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Speaking Points from Cllr. Dominic Hannigan, Labour, Meath

Oral Hearing by the Environmental Protection Agency re. Licence for Incinerator at Carranstown, County Meath

Monday, March 7, 2005, Boyne Valley Hotel, Drogheda

(CHECK AGAINST DELIVERY)

Chairperson

I am Cllr. Dominic Hannigan, an elected member of Meath County Council, in whose area Indaver Ireland propose to build the country's first municipal waste incinerator.

I and my colleagues have submitted observations to this proposed waste licence issue a number of grounds, including:

1. The proposal runs contrary to the principles of reduction, recycle and reuse which should be the cornerstone of an effective waste management policy;

2. We do not believe that the technology involved is sustainable or warranted in Ireland, and that there are several unanswered questions relating to its impact in terms of atmospheric pollution, the dispersal of dioxins and other matters;

3. We question whether the choice of site for this facility in historic Boyne Valley, within 5 KM of major population centres such as Duleek, Bettystown, Laytown and Drogheda is wise;

4. We believe that it will have a negative impact on traffic, surrounding amenities, agriculture and food production in the area, and will serve to depress property prices in the adjacent areas;

And fifth: we are deeply concerned that the development of an incinerator at Carranstown could have a negative impact on water applies in this area, and in particular on the major aquifer which lies directly under the incinerator.

I wish to turn to the potential negative impact on the aquifer first, which remains the most sustainable supply source of water for this entire region. The North Eastern Health Board, now the Health Services Executive which is the health authority for this region sent thirty- five observations to the Environmental Protection Agency (EPA) in relation to Indaver's application for a waste licence for its incinerator plant at Carranstown.

The health board allege that Indaver will fail to comply with EU directives on waste management. The NEHB document also addresses the protection of ground and drinking water supply, contingency planning in the event of gas explosion and fire; deals with air, noise and odour emissions.

These were prepared by the NEHB's Environmental Health Services, and lodged with the EPA in February 2002, in which they put on the record that Indaver did not consult with the board during the pre-planning phase for the plant, despite claims to the contrary by the developer, then and since.

It says that Indaver should restructure their EIS to take account of European Union waste management policy, and notes that the developer will incinerate all unsorted waste, which the health board claims is contrary to the EU Directive on Incineration (2000/76/EC). They add that such a policy "...is contrary to the basic principles of the waste management

hierarchy of prevention, minimisation, reuse and recycling". A point I will return to later.

Significantly, the NEHB also state that World Health Organisation' criteria for selection of sites for the new hazardous waste facilities specifically exclude areas with limestone deposits. The geology of Carranstown is principally one of limestone and karst limestone at that, meaning a fractured geology.

The NEHB state that the '...limestone bedrock constitutes a regionally important aquifer (a natural underground water reservoir) which is karst and fractured and is ... susceptible to ground water pollution".

It then adds that this underground water is the sole source of water for houses in the area. The local press during last summer, in the form of the *Drogheda Independent* contacted Meath County Council to establish the precise number of houses supplied by private wells or group water schemes fed from the aquifer. However, the County Council were unable to answer the local media's enquiries, this raises serious questions at the state of contingency intelligence and planning in our area.

The health board also requests that provision is made for the retention of firewater on the site to avoid a potential threat of ground water pollution. Firewater is collected on a site following a fire and should not be discharged into the ground water supply.

I would draw the Chairperson's attention to Meath County Council's *Development Plan*, dealing with Aquatic Environmental and Aquifer Protection

It states "The Rural Detail Maps indicate known areas with groundwater potential and major abstraction points. Groundwater protection policies

will be applied in respect of activities in relation to agriculture, individual wastewater disposal systems from individual dwellings, waste management activities, extractive industries and other sectors, which would affect groundwater quality or availability in the vicinity of vulnerable areas and abstraction points". It then continues: "In particular, Meath County Council has prepared an "Aquifer Protection Scheme" for the county which indicates the location of groundwater resources and their vulnerability to damage. Proposals from the categories described above and others will be considered in the light of this scheme and may be modified and or rejected accordingly".

I would advise that both Counties Meath and Louth have experienced major problems in relation to water shortages, as development outpaces the ability of the local authority to provide adequate water supplies, and we are now limited in the amount of water we can abstract from the River Boyne. I would also advise that the nearest abstraction point to Carranstown is only 2 KM as the crow flies from this Incinerator, which could be sustainable to atmospheric pollution from the Incinerator.

In the last week, the local press reported problems with the water supply. At present County Meath draws over 13,800m3 of water from the Staleen water treatment works each day. This water supply serves the Laytown, Bettystown, Kentstown and Navan areas. In recent months officials told how planning applications in east Meath are on hold because of the lack of water. It also serves Drogheda and South Louth.

Also, Dail Eireann was told by the Minister for the Environment and Local Government on Wednesday, 29th January, 2003 (Question No. 883) "Where an activity that involves a risk to groundwater is being carried on by any person, that person carries primary responsibility for protecting the groundwater against pollution. It is an offence for a person to cause or

permit polluting matter to enter waters, including an aquifer. Among public authorities, responsibility for the protection of groundwater is assigned primarily to local authorities under the Local Government (Water Pollution) Acts. Other functions for protection of aquifers are execrable by local authorities under legislation such as the Waste Management Acts and the Planning and Development Acts. The EPA exercises general supervision under the Environmental Protection Agency Act, 1992 in relation to the performance by local authorities of their environmental protection functions, and has responsibility for groundwater protection in the context of its own licensing, monitoring and other functions. Maps of aquifers in all Member States, including Ireland, were published by the European Commission in 1982 at scale 1:500,000. The map for Ireland was prepared by the Geological Survey of Ireland (GSI). Work has been ongoing by GSI since then for the production of more detailed modern maps at a scale of 1:50,000 as part of groundwater protection schemes being prepared by local authorities. Modern aquifer maps have been prepared for 13 counties, mapping of the remaining counties is ongoing by the GSI and will be completed by end-2004 as part of work being undertaken in river basin management projects for implementation the EU Water Framework Directive (2000/60/EEC). The publication 'Groundwater Protection Schemes' (a copy of which is in the Oireachtas Library), was jointly published in 1999 by my Department, the GSI and the EPA and contains guidance for local authorities on the preparation of groundwater protection schemes to provide a systematic framework for the protection of these waters. As part of its functions under the Environmental Protection Agency Act 1992, a national Groundwater Quality Monitoring Programme was established by the EPA in 1995 with the assistance of the local authorities. Data generated by the programme are included in the EPA reports 'Water Quality in Ireland' for 1995-1997 and 1998-2000 (copies of which are in the Oireachtas Library). The report for the period 1998-2000 indicates localised pollution of groundwater in certain areas but no widespread pollution of particular

aquifers. Groundwater is monitored by EPA in association with the GSI at some 300 sampling points nationally. Monitoring is carried out twice a year, to coincide with groundwater levels at their lowest and highest levels. Council Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances, the 'Groundwater Directive', is concerned with the protection of groundwater by means of an authorisation (licensing) system for discharges which may contain dangerous substances. The Directive applies to a specified range of substances which could pose a serious threat to groundwater quality, through direct discharges to groundwaters or by indirect discharges arising form waste disposal operations or other activities. The Groundwater Directive has been transposed and implemented in Ireland mainly through the Local Government (Water Pollution) Acts, the Waste Management Acts and related regulations.

The Water Framework Directive (2000/60/EC) (WFD) came into force on 22 December 2000 and addresses all inland and coastal waters, including groundwater, and all sources of water pollution. Proposals are being developed by the European Commission in accordance with Article 17 of the WFD for specific measures to be taken to prevent and control groundwater pollution. I refer to the reply to Question No. 417 on 10 December 2002 for detailed information on the measures being taken for implementation of the Directive in Ireland."

Groundwater is a major natural resource in Ireland typically providing between 20% and 25% of public drinking water supplies. In many rural areas, groundwater is the only source of supply with over 100,000 wells and springs in use. Further, there is a vast surplus of unused groundwater resources available for water supply at present (DELG/EPA/GSI, 1999). Most of these resources are concentrated in the top 30m of the bedrock profile and within sand and gravel deposits (Daly 1995).

As well as providing drinking water, the resources are important in that they provide a significant proportion of the flow in many rivers (more than 90% of summer flow volumes in some cases). The interdependence of groundwater and surface water has been recognised by the EU Water Framework Directive, which requires that they be considered together in the development of integrated catchment management policies. This is a major new piece of legislation and Ireland will be investing several tens of millions of euros over the next few years in the development and maintenance of these management plans. This Directive is therefore likely to continue the trend established by previous legislation (such as the Nitrates Directive), in which groundwater issues have moved closer to the forefront of environmental planning considerations.

Having set out the national policy perspective on the protection of groundwater, can I now set out the reality on the ground. In reality, little has been done, yes - the aquifer system has been mapped and the local authorities have issued guidance in their development plans for their protection. Hydrogeology is a very specialised science, and I have serious doubts as to the competence of the EPA in dealing with any situation where groundwater is at risk . Does the EPA have a division dealing exclusively with Hydrogeology?

May I expand this point by quoting from the EPA's own report on the risk to this major Aquifer. To start with, Indaver admit that their activity will pose a 'Moderate Risk', however, the EPA themselves elevate this risk to "HIGH" and yet, despite this upgrading risk, only want to have the infrastructure at the plant checked annually?

I submit that this rather lax attitude to regulation added to the Council's lack of detailed knowledge of the number of householders drawing water

from the ground should be a major worry, this worry is clearly, shared by the Health Board. As a civil engineer, I know that clean water is key to effective public health.

I now wish to quote from the EPA inspectors report:

"The applicant describes the overburden geology as consisting of silty clays (boulder clays), and states that the thickness of the boulder clays varies across the site, ranging from 5.0 m towards the west of the site to greater than 20m towards the centre. Sand and gravel lenses are found throughout the boulder clays. Limestone bedrock is found beneath the overburden. The limestone bedrock constitutes a regionally important aquifer which displays both karst and fracture flow features. The groundwater within the limestone aquifer of the proposed site flows eastwards and discharges as base flow into the Nanny River by means of local tributaries of the Nanny. The applicant considers the aquifer venerability for this site to be moderate, but based on the varying thickness and type of overburden cover, I consider the aquifer venerability high. The RPD does not permit any discharges to groundwater other than the effluent from the treatment of domestic sewage, for which the waste water treatment system must be constructed in accordance with Agencies *Waste Water Treatment Manual, Treatment Systems for Single Houses.* The RPD requires that waste activities be carried out on hard standing areas (condition 5) with collection of any contaminated runoff. The integrity and water tightness of all tanks, including the waste bunker for the incineration plant must be checked on an annual basis. *(Page 9 and 10, Inspectors Report WLREG No 167/1 - EPA)*

We must go back to the issue of site selection for Indavers facility. Clearly the Health Authority, mindful of their duties for the protection of public health have put a severe question mark over the suitability of Carranstown

for an incinerator. They base and ground their arguments on the geology of the site and deploy the World Health Organisations criteria for site selection to buttresses their argument. The EPA themselves upgrade the risk assessment to HIGH. People must surely ask, particularly in an area which suffers from acute water shortages, why we would even risk damaging the water supplies to one of the most populous regions on the east coast?

In conclusion, I would like to quote from a paper entitled *Groundwater Protection Schemes and GIS – a Powerful aid in the Planning Process*, by Vincent Fitzsimons, Seamus Gilroy and Jamie Cudden:

"Groundwater is an important, if under-utilised, resource, that is under threat from potentially polluting human activities. Groundwater protection schemes have been designed to provide a logical, impartial basis upon which pollution prevention measures can be developed. Further, when incorporated into a Local Authority's GIS, a groundwater protection scheme becomes a powerful tool whereby information of direct relevance to engineers and planners is readily accessible and can be incorporated directly into the planning process."

I would concur with those sentiments and appeal that the EPA should not grant a licence, on the basis that the balance of evidence here in relation to Ground Water Protection seems to indicate imprudency.

May I now turn to the issue of the type of waste being received at the plant, I again quote the North Eastern Health Board submission. It says that Indaver should restructure their EIS to take account of European Union waste management policy, it notes that the developer will incinerate all unsorted waste, which the health board claims is contrary to the EU Directive on Incineration (2000/76/EC). They add that such a policy "...is

contrary to the basic principles of the waste management hierarchy of prevention, minimisation, reuse and recycling".

What does this mean in practical terms: it means that whellie bins laden with PVC electrical ducting, wires, bath panels, shower trays and the like will be burnt, with other packaging in everyday use, such as PVdC products, fruit and meat packaging. It will ensure, that dioxins are liberated into the atmosphere, since PVC and PVdC - all of which by the nature of the polymers concerned contain high salt contents. And what of other materials such as Teflon - which is contained in many food cooking pots and clothing, Teflon cannot be successfully treated by incineration at the temputure envisaged. And yet Indaver, have no means to segregate waste arriving at the plant.

By the admission of John Ahern and Desmond Greene, Directors of Indaver Ireland, to 70 parents of pupils at the Mount Hanover National School at a meeting in Carranstown on 8 December 2000, the input process at the start of the cycle is insufficient in its capacity to ensure that all input material is non-hazardous. The waste is not checked for its content of heavy metal, acidic or other materials . Specific examples:

- Hospital waste / Radioactive waste
- BSE / bone meal waste
- Asbestos
- Electronics / Batteries (high in heavy metals with greater dioxin/furans)

All (and others) may be inconspicuously inserted with non hazardous waste. Subsequent verbal answers to this concern involve the emphasis on the Origin of Lading certificate accompanying the waste. However, as there is no definition of the control process, concerns are summarised as

follows: (1) Undefined validation and assurance processes to ensure non-hazardous waste input and (2) Undefined process to ensure the Certificate of Origin establishes the waste input is actually from the region of the North East ie Cavan, Monaghan, Louth, Meath.

Non assessment of these process implications for the local area leave the plants whole operation open to abuse. Later analysis may lead to possible litigation as the plant CANNOT guarantee to operate within the limitations of any possible non-hazardous licence.

The Indaver EIS proposed to discharge odours through the chimney stack during periods when the plant lines have been shut down for maintenance, the health board add that the developer proposes that '...waste in the bunker would be sprayed with odour suppressing chemicals to minimise odours' The NEHB are categoric in condemning this proposed practice, stating '...that masking of odours is unacceptable – All odours shall undergo treatment prior to extraction". They further request Indaver to submit proposals as to how they will treat odours during a shutdown period.

All of the above evidence, I would submit, must cause great concern for the public, it is not that incineration is an untested technology, the question must be is it an appropriate technology in a country which does not have a good record of ensuring compliance with legislation in relation to planning, waste or other areas is actually followed up on.

I would submit that the EPA should not award a licence on this occasion, and seek to ensure that other alternative and more sustainable strategies are considered.

Thank you for your time.