case the County Council currently has a 16 week determination period unless an extension of time is agreed in writing . The 16 week determination period expires on 18 November 2015.

The District Council has passed a resolution along the following lines at its meeting on 8 October 2015 :

> *(i) On the present information available the District Council calls for a 5 year moratorium on fracking in the District. When sufficient evidence becomes available the District can reconsider its policy.*
> *(ii) It therefore calls upon the Planning Committee to take this decision into account when making its recommendation to the County on the fracking planning application.*

In law, local authorities are statutory corporations which are dependent on powers given to them by statute enacted by Parliament for their ability to act. Local authorities do not have a statutory power to implement a moratorium on determining planning applications for fracking.

Against that background the statutory duty of the County Council to determine planning applications for fracking on planning grounds and the District Council's legal power to exercise its discretion to make a consultation response in relation to a fracking application subject to the normal public law principles are not affected by the resolution.

The resolution of Ryedale District Council does not suspend the operation of the planning system in relation to the determination of planning applications for fracking by County or the exercise of the District Council's discretion to make a consultation response in relation to a fracking application. Only Parliament and the Government can legally put in place a moratorium on fracking.

In addition the District Council cannot fetter its discretion by the adoption of a blanket policy of a moratorium when considering consultation responses.

Please also see the link below for my report on a motion relating to fracking :

http://democracy.ryedale.gov.uk/ieListDocuments.aspx?CId=114&MId=1520&Ver=4

THE APPLICATION

The application would comprise 5 principal phases:

Phase 1 Pre stimulation workover
Phase 2 Hydraulic Fracture
Phase 3 Production Test
Phase 4 Production and Stimulation/well test
Phase 5 Site Restoration

Impacts arising from each phase are discussed in more detail later in this report.

The submitted application is accompanied by a detailed Environmental Statement. there are a number of technical reports which cover the following subject areas.

- Planning Statement
- Air quality
- Habitat Survey
- Heritage Impact
- Landscape and Visual Impact
- Lighting Management
- Noise
- Service Activity
- Transport Assessment and Traffic Management Plan
- Waste Management
- Flood Risk
- Hydrugeological Risk Assessment
- Baseline Water Quality Management Plan
- Foul Sewage and Utilities Assessment
- Site Restoration Plan

Full copies of the document are available to view on the County Councils website and a hard copy of the application is available for inspection at the Planning reception at Ryedale District Council's offices.

The application site - known as KM-A is an existing wellsite which is formed of two well pads - and relates to wells previously known as KM3 and KM7 and the other known as KM8. The site is approximately 800 metres to the south west of the main built up area of the village. There are however a number of individual properties that are close to the site, listed as Sugar Hill; Kirby-O-Carr Farm; High Grange Farm; Glebe Farm and a bungalow called 'Marlin'.

A plan showing the location of the site (and plans and elevations of the proposed development) are appended to this report.

POLICY

Relevant policy

National Policy
National Planning Policy Framework

Local Planning Policy
North Yorkshire Minerals Local Plan, 'Saved Policies'

4/1 Determining Applications
4/10 Water Protection
4/13 Traffic Impact
4/14 Environment and Amenity
4/15 Public Rights of Way
7/3 Geology
7/4 Appraisal Boreholes
7/5 Production Wells
7/7 Development of new reserves
7/10 Restoration

Ryedale Plan - Local Plan Strategy

SP1 General Location of Development and Settlement Hierarchy
SP6 Delivery and Distributing of Employment Land and Premises
SP12 Heritage
SP13 Landscapes
SP14 Biodiversity
SP15 Green Infrastructure Networks
SP16 Design
SP17 Managing Air Quality, Land and Water Resources
SP19 Presumption in Favour of Sustainable Development
SP20 Generic Development Management Issues

ASSESSMENT

The application documentation has been appraised by officers who have made the following comments in response to the information received.

Countryside Management Officer

I am satisfied with the level of survey and the conclusions concerning risk of impacts to protected species or habitats on site and some suitable ecological enhancement measures have been included .

The potential for harm through leakage of flow back fluid into nearby watercourses to protected species and habitats away from the site (such as the Derwent SAC and SSSI) hinges on the effectiveness of the existing bund and the bole hole to retain the fluid. I would urge that some monitoring of watercourses before, during and after the operation of the site is undertaken to give some quantitative data on this question.

The NYCC ecology consultation statement mentions that they are going to carry out a HRA but I could not find this document.

Building Conservation Officer

- The Heritage Impact Assessment identifies the possibility of non-designated Heritage assets being affected but there is no further assessment in the documentation.
- Documentation indicates that HGV's associated with the development would use the route crossing the Grade II listed bridge over Costa Beck. Again there is no proper assessment for the impact of the development on this designated heritage asset.
- The application as currently submitted therefore fails to satisfy the requirement that designated and non-designated heritage assets have been properly assessed as part of EIA process.

Tree and Landscape Officer

- The application site is located on an established well site which in part has mature and established landscaping.
- Additional planting is recommended on the newer less established boundaries, particularly the north eastern boundary where it is close to an existing Public Right of Way (PROW).
- If permission is granted conditions are recommended to this effect.

Environmental Health Officer

Planning Application NY/2015/0233/ENV

The Head of Planning Services at North Yorkshire County Council has issued a letter to the applicants on 11 October requiring further information under Regulation 22 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011, that will require the County Planning Authority to advertise, consult and make available for comment by any interested party for a period of not less than 21 days. Other matters are also included in the letter that require further clarification. I do not propose to repeat these in this consultation response.

NOISE

Policy
General

The National Planning Policy Framework (NPPF) (DCLG 2012) states in Paragraph 109 that as well as other listed criteria the planning system should contribute to and enhance the natural and local environment by preventing both new and existing development from contributing to or being put at unacceptable risks from, or being adversely affected by unacceptable levels of soil, air water or noise pollution or land instability. Paragraph 120 states that to prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account.

Paragraph 122 advises that local planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. Local planning authorities should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.

Noise policies
Paragraph 123 of the NPPF states that
Planning policies and decisions should aim to:

- *Avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development;*
- *Mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions;*
- *Recognise the development will often create some noise and existing businesses wanting to develop in continuance of their business should not have unreasonable restrictions put on them because of changes in nearby land uses since they were established, and*
- *Identify and protect areas of tranquility which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.*

The term "significant adverse impacts" and "adverse" are explained in the Noise Policy Statement for England (Defra 2010).

Further *Planning Practice Guidance: Noise* was issued in 2014 further explaining the concepts of adverse effects to noise, following on from their introduction in the Noise Policy Statement for England (NPSE) and providing further general guidance on planning and noise. The Guidance advises that noise can override other planning concerns but that neither the Noise Policy Statement for England nor the NPPF (which reflects the Noise Policy Statement) expects noise to be considered in isolation, separate from the economic, social and other environmental dimensions of proposed development.

In addition to the generic guidance on noise there is the *Planning Practice Guidance: Minerals (PPGM) (DCLG 2014)* which supersedes the previous Technical Guidance to the National Planning Policy Framework (2012), which contained guidance on minerals and noise. In relation to noise emissions the PPGM states that

"*Those making mineral development proposals, including those for related similar processes such as aggregates recycling and disposal of construction waste, should carry out a noise impact assessment which should identify all sources of noise and , for each source, take account of the noise emission, its characteristics, the proposed operating locations, procedures, schedules and duration of work for the life of the operation, and its likely impact on the surrounding neighbourhood.*

Proposals for the control or mitigation of noise emissions should:

- *consider the main characteristics of the production process and its environs, including the location of noise- sensitive properties and sensitive environmental sites;*
- *assess the existing acoustic environment around the site of the proposed operations, including background noise levels at nearby noise-sensitive properties;*
- *estimate the likely future noise from the development and its impact on the neighbourhood of the proposed operations;*
- *identify proposals to minimise, mitigate and remove noise emissions at source;*
- *monitor the resulting noise to check compliance with any proposed or imposed conditions*

The PPGM continues by advising that mineral planning authorities should determine the impact of noise by taking into account the prevailing acoustic environment and in so doing so consider whether or not noise from the proposed operations would:

- *give rise to significant adverse effect;*
- *give rise to an adverse effect; and*
- *enable a good standard of amenity to be achieved*

In line with the explanatory Note of the Noise Policy Statement for England, this would include identifying whether the overall effect of the noise exposure would be above or below the significant observed adverse effect level and the lowest observed adverse effect level for the given situation

Guidance on **What are appropriate noise standards for mineral operators for normal operations?**) is given: in Paragraph 21

Mineral planning authorities should aim to establish a noise limit, through a planning condition, at the noise-sensitive property that does not exceed the background noise level ($_{LA90,1h}$) by more than 10dB(A) without imposing unreasonable burdens on the mineral operator, the limit set should be as near that level as practicable. In any event, the total noise from the operations should not exceed 55dB(A) LAeq, 1h (free field). For operations during the evening (1900-2200) the noise limits should not exceed the background noise level ($L_{A90,1h)}$ by more than 10dB(A) and should not exceed 55dB(A) LAeq, 1h (free field).

For any operations during the period 22.00 – 07.00 noise limits should be set to reduce to a minimum any adverse impacts, without imposing unreasonable burdens on the mineral operator. In any event the noise limit should not exceed 42dB(A) LAeq,1h (free field) at a noise sensitive property.

Where the site noise has a significant tonal element, it may be appropriate to set specific limits to control this aspect. Peak or impulsive noise, which may include some reversing bleepers, may also require separate limits that are independent of background noise (e.g. Lmax in specific octave or third-octave frequency bands – and that should not be allowed to occur regularly at night.)

Care should be taken, however, to avoid any of these suggested values being implemented as fixed thresholds as specific circumstances may justify some small variation being allowed.

Paragraph 22 provides guidance on **What type of operations may give rise to particularly noisy short-term activities and what noise limits may be appropriate?**

Activities such as soil-stripping, the construction and removal of baffle mounds, soil storage mounds and spoil heaps, construction of new permanent landforms and aspects of site road construction and maintenance.

Increased temporary daytime noise limits of up to 70dB(A) LAeq 1h(free field) for periods of up to eight weeks in a year at specified noise-sensitive properties should be considered to facilitate essential site preparation and restoration work and construction of baffle mounds where it is clear that this will bring longer-term environmental benefits to the site or its environs.

Where work is likely to take longer than eight weeks, a lower limit over a longer period should be considered. In some wholly exceptional cases, where there is no viable alternative, a higher limit for a very limited period may be appropriate in order to attain the environmental benefits. Within this framework, the 70dB(A) LAeq 1h(free field) limit referred to above should be regarded as a maximum.

Ryedale Local Plan (2013) – SP20
Character
Proposed uses and activity will be compatible with the existing ambience of the immediate locality and the surrounding area and neighbouring land uses and would not prejudice the continued operation of existing neighbouring land uses.

Amenity and Safety
New development will not have a material adverse impact on the amenity of present or future occupants, the users or occupants of neighbouring land and buildings or the wider community by virtue of its design, use, location and proximity to neighbouring land uses. Impacts on amenity can include, for example, noise, dust, odour, light flicker, loss of privacy or natural daylight or be an overbearing presence.

Developers will be expected to apply the highest standards outlined in the World Health Organisation, British Standards and wider international and national standards relating to noise.

This must be set in the context that Ryedale District Council are consultees on this application and the application will be determined by the County Planning Authority.

Assessment
The Environmental Statement contains a noise assessment, which outlines the potential impact of the development with respect to noise. The assessment seeks to determine the potential noise impact on the community by comparing predicted levels against the appropriate guidance and assessing it with regard to significance. The assessment acknowledges that in some cases there is clear guidance as to what might constitute a significant impact, in other cases, interpretation and further evaluation is required before being able to draw conclusions on the significance of the predicted impact.

The assessment includes details of the relevant planning policies and other noise standards and guidance. The consultant when discussing the standards in the Planning Practice Guidance –Minerals, states that the noise limits within paragraph 21 only apply for normal mineral operations. The term is not defined but the consultant's interpretation is that this would mean the period when the mineral asset is actually being extracted and implies a relatively long period as the limits for noise are relatively low and does not believe that they should apply to short term periods associated with site preparation and construction of facilities, both of which would be shorter term. Paragraph 22 which covers short term noisy activities such as soil-stripping, construction and removal of baffle mounds, soil storage mounds and spoil heaps, construction of new permanent landforms and aspects of site road construction and maintenance, provides for much greater noise levels of up to 70 db(A)$L_{Aeq,1hr}$ (free field) for periods of up eight weeks of the year at specified noise-sensitive premises. The paragraph however fails to mention the construction of any permanent facilities that might be associated with normal long term mineral extraction or its applicability to such activities as proposed. The consultant believes that as the 24 hour/day pre-stimulation workover activity and daytime hydraulic fracturing are both limited in time and are not long term mineral extraction activities, that paragraph 22 is relevant to both activities as is BS 5228-1, a code of practice for noise and vibration control on construction and open sites.

The assessment methodology refers to the baseline noise study which was undertaken to establish existing noise levels within the area of the proposed development and to allow comparisons with the change in noise level. Different assessment thresholds have been established for each phase of the development, based upon the Significant Observed Adverse Effect Level (SOAEL) and these are compared with predicted levels. The Lowest Observed Adverse Effect Level (LOAEL) values are lower than SOAEL values and the consultant acknowledges that there is a general obligation for the Applicant to achieve lower levels close to the LOAEL, taking into account the economic and social benefit of the activity causing the noise and that design mitigation should be considered during all phases in order to seek to move towards LOAEL. The assessment methodology derives a variety of assessment thresholds considered relevant for each category of noise impact, which are summarised in Table 16.6 of the Noise Assessment.

I agree with the consultants statement that the objective of the noise mitigation strategy is to achieve levels better (lower) than SOAEL values and approach LOAEL values wherever it is reasonably practicable to do this in line with the Noise Policy Statement for England (NPSE) and Planning Policy Guidance (PPG).

It is proposed to mitigate the impact of the development to nearby residents by design of the equipment, limiting hydraulic fracture stimulation (the noisiest of the operations) to daytime and by the installation of 8.7m screening barriers that have been designed to ensure the optimum mitigation. The barrier has a beneficial effect for all potential noise sensitive receptors. It has been identified by the Head of Planning Services of NYCC that these would have to be high cube containers as oppose to standard ISO shipping containers to achieve the stated height. In addition further information is being sought regarding paragraph 6.1.1 on page 38 of the Planning Statement, which includes reference to *" alternative noise attenuation systems are currently being considered"*.

In addition, a further way to minimise disturbance is to avoid the development over the summer months when people are more likely to utilise their gardens, when visitors are using the nearby campsite or residents sleep with their windows open. Whilst the assessment acknowledges this, it states that the applicant will seek to undertake the pre-stimulation workover and hydraulic fracture stimulation during the autumn and winter season, however the timing of the operation is dependent upon receipt of planning consent, the issuing of Environmental Permits and availability of equipment. Noise monitoring is also proposed during the operations identified as likely to cause the most disturbance, the pre-stimulation workover, hydraulic stimulation/well test phase and restoration.

The Impact Assessment predicts and assesses the noise generated from activities associated with the proposed development for each of the phases of work.

Pre-stimulation workover
The pre-stimulation workover will extend over 2 weeks and will be continuous over this period day and night. Predicted levels at the identified noise sensitive receptors (NSR's) with the noise barrier in place range between 31-46dB(A) $L_{Aeq,1hr}$. Measured pre - existing daytime ambient levels are however 52dB(A) $L_{Aeq,1hr,}$ mainly due to traffic and milking equipment associated with the farm, but reducing to 30dB(A) $L_{Aeq,1hr}$ at nigh-time. The predicted levels with the barrier in place are effective at reducing noise except in the southerly direction to Kirby O Carr, where there is only a partial barrier. The prediction is however made assuming the worse case scenario that the rig engine will be operating continuously during the 1 hour assessment period, whereas, it is stated that in practice it will be working for no longer than 50% of the time which should reduce the quoted level by a further 3dB. In addition it advises that at detailed design stage that it may be possible to extend the partial south section of the barrier further west to reduce the impact on this property. The most sensitive period during this activity is the night time period and the predicted levels for Alma Farm and Shire Grove are considered satisfactory. In relation to Kirby O Carr the levels are predicted to be on the range 43-46 dB(A) $L_{Aeq,1hr}$ depending upon the on- times of the workover rig. The consultant concludes that due to the predicted and limited time period the effect is considered insignificant. For Kirby O Carr , the predicted levels for night time are 12-15 dB above existing background levels. The levels are on the threshold of acceptable standards and not considered as insignificant but having regard to the two weeks duration of the activity, are considered as acceptable. I would however wish to see if the noise barrier could be extended to mitigate further at this property, which would also assist at the hydraulic fracture stimulation phase and as such I have suggested a condition requiring a resubmitted scheme for noise mitigation, to take this into account.

Hydraulic Fracture Stimulation/Well Test
This phase follows the pre-stimulation workover and will extend over 6 weeks, during which the main potentially significant noise generating activity will be the hydraulic fracture stimulation, which will be undertaken for a period of up to five(5) hours on five(5) separate occasions during the first five (5) weeks of this phase of work. Noise levels are predicted to be higher than those during the workover rig activity; however it is proposed that in order to minimise the impact on the community that this activity will be limited to daytime only. This will have to be defined, but it is suggested it should be between 07:00 -19:00 hrs. There will, however be preparation and low level activities taking place overnight.

Hydraulic fracture activities- daytime
Predicted levels for the hydraulic fracture activities during daytime range from 48-59 dB(A) $L_{Aeq,1hr}$ with the barrier present. The barrier which has been designed to reduce noise for daytime activity during the hydraulic fracture stimulation/well test phase is predicting a reduction of 4dB at Alma House and Shire Grove and 6dB at Kirby O Carr, however it is Kirby O Carr which will receive the highest levels. The Consultant assesses the predicted levels as within his SOAEL threshold of 70 dB(A) $L_{Aeq,1hr}$ daytime and 55dB(A) $L_{Aeq,1hr}$ for evening for two of the NSR, but at Kirby O Carr the predicted level of at 59 dB(A) $L_{Aeq,1hr}$, exceeds the evening SOAEL. The consultant concludes that due to the predicted and limited time period the effect is considered insignificant. Again the predicted levels are not considered insignificant, but due to the mitigation of the noise barriers, the levels are considered to be acceptable and in line with PPGM Guidance, other than at Kirby O Carr. It is debatable as to what is an acceptable standard for this activity, but on balance due to the limiting of the hydraulic fracture stimulation to daytime and its limited duration, on balance I do not believe there is sufficient grounds to sustain an objection to this activity on the ground of noise.

Hydraulic fracture activities- Overnight
No hydraulic fracturing will take place on an evening or night; however, there will be lower level activities being carried out. Predicted levels for these activities with the noise barrier in place range between 28-42 LAeq,1hr, which is considered acceptable for all NSR's.

Production Test
This phase will extend over 13 weeks over a 24hour period. The production test equipment comprises a temporary high pressure flowline which will connect the KM8 well with the existing gas production equipment on site, from which gas will flow to the Knapton Generating Station via the existing underground pipeline. Although the test will continue for an extended period, including at night, the predicted greatest change in levels is mo more than 1.2dB despite the baseline levels at night been very low. Noise in this phase will be similar to that during normal gas production. It is agreed that the levels will be within acceptable limits and that no noise monitoring is considered necessary, unless complaints arise. Noise in this phase will be similar to that during existing gas production.

Production
This phase would see the flowline equipment installed on a permanent basis and the hook up of an array of other equipment necessary for the permanent producing well facility. The applicant has stated an estimated period that gas could be produced from the well to be nine years. Noise again will be similar to that during existing gas production.

Restoration
Site restoration activity will generate similar levels of noise as that during the initial construction of the KMA wellsite and conditions have been suggested.

Relevant Standards applicable to this development
It must be recognised that for a proposal of this nature and given the low levels of existing noise, that some degree of noise and disturbance is inevitable, however the question is, can it be mitigated to within acceptable levels having regard to the standards and duration of the proposed development ?

The acoustic consultant argues that hydraulic fracturing activity and any short term daytime activity associated with site preparation for mineral extraction or final restoration totalling less than 8 weeks/year falls under Paragraph 22 of the PPG - Minerals, and as such can generate up to 70 dB(A) $L_{Aeq,1hr}$. Such a level for such a period of time would be regarded as very disturbing. However it is stated that this is described as a maximum (limit) which suggests the objective would be to agree a lower limit if reasonable. The consultant does not believe that short term phases such as pre-stimulation workover and production tests which have to continue overnight are associated with 'normal production activities' and as should not be considered under Paragraph 21

As no quantified lower limit is specified, the consultant argues that guidance for appropriate limits during site restoration is provided within BS5228 -1, which is a standard which is used by the construction and engineering industries, and believes that as well as providing guidance on restoration BS5228-1, can be applied to other short term activities such as pre stimulation workover. A summary of proposed thresholds is provided in table 16.6 but the consultant states that the objective of the noise mitigation strategy is to achieve levels better (lower) than SOAEL values and approach LOAEL values where it is reasonably practical to do this, in line with NPSE and PPG guidance. The table however identifies maximum levels and not the predicted levels as the SOAEL levels of significance. It is recommended that it is the predicted levels that should aim to be achieved and I have suggested conditions accordingly.

Noise Monitoring Plan
The focus of the Noise Monitoring Plan is stated as the validation of the computer noise predictions through the monitoring and then the comparison of these with the significant effects threshold. The reporting advises that monitoring will be carried out simultaneously using unattended logging equipment capable of remote checking and downloading of data. This will monitor a range of specified noise criteria continuously during the day, evening and night for the initial period of each phase until levels are shown to be stable. results will be reviewed initially on a daily basis and then weekly if levels become stable and levels are not expected to change. During the 5 daytime hydraulic fracturing events; levels will be reviewed within 24 hours. Final reports will be issued on completion of each of the three phases proposed to be monitored, namely the pre-stimulation workover, hydraulic fracture stimulation/well test and restoration.

These detailed reports will be retrospective but will indicate the accuracy of the predictions and may well influence any further similar applications. A series of Action Levels are proposed, but the County Planning Authority are recommended to give consideration to requiring amendments to these trigger levels by requiring that Action Level 1 is based on predicted levels and Action Level 2 be based on the proposed noise conditions.
In addition the County Planning Authority should be notified within 24 hours and a formal report should be issued within one week of the noise specialist's visit.

Traffic
Traffic movement on local roads is activity that will also potentially generate noise impact. Assessments have been undertaken utilising Calculation of Road Traffic Noise (CRTN) - Department of Transport and Welsh Office and also the design Manual for Roads and Bridges (DRMB), Volume 11. The low baseline flows on Habton Road are below the 50 movements/hour considered the minimum that allows for a calculation using CRTN. The baseline traffic flows on Kirby Misperton Road are above this level. The impact assessments by the acoustic consultant indicate that predicted increase of noise from traffic associated with the pre-stimulation workover, hydraulic fracture stimulation/well test and restoration phases and the short duration of the proposed development are such that the effect on properties on the two roads is not considered to be significant.

Assessment of noise however is not the only criteria when assessing the impact of increased traffic flows in a rural village and surrounding areas, other factors such as size of vehicles, numbers of vehicles, access routes, times of access, duration of development, congestion etc are all relevant in making an overall assessment in relation to the impact of such a proposed development.

The County Planning Authority have raised a number of concerns over the Transport Assessment, including an assertion that the time of year it was undertaken was unrepresentative.

Air quality
An Air Quality Impact Assessment has been undertaken to identify and quantify point sources and fugitive emissions. . The Assessment indicates that nitrogen dioxide is the predominant pollutant in relation to air quality. During the high intensity operational phases of fracturing operations for a duration (3 to 4 hours with a maximum total duration of 20 hrs), it is predicted that there could be an exceedence of air quality standards. However, the assessment considers the maximum process contribution for full time operation over a period of one year for each of five years meteorological conditions and considers it unlikely that all periods of fracturing will coincide with the meteorological conditions necessary to result in the maximum process contributions. A longer term assessment of the predicted environmental concentrations of nitrogen dioxide indicates concentrations well below the air quality standard and at levels which will not significantly impact on air quality. At all local sensitive nature conservation sites the impact on air quality is stated to be low and in most cases insignificant with no threat to relevant ecological benchmarks.

The Air Quality Emissions Monitoring Plan advises that for the majority of pollutants measured the samples will be collected on a fortnightly basis and then reported to Third Energy within 20 days of the collection of the sampling. It is stated that in the case of the dust deposit gauges if the level of $100mg/m^2/day^1$ in any sampling period is exceeded for three consecutive periods from any of the monitoring stations then Third Energy will investigate the possible causes and initiate a short term monitoring programme to measure PM10 levels at all locations on the site. The proposals do not provide for the submission of the results to the County Planning Authority, so it is recommended that this is included by way of condition.

While this may be satisfactory for a fixed installation and long term monitoring, the delays in analysis and reporting while providing monitoring information to be compared against what was predicted, will have no practical effect if there were some measures of mitigation that could be undertaken in the interim e.g. daily visual inspection of dust levels from the roadway to arrange for damping down. The exception to this is the proposed real time monitoring for the presence of natural gas which will be deployed at the well through fixed and portable gas detection system.

If detected, gas detection equipment will provide immediate indication of the release and operational control processes can be initiated to contain any release. The portable gas monitoring in addition to monitoring methane also monitors hydrogen sulphide, oxygen and carbon monoxide.

The County Planning Authority should require a daily visual assessment of dust level, in relation to the prevailing weather conditions and these observations and any measures of mitigation undertaken logged.

No flaring is proposed on the site and it is recommended that, as proposed by the applicant it is conditioned that all gas be piped to the Knapton Generating Station for assessment during the production testing phase.

An analysis of the gas composition did not identify hydrogen sulphide (H_2S) as being present. Although odour releases during the proposed development are not anticipated, it is proposed that continual monitoring for odour will be undertaken at the wellsite, however it does not specify the duration of that monitoring or how it will be undertaken. It is therefore recommended that an Odour Monitoring Plan be submitted to the County Planning Authority for approval.

Water and waste

It is advised that 4,000m3 of water will be required to complete the proposed hydraulic fracturing operation and it is proposed to pump water from the Knapton Generating Station (KGS) to KMA via the existing pipeline ordinarily used for the transport of produced well water from KGS to KM3 water injection well. There is no information as to the pattern of water usage provided. There is some uncertainty as to the quantity of flow back water as the information states that all flowback water may be diverted directly to storage tanks and /or disposal at an approved Environment Agency facility. The County Planning Authority have issued a Regulation 22 notice seeking further information and clarification on issues relating to water usage and storage in order to satisfy itself that there is sufficient storage on site for both the water requirements for the hydraulic stimulation and storage for waste water having regard to the worse case scenario regarding the anticipated flow back following hydraulic fracture stimulation operation.

The County Planning Authority should satisfy itself that in addition to adequate storage, that satisfactory arrangements are in place for the transportation and final disposal of the residual flowback water.

Environmental Health Officer Conclusions

The application site is for an existing wellsite and for the hydraulic stimulation of an existing well. This application contains no proposal to re-drill the well or undertake lateral drilling.

A balance has to be struck between not imposing unreasonable burdens on the developer and ensuring there would be no impact or unacceptable impact on local residents and the environment. Clearly it must be recognised that for a proposal of this nature and given the low levels of existing noise, some degree of noise and disturbance is inevitable. Having regard to the proposed duration of the proposal, the noise guidance available and the proposed mitigation and noise monitoring, I do not believe, if adequately conditioned, that there are sufficient grounds to sustain an objection on the grounds of noise.

Having regard to all the matters considered above, I am of the opinion that if the Council is minded to recommend approval for this development to North Yorkshire County Council, the following conditions should be applied:

1.Prior to commencement of the development a finalised scheme of noise mitigation shall be submitted to the County Planning Authority(particular regard having bee paid to the south east part of the proposed noise barrier). The proposed measures of mitigation to be agreed in writing by the County Planning Authority prior to commencement of the development.

2. No HGV's involved in the delivery of materials and equipment to the site shall enter or leave the site on any day except between the following times
Monday to Saturday 0700 -1900 hours unless associated with an emergency (emergency shall be regarded as circumstances in which there is a reasonable cause for apprehending injury to persons or serious damage to property)

3. No hydraulic fracturing stimulation shall take place outside the following times; Monday to Saturday 0700 - 1900 hours and at no time on a Sunday or Bank Holiday.

4. There shall be no access or egress by any vehicles between the highway and the application site until vehicle wheel wash facilities have been installed on the access road to the site in accordance with details to be submitted to and approved in writing by the County Planning Authority. These facilities shall be kept in full working order at all times. All vehicles involved in the egress from the site shall be assessed for cleanliness and shall be cleaned as necessary before leaving the site so that no mud or waste materials are deposited on the public highway.

5. A visual assessment shall be made of the access road and site in relation to dust levels twice a day (morning and afternoon) during use by vehicles and dust emissions shall be assessed according to a scheme submitted to and approved by the County Planning Authority.

6. Odour levels shall be assessed during operational works according to a scheme approved by the County Planning Authority.

7. The atmospheric emissions generated in the course of the development shall be monitored in accordance with the Air Quality Monitoring Plan and the results of such monitoring should be submitted to the County Planning authority within 20 days from collection of samples.

8.No flaring shall take place on the site and all produced gas shall be piped to the Knapton Generating Station.

9. Noise

The tables below give the noise limits for the particular locations, work activities and time periods.

Pre Stimulation workover

NSR	Noise limit Day 07:00 -19:00 dB(A) LAeq, 1 hr	Noise limit Evening and night 19:00 - 07:00 next day dB(A) LAeq, 1 hr
1- Alma House	41	35
2 - Kirby O Carr	55	46
3 -5 Shire Grove	47	36

Hydraulic Fracturing/Well Test - daytime

NSR	Noise limit Day 07:00 -19:00 dB(A) LAeq, 1 hr	
1- Alma House	55	Not monitored
2 - Kirby O Carr	60	
3 -5 Shire Grove	50	

Hydraulic Fracturing/Well Test - evening/nightime

NSR	Noise evening/nightime 19:00 -07:00 dB(A) LAeq, 1 hr	
1- Alma House	35	Not monitored
2 - Kirby O Carr	42	
3 -5 Shire Grove	35	

Production

NSR	Noise limit Day 07:00 -19:00 dB(A) LAeq, 1 hr	Noise limit Evening and night 19:00 - 07:00 next day dB(A) LAeq, 1 hr
1- Alma House	45	35
2 - Kirby O Carr	55	35
3 -5 Shire Grove	50	35

Restoration*

NSR	Noise limit Day 07:00 -19:00 dB(A) LAeq, 1 hr	
1- Alma House	55	
2 - Kirby O Carr	55	
3 -5 Shire Grove	55	

* Limited to 07:00-19:00 hrs
All noise levels to be free field

10. Noise monitoring.

A revised Noise Management Plan shall be submitted incorporating revised trigger levels based around the proposed noise condition limits. and providing for the reporting of noise levels and breaches of trigger levels to the County Planning Authority. Such a plan to be submitted for approval in writing by the County Planning Authority prior to commencement of the development.

CONCLUSION

At the current time it is understood that a formal request has been made by NYCC Head of Planning Services for further information under Regulation 22 of the EIA Regulations. If further information is submitted this will require the Local Planning Authority (NYCC) to advertise, consult and make available the further information after a period of at least 21 days.

At the current point in time it is considered there are several technical consultees who have yet to respond to the initial consultation (including NYCC - Highways and the Environment Agency). It is difficult to respond in detail in respect of key issues in respect of the traffic and ground water/potential pollution issues in the absence of the further information that has been requested, or the responses from consultees.

RECOMMENDATION - OBJECTION AND REFUSAL RECOMMENDED

On the basis of the current submission the Ryedale Council considers that inadequate information has been submitted for the Local Planning Authority to be able to properly assess the full impacts of the proposal on both designated and non-designated heritage assets. The proposal is therefore, contrary to the NPPF and the adopted development plan, Policy SP12 - Heritage.

Furthermore, it is recommended that no final decision can be made in respect of the application unless and until the further information requested by NYCC under the provisions of Regulation 22 of the Town and Country Planning (E.I.A) Regulations 2011 had been submitted by the applicant.

The submission of any additional information under Regulation 22 is required to be the subject of further consultation with Ryedale District Council as a statutory consultee.

RECOMMENDATION: **Refusal**