

BASSETLAW AGAINST FRACKING 42, St Saviours Close  
RETFORD DN22 6SA

## **OBJECTIONS TO PLANNING APPLICATION No. ES/3379**

### **1.OBJECTION TO LOCATION AND LANDSCAPE DETERIORATION**

It may be felt by the developers, Island Gas , that they have been considerate to the small North Nottinghamshire village of Misson by placing their potential drilling site for shale gas a relatively short way outside of the village. I Gas have not however provided to the Council a justification for the choice of this site over any other within the larger licence area which they hold. They have chosen a former rocket site, now used as a sales and storage area for former military vehicles.

Currently, this is a peaceful area, surrounded by fenland, and is a popular route for leisure cyclists. **It is the NCC policy to develop through its Cycling Strategy the sport of cycling as a healthy pursuit.**

The area is full of birds and other wildlife which attracts walkers, because of the sites of Special Scientific Interest which have received large sums of public investment. These sites are extremely close to the proposed site for drilling. The incessant 24-hour a day seven days a week noise will not only shatter the peace for human beings over the flatland for miles, but will drive away birds and many small creatures from the area because of the massive vibration.

This area should be considered *environmentally sensitive* under Notts County Council Policy MP 12

The industrial side of this village is more on its Bawtry side. Already there is a problem with the mushroom farm there and the smell and nuisance that it has posed for the village. There is only one road through it. To have another nuisance of considerable force at the other end of the village is a gross intrusion and the location is totally inappropriate.

It is too close to houses which are occupied

### **RIG HEIGHT**

- In the IGas scoping document that IGas submitted to the Notts County Council, they stated the rig would be between 35 to 44 meters high. In the planning application the rig has been stated at a 57 meters high. This is a huge increase. This is likely to have more impact to villages overlooking the area, such as Gringley on the Hill. The landscape will be changed to its detriment.

### **2.OBJECTION TO CHANGE OF AIR QUALITY**

The character of the air quality in the vicinity of the rocket site is such that there are no smells and that it is good and clean and free from pollutants.

It is scientifically proven that in parts of the wide open state of Wyoming in the United States, the air quality is worse than in Los Angeles. This is because of the presence of fracking wells.

Although we are dealing with an application for exploratory boreholes, the diesel fumes and pollutants from the

lubrication fluids for the drills will have an adverse effect on the air quality.

If fracking goes ahead and wells are developed in this area (which is the intention of I Gas itself), air will be polluted. In addition because the surrounding land is flat, pollutants will be swept up to the village of Gringley- on-the Hill. Winter winds will carry pollutants and smells to that village which already receives the smell of the mushroom farm.

Prevailing summer winds will blow pollutants towards Haxey village. It has to be recognised that the smells are not just noxious, but carcinogenic. Radon will also be extracted with the escape of methane, which according to the IPCC, is 86 times more potent a greenhouse gas than CO<sub>2</sub> over a 20 year period.

**Following the Climate Change International agreement made by nearly 200 countries in Paris in December 2015, the UK government has proclaimed that it will honour this Agreement. Experts have already shown that it is impossible to do this if it continues with its policy of fossil fuel extraction in the form of shale gas. Even the Chair of the government's own Task Force Report into shale gas, Lord Chris Smith has stated that the drilling of wells for this purpose of extracting shale gas will not be viable without the billion pound competition to implement Carbon Capture and Storage. This was also reinforced by Prof Younger of Glasgow University.**

**The Notts County Council has an overriding duty in this matter and should not be bound by the narrow confines of**

**planning criteria when the international governments have agreed that the planet is in serious danger and wishes to see any rises in global warming temperatures limited to less than 2°. It should take the lead and not lag behind national legislation which will have to be introduced and will affect all planning policy.**

On the **2nd of July 2015** the **Health And Well-Being Board of Notts County Council** considered a strategy paper from the Director of Public Health entitled *"Air Quality and Health: delivering longer, healthier lives in Nottinghamshire County "*.

It was extremely interesting to see that The Director of Public Health's Report referred to such initiatives as requiring the gable ends of houses that were being developed to be placed end-on to public roads where there is considerable motor traffic and the increased use of ground heat pumps for public housing.

It goes into such detail as to suggest that taxi drivers should stop idling their engines in Nottinghamshire. However nothing was mentioned about the pollutant dangers of fracking to air quality.

BAF offered to the Board 31 scientific articles and research papers giving evidence that the methane which leaks from fracking wells is **dangerous for human health**. There are numerous other articles available from Australia and United States. To date that Board has not considered those papers in relation to fracking and air pollution.

**In our view no planning application should be granted which causes deterioration of air quality in the area of the**

**borehole application, because it will be against the Notts county council policy of delivering “longer and healthier lives in Nottinghamshire County”.**

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### **3.OBJECTION TO CAUSATION OF FACTORS LEADING TO REDUCTION IN HOUSE VALUES**

While in itself a drop in value of an individual house may not be a substantive case for the Planning Committee to refuse an APPLICATION, a set of circumstances being imposed upon area by a particular industry which results in a general percentage loss in house values must be considered.

Already in the Shireoaks and Barnby Moor villages there is evidence of lost house sales because the particular properties lie within the area of a PEDL. Names and addresses can be supplied but for personal reasons are not being placed in a public document.

One couple has gone so far as to say that the announcement of a scoping request by the same company at Barnby Moor had caused a severe loss of life savings.

It will be found that the areas surrounding developments for shale gas extraction lost many thousands of pounds in value in Lancashire.

The perceived causes by potential buyers are to do with spoliation of the ecology of an area, heavy traffic for bringing

in water for hydraulic fracturing, sand and chemicals as well as industrial equipment, loud noise from drilling day and night, noxious smells-all caused by the fracking operation, as well as the potential for the industrialisation of the area

In the village of Misson itself house sales have come to a halt. To lose one's house sale is a psychological as well as a financial harm.

For a local authority to allow a particular industry to cause harm-even to the extent that people are unable to move-is against a **basic human right of freedom of movement.**

#### **4. OBJECTION ON GROUNDS OF TRAFFIC PROBLEMS**

Island Gas seeks to state that the traffic movements will not be a nuisance. Already there is heavy traffic from other industrial buildings outside the village on the other side. To add to it will make the village landlocked at certain periods, making it difficult for people to go shopping to towns or for their entertainment.

Springs Road is the only narrow road, with bends, which passes the former rocket site and proposed drilling site. It leads from the village of Misson out to the B1396 and joins the A614 at Blaxton. There are far more road accidents on the B1396 than might be anticipated for its traffic volumes and road classification. A number of these collisions have been where vehicles have joined at the A614 junction.

Site traffic would considerably increase in terms of heavy goods vehicles. In fact the figures for anticipated movements would exceed IEA thresholds for HGV movements. Major

resurfacing of the B1396 took place some five years ago. It has to be assumed that HGV vehicles leading to and from the site, particularly if the result of the exploratory drilling leads to the need for fracturing processes using millions of gallons of water in huge tankers, will lead to the surface becoming badly rutted again. On Springs Road there is traffic from the village, as well as industrial traffic already and agricultural vehicles.

The surface is uneven and it is likely that heavy traffic will press it into the bogland beneath. It also has to be remembered that this road crosses a level crossing and in December 2012 a four-year-old girl was killed at this point.

**It is not a suitable road for HGV vehicles, and any significant increase is likely to endanger the lives of leisure cyclists. The company states that the total no of movements proposed is 19,000 of which 7,500 will be HGVs .**

- **Toxic waste water containing NORM (Naturally Occurring Radioactive Materials) and dangerous chemicals in concentrated form (such as sulphuric acid) will be transported through countryside roads and stored on-site.**
- **Any accident where a spillage occurs could be extremely damaging to the environment.**
- **This presents an unacceptable risk to the local community, especially since the site is near to a SSSI.**

## **5. OBJECTION TO POTENTIAL GROUNDWATER AND DRINKING WATER POLLUTION**

It is no accident that the area is called Misson Springs. Groundwater seeps upwards as well as downwards through faults. Below the proposed borehole drilling site are two aquifers They supply E. Midlands drinking water. The poisonous fluids used for lubrication are not fully collected. Some 30% according to the industry are left in the ground.

**BAF commissioned Emeritus Prof of Geophysics, David Smythe to examine the geological and water-producing nature of the site of this application.** He produced a well referenced Report of 20,000 words long with detailed geological diagrams, and numerous references to other learning studies to backup his statements.. An overview statement produced by him is below.

***“Planning application no. ES/3379 by Island Gas Limited to drill at Springs Road, Misson, Nottinghamshire: Objection on grounds of geology and hydrogeology***

***David K. Smythe (Emeritus Professor of Geophysics, University of Glasgow)***

**“The IGas application to drill at Misson Springs is the first stage of unconventional gas development, that is, the fracking of shale deposits.**

**“The company is seeking to mask its true intentions, firstly, by adding two spurious conventional gas targets to the work programme, and secondly, by postponing the necessary fracking of the horizontal well through the shale till a subsequent application. The supplementary**

conventional exploration targets make no sense geologically or economically. The horizontal well has no purpose other than to prepare for fracking.

My detailed technical report (20,000 words and 17 diagrams, available online at [www.davidsmythe.org/fracking](http://www.davidsmythe.org/fracking)) shows that IGas has a very poor understanding of the geology of the area.

In addition, the skimpy nature of its technical proposals, for example the complete lack of information on how the wells will be lined, suggests that it is treating the planning process with contempt.

The company has produced misleading diagrams in an effort to show that the Sherwood Sandstone, a Principal Aquifer, will not be at risk. This is the main underground water supply for the East Midlands. IGas fails to mention another Principal Aquifer, the Magnesian Limestone, which also lies directly below the site.

IGas claims that there are no geological faults in track routes for contamination from depth to the aquifers - but this is untrue, as I have shown from coalmine information and from other surveys that IGas neglected to consider. IGas wrongly claims that the development will take place on the mudstone rocks overlying the aquifer.

Part or all of the development lies directly on the Sherwood aquifer, and, in addition, I have identified a new geological fault, the Misson Fault, which runs right through

**the site. This newly found fault also explains why the springs are located here.**

**I consider the application to be both misleading, both in its intentions and with regard to protection of groundwater resources, and technically is of third-rate quality. It should be refused.” *D.K.Smythe***

**The PDF of the FULL REPORT is attached at the end of our document.**

**So serious are the concerns shown by Prof Smythe that BAF has requested him to submit his report separately and immediately on a personal objection to Notts County Council and the Environment Agency which is responsible for issuing a permit aswell as the Water Boards.**

BAF considers that the County Council and the Bassetlaw District have a Duty of Care towards the population of Nottinghamshire and should adopt the Precautionary Principle with respect to the strong evidence given by Prof Smythe, referencing many other sources of evidence, unless it can be shown by long serving and qualified experts in the field that his evidence as to inaccuracies, omissions and misleading information as well as new faults under the proposed site , are substantially incorrect.

**Drinking water and clean water for agriculture and local industry should not be compromised.**

## **6. OBJECTION TO THE WASTEFUL USE OF CLEAN WATER**

**The Toronto Star (Saturday, December 5, 2015) reported an article “Use of water underestimated, study says” pointing out that freshwater is one of our planet’s most precious resources as the global population grows and demand for water rises, it urges its use to be carefully monitored as to availability. “Numerous studies have attempted to calculate the amount of freshwater humans consume globally from year to year. But in a worrying new study in the journal Science, scientists argue that we have been significantly underestimating our water footprint.”**

**The research referred to raises the estimate of global water consumption by nearly 20% and suggests that we have in fact crossed an unsustainable threshold in our water use. The authors are Fernando Jaramillo and Georgia Destouni of Stockholm University. I gas will state they are not using a great deal of water at the moment because the extreme pressure required for the hydraulic fracturing is not going to be part of this application.**

**However this is just part of the obfuscation of the real situation. The drilling of a horizontal arm of the borehole is not just being done without the serious intention of using it for future fracturing of shale rock. This process requires millions of gallons of water mixed with sand and toxic chemicals for lubrication, all of which have toxic elements.**

**Wherever I gas gets its water from it will be necessary to tanker it to the site and the place from which it is taken will be depleted of freshwater for drinking and agricultural**

purposes. The flow back water which is extracted will only amount to 70%, leaving 30% in the ground. The 70% will have to be tankered away. It is a wasteful use of clean water in the present circumstances in which the planet finds itself. The company cannot control the seepage via faults.

## **7. OBJECTION ON GROUNDS OF ECOLOGY.**

**The River Idle Valley Washlands SSSI and Misson Carr, a Site of Special Site Scientific Interest, managed by Notts Wildlife Trust. These and the Misson Line Bank SSSI are all close by to the proposed sites for drilling.**

**Creatures and insects and birds of considerable rarity reside here and will respond to underground vibration, light pollution by night and noise, by leaving the area.**

**The site is also close to a Ground Water PROTECTION ZONE. Any spillages from the site could creep along the many drainage ditches which are important for wildlife.**

## **8. OBJECTION ON GROUNDS OF HERITAGE**

**The 15<sup>th</sup> century parish church of St Mary Magdalene in the village of Walkeringham according to residents is built upon unstable ground. They fear that the vibration will be transmitted from the nearby fracking drills in Misson.**

**9. OBJECTION ON GROUNDS I GAS FINANCIAL INSTABILITY, LEADING TO A POTENTIAL ABANDONMENT OF AFTER –CARE FOR THE SITE**

**Reference should be made to the undermentioned article which shows that the fracking companies are in a downward spiral financially.**

**<http://www.wsj.com/articles/fracking-firms-that-drove-oil-boom-struggle-to-survive-1443053791>**

**If this became the experience in the UK then local communities would be left paying the costs of the clean-up after the exploration and production companies have gone into liquidation.**

This is what has happened in Alberta in Canada where falling oil and gas prices have prompted smaller companies to abandon their operations leaving the provincial government to close down and dismantle their wells.

In the past year alone the number of orphaned wells in Alberta increased from 162 to 702. At the current rates deconstructing wells abandoned in the past year will be a 20 year task.

**Johnson, T. (2015, May 11). ' Alberta sees huge spike in abandoned oil and gas wells.' CBC News. Retrieved from <http://www.cbc.ca/news/canada/calgary/alberta-see-s-huge-spike-in-abandoned-oil-and-gas-wells-1.3032434>**

**The prospect of something like this happening in Nottinghamshire should not be ruled out. Indeed it is quite possible, if oil and gas prices stay low for some time as is predicted.**

Despite IGas making a bid for multiple exploration sites it made a **£19.3 million loss** last year and its share price fell to 14.p. The model favoured by the oil and gas sector is that big players like TOTAL (its investor) will pay for the exploration and leave development to smaller players like IGas.

However, if IGas goes into liquidation the losses and costs of clean-up will not be carried by TOTAL (*a company from France where fracking is banned*) or any other big player . These will fall to the public purse.

There are already in the United Kingdom very many orphaned wells which have been left as a result of the conventional extraction of oil.

## **10. OBJECTION ON GROUNDS OF IMPACT UPON RESIDENTIAL HABITATIONS**

The drilling operation takes place over a long period of months 24 hours a day, with floodlighting at night. Intense noise which will reverberate across the valley, and dust and dirt and pollutants in the atmosphere, will affect nearby dwelling houses. **We do not accept that I gas will be able to mitigate the circumstances.**

Already the area is **blighted** in terms of the value of residential property and if the exploration leads to full fracking there is no doubt whatsoever (from experience gained already within Notts and in Lancashire) that house sales will be lost and people will not wish to move into this type of area where a PEDL has been awarded. **This will cause an economic downturn in terms of tourism and jobs which**

will not be replaced by I gas with any substantial increase in local labour needs.

#### **11. OBJECTION CONCERNING MONITORING WELLS IN RELATION TO THIS APPLICATION.**

The application for monitoring wells which has been made by Island Gas is also pertinent to this application.

The company has done nothing to address our earlier objection to the lack of independence for monitoring. They propose to do it themselves and this can hardly be thought reasonable.

Island gas has not addressed in this application any complete answer as to the effectiveness of monitoring of the work. BAF draws attention to the statement made by Emeritus Prof of Geophysics David Smythe who stated

*"I have looked at the monitoring wells application. These are for up to four shallow boreholes no deeper than 40 m max at the site. What is really needed for **realistic groundwater monitoring** are three deep boreholes (c. 1500 m each) penetrating to **the Millstone Grit Formation**. The first of these should be 1 to 1.5 km west of the drillsite, above where I anticipate that the horizontally deviated fracked well in the **Bowland Shale** will be.*

*The second and third boreholes should be to the NE and SE of the site, respectively, and about 1 km radially away from the main drill pad. The three boreholes form a triangle with sides 2 to 2.5 km in length. These boreholes should be monitored for a year before the main exploration well(s) are drilled, and*

*of course monitored during and after.*

*Of course IGas will object, but if they are serious about proving non-contamination from the fracking up into the Millstone Grit (**a minor aquifer**) and the Sherwood Sandstone (**principal aquifer**) then they should agree to do this. Water monitoring boreholes such as I propose are not expensive relative to the cost of oil/gas exploration wells (maybe £100K each, as opposed to £2-5 M for the main well(s)).”*

**BAF is aware of the deep public concern for the safety of its drinking water and groundwater in this North Notts area and in Nottingham city. The fact that there is legitimate doubt about the monitoring process envisaged for this application is another reason for it to be deferred and/or rejected. There is also no account taken of the need for monitoring the network of drainage ditches which lead to the nearby Site of Special Scientific Interest.**

**FOR all of the above reasons, Bassetlaw Against Fracking considers that the Planning committee of Notts County Council should not proceed on the grounds that this borehole application is similar to any other borehole being put into ground for water extraction by a local farmer.**

**It is not. The intent and purpose of these boreholes is clear from the start although the company itself says all that they are doing is asking for exploratory wells. *The councillors on the planning committee are not fools and should realise that the company is not exploring for no purpose.* It wishes**

to find shale gas. The company wants to set a precedent for future applications within other licence areas which will lead to the industrialisation of the North Notts countryside. To be economic it needs many wells.

**Bassetlaw against Fracking earnestly requests the Planning Committee to reject this and all other applications for drilling from the company Island Gas.**

David H Larder (*Chair: Bassetlaw against Fracking*)