

Environmental Protection Agency
Headquarters PO Box 3000
Johnstown, Castle Estate,
Co. Wexford
Ref: W0231-01

Baile Na Ridire
Lusk
Co. Dublin
24 sept 2007

Location ; Proposed landfill by Fingal Co. Council at Nevitt Lusk Co. Dublin.

To the EPA board / Technical Committee

Please accept the following as an objection to the proposed EPA decision to grant a licence for Fingal County Council landfill at Nevitt, Lusk, Co. Dublin.

This is also a request for the EPA to grant an oral hearing with regard to the above.

The information left out that is of critical importance by Mr. Marnane in his inspector's report.

- The aquifer map of Fingal

You Mr. Marnane have given a proposed decision to put a landfill on the cleanest biggest food producing aquifer in Ireland here in Fingal and you never even mentioned it in your main report. This is totally unprofessional.

- Kerrigans and Moores wells zone extend into the Nevitt.

You know quite well Mr. Marnane that these wells are industrial wells according to DoELG /EPA / GSI (1999) as confirmed by professional hydro geologists White Young and Green and as such are protected . This is totally unprofessional.

- You know quite well Mr. Marnane that there are over 100 wells down gradient and a lot of these wells are industrial and are protected also. This is totally unprofessional.

- You left out the GSI submission on the location of the water divide in your main report.

They clearly state that they cannot determine where the water divide is. GSI are the legal guardians of groundwater in Ireland. In other words, they are the highest professionals in Ireland on groundwater and you left this critical submission out of your main report. This is totally unprofessional.

- No EIS has been completed of the huge Horticultural industry. Not mentioned in the main EIS. This is totally unprofessional.

- No EIS has been completed on the aquifer of Fingal, where you are proposing to put a landfill . Not Mentioned in the main EIS . This is totally unprofessional.

- K C Cullen identifies the Nevitt as a future water supply backed up by physical evidence. (professional hydro geologist)

You Mr. Marnane did not mention this in your main report. This is totally unprofessional

- GSI also identifies a potential area for development of further groundwater abstraction along the major north south fault line. PH McCarthy & Partners Consulting Engineers for Fingal Co Council stated in July 1994 The results of this evaluation would indicate how best to proceed with any long term development of the aquifer and the scale of such a development in terms of minimising and mitigating any environmental impacts while providing a vital and strategic water supply to North County Dublin Mr Marnane you failed to recognise that the water in the Nevitt area is a vital and strategic water supply for North County Dublin.

- RPS identifies the Nevitt area as a future water supply.

Environmental
Protection Agency

28 SEP 2007

It is quite obvious to all observers that the Bog of the Ring, The Nevitt and Annsbrooke are all joined by huge amounts of Gravel, a major North-South fault line and the rock is highly fissured. It is also obvious that it is all connected as one. How could you not possibly recognise this. This is totally unprofessional.

Dr Paul Ashley also recognised the Nevitt area as a future water resource and stated in his first report that the bog of the ring public water supply would be put at risk if a landfill were to be developed in the Nevitt. Mr Marnane you left this out of your main report. This is totally unprofessional.

- Bernard Murphy employed by RPS (professional hydrogeologist)
He clearly states in his report, over 3 years ago the ZOC may extend underneath this proposed landfill. Mr. Marnane you never mentioned this in your main report. This is totally unprofessional.

- RPS changed the non-technical summary, which is an admission of their mistakes.
You as an inspector should have said misrepresentation of information is not acceptable. This is totally unprofessional.

- Jim Burke was the first engineer to work on the Bog of the Ring. He was senior engineer with Dublin City Council, now retired.
He said Bog of the Ring, Nevitt and Annsbrooke is one huge water resource and it is all connected. We know he is right because of all the gravel, fault lines and highly fissured bedrock. You left this information out of your main report. This is totally unprofessional.

- Mr. Marnane we have asked for a dye test to be completed and we were told it would take one hundred years to see where the dye goes. Yet you have stated that 1.5 million litres of water flows under the Nevitt every day ie an amazing 550 million litres of fresh bacteria free water every year and this is only in the bedrock of the Nevitt. This water is flowing across the aquifer in a North South [approx .] direction down to over a hundred wells [most are industrial]. We have not even considered the amount of water flowing through the gravel and fault lines in the Nevitt. No wonder all the hydro geologists are saying the Nevitt area is a water supply.

Since we are discussing the future of two water supplies and a national food industry supply chain. Why did you not ask for a dye test, after all with so much water flowing underneath the Nevitt, it is obviously moving very quickly and therefore contamination would move very quickly also. We would know inside a very short time frame where the dye goes. This is totally unprofessional.

- Mr. Marnane, you asked RPS to complete a mod-flow. They said they would not complete a mod-flow. This is totally unacceptable that you backed down. Since the GSI are the only professionals that have completed a mod-flow in the area of the Nevitt. Their opinion on the specific location of the water divide is of a much higher level than any other hydro geologist. But of course you left out this information. This is totally unprofessional.

- Exclusion of bore wells.
Mr. Marnane, the GSI said there is not enough bore wells drilled to determine where the water divide is. During this process you should have requested RPS to drill more wells. This is totally unprofessional.

- How do you know which bags of household waste are hazardous or non-hazardous. Nappies you said will be 4% approximately, That is 400,000 tonnes of nappies in the landfill approximately.

- You know, Mr. Marnane, nappies generate cryptosporidium the same parasite that contaminated the Galway water supply with disastrous results

RPS has admitted 36,400 litres of leachate (poison) will leak out every year. You are trying to put a landfill on a water supply that the horticultural industry depends on. We don't know where the water divide is located (GSI) between the Nevitt and the only public water supply in Fingal, and of course the future water supply. Have you learned nothing from Galway's water supply being contaminated? Obviously major environmental disasters do happen. This is totally unprofessional.

- You mentioned that there would be 10 metres of clay left underneath the landfill.

You failed to mention there is very little clay in the North, South, East and West of the Nevitt. You also failed to mention AGB4, which has only 0.7 metres of clay, and then gravel yes gravel, gravel . This is in the centre of the proposed landfill. This is totally unprofessional/

- You said the GSI have classified this aquifer as locally important. You have failed to say they would look at it again when they receive more information. You also failed to mention the ZOC of the Bog of the Ring extends into the Nevitt R4, ZOC of industrial wells extends into the Nevitt R4, and a huge gravel aquifer that is a regionally important gravel aquifer. This is totally unprofessional.

- Mr Marnane you have mentioned that the following systems would have to fail to contaminate groundwater.

Leachate collection system, synthetic liner, mineral liner, under drainage layer and in situ clay ! Mr Marnane Wake up, RPS have already admitted 36500 litres of leachate will leak out every year. You also failed to mention that other experts stated that the figure should be between 36500 and 365000 litres of leachate will leak out per year. Mr Marnane RPS have admitted that 36,500 litres of leachate will leak out every year so therefore these systems do fail , you said landfills cannot be considered fully watertight and you are trying to put a landfill on a huge water supply of Regional and National importance. This is totally unprofessional.

- Because RPS have admitted 36500 litres of leachate will leak out per year and Mr. Marnane has admitted landfills cannot be considered fully watertight . The Groundwater Directive will be broken. Again , in the center of the landfill at AGB4 there is only 0.7 meters of clay and then gravel. Leachate will flow through this pathway very quickly. Mr. Marnane you never mentioned this in your main report. This is totally unprofessional.

I am requesting an oral hearing because :

- 1) Horticultural industry is of national importance and was not covered properly by Mr. Marnane [no EIS] .
- 2) The public water supply at Bog of the Ring is of regional importance and was not covered properly by Mr. Marnane, [GSI cannot determine where water divide is] .
- 3) New Area, the future water supply is of regional importance and Dublin City Council may extract water along Offaly, Kildare, Meath and Fingal (the same aquifer) for Dublin City water supply. This aquifer because of the horticulture industry is already of national importance. Meath and Fingal Co Councils are already extracting drinking water from this nationally important North Leinster Aquifer. This was not covered by Mr. Marnane. No EIS completed on the aquifer of Fingal with approx. 200 wells and a lot are industrial which are protected.
- 4) New area, Mr. Marnane did not mention ownership of groundwater. Mr. Marnane has no right to say contamination will go down along the North-South fault line to the South of this proposed landfill, Obviously this area will be contaminated [outside boundary of the Nevitt]. Mr. Marnane is crossing over legal borders, ownership rights etc on ownership of groundwater and he has no right to do this. No person has the right to contaminate the water of another person [a dye test should be completed]. The area of ownership of groundwater and all the legal implications was not covered by Mr. Marnane.
- 5) New area ,we require at least two qualified hydro geologists from separate companies to state their qualifications, names, address's, phone numbers and emails, to make a definite statement on the water divide and of course a letter form their insurance company backing up their statements and accepting all future responsibility, liability and costs associated with any future environmental disaster. That is two water supplies and a food supply chain of national importance destroyed. We estimate at least 1000 million Euro because obviously the point source of the pollution would have to be removed [ie landfill removed] and all the other costs.
- 6) We demand Fingal County Council to issue a clear statement backed up by their insurance company accepting all future environmental responsibility, liability and costs associated with two water supplies

and a food supply industry destroyed. It is important after the Galway situation that a clear path is identified for compensation. After all we are talking about people's health. We have only one shot at this [it would be a lot different if this was a poor aquifer].

- 7) National policy is changing. It is incredible that the strategic planning need for the proposed landfill has yet to be decided by the planning authority. See Trevor Sergent's press release.
- 8) New report, Mr. Marnane left out so much information, Kerrigans & Moores should be industrial wells and therefore protected.) and so many Hydrogeologists reports.
- 9) An Bord Pleanála is adjudicating on the original non technical summary from the EIS which we now know is not correct, however the EPA is adjudicating on a new non technical summary.

THE BOTTOM LINE , ONLY FOR QUALIFIED HYDROGEOLOGISTS

Name the hydrogeologists which
 Say , not sure where the water divide
 Is, clearly states the Nevitt area
 Is a future water supply, clearly states
 The public water supply is at risk and ZOC
 Could extend underneath the landfill .
 [different statements].

Geological Survey of Ireland GSI

Dr. Paul Ashley London

White Young and Green

K C Cullen

Bernard Murphy

Name the hydrogeologists
 which say the water divide is at
 hr13 and the public water
 supply is at no risk

Shane Helihiy
 Did you ever say the public
 Water supply is at no risk

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Mr. Murnane says there is water
 Divide [hr13 approx.], but I have been
 told Mr. Marnane is not a qualified
 Hydrogeologist, so his opinion
 Does not Count.

Shane helihy , will you make a definite clear statement on the water divide, state clearly the public water supply at the Bog of the Ring and the Horticultural Industry will never be contaminated, take full responsibility and sign it. Show your professional Indemnity insurance and get a large insurance company to back you up. The insurance company must state clearly that they will take full responsibility , liabilities , costs etc. for any future environmental problem in relation to this proposed landfill . There would have to allow for at least IOOO Million Euros to 2000 Million Euros on the policy. Engineers, Solicitors , electricians etc have to sign off all their work all the time and have to have insurance.

We have a very dangerous situation, Mr. Marnane is after given a provisional decision to put a landfill on a public water supply [water divide has not been identified , GSI and others].

A future water supply [vital and strategic for North Dublin and possibly for Dublin.

A present water supply for the huge Horticultural industry of Ireland based , In Fingal. Access to clean water is vital for this Industry.

This aquifer is of Regional and National IMPORTANCE.

This aquifer is the biggest, cleanest food producing aquifer in Ireland.

You are also putting peoples health at risk [water and food contamination, Remember Galway].

You are also putting thousands of jobs at risk [Horticultural Industry].

No EIS has been completed for the Horticultural Industry of National Importance .

No EIS has been completed for the aquifer of Fingal [approx. 200 wells].

Mr. Marnane , you now have the dis- honor of possibly being the first EPA inspector in Ireland or Europe to give a provisional License to put a landfill on a perfectly good water supply, [you believe landfill is more important than a water supply] that you and RPS admit the landfill will leak [not watertight] and no EIS has been completed for an aquifer or an industry of National importance which depends on this water. The EPA is debarred in Law in granting a license, if it causes Environmental damage. An EIS has to include all information, especially of National importance. Mr. Marnane have you broken your own laws. In relation to future projects as a Inspector, there will be immediate objections to your name. How can the public have any faith or trust in you or your decisions. You constantly write, It is considered and I presume this could mean In my opinion. This is a plausible phrase [is it true or is it false]. Mr. Marnane , you don't even know yourself.

We are giving Mr. Marnane report to the Minister for the Environment John Gormely, Minister for Natural Resources Eamon Ryan and Minister for food Trevor Sargent.

When we make our speech in Brussels in front of the MEPS, we will present Mr. Marnane report and tell them this man and the EPA of Ireland is trying to put a landfill on a perfectly good water supply. Examples of what some wells are producing in the Nevitt area are,

Bog of the Ring , public water supply	4 million litres per day	1/d
Country Crest	3.2 million	1/d
Moores	900,000	1/d
Thornes	750,000	1/d
Four artesian wells in the Nevitt		
High water tables in other wells in Nevitt		
Three pumps tests in Nevitt	1500000	1/d
Bergins	2 million	1/d
Kerrigans	1 million	1/d
Larry Hagan	900000	1/d

We estimate there are hundreds of wells in this aquifer , why destroy them. These wells have to be tested every two to four weeks under strict super market rules.

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There are water quality records going back many years. As a matter of fact, Jones are the largest producers of lettuce in Ireland [two wells 1.5 million l/d] . Tesco will not let Jones use rain water or public water supply, only groundwater from this aquifer because the water is bacteria free and is of such a high standard. This Horticultural Industry has been built up over 300 years and one of the secrets is bacteria free water in growing and processing the vegetables / potatoes etc. Why destroy all this especially when people are not doing there job properly.

Dr. Conor Murphy from Icasus, said Dublin faces acute water shortages in the future. We have to look for new water supplies like groundwater. Well Mr. Murphy there is lots of groundwater in Fingal but the EPA , if they grant a license, will be destroyed, [RPS and Mr. Marnane admits the landfill will leak and not watertight]. Under the new Groundwater protection Directive , no hazardous substances can enter underground water used for human consumption . Section 32 [1] of the Waste Management act , A person shall not hold , transport, recover or dispose of waste in a manner that causes or is likely to cause Environmental damage. The Landfill Directive states in parts , prevent any resulting risk to human health [technical promblem with equal inward pressure is, the Nevitt is on the side of a hill]. The only way that you will not break the Landfill Directive on health is not to put a landfill on a water supply. The Water framework Directive will also be broken. These four Acts will be broken if a landfill is put on the cleanest biggest food producing aquifer in Ireland , ie Fingal.

Amazing, the people of Fingal have been suffering from water shortages for many years, and there are huge amounts of fresh bacteria free water right underneath our feet. South Africa s ground water ethos [which was put on their Statuary books in 1998] is Some for all for ever. Leonardo De Vinci said , a clean water supply is as important to humanity as the blood that runs in our veins.

Mr. Marnane / RPS said the development of a landfill is likely to impact on the development of a water scheme and the zoc of the water supply will extend into the Nevitt . However, it is considered that any potential leakage from the landfill will not have a significant impact of the quality of the groundwater. Mr. Marnane would you let your family drink this water from underneath this landfill.

How dare you Mr. Marnane , take the right away from future citizens to make decisions, to use the Nevitt area as a water supply , you have no right. Precautionary Principle should be applied immediately. You should apply the Precautionary Principle in front of the landfill and not behind it . You have no right to imply that landfill is more important than a water supply.

To the Board members and Technical Committee, you have the future of the Horticultural industry of National importance [no EIS], a public water supply of Regional importance [water divide has not been determined , GSI] , a future water supply [of regional and National importance], the North Leinster aquifer of National importance [no EIS] and thousands of jobs in your hands. Mr. Marnane , Kerrigans and Moores should have been presented as Industrial wells and therefore protected] and you left out critical reports from qualified Hydro geologists especially the GSI [they clearly state the water divide can not be determined] . If you require

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legal work done , you go to a Solicitor , The solicitor signs their work , therefore accepting responsibility for their work and obviously the Solicitor has to have insurance. If you require a bridge built, you go to an Engineer. The Engineer signs their work and therefore accepting responsibility for their work and obviously the Engineer has to have insurance. I know Ian is an intelligent man and I am not accusing Ian of anything . I am asking the Board , for you to ask Mr. Marnane to re write his report , no EIS on the Horticultural industry , no EIS on the aquifer of Fingal and hydrogeologists reports left out, it will always be looked upon as unprofessional and incomplete unless it is changed and signed off by a minimum of two independent hydro geologists , accepting full responsibility. The hydro geologists would obviously have to show there insurance policy [minimum 1000 million euros on policy] and insurance company accepting all future environmental liabilities associated with this proposed landfill . This is a minimum basic requirement for projects all around the World. You owe this especially to the farmers in Fingal that has taken 300 years to build up there huge horticultural industry. To the Board members / Technical committee, we have only one shot at this , there is too much at risk, we need those independent hydro geologists [backed up by insurance policy's], it is a basic requirement. I recommend we give all the new information to the GSI and let them make a decision on the groundwater and the aquifer. I recommend we complete a dye test and a Mod flow. The spotlight is on the EPA now whether you give a license to put a landfill on a perfectly good water supply that is of National and Regional importance [no EIS on horticultural industry or aquifer] . RPS admits it will leak 36500 litres per year of highly toxic substance called leachate, there are huge amounts of gravel present, fault lines and bedrock is highly fissured and obviously contamination will occur very quickly through this aquifer. Mr. Marnane should have communicated more with experts on Hydrogeology especially. The point that a lot of people is missing is , FIVE professional hydro geologists clearly state the Nevitt area is a future water supply and that is including RPS and GSI . We need to focus on this point especially the technical committee and the board of the EPA.

Thanking you

Deaglan De Faoite

Deaglan De Faoite

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