



Information letter for those to whom fracking matters and updates on the website FFI

Thanks to all for your contribution

contact: ineke@frackingfreeireland.org

visit: www.frackingfreeireland.org



EVENTS and other small **CAMPAIGN** news

NotForShale Belfast will be giving out info (Dvds, Flyers) at front of

City Hall Belfast sat 21st July at 11am. Come along if you feel you want to help out and inform the public about the dangers of Fracking and meet like minded people. Bring some material to hand out if you can...

Fight the Frack

Contact: Michael Cairns mcairns@notforshale.com

Love Leitrim Brave run for anti fracking cause

<http://www.mylocalnews.ie/articles/529/13/love-leitrim-260567/love-leitrim-brave-run-for-antifracking-cause-39504/>

Contact:

Visit: <http://frackingfreeireland.org/contact/contact-local-groups> for contact details local groups and meetings

REQUEST FOR A SPEAKER – From Debbi dublinbranch@iwt.ie

Would you have someone suitable you could to suggest to speak at Green Drinks in August? Its on Tuesday August 7th, in Messrs Maguires, Burgh Quay and opens about 18.30, with speaker coming on about 19.00 and usually speaking for about 20-30 minutes with an open discussion afterwards. There is a screen for powerpoint presentation too if required. We would like someone to explain what fracking is, what the dangers are, and why there is such an anti-fracking movement, and what the campaign involves.

PLEASE ADD ADDRESS

Chris Coffey chriscoffey.11@gmail.com CORK

wants to set up a a Cork based anti-fracking group/campaign. Basically to raise awareness around the issue and try and get as many people writing to relevant local and national politicians to protest any possible plans for fracking in Ireland.

WHAT YOU CAN/MUST DO

Friends of the Earth - www.foe.ie

Do you live in one of these constituencies? If so we need you!

**Cork South Central
Dublin North
Dublin North East
Dublin South East
Kildare North
Laois-Offaly
Longford-Westmeath
Louth-Meath East
Roscommon-South Leitrim**

These are constituencies with key TDs from the Environment Committee. They will play a very important role in the development of the Climate Law in the next half of the year. We need people in these constituencies to come with us and meet their TD. If you can be part of our campaign now [get in touch](#).

The clearest promise in Minister Hogan's climate roadmap is that he will publish a draft Bill for the Environment Committee to consider. It is vital that these TDs know there are voters in their area who care about climate change. They will certainly hear from vested interests who don't want a climate law, make sure they hear your voice too!

Meetings are already planned for these constituencies but we need more people to come along. You won't be going alone and you won't have to do all the talking. We'll make sure you have all the support and information that you need. [Reply to this email](#) or give us a call in the office on 01 639 4652, if you can get involved.

In the last few weeks Phil Hogan has fallen behind on his climate roadmap. We need the Environment Committee to be active and committed on climate change. Politicians sometimes make excuses by saying people don't ask them about climate change. Come with us and ask your local TDs what they're doing to make sure Hogan delivers on time.

If you don't live in one of these constituencies, but you would be happy to arrange to visit your TD with a bit less help from us, we'd love to hear from you too.

Looking forward to your response, < br /> Your Friends of the Earth Team,
Oisín, Molly and JoAnne,

P.S. The constituencies again are - **Cork South-Central, Dublin North, Dublin North East, Dublin South East, Kildare North, Laois-Offaly, Longford-Westmeath, Louth-Meath East, and Roscommon-South Leitrim**. Please forward this email to anyone you know who lives in these areas and cares about climate change.

Study – read a book!

[Energy Policies of IEA Countries - Ireland](#) -- 2012 Review, 176 pages, ISBN 978-92-64-17146-6, paper €75, PDF €60 ([2012](#))

Type: Studies

Subject: [Energy Efficiency](#) ; [Energy Policy](#) ; [Natural Gas](#) ; [Renewable Energy](#)

Ireland has suffered a significant economic downturn, but remains committed to its ambitious energy targets to bring the country towards a low-carbon economy. Ireland's location at the edge of the Atlantic Ocean ensures one of the best wind and ocean resources in Europe, and Ireland has set the ambitious target of producing 40% of its electricity from renewable sources by 2020.

<http://www.iea.org/W/bookshop/add.aspx?id=435>

Steingraber on fracking and raising kids in a toxic world

In [Tuesday's post](#), environmental health expert [Sandra Steingraber](#) talked about her career path and what worries her most about the links between cancer and our environment. In Part 2 of our interview, Steingraber talks about fracking, raising children in a toxic world and what's next.

www.smartplanet.com/blog/pure-genius/steingraber-on-fracking-and-raising-kids-in-a-toxic-world/7158

FAQ

[FAQ - Environmental Protection Agency, Ireland](#)

You are here: Home > **Ireland's** Environment > FAQ. **Shale-gas** Fracking - What is the EPA's role? Class 9.1 of the EPA Acts covers "The extraction, other than ...

www.epa.ie/irelandsenvironment/faq/answer,31443,en.html

Why is fracking under the spotlight when it has been practised here for over thirty years?

article in INSHORE IRELAND June/July 2012

Please scroll down for article (clipping)

FRESHWATER FOCUS

Why is fracking under the spotlight when it has been practiced here for over thirty years?

Gery Flynn

Now that exploration licences have been issued several companies explore for shale gas throughout Ireland, the debate is hotting up on the process that could be used to extract it - hydraulic fracturing, or fracking. To find out more about this controversial hydrocarbon extraction process *Inshore Ireland* spoke to Gareth Jones of Conodate, a geological consultancy that specialises in biostratigraphy, lithographic analysis, karst interpretation and geothermal energy. Mr Jones is also professionally accredited by the Institute of Geologists of Ireland and by the European Federation of Geologists.

WHAT IS FRACKING?
The term fracking derives from hydraulic fracturing, a process to extract gas from rock formations where it doesn't flow out of the ground easily. It's worth saying here that 2012 is the 50th anniversary of the discovery of gas onshore in Ireland, in Dowra Co Cavan in 1962. And it's thirty-one years since the first fracking here. So there's nothing new about any of this; development of this source does not involve new technologies but the refinement of old ones. Fracking involves drilling a deep well down from the surface to 1.5 kilometres deep to reach the layer in which the gas is trapped. Then what was a vertical well is turned into a horizontal well and drilled sideways for up to a kilometre along the shale bed. Water is then pumped down under pressure into the shale bed to break it up and cause it to crack. Sand included in the water keeps these cracks open and the gas can then flow out.

WHY HAS THERE BEEN MUCH OPPOSITION TO FRACKING - IN THE US IN PARTICULAR?

Another aspect is the possibility of contamination - the escape of methane up to the surface or into groundwater. This is a very confused area however. There's a classic scene in the documentary film *Gasland* where water coming out of a tap is set alight. That gas is in fact methane from a natural source close to the surface and is not due to the gas wells that have been drilled in the area. The locals have been setting fire to their water for decades - long before fracking was developed there. It's crucial that drilling companies test what is in the water already before they start work. There's a difference between the biogenic methane that occurs near the surface and the thermogenic methane deep down which is what they want to extract. A lot of the scare stories were not true, and those that were, are due to bad practice in the well-drilling system.

DOES IRELAND HAVE SIGNIFICANT RESERVES OF METHANE GAS?
It's impossible to know that until somebody starts drilling and producing gas. That will then give a good idea of what is likely to be present. We do know there is some gas because it was found as far back as 1962. Gas was re-found in 1981, and again in 2002, so we know it's there. Tamboran, one of the exploration companies already here, estimates there may be 2.5 trillion cubic feet of gas present. Others say it could be more. If that is proved correct it would probably provide Ireland with forty years of gas supply. But again, we won't know until somebody actually gets in there and finds out.

WHAT IMPACT WOULD A DISCOVERY HAVE ON OUR NATIONAL ECONOMY?
Ireland is extremely dependent on imported energy in the form of oil, gas, coal and electricity - some of it nuclear. We import over

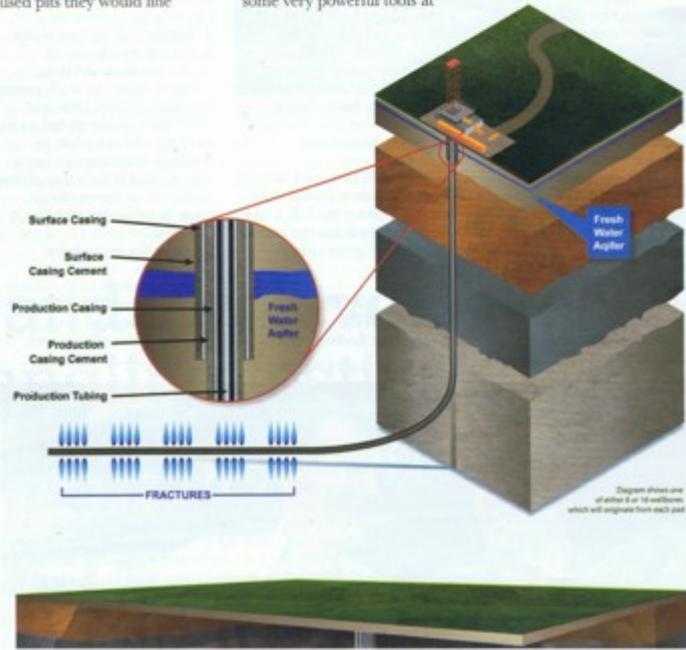
Also, the supply of water, although a problem, is also an opportunity. Then there's the issue of disposal and cleaning of processed water which is often sub-contracted and offer great opportunities. And there's the requirement for sand. In the US for example, stock values of companies supplying water and sand for fracking are currently rocketing up the stock exchange.

HOW CAN WE ENSURE THAT FRACKING WILL NOT CONTAMINATE GROUNDWATER?
There are different parts to this question. First, regarding surface water there are examples in the US where surface pits used to contain and recycle processed water have not been properly constructed and lined, and that has caused problems. The companies involved here however say if they used pits they would line

them properly but that they would probably use tankers instead of pits. Another issue to consider is possible contamination of the aquifers that contain drinking water. This is a question of good drilling practice. It will be absolutely essential that wells are drilled and cemented properly as they go through these aquifers, to avoid any contamination whatsoever. We are quite fortunate in Ireland compared to the US because we have many regulations already in place - derived from national and EU regulations. The Water Framework Directive is one of the most powerful pieces of EU legislation and there are others that would also apply.

DOES FRACKING REQUIRE USING MANY DIFFERENT CHEMICALS?
Control is really in the hands of the EPA, and they have some very powerful tools at

their disposal. A figure of six hundred chemicals is often quoted but in practice it's more usually around five or six. The five most commonly-quoted chemicals are things like hydrochloric acid; glutaraldehydes; dimethyl formaldehyde; polyacrylamide and citric acid. These are all commonly-used to clean swimming pool water and as disinfectants in medical and dental laboratories and clinics. And citric acid is what you put in your gin and tonic. So the commonly-used ones are usually reasonably harmless. Tamboran say that as they're looking at relatively shallow depths they will require practically no chemicals.



Reporter: Saskia de Jong saskiadj@gmail.com

Some info: For who will react and correct the info written in the **Why is fracking under the spotlight when it has been practiced here for over thirty years?** article by Gery Flynn, in the "Inshore Ireland" - bi-monthly June/July 2012 Vol 8 Issue 3, page 12 -" the Marine & Freshwater Environment Publication"

email to:

Editor Gillian Mills mills@inshore-ireland.com

Features Editor Gery Flynn flynn@inshore-ireland.com

or

write to the postal address:

Inshore Ireland

Rockfield

Athenty

Co. Galway

On page 3 of "Inshore Ireland" - bi-monthly June/July 2012 Vol 8 Issue 3 - "The publishers do not accept responsibility for the veracity of claims made by contributors and advertisers. While care is taken to ensure accuracy of information contained within Inshore Ireland, we do not accept responsibility for any errors or matters arising from same."

Next issue - Aug/Sept - will be published on 18 August 2012.

CORRESPONDENCE – LETTERS- SPEECHES

Letter by Nuala:

This letter was published in the Leitrim Obs and the Sligo Champ, I also sent it to the Irish Times but, as I was away, dont know if it was printed there

<http://www.sligochampion.ie/opinion/effect-of-lower-gas-field-estimates-3162397.html>

Letter by Geralyn McCarron to the Belfast Telegraph

Gas wells storing up a problem for our

futurewww.belfasttelegraph.co.uk/opinion/letters/gas-wells-storing-up-a-problem-for-our-future-16180771.html

The scale of proposed unconventional oil and gas extraction in Ireland is immense. From the first round of licences issued in 2011, 12 counties are affected.

According to the Society of Engineers, the second round of licences is expected soon. Already, in Northern Ireland, Tamboran has a licence for Fermanagh, Rathlin Energy for Antrim and Rathlin Island, Providence for Lough Neagh and an offshore licence down to the Antrim Coast.

Tamboran, for example, plans 1,440 wells in Fermanagh alone; this equates to a seven-acre pad every square mile, 60 pads with 24 gas wells on each.

The industry's own figures show that 5% of wells leak immediately and, by 30 years, 50% of all oil and gas wells are leaking - whether they have been fracked or not. In 30 years' time, when the gas is running out and the gas men are going, or have gone, what will our economy be based on?

Statistically, Fermanagh will be left with a legacy of 720 leaking gas wells for eternity.

If the people of Northern Ireland sit quietly, say nothing, do nothing and think that this is someone else's problem, fracking will go ahead by default.

If you want to ensure that, in 30 years' time, your family will live in a healthy environment, with clean air, pure water, safe clean produce and an economy based on sustainable agriculture, you need to make your voice heard now.

Or, if you want fracking to go ahead, do nothing.

GERALYN McCARRON

Tempo, Co Fermanagh

Response from Sonya to article of Frank Covenry and Yvonne Scannell

<http://www.irishenvironment.com/commentary/frank-covenry-and-yvonne-scannell-fracking-and-local-credibility-in-ireland/>

Our democratically elected councils have a long tradition of representing and engaging with the community. The Green Paper on Local Government Reform states that there is significant potential for stronger community influence and input into the decision-making processes of local government. Indeed, if some of those recommendations had been implemented, local citizens would have had recourse to:

- Petition rights – enabling local communities to raise issues formally;
 - Plebiscites – formal local votes on specific proposals.

However, neither the Green Paper nor the Aarhus Convention have been fully implemented, leaving local citizens with few options in relation to participatory democracy. Instead, they have used what means they have to petition the local councils to have their concerns heard.

The authors' derogatory reference to a 'partisan crowd in the local hall' begs the question: how do informed citizens act? Clearly, if one had access to the above, they would be the preferred options. Without recourse to such mechanisms, however, informed citizens may petition their council, organise presentations, etc.

It was stated that both the councils and people should leave all decisions to the EPA and Bord Pleanála. However, even the authors do not have faith in these organisations. This is evidenced by one of several points made by Yvonne Scannell in her submission to the review of the EPA:

"The relationship between EPA and Bord Pleanála is dysfunctional. BP are supposed to cooperate on EIA assessment, etc. but do not.

From the authors' Ireland report 2010
Access to Justice, Case C-427/07 Commission v Ireland

Although the EPA do a fine job, it is acknowledged that they are understaffed and underfunded. The EPA is presently reviewing the process of hydraulic fracturing. Once this is finalised, the process should move quickly. Is it not now that people should seek to inform themselves of such a complex and possibly destructive technology, which may adversely impact on the environment and health?

There is one word that underlies both the councils and the citizens, and that is local. It is locally that people will have to live with the adverse impacts of this technology and

the industrialisation of their area. Are they to be excluded? Are all the decisions to be made by those who are professionals but whom will remain unaffected?

As the Aarhus Convention is now before the government for ratification, the 'partisans in the local hall' may now have a chance to become informed citizens with a participatory say in their future.

Yours sincerely,

Sonya Oldham
People's Association Watchdog <http://www.paw.ie/>

Letter by Saskia de Jong, ATUN (Action for Thoughtful Use of Natural Resources)

Date: 13/07/2012

minister.o'dowd@dcenr.gov.ie

Fergus O'Dowd TD
Minister of State
Department of Communications, Energy and Natural Resources,
29-31 Adelaide Road,
Dublin 2

Secretary General's Office: Tel + 353-(0)1-678 2032 margaret.mulhall@dcenr.gov.ie

Request for environmental information under Directive 2003/4/EC, which was transposed into Irish law as S.I. 133 of 2007.

My Reference No.: xxxx

Dear,

Please provide us with information (in hard copy form) we are hereby requesting under the EUROPEAN COMMUNITIES (ACCESS TO INFORMATION ON THE ENVIRONMENT) REGULATIONS 2007.

We would ask that you deal with this request as quickly as you can, as required under article 7(2) (a) of the Regulations.

Therefore we are requesting to provide us at the above address with:

- 1) - The Minutes and/or other recordings of the Minister of State, Fergus O'Dowd with the Leitrim County Council delegation on 05/06/2012 in regard to the potential for hydraulic fracking in the Leitrim area.
- 2) - The document ,clarifying matters for members of Leitrim County Council, issued by the Minister of State, Fergus O'Dowd, following the meeting.

For clarification we are requesting to be supplied with copies of all reports, documents and correspondence (received and sent), all data including but not limited to actual knowledge that in any way relate to the above, and most important copies and any other records relating to the above as already requested above.

We seek the requested information in a form as specific as possible.

We would be grateful if neither you nor your staff telephones us in relation to this request but confines all communication to email or letter post.

prevent the toxic chemicals, heavy metals, lead, salt and radioactive substances that are found in fracking wastewater from overflowing their tanks and holding ponds and finding their way into the ground?...

Response...

Tamboran are claiming they will use a technology called 'Ecosphere' - 100% recuse of water so no need for holding ponds - not than I ca see anyway. See extract from Hansard (28th June 2012, Tamboran presentation to ETI committee). Full text at <http://www.niassembly.gov.uk/Assembly-Business/Official-Report/Committee-Minutes-of-Evidence/June-2012/Shale-Gas-Exploration--Tamboran-Resources-Ltd/>

More details on thar miracle of miracles Ecosphere at http://www.spe.org/atce/2011/pages/schedule/tech_program/documents/spe145454%201.pdf

..... **to be continued on fracking ireland google groups.**

full debate and more on: fracking-ireland@googlegroups.com

Become a member, contact: Charlie Williams charlie2williams@gmail.com

and/or join NO FRACKING IRELAND <http://www.facebook.com/login.php?next=https%3A%2F%2Fwww.facebook.com%2Fgroups%2F146055765467930%2F>

or other groups. Visit: <http://frackingfreeireland.org/contact/contact-local-groups>

Please scroll down for next clipping opinion

Northern Ireland must go for shale gas fracking

A NEW report on fracking by the Royal Society and the Royal Academy of Engineering has just been published. In it the chair of the panel, professor Robert Mair, says "the risks involved with fracking can be managed effectively in the UK provided best practices are implemented".

The report says that extracting shale gas by fracking should go ahead in the UK subject to tight regulations. It says that despite the evidence that fracking can trigger small earthquakes, the tremors felt at ground level would be about the same size as those caused by a lorry driving past a house.

It goes on to say that the chances of contamination of water are very low as the fracking process takes place thousands of feet below the water table.

In the US, where I was in April, I found that the Energy Information Administration in the US in its latest monthly review has said that it is because of the shale gas revolution that carbon emissions in the US are falling back to their 1990 level.

In addition consumers in the US have saved a massive \$100 billion with both electricity and gas prices half of what they are here.

For prosperity in Northern Ireland with low energy prices then we must go for shale gas fracking.

TERRI JACKSON
MSc MPhil MInstP
Bangor, Co Down

lack of information

It will come down to a decision to leave or to stay and fight. It looks like our governments don't care enough about Fermanagh and Leitrim to ask the simple questions and demand honest answers. What do they think we are going to do. Do they think that we are so weak as to accept irreversible damage to this area. If it comes to a fight god help me i don't know where it will take me. What will I do to protect the health of my children. Leaving may not be as simple as it sounds. If we accept our reality that is our future and the community we live is intrinsically linked to the future development of these few counties we must now be prepared to stand strongly together and fight for the truth. For or against.

We need to demand an independent review of the health impacts in areas where unconventional gas has and is been produced.

Regards

Eddie Mitchell

Response by Annie Allen

Hi All

When it comes down to it, the main reason anyone with any sense is interested in whether we get fracked or not, is down to health. Not only our own but our children's and grandchildren's and the destruction of this beautiful world of ours, not just Ireland but all of it.

It is way past time when we should all be working together to force our politicians to take notice of the real implications of fracking. There is so much rubbish talked about the economics and the technology that many people are distracted from the main issue.

The economics do not work, we can prove that beyond all doubt, the costs of fracking and the loss of sustainable industries such as agriculture and tourism and all the associated products and services far outweigh any profits from any aspect of fracking. There is enough evidence of that already. But saying that, it would be sensible to gather all the evidence and prove the situation here in Ireland.

The technology does not work, that is already proved, we don't need scientific studies, there is enough evidence both scientific and anecdotal, from both sides, at some point all wells will leak, drilling through our aquifers is madness.

Demanding an independent study into the health effects would be a great start and by saying that I don't mean to dismiss all the work that has been done already. The thing that has most distressed me in all of this is the lack of solidarity, it seems to me that many people in this campaign are not doing what is best for all but making sure they first protect their own interests, which in my opinion is extremely short sighted. The thing that keeps me going when the fight seems hopeless is the thought of what my grandchildren and theirs will think of this generation who had a chance to stop the frackers and did not, when all the water is poisoned, the air is polluted and the land is a desert.

There has to be a breakthrough sometime, I hope this is the start of a much more joined up campaign and people working together to get the evidence which is already there presented to those with the power to stop the process that at times seems inevitable even though we all know it is wrong. Its time we all remembered what is important and its not money or power.

As Eddie says it is not just the few counties that will suffer, we all will, whether the fracking comes to our neighbourhoods or not, I live in Wexford, supposedly not a place likely to be fracked, maybe not, but everywhere will be affected. My husband's family all come from Sligo and Cavan and Roscommon, and when we visit we are struck by the beauty of the landscape there, although this is a beautiful island altogether; I can't bear the thought that all that will be

ruined by fracking.

Cheers Eddie for saying what you have, it really sounds as if its from the heart, lets hope its the start of a much more open campaign, an end to putting self interest first and jockeying for some sort of political position and power; an end to secret meetings; a lack of reporting progress and setbacks and a lot more joined up thinking of which we are all more than capable.

Best regards

Annie Allen

Additional info by Charlie Williams charlie2williams@gmail.com

Also => The Irish Times - Saturday, July 14, 2012, [Dangers from fracking 'very low' if done correctly](#)

As expected, a PR for the fracking industry with all [their exaggerations](#) and [belittlement](#). Tamboran's 'piece of art' can be downloaded here

=> https://sites.google.com/site/frackingireland/Tamboran%20Engineers_Ireland_NW_26March2012-1.pdf

[Geochemical evidence for possible natural migration of Marcellus Formation brine to shallow aquifers in Pennsylvania](#), or as Pro Publica put it [New Study: Fluids from Marcellus Shale Likely Seeping Into PA Drinking Water](#). Different events, different evidence... So it's only a matter of time until the damage is even getting bigger.

Received from Meg Meg Rybicki

North West Network against Fracking has called for a ban from the very beginning. There is no "safe" way to frack , and playing a "softly softly" approach to some of the thuggish characters emerging in this fight is to battle a scud missile with a water pistol. Sorry about the extreme imagery, but there are some extremely self serving individuals and groups who are pro fracking, as they have lost alot of money, through greed and over stretching themselves, during the last "boom" in our economy, (the development of ghost estates is a testimony to their shortsighted greed). There are also opportunists who see fracking as a money making exercise for themselves (ie security providers) and will be quite ruthless in their pursuit of said money.

We would love to see groups working together more, ie. if a email or letter writing campaign starts, then roll it out across all the groups across the country. This is just an example, but so many bright and brave people and groups out there, cohesion, no matter how different our ideology, politics, or characters are, will strengthen and bolster this campaign. Sligo County Councillors quoted directly from our round robin letter to them, which was posted to all the councillors (over 250 signed letters) at Christmas last year. This was in the January 16th meeting when they voted unanimously to ban fracking. There have been so many innovative and successful small actions by individuals and groups, it would boost the campaign, we think, if everyone collated the successful actions together, in a sort of half year round up, gathering up all the press articles, letters, and photos in local papers, to valorise what we have done so far, and give ideas for the rest of the year.

We agree with Sonya that there are people with huge experience in certain areas, and a country wide co ordination of those skills, in a sort of data base, would cut down research time, ie. an email sent to the right person in the first place would be helpful.

Lastly, thanking everyone of you who has given this past year up to fight this hideous profits before the health of the people and the environmental threat.

Meg

MOVIES- SONGS

Eddie Mitchell talk on Potential Extraction of Unconventional Gas in the Northwest of Ireland .f4v

Eddie Mitchell talks on land access, visual impact, the sheer scale of the proposed operation and his correspondance with Richard Morman and the Petroleum Affairs Division. He looks into the wording of the present contract between the shale gas companies and the government and the potential situation which may result regarding Access to Land. Given at the Public Meeting on 12th June 2012 in Manorhamilton, Leitrim organised by Love Leitrim.

<http://www.youtube.com/watch?v=irQYtqC8znY&feature=plcp>

Rob Doyle Response to Aberdeen Report- Part 1.f4v

Rob Doyle responds to the Aberdeen Report at Public Meeting, 12th June 2012 in Manorhamilton, Leitrim, Ireland organised by Love Leitrim. He briefly outlines the process of 'fracking' and gives an overview of the state of play at the present time. He then outlines the findings of the Aberdeen Report, including that which the report failed to consider. Rob then gives his own observations on the report.

<http://www.youtube.com/watch?v=b6SeJM7sDnw&feature=relmfu>

Rob Doyle Response to Aberdeen Report - part 2.f4v

Part 2 of Rob Doyle's overview of and response to the Aberdeen Report. Talk given at Manorhamilton public meeting on 12th June 2012, organised by Love Leitrim

<http://www.youtube.com/watch?v=jG4dLax8MvE&feature=relmfu>

Dr Carroll O' Dolan Talk - Health Implications of Proposed Fracking in NW Ireland

<http://www.youtube.com/watch?v=ahVkrM1a25k&feature=relmfu>

Dr Carroll O' Dolan Part 2

<http://www.youtube.com/watch?v=l4IbB3sae4&feature=relmfu>

<http://www.youtube.com/user/LeitrimFree/videos>

Music video against drilling

Songs Against Drilling: With interviews and concert footage, the filmmaker Alex Gibney covers a rally against hydraulic fracturing and accompanying benefit concert featuring Natalie Merchant and Mark Ruffalo.

http://www.nytimes.com/2012/07/06/opinion/songs-against-drilling.html?_r=1&nl=todaysheadlines&emc=edit_th_20120706

Protest song: Don't frack my Mother

Sean Lennon and Yoko Ono perform their new environmental protest song with a little help from Jimmy.

http://www.youtube.com/watch?v=uzZ_Fix5K6I

IRISH NEWS

Councillors seek clarification on fracking.

<http://www.leitrimobserver.ie/news/fracking/councillors-seek-clarification-on-fracking-concerns-1-4039566>

<http://frackingfreeireland.org/wp-content/uploads/2011/07/Councillors-seek-clarification-on-fracking-concerns-Fracking-Leitrim-Observer1.pdf>

Minutes: <http://frackingfreeireland.org/wp-content/uploads/2011/07/Minutes-11th-June-2012.pdf>

11/06/2012 Correspondence - Page 6 - Attendance of Councillor Mary Bohan at the Joint Meeting of the Leitrim County Council and Fermanagh District Council on the Shale Gas Extraction in the Town Hall, Enniskillen on the 1st February 2012 be retrospectively approved."

12/265

11/06/2012 Correspondence - Page 7 + 8 - 10. Letter dated 11th June 2012 from Minister Fergus O'Dowd T.D., with responsibility for the New ERA Project in regard to meeting held with him and his Officials and a delegation from Leitrim County Council in regard to the potential for hydraulic fracking in the Leitrim area.

Councillor Martin Kenny stated that he was part of the delegation that met Minister O'Dowd on the 5th June 2012 in relation to this issue. He stated that Minister O'Dowd had listened carefully to what was said and appeared to have a good grasp of the issues. He stated that the Members had made their position very clear. He stated that the Minister did acknowledge that there are problems and that there is a lot of research to be done in this regard. He outlined that the Minister had confirmed that the Licencing options granted specifically exclude exploration drilling. He stated that the Minister was more than fair in his comments but stated that his fears were not totally allayed.

Councillor Francis Gilmartin concurred with these comments and thanked Councillor Enda McGloin for arranging the meeting. He stated however that at no stage did Minister O'Dowd state that there would be no fracking.

Councillor Gerry Dolan stated that he was very disappointed that he was not notified in relation to the meeting and queried why he was not informed in this regard.

Ms. Jackie Maguire, County Manager confirmed that, in accordance with the agreed protocol, she had contacted the Party Whips for Fine Gael and Fianna Fail, the Spokesperson for Sinn Féin and the Spokesperson for the Independent Members which is Councillor Enda Stenson and they had come back to her with their nominations. She stated that she had not been advised of any change to the agreed arrangements or spokespersons in this regard.

Councillor Sean McDermott stated that the meeting was very transparent and that the Department Officials have a good grasp of the issues. He stated that it was a reasonable meeting with a lot of clarifications/answers given.

Councillor Mary Bohan stated that all Members present outlined the position / fears etc. She outlined that the meeting had cleared up a number of issues and the Minister had set out clearly that all of the concerns are acknowledged and that the process cannot be allowed to happen unless it can be done safely. She stated that the timelines involved etc had been outlined as per the correspondence issued and that this should be put into the public domain. She stated that the Minister had very clearly stated that we do not know as of yet if there is a safe way and that he had listed all of the requirements and Directives etc to be complied with. She stated that it is likely that there will be an application for an Exploration Licence early in 2013 and that the Members cannot prevent this. She stated that once made all of the various regulations, Directives etc will have to be complied with and this is going to be a long process – possibly two years. She stated that there will be a period for public consultation and everyone will have an opportunity to have their say.

IEA: Irish Focus on Renewables Will Increase Gas Reliance

<http://www.naturalgaseurope.com/irish-renewables-will-increase-gas-reliance-7196>

Comment by Ineke ineke@frackingfreeireland.org

Pitty that the Dutch Maria van der Hoeven seems to forget that Ireland can avail of tidal and wave and blue energy as well. Waves will always be available.

Read more of sustainable energy developments in:

<http://frackingfreeireland.org/wp-content/uploads/2011/09/Letter-to-Mr-Rabbitte-Irelands-future-energy-needs-sample.pdf>

And moreover: Minister Think global/European! Shortage of gas in one country can be backed up by another. Just another gas lobby!

Comment by Charlie: As a backup particularly for wind energy as long as there is no sufficient storage or interconnection (Ireland's electricity = 60% gas). But gas is no long term solution... And gas (when burned) doesn't ask for it's origin!

Dangers from fracking 'very low' if done correctly (14 July 2012)

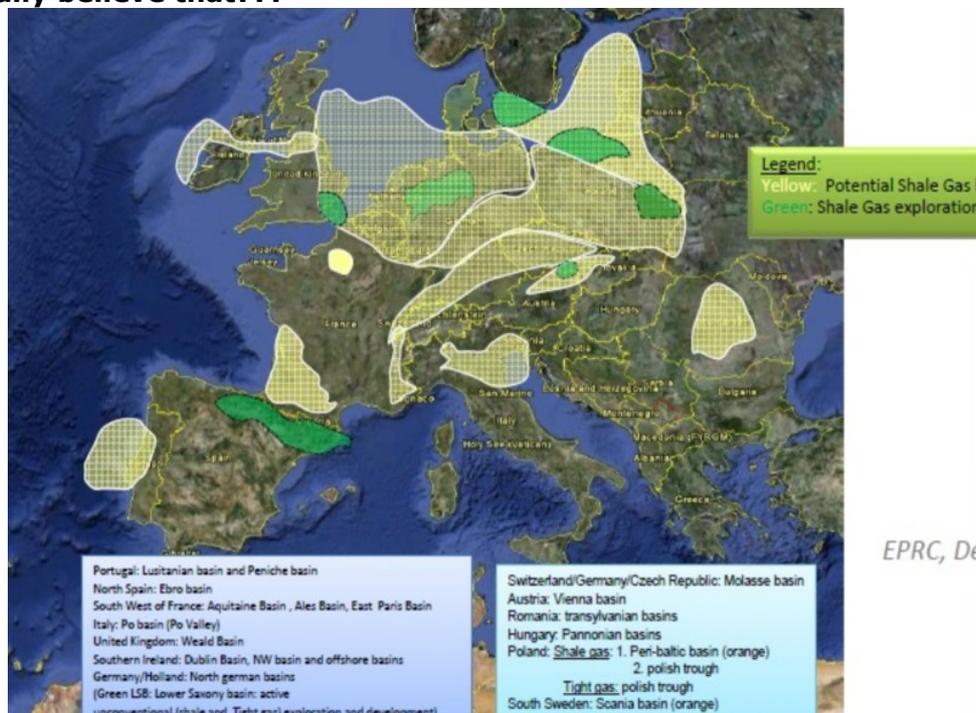
<http://www.irishtimes.com/newspaper/ireland/2012/0714/1224320063674.html>

Comment: Charlie Williams

Just to give you a clue. This is where Tamboran wants to extract 2.2 trillion cubic feet of shale gas in Ireland.

And all without the use of chemicals.

Do you really believe that???



<http://www.irishenvironment.com/reports/international-energy-agencys-golden-age-of-gas-and-golden-rules-on-fracking/>

Google alert messages

[Good news for green rights as Ireland signs treaty](#)

Irish Times

So the rights guaranteed by the convention have an added value and significance in the current climate, particularly when there are potentially new (and very controversial) developments on the horizon – for example, **shale gas** exploration and extraction ...

[Fracking and the Environment: Exploration licenses granted to ...](#)

When I began posting in this thread I posted material that was both positive and negative toward fracking as I found them, in order to express both viewpoints.

www.politicalworld.org/showthread.php?p=258380

[Gas wells storing up a problem for our future](#)

Belfast Telegraph

Statistically, Fermanagh will be left with a legacy of 720 leaking gas wells for eternity. If the people of Northern **Ireland** sit quietly, say nothing, do nothing and think that this is someone else's problem, **fracking** will go ahead by default. If you ...

EU -NEWS

[Why European Shale Is Totally 'Fracked'](#)

www.forbes.com/sites/matthewhulbert/2012/07/12/why-european-shale-is-totally-fracked/

UK

[Worry for homeowners who face the threat of fracking.](#)

<http://www.guardian.co.uk/money/2012/jun/23/fracking-undermine-value-home>

Microseismic first

Elaine Maslin | 07/06/2012

A US seismic firm is to carry out microseismic mapping and monitoring onshore in the UK for Cuadrilla Resources.

Under a contract with UK-based shale gas explorer Cuadrilla, Houston-based Microseismic said it will monitor the explorer's hydraulic fracturing operations in the western Bowland Shale Basin.

The deal includes detailed mapping of fracture growth and seismicity monitoring of the Beconsall well in Lancashire.

Microseismic said it had the capacity to monitor multiple potential wells for optimised field development.

It also claimed this contract meant Microseismic would be the first company to have a near-surface monitoring system installed in Europe.

The Bowland Shale Basin has been estimated to have shale gas in place of up to 200 trillion cubic feet.

However, work by Cuadrilla in the region has proved controversial following a series of minor earthquakes blamed on the fracturing process.

Peter Duncan, founder and chief executive of MicroSeismic, said: "Although we think of ourselves as sitting on a passive surface, we are actually on a surface of continual, but undetectable natural seismicity.

<http://www.pandjenergy.co.uk/2012/06/microseismic-first/>

FRANCE

French Government May Look Again at Shale Gas, Les Echos Says

Bloomberg

<http://www.bloomberg.com/news/2012-07-16/french-government-may-look-again-at-shale-gas-les-echos-says.html>

The French government may review its position on **shale gas** as part of the planned mining code revision, Les Echos reported, citing unidentified industry ministry officials.

CZECH REPUBLIC

Reporter: Jan Kozderka kozderka@gmail.com

Until December 2011 very few people knew what shale gas was, let alone that there were plans underway to frack here. On December 21, right before the holidays, the local authorities in the 3 areas selected for drilling got a letter from the Ministry of the Environment (the same Ministry that for dozens of years wouldn't give permission to build even an outhouse) announcing that a decision to open 3 areas for exploration had been made and that the municipalities had until January 6, 2012 to raise objections. The 3 areas selected in stealth mode for exploration for companies Cuadrilla Resources and Basgas Czechia (Hutton Energy, San Leon Energy) were: Berounsko, Valašsko and Trutnovsko, areas with nationally protected parks, unique carst formations and in the case of Trutnovsko an underground water reservoir supplying 250 000 people.

Resistance developed on 2 fronts:

1) A local movement called STOP HF (www.stophf.cz), unifying in the first stage concerned citizens and experts on water and geology, later NGOs and municipalities in all the regions of the country, started a website, a Facebook group and a petition to reverse the Ministry's decision. Creating a scientific council and an emergency committee, in the space of a few months and with unprecedented support from citizenry, this small group was able to organise a demonstration, get national media coverage and 30 000 signatures for the petition. With the petition at hand, jointly with several deputies and senators, they were able to introduce a law banning fracking to both chambers of the Czech parliament.

2) Several local representatives started to realise what was going on and working during the Christmas holidays, they raised objections to the exploration plan of the Ministry. They attacked the decision on legal grounds, created a petition against it and started to tour the affected towns and villages, explaining what was at stake. Gathering also some 30 000 signatures for their own petition and joining forces with STOP HF, they were able to get the Ministry of the Environment to revoke the permit to explore and return the permit application process to the beginning.

With the gas genie out of the well, the industry responded with a strong PR (agency Grayling) and marketing message. Their main talking points are:

- people opposing shale gas are traitors of the nation, because they want energy dependence on Russia. Shale gas will liberate us from

Russia 's grip.

- fracking is totally safe, no contamination risk whatsoever
- fracking will create jobs and wealth
- fracking is green

Many even smart people are persuaded by the argument that we should at least explore for shale gas to have a better picture of what 's underground.

We do try to counter with studies demonstrating the pollution risks, the job fallacy, the green fallacy and the fact that Russia is not the only gas provider, that the main influence on our supplies is the price on world markets and that the companies themselves are foreign, which is not a safety guarantee. As for the exploration, it does include a test well that by itself could lead to the connection of deep underground and aquifers and pollute drinking water. The exploration is a substantial investment and if the government gives the go ahead now, it could find itself in arbitrage hot water later, if it changes its mind.

All is now in the hands of the lawmakers. The deputies and senators have the law to ban fracking on their table and we are facing the crucial time when they will decide. Our hope is that deputies will vote for the common good, but as the Czech republic is not known for many transparent decisions, actually according to Transparency international we rank at the 57th place in the world on the corruption index, along with Namibia, there is a risk that the industry will buy the decision. We see a similar phenomenon occurring on the media scene, the industry PR funding has increased dramatically and we find it more difficult to spread our part of the message.

As we can 't compete with the industry on the dollar basis, we need to find creative ways how to reach decision makers and inform them about the dangers and ask them to at least consider the long term solution in favor of the short term one. If you have any ideas what to do, please advise.

Thanks,

Jan Kozderka

GLOBAL NEWS – LIST OF FRACKING BANS

There's now a a FB page for Marcellus Effect now -
at <http://www.facebook.com/pages/Marcellus-Effect/416713011713515>

List of fracking bans and moratorium

<http://frackingfreeireland.org/wp-content/uploads/2011/09/List-of-Fracking-Bans-and-Moratoriums-juli-2012.pdf>

Vermont first state to ban fracking

Vermont's governor has signed a bill making it the first U.S. state to ban fracking, the controversial practice to extract natural gas from the ground.

"This is a big deal," Gov. Peter Shumlin said Wednesday. "This bill will ensure that we do not inject chemicals into groundwater in a desperate pursuit for energy."

<http://edition.cnn.com/2012/05/17/us/vermont-fracking/index.html>

The Future of Fracking: New Rules Target Air Emissions for Cleaner Natural Gas Production

<http://ehp03.niehs.nih.gov/article/fetchArticle.action?articleURI=info%3Adoi%2F10.1289%2Fehp.120-a272>

US

Feds: Operator knew of pipeline problems years before Michigan oil spill

http://edition.cnn.com/2012/07/10/us/michigan-oil-spill-ntsb-findings/index.html?hpt=us_c2

No insurance for fracking...

Received from Sue Heavenich sueheaven@gmail.com

How ironic that just 3 days before Nationwide announced their policies do not cover damage from fracking, that our regional New York Farm Bureau field Rep was stumping for drilling on local farms. Farm Bureau loves drilling - at least the idea that farmers might make a chunk of change with their land - as long as it doesn't ruin the soil or water. Farm Bureau also loves Nationwide - well, at least it did 3 days ago.

<http://marcelluseffect.blogspot.com/2012/07/what-no-fracking-insurance.html>

CANADA

Fracking Contamination 'Will Get Worse': Alberta Expert Sept 2011

A well-known industry expert in tracking leaking methane from oil and gas wells says a groundbreaking U.S. federal study on hydraulic fracturing highlights not only an old and growing problem, but the need for tighter regulations in the shale gas industry.

"The shale gas boom combined with hydraulic fracking will cause wellbores to leak more often than run-of-the-mill conventional wells," says Karlis Muehlenbachs, a geochemist at the University of Alberta. "The problem is going to get worse, not better."

<http://thetyee.ca/News/2011/12/19/Fracking-Contamination/>

AUSTRALIA

Australian Shale Gas Industry Explored in New Kuick Research Study Recently ...

Business Wire (press release)

New market study "Australia **Shale Gas** Market Analysis" drawn up by Kuick Research has been recently published by Market Publishers Ltd.

[See all stories on this topic »](#)

Cuomo Proposal Would Restrict Gas Drilling to a Struggling Area

ALBANY — Gov. [Andrew M. Cuomo](#)'s administration is pursuing a plan to limit the controversial drilling method known as hydraulic fracturing to portions of several struggling New York counties along the border with Pennsylvania, and to permit it only in communities that express support for the technology.

http://www.nytimes.com/2012/06/14/nyregion/hydrofracking-under-cuomo-plan-would-be-restricted-to-a-few-counties.html?_r=2&ref=nyregion

Empire State Poll 2012 – Cornell University

<http://sri.cornell.edu/sri/files/esp/2012/Report%202%20-%202012%20-%20Natural%20Gas%20Drilling.pdf>

Coup d'arrêt aux forages de Shell en Guyane

http://www.lemonde.fr/planete/article/2012/06/13/coup-d-arret-aux-forages-de-shell-en-guyane_1717478_3244.html

Lucas dumped from Curtis Island

After weeks of speculation, AJ Lucas has been cut from the Curtis Island Water and Sewage Project.

AJ Lucas was the main contractor on the project, after being appointed by Gladstone Area Water Board.

The project will construct pipelines from the mainland to the LNG Projects on Curtis Island.

AJ Lucas has left subcontractors irate over its failure to pay its bills as required. The issue has become so severe it was raised in Parliament by Independent Member for Gladstone Liz Cunningham and Minister for Energy and Water Supply has become involved.

Several businesses in the region have said they fear financial ruin if the situation is not resolved.

Earlier today Gladstone Area Water Board and Gladstone Regional Council reached an agreement with AJ Lucas to terminate the contract.

The three parties released the following joint statement.

"This agreement identifies several issues of dispute between the Parties and stipulates a process for the resolution of these disputes which must be concluded within approximately ninety (90) days. Nonetheless, the Parties can reach agreement on all or some of the issues at any time. Communications towards this objective are ongoing and it is anticipated that some issues may be capable of resolution within one (1) week.

"An important part of this arrangement is that any monies GAWB & GRC agree to pay AJ Lucas in resolution of any issue in dispute will be applied by AJ Lucas Operations Pty Ltd for the payment of valid and outstanding debts by creditors and subcontractors until such time as they are all finalised."

<http://www.gladstoneobserver.com.au/story/2012/06/08/lucas-dumped-curtis-island/>

[International Energy Agency's Golden Age of Gas and Golden Rules ...](#)

More gas, more GHG – not exactly a vision for a golden age. So the question remains, if unconventional, **shale gas** extraction in **Ireland** is minimal, is it worth ...
www.irishenvironment.com/.../international-energy-agencys-g...

[Fracking and the Environment: Exploration licenses granted to ...](#)

NPR Podcast: Pennsylvania Doctors Worry Over Fracking 'Gag Rule' A new law in ...
www.politicalworld.org/showthread.php?p=260150

EARTHQUAKES:

Drillers face first class-action suit for triggered temblors

Mike Soraghan, E&E reporter

Published: Thursday, July 5, 2012

What may be the first class-action suit against oil and gas companies for unleashing earthquakes is working its way through the federal courts in Arkansas.

The suit stems from a "swarm" of earthquakes as strong as magnitude 4.7 that rattled the northern part of the state. The quakes prompted state officials last summer to ban drilling waste disposal wells in a 1,150-square-mile area. Four wells ceased operations.

The people who brought the suits and their attorneys say the companies knew about the risk of earthquakes from their operations but did not do enough to prevent them.

"Defendants, experienced in these operations, were well aware of the connection between injection wells and seismic activity, and acted in disregard of these facts," says the suit, filed by the Little Rock class-action firm Emerson Poynter LLP on behalf of Stephen Hearn and several other residents of Faulkner County, Ark.

The suit says that the companies' "ultrahazardous" actions have made residents fear for their safety and caused the cost of earthquake insurance to skyrocket.

The suit names subsidiaries of Chesapeake Energy Corp., which operated two of the wells, and BHP Billiton, which acquired the wells from Chesapeake as part of a larger purchase in 2011. Spokesmen for the two companies declined comment, but each has filed blanket denials with the court.

A smaller well owner, Deep Six Water Disposal Services of Oklahoma, was dismissed from the case last week. Another well owner, Clarita Operating of Little Rock, filed for bankruptcy after the first suits were filed.

Several class-action suits have been consolidated into the case under Hearn's name. The case is currently in discovery and is scheduled for trial in March 2014.

In a brief email exchange with *EnergyWire*, lead attorney Scott Poynter said he was not familiar with any other suits against drillers for causing earthquakes with disposal wells.

There is no federal law against causing earthquakes, but the suit alleges that the quakes were caused by negligence, amounted to trespassing and created a public nuisance (*EnergyWire*, June 18).

Before two of the wells stopped operating in the spring of 2011, there were 85 earthquakes with a magnitude of 2.5 or higher. Since the shutdown there have been fewer quakes, according to the state Geological Survey.

The state's moratorium was based in part on the finding of University of Memphis seismologist Steve Horton, who said continued injection would risk a damaging earthquake in the area. He later published findings linking the earthquakes to drilling-waste wells.

The earthquakes were not linked to hydraulic fracturing, or "fracking." But fracturing creates millions of gallons of briny, toxic wastewater that drillers must eventually dispose of, usually by injecting it into the type of wells that are at the heart of the case.

Advances in fracturing technology that involve blasting millions of gallons of water into production wells have led to a surge in gas production in shale formations such as Arkansas' Fayetteville Shale.

It is well understood among scientists that injecting wastewater underground -- whether from energy production or something else -- can lubricate faults and create earthquakes. But there are about 40,000 oil and gas disposal wells in the country, and only a few have been linked to earthquakes. There has never been a death or serious injury from such a quake.

State officials in Ohio also shut down several waste injection wells earlier this year after linking a magnitude-4.0 quake and a host of smaller ones to a well in Youngstown.

Scientists are investigating whether other earthquakes in Colorado, Oklahoma and Texas are linked to drilling activities such as waste injection. Seismologists at the U.S. Geological Survey have suggested that some of those quakes, along with the Arkansas swarm, are part of a "remarkable" increase in the number of earthquakes in the middle of the country that is "almost certainly man-made" and likely linked to oil and gas operations (*EnergyWire*, March 29).

REPORTS – RESEARCH- PRESENTATION

Empire State Poll 2012 – Cornell University

<http://sri.cornell.edu/sri/files/esp/2012/Report%202%20-%202012%20-%20Natural%20Gas%20Drilling.pdf>

Fracking can pollute aquifers.... or maybe not

Received from Sue Heavenich

Scientists from Duke University (North Carolina, USA) published a study this Monday that provides evidence for possible natural migration of Marcellus Formation brine into drinking water aquifers. while their tests were not correlated with gas well locations, these natural pathways *could* provide a pathway for methane and frack fluid from shale gas wells. More at <http://marcelluseffect.blogspot.com/2012/07/fracking-can-pollute-water-or-maybe-not.html>

Meanwhile, it looks like DOE is finally going to put some tracers in fracking fluid to see where they end up.

A "Significant" Portion of Chesapeake Assets Have No Positive Value, According to New Report

Posted: 13 Jul 2012 11:56 AM PDT

By Deborah Rogers

For quite some time, a handful of hardy skeptics including myself, have been publicly questioning the claims of shale gas reserves made by various large Independents. In a memorable reference to me, Aubrey McClendon, CEO of Chesapeake Energy, actually went on MSNBC and stated "who are you going to believe, me or some goat farmer from Ft. Worth?" I have always found this quote terribly funny. Particularly now.

The Wall Street Journal broke a story this morning that ITG Investment Research, at the request of several large institutional investors, engaged in a study which now calls into question Chesapeake Energy's (CHK) claims of booked reserves.

ITG gathered its well by well data from public sources such as production history filed with the Texas Railroad Commission. ITG found that booked reserves have been significantly overestimated.

According to the WSJ:

"The analysts said they believed a significant portion of the company reserves in areas including the Barnett "have no positive value, heralding a potential writedown in our opinion."

Overestimate reserves...yes...but never underestimate a goat farmer!

Don't Drink the Water: Fracking Fluid Likely in PA Drinking Water Supply

● by [Tara Holmes](#)

Live in Pennsylvania? Live near a [fracking well](#)? If so, the chances of finding fracking fluid

seeping into your [drinking water](#) — a major concern that's been touted by environmental groups and independent researchers for years — may be more likely than previously thought.

Scientists at Duke University and California State Polytechnic University at Pomona [found](#) that water from wells and aquifers in Northeastern Pennsylvania contained traces of brine from the Marcellus Shale, the shale deposit [found](#) in the northern Appalachian region of North America and the deposit popularly cited for domestic fracking operations. Brine, a naturally occurring substance, is acting as an indicator to a disturbing fact: previously thought to be "contained" underground chemicals may not be so contained after all. In fact, these same chemicals could be seeping toward the surface and into our drinking water supply much more easily and frequently than predicted.

While no specific fracking chemicals were detected in this study, the mere thought that chemicals can move freely through underground rock layers more so than previously believed is very alarming. The findings also contradict the notion typically upheld by vested interests, predominately composed of oil and gas companies, that rock formations deep within the Earth will securely seal in material injected thousands of feet underground, whether through underground disposal or drilling. However, matter can't just disappear and will inevitably end up somewhere down the line.

The joint Duke/California State University study isn't the only one discovering a connection between injecting chemicals deep underground and local drinking water ramifications. In 2011, Duke researchers also found that "[methane gas was far more](#) likely to leak into water supplies in places adjacent to drilling." In addition, in April of this year, [Ground Water](#) published a [paper](#) that predicted fracking fluid contaminants could "reach the surface within 100 years – or fewer if the ground is fracked."

The oil and gas industry is not happy to hear this news, immediately questioning the legitimacy of the findings, [citing](#) "researchers do not know how long it may have taken for the brine to leak." However, the question isn't about how long it will take for chemicals to make their way to the surface of the Earth; the simple fact that brine can travel to the surface, therefore entering groundwater systems, is enough evidence to raise serious concern. Whether this process takes 10, 50 or 100 years shouldn't matter. What should matter most is preventing any fracking chemicals from ever entering our water and our land, period.

Related Stories:

[Accidental Vote Legalizes Fracking in North Carolina](#)

[Vermont First State to Ban Fracking](#)

[Ohio Fracking Wastewater Test Reveals Toxic Mess](#)

Read more: [brine](#), [drinking water](#), [fracking](#), [hydrofracking](#), [marcellus shale](#), [natural gas drilling](#), [pennsylvania](#)

Read more: <http://www.care2.com/causes/dont-drink-the-water-fracking-fluid-likely-in-pa-drinking-water-supply.html#ixzz20Q4IEq4D>

Ecological Economics and Rio + 20; A Presentation Given by Deborah Rogers in Rio de Janeiro, June 2012

Shale Gas or Shell Game?

By Deborah Rogers

Presented at the International Society of Ecological Economics (ISEE) Conference in conjunction with the United Nations Rio + 20, Rio de Janeiro, June 2012

There is no doubt that gas exists in shale. That is a given. But shale gas has been touted as a cheap and abundant source of energy. Much emphasis has focused purely on the amount of

gas trapped in shales but much of this gas may never be commercially extractable unless natural gas prices rise dramatically. In that case, natural gas is no longer a cheap source of energy.

It is important to sift through all the hype and rhetoric to assess whether production can truly be counted on to provide benefits. For instance, has production been as secure as it appears? Have jobs and revenues really been as stable as claimed? What have the environmental impacts really been? Can we count on energy independence from shale gas and unconventional oil?

In August, 2011, the U.S. Geological Survey (USGS) slashed reserve estimates for the Marcellus by 80%. (1) The Energy Information Administration (EIA) followed suit in January, 2012 by slashing its reserves estimates for the Marcellus by 66% and overall U.S. reserves of natural gas by 40%. (2) Prior erroneous estimates had been provided to government by industry. Interestingly, the same scenario played out in Poland and reserves there have recently been slashed by 85%. (3) Again, prior erroneous estimates had been provided by industry. And lastly we learn that shale reserves have now been slashed in India quite considerably as well. (4)

A leading argument states that shale gas "[has risen] from 2 percent of all natural gas production in 2000 [in the U.S.] to 23 percent 10 years later," a statistic the M.I.T. group called a "paradigm shift." (5) But this is misleading unless put into context. Drilling for conventional gas (i.e. vertical drilling) began to wane in the U.S. in the 1970's. When shale gas (i.e. horizontal drilling) began to be drilled in earnest, Wall Street invested billions. Consequently, investment in conventional gas projects was decimated in the U.S. Therefore, shale gas is merely replacing older conventional projects, not adding to them. EIA estimates that natural gas will only grow by .8% per annum through 2030.

Further complicating the picture is the fact that shale wells, by their very nature, can have high initial production which drops off significantly about 12-18 months out and never recovers to initial levels. High initial production, however, can give the impression that shale gas is more successful than it may really be.

Lee Raymond, the former CEO of ExxonMobil, recently questioned shale gas reserves. Mr. Raymond stated "...It's going to be a little while before people are really confident that there is going to be a sufficient amount of gas for 30 years...I'm frankly not sure that we have enough experience with shale gas to make the kind of judgment...". (6)

So is this "shale gas revolution" truly a "boom"? It has certainly been characterized as a "boom", but it makes sense to delve deeper into the underlying fundamentals before jumping on board.

It is a fact that while gas prices were plummeting after the economic downturn, many shale companies continued to drill rather than shut in wells. Shutting in wells has always been the traditional approach to low prices for the oil and gas industry. Shale wells, however, deplete so quickly that new wells must be drilled continuously and prolifically to maintain cash flow and production. Given the heavy debt loads of some shale gas operators, continuous drilling was a

way to meet debt service but in turn decimated prices. Further, it has become apparent that perpetual expansion through drilling cannot keep production stable regardless of the frenzied pace. Financial analysts and journalists refer to this as the "drilling treadmill."

An excellent example of the drilling treadmill can be seen by examining the audited accounts of the City of Fort Worth in the Barnett shale play. (7)??In 2008, the city received approximately \$50M in gas revenues. This dropped precipitously in 2009 to about \$19M. In 2010, it trended back up and closed the year at approximately \$38M. On the surface, it would seem that things were simply recovering from the economic downturn and returning to normal — until the number of producing wells is considered.

Between 2008 and 2010, the number of producing wells within the city proper grew more than fourfold. So even though there were now four times more wells, these new wells could only keep revenues at 2/3 the levels seen in 2008. Although gas prices did decline during this period, severe depletion rates of the older wells was clearly the primary contributor.

By the way, this pattern has occurred repeatedly in North Texas. For instance, Denton County saw a 58% increase in number of wells for a 23% decrease in revenues. The wells at DFW airport have come in with dismal returns. (8) They never performed up to original projections. Chesapeake Energy needed 2.0/Bcf to break even. The wells have produced .9/Bcf . The University of Texas at Arlington saw revenues peak at approximately \$7M with a mere 6 wells on campus to plummet drastically in a matter of months. Revenues in 2010 were down to \$800K even though there were now 22 wells on campus.

While wells were proliferating and revenues plummeting, however, gas drilling was providing copious pollution and environmental degradation. The city of Ft. Worth released the findings of a report in June 2011 conducted by Eastern Resources Group (ERG) on all the gas facilities in the city proper.(9) Benzene, a known human carcinogen, is being emitted at quantifiable levels at 94% of the sites within the city. Another toxic compound, formaldehyde, also a known carcinogen and precursor for ozone, was detected by Titan Engineering at extraordinarily high levels in an industry funded study although greatly downplayed by industry. (10) In addition, carbon disulfide and various other toxics have also been detected in numerous tests contributing to an overall toxic cocktail. The Texas Commission for Environmental Quality (TCEQ) concluded after their testing that "gas facilities can, and sometimes do emit compounds at levels that could be deemed unsafe". (11)

Further, TCEQ submitted a report to EPA in December 2011 which confirms that gas drilling operations in the Barnett are contributing significantly more volatile organic compounds (VOCs) than all cars, trucks and other on-road mobile sources combined in the area. (12) Mobile sources account for 80 tons per day (tpd) of VOCs while gas drilling is estimated to account for 114 tpd. That is 42% higher than mobile sources. Further, VOCs from gas drilling have grown 60% in a mere 6 years correlating with the most significant growth in drilling for the region. VOCs are also known causes of ozone and Dallas-Ft. Worth has now passed Houston (2011) as having violated federal ozone standards the most of any area in Texas. (13)

Perhaps most problematic, however, is the fact that VOCs are known causes of debilitating diseases such as childhood asthma of which the children of Tarrant County (home to Ft.Worth

Tx. and the heart of the Barnett Shale) suffer at the astonishing rate of 25% or three times the state average and about 2.5 times the national average.(14)

Such pollution is not unique to Texas. A research team at Cornell University issued a paper in late 2010 which estimated emissions from shale formations and concluded that, taken the full life cycle including drilling , completion and production, shale gas was not cleaner than coal. (15) In fact, it is almost twice as dirty. Industry pushed back hard against the study claiming it was exaggerating emissions on a vast scale. Interestingly, the University of Colorado at Boulder together with the National Oceanic and Atmospheric Administration recently released the results of a three year study of natural gas fields north of Denver Colorado. (16) Methane emissions were found to be twice as high as emission inventories and corroborated the Cornell research teams conclusions. In fact, actual field measurements turned out to be greater than the Cornell scientist's original projections.

Further, job growth has not been as great as industry and political claims. According to the Bureau of Labor Statistics, a low point for total employment in the oil and gas extraction sector occurred in 2003 with approximately 118,000 jobs. Between 2003 and 2011, job growth did grow 56% to reach 186,000 jobs, a net gain of 67,900 jobs but this occurred over nearly a decade. To put this into perspective, this job creation amounted to 1/20th of 1% of overall employment figures in the U.S. There are currently 12.8 million unemployed. A growth of 67,900 jobs in the entire oil and gas sector, onshore and offshore, during a period of "game changing", "revolutionary" activity in the natural gas markets demonstrates beyond a shadow of a doubt that jobs creation is overhyped to an unconscionable degree.(17)

Shale gas also presents problems from a land use perspective. Dr. John Lee, a petroleum engineer and the architect of the U.S. Securities and Exchange Commission (SEC) rule change for oil and gas stated "It is sometimes said that 20% of shale wells carry a project...the other 80% can easily be uneconomic."(18)

Because of the way fracture stimulation works, shale gas is extraordinarily land consumptive. Vast tracts of land are pockmarked with a grid pattern of pad sites approximately every 2500 feet, north, south, east and west in more mature plays. Further, to date there are no complete reclamation plans that have been mandated for natural gas pad sites. Once wells have played out, usually within ten years, the land is virtually worthless because without reclamation it cannot be used for any other purpose and equipment is often left to rust on site. 80% of land used for shale production will be uneconomic at best. In the Barnett, 94% of the land has proven uneconomic.

And yet another problem has emerged regarding land use and shale gas. Though production cuts were announced by a number of shale gas companies in January 2012 due to the destabilization of the market and severe price declines, these cuts have not materialized in any meaningful way. In fact, many of these production cuts appear to be little more than housecleaning of embarrassing assets. For instance, according to some company press releases, wells that have been drilled will not be completed and other wells which have been completed will not be hooked up to pipelines. (19) This is in effect an abandonment and as such the land will produce no revenues of any kind in the form of taxes or royalties and yet

cannot be used for any other purpose due to the lack of a reclamation plan. It is now virtually worthless.

According to production history filed by operators in various states, shale gas volumes have not turned out to be as homogeneous as once thought. In the earlier days of the plays, it was widely touted that you could drop a bit and hit gas anywhere in one of these plays. Aubrey McClendon, CEO of Chesapeake Energy, admitted to Bloomberg that "There was a time you all were told that any of the 17 counties in the Barnett Shale play would be just as good as any other county. We found out there are about two or two and a half counties where you really want to be." It is now known that every shale play in the U.S. has been reduced to such a core or tier area.

Yet even within those core areas, production can be erratic. Geologists at Labyrinth Consulting have examined 9,100 of the 15,000 wells in the Barnett play using production data filed by the operators with the Texas Railroad Commission and found that less than 6% actually met minimum economic thresholds. (20)

This is not unique to the Barnett either. According to the Powers Energy investor, Chesapeake and Southwestern had claimed average EUR's in the Fayetteville of as much as 2.4-2.6 Bcf. But there has never been a single shale well in the Fayetteville play that has ever produced more than 1.7 Bcf according to production data filed with the Arkansas Oil and Gas Commission. Most do well to produce even 1 Bcf and the average for Chesapeake wells is 541 Mcf. (21)

In the Haynesville play, operators claim EURs between 5-7.5 Bcf. Actual EURs based on historical production are PetroHawk 4.5, Encana 3.5, EOG 3.0 and CHK 2.75. Clearly substantial overestimation of reserves has occurred in each play. (20)

Under the new SEC rule for oil and gas adopted in 2009, companies can now claim reserves that were previously not allowed and book them without a mandatory third party audit. There is a clear upside to being able to book more reserves. It is the ability to make it appear that growth is occurring in a company and finding costs are plummeting. Some shale gas companies actually increased reserves by as much as 200% on their books after the rule change. Yet without independent third party audits there is no certain way to assess whether these reserves truly exist in a viable way. Perhaps even more problematic is that fact that these companies were allowed to borrow monies based upon such claims of assets. Further anomalies have arisen in the SEC filings. SEC has informed some companies that they are calculating reserves at "mathematically impossible rates."

In the first two weeks of January 2012, near record prices were paid by foreign entities, primarily foreign Majors, for U.S. shale assets. Eight billion dollars (\$8B) in deals was consummated. This would seem paradoxical given the inherent economic problems with shale gas until one considers the pricing imparities between crude and natural gas and the rising spectre of U.S. shale gas exportation and the SEC rule change.

Each publicly traded oil and gas company has two sets of economics: the first is the field economics, which is the actual well performance data and actual costs; and the second is the "Street" economics, which is what drives the share price. The better internal numbers look on financial statements such as reserve estimates, costs etc., the more monies that are available

in the capital markets. In addition, investors like to see a growth trajectory for a company. A company that cannot show future growth is almost certainly going to languish at some point. It is interesting to note that the Majors, without exception, have not been able to grow reserves in over a decade. It is also interesting to note how they have dealt with this fact. They chose to invest enormous sums of money in share repurchase programs. This is an effective way to keep a company looking as though it is growing when in fact it is not. Buying back shares reduces the number of shares outstanding and therefore increases earnings per share.

Exxon Mobil Corp., Chevron Corp., Royal Dutch Shell, BP and ConocoPhillips have poured billions in recent years into share repurchase programs, which has increased the value of their stocks. ExxonMobil, for instance, spent \$11.2 billion on share repurchases in 2010. (22) This increased in 2011 with the company repurchasing as much as \$5B a quarter.

Due to the changes in the SEC rule for Oil and Gas, these companies can now claim shale assets that have not necessarily been independently verified and it can appear that growth in reserves is once again occurring in the Major's portfolios

But there is another aspect to this which is potentially much greater than the appearance of growth to these companies. It is the fact that crude oil hit record highs in 2011 in the international markets.

The price of natural gas in Asia and Europe is indexed to the price of crude oil. In fact, while gas trades in the US currently around \$2.00/mcf in the U.S., it is trading at approximately \$12-16/mcf in Asia depending on the length of the contract. Operators could theoretically extract, pipe, refine and ship to Asia from the U.S. for about \$9. It can then be sold for as much as \$16. That is eight times what the domestic U.S. market pays and a very profitable spread.

To sum up, although touted as the "bridge fuel", shale gas may not be the best choice after all. Clearly there are inherent difficulties with extraction including air toxics, possible ground water ruination, water depletion, land consumption and subsequent degradation, methane emissions more potent than carbon dioxide and health impacts to surrounding communities. Further, the economics are questionable at best. Platts Oil and Gas Reporter, a preeminent industry publication, stated in December 2010 that "the switch from [shale] gas to [shale] oil suggests shale gas can survive only through cross-subsidization, not on its own merit. Perpetual expansion cannot forever disguise a serious problem with the bottom line." (23)

But perpetual expansion is what shale gas does best. It is the very nature of the beast.

Wells have declined so rapidly in every shale play to date that perpetual expansion has been the only option open for operators to keep production levels up. But serious consideration must be given before turning landscapes worldwide into industrial, desertified regions all for the sake of a "bridge fuel". Land consumption, when it is known beforehand that 80% of the wells will be uneconomic, becomes of paramount importance. Shale gas wells have proved short lived in the U.S. thus far. Without a comprehensive reclamation plan in place, the land then becomes worthless for other purposes and cannot generate revenues.

We have all witnessed flood after flood, earthquake after earthquake, freak storms and unseasonable weather patterns throughout the globe. The human costs of such devastation have greeted us on the evening news no matter where we reside. But make no mistake, there will be a tipping point where the human costs are finally and truly measured in dollars and rupees and reals. When this occurs, the excuse and platitudes of job growth of a mere 67,900 over a decade will pale into insignificance and economic stability will be a joke.

Clearly there are extensive questions surrounding claims by the oil and gas industry regarding shale gas production and its abundance and surety. As we have seen, reserves have been vastly overstated in every major shale play in the U.S., reserve estimates are being slashed worldwide, revenues have not proved long lived or reliable, jobs have not proved long lived or as numerous as industry claims, land has been degraded by drilling and then abandoned, wells haven proven short lived, and industry insiders readily admit that 80% of shale wells can "easily be uneconomic."

I will conclude with a comment that I truly wish I could take credit for because it is so brilliant...but I can't. It belongs to Warren Buffet. He made this comment after the economic meltdown in 2008 but I find it very apropos now with regard to shale gas and particularly concerning the demise of Chesapeake Energy, the second largest natural gas producer in the U.S. And the comment is this: when the tide goes out, that's when you get to see who has been swimming naked all along."

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Oil and gas has highest bribery rate

By Guy Chazan

The oil and gas industry was subject to the most prosecutions for bribery and graft in the UK of any sector over the past four years, according to a new survey.

The study by Ernst & Young found that of 26 completed cases since 2008, oil and gas made up nearly one-fifth of prosecutions. The industry saw five completed cases,

compared to three each in the medical goods, insurance, and engineering and construction sectors.

Most of them involved payments made abroad, or kickbacks to foreign government officials.

With most oil and gas produced in third-world countries, the industry is far more exposed to the risk of corruption than other kinds of business. To cite one example, Nigeria, Africa's biggest oil producer, and a place where western oil majors such as Shell, Total and ENI have been operating for decades, comes 143 out of 182 in Transparency International's 2011 corruption perception index. Angola, another big African crude exporter where BP has a number of big projects, is at 168.

Western oil companies are particularly exposed to the risk of corruption because they usually operate in joint ventures with state-owned entities or foreign governments and "are at risk of being liable for any bribes or corrupt activity by any partners acting on their behalf," Ernst & Young said.

The issue of corruption has taken on added urgency with the advent of the UK Bribery Act, which came into force in 2010. The act bans facilitation payments, which are widespread in developing countries and seen by many companies as an indispensable means of expediting often painfully slow bureaucratic processes.

Many oil companies have instituted rigorous internal procedures to root out corruption. But Jonathan Middup, UK Head of Ernst & Young's anti-bribery and corruption team, said they often got their priorities wrong.

"Companies spend a disproportionate amount of time and effort on compliance around corporate hospitality and facilitation payments," he said, "and not enough on the issue of third-party due diligence – what agents, intermediaries, introducers and joint-venture partners are doing in their name."

Third-party risk, he said, is "constant and ongoing". "You can't prevent other people breaking the law, but you are liable if they do," he said.

The issue is particularly acute for oil companies because of the importance of multimillion dollar procurement contracts in big oil developments. Constant vigilance is required to make sure contracts are not awarded to parties related to the companies' joint-venture partners.

Many of the cases analysed by the Ernst & Young study emerged from the scandal surrounding the Iraq Oil-for-Food programme, in which a number of companies and individuals admitted to bribing public officials in Iraq and breaching UN sanctions.

State Disclosure Policies, Oversight of Natural Gas Fracking Are Inadequate Protection for Water Supplies, Public Safety, New Report Finds

PRESS RELEASE

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State Disclosure Policies, Oversight of Natural Gas Fracking Are Inadequate Protection for Water Supplies, Public Safety, New Report Finds

WASHINGTON, July 9, 2012—In a new report issued today, OMB Watch finds that state oversight laws requiring disclosure of the chemicals used in natural gas fracking are in need of an overhaul. Disclosure of the chemicals used in hydraulic fracturing, or "fracking," is spotty and incomplete, and essential safeguards are missing.

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