Environmental Protection Agency
Licence Register No. 167-1
Oral hearing
March, 2005

INDAVER IRELAND
CLOSING SUBMISSIONS

Introduction

These closing submissions are being made on this, the seventh day of this oral hearing. During those seven days, the discussion and submissions have ranged far and wide. It has to be said that many of the matters raised are entirely extraneous to the application for a waste licence the subject-matter of the proceedings. It may be useful, therefore, to remind ourselves of the nature of the task which lies before the Environmental Protection Agency ("the Agency").

This is not a hearing into an application for planning permission. This is not a review or audit of government policy on waste. This hearing is being held into an application for a waste licence. The initial application was made pursuant to the Waste Management Act 1996 in or about 5th December 2001. The statutory criteria to which the Environmental Protection Agency are to have regard to in determining an application for a waste licence are set out in Part V of the Waste Management Act, 1996 (as amended), and, in particular, at Section 40(4).

Two aspects should be emphasised. First, prescribed environmental standards have a particular importance in the context of an application for a waste licence: the Agency must be satisfied that emissions will not result in the contravention of a prescribed standard. There can be no doubt but that the proposed development as licensed will be in accordance with the relevant Irish and EU standards. (Indeed, this has not seriously been questioned, rather the objectors have sought to suggest that controls above and beyond those prescribed by the EU should be imposed unilaterally by the Agency.)

The approach of the Agency has been explained in a letter from its Director General to the Secretary General of the Department of Health and Children of March 25, 2003. This letter explains that the Agency sets stringent emission limit values for pollutants and potential pollutants, and, in addition, evaluates the potential impact of the maximum licensed emissions on the environment to ensure that all EU standards for the environment and World Health Organisation ("WHO") guidelines will be met. It is respectfully submitted that this approach is entirely consistent with the licensing scheme set out in the Waste Management Act, 1996.

The second important theme which emerges from the Waste Management Act, 1996 is the central place of the concept of "environmental pollution" in the statutory licensing scheme. The Agency shall not grant a licence unless satisfied that the activity concerned, carried out in accordance with such conditions as may be attached to the licence, will not cause environmental pollution. "Environmental pollution" is defined under Section 5 of the Waste Management Act, 1996 as follows.

> "'environmental pollution' means, in relation to waste, the holding, transport, recovery or disposal of waste in a manner which would, to a significant extent, endanger public health or harm the environment, and in particular –
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> (a) create a risk to waters, the atmosphere, land, soil, plants or animals,
> (b) create a nuisance through noise, odours or litter, or
> (c) adversely affect the countryside or places of special interest;"

It is clear from the definition, and, in particular, from the use of the term "to a significant extent", that what the Agency is to have regard to is the likely or probable impacts of the proposed development. This point is underscored by the legislative provisions in respect of environmental impact assessment: what must be assessed are the "likely significant effects" of the proposed development.

The Agency has before it ample material and evidence on the impacts of the proposed development. Much of this evidence was presented on a worst case basis. For example, the impact of air emissions was calculated on the basis that the facility was operating to the full of its emission limit values, twenty-four hours a day, seven days a week for a year. In other words, the impact was calculated by assuming emissions greater than those ever likely to arise during routine operation. Similarly, in the context of dust/particulates, calculations were also made on the worst case basis *i.e.* it was assumed that all particulates emitted would be of a size $PM_{2.5}$ (particulate matter less than 2.5 microns).

Where Indaver Ireland and the objectors part ways is in relation to *speculative* impacts of the proposed development. The objectors seek to challenge the development by attempting to conjure up hypothetical scenarios and then to criticise both the developer and the Agency for not considering these as significant. Thus, for example, notwithstanding the fact that there are no significant water emissions, some of the objectors have sought to suggest that there is a risk to water, relying on scenarios whereby blasting or some other unexpected occurrence (including a terrorist attack or act of God) causes unspecified damage to the acquifer.

It is respectfully submitted that the Agency should not accept this invitation to enter into the realm of speculation. Rather, it is submitted that the Agency should follow its statutory remit and look to the likely significant effects.

Environmental impact assessment

During the course of the hearing various arguments were made as to the adequacy of the environmental impact assessment procedures. These arguments can be grouped under two broad headings, as follows: general arguments directed to what are alleged to be defects in the national legislation, and more specific arguments directed to what were alleged to be shortfallings in the manner in which the environmental impact statement and waste licence application dealt with certain matters. It is proposed to address complaints of the latter type a little later in this submission, in the context of the particular environmental issues being discussed. At this stage, we wish to rebut the general arguments.

As part of its adjudication on an application for a waste licence, the Agency has a function as one of the "competent authorities" for the purpose of the environmental impact assessment directives. Under national law, the process of environmental impact assessment is carried out by both An Bord Pleanála and the Agency. In the present case, an environmental impact

statement accompanied the application for planning permission, with a further copy being furnished to the Agency. The Agency is required to consider the contents of the environmental impact statement insofar as relevant to its decision to grant or refuse a waste licence.

Various of the objectors have sought to criticise the manner in which the environmental impact assessment directive has been implemented under Irish law, and, in particular, have sought to criticise the division of function as between the An Bord Pleanála and the Agency.

It is submitted that these criticisms are unfounded. There is nothing in the legislation which in any way inhibits the Agency from carrying out a detailed assessment of the environmental impacts of the proposed development (whether in terms of air emissions, water emissions or impact on the countryside or places of special interest (including, for example, visual impact on the UNESCO site at the Bends of the Boyne)). Indeed, just such a challenge to the implementation of the directive has been rejected by the High Court. This challenge, which arose in the context of the self-same development the subject-matter of the present application for a waste licence, was brought in proceedings entitled "Eric Martin, Applicant, and An Bord Pleanála, Ireland and the Attorney General, Respondents". These proceedings bear the Record Number 2003 No. 274 J.R. The judgment of the High Court was delivered on November 30, 2004. An appeal against the decision is listed for hearing before the Supreme Court on April 25, 2005.

(For the sake of completeness, insofar as some objectors (especially An Taisce) have sought to rely on the earlier decision of the High Court in **Cosgrave v. An Bord Pleanála**, unreported, April 21, 2004 it should be noted that the challenge to the validity of the planning permission based on the alleged improper implementation of the directive in that case was also rejected.)

It is important to note that the process of environmental impact assessment is an ongoing one, and does not stop with the submission of an environmental impact statement by the applicant for the development consent. Indeed, this very oral hearing itself is part of the process of environmental impact assessment in that it forms part of the process of public consultation provided for under the directive. It is expressly provided under Section 40(3) of the Waste Management Act, 1996 that the Agency is entitled to have regard not only to the environmental impact statement but also to "... any submissions, observations or supplementary information relating to such statement furnished to the Agency ...". In the present case, the Agency has the benefit of the initial environmental impact statement as submitted at the time of the application for planning permission, together with the material submitted as part of the application for the waste licence.

For the sake of completeness, there is no requirement under the directive to carry out separate environmental impact assessments in respect of alternative sites (as suggested by Mary Lou McDonald, M.E.P.). Nor is there a requirement to carry out a health impacts risk assessment (as suggested by Dr. Anthony Staines and Mr. Jack O'Sullivan).

Air Emissions

Extensive modelling was done both by Indaver Ireland's experts and by the Agency in respect of the air emissions from the proposed activity.

The EU has, through the waste incineration directive, established emission limit values for waste incineration which it has determined, after significant research and study by experts, do not pose a risk to human health or the environment. The emission limit values set in the proposed decision do not exceed the EU limits. Indeed, it has not been seriously suggested that the typical operation of the incinerator will result in the limits being exceeded, and Indaver Ireland's evidence suggests that emissions will be substantially below the values set in the waste incineration directive.

This means, and can only mean, that the operation of the incinerator pursuant to and in accordance with the proposed decision would not to a significant extent endanger human health or harm the environment *i.e.* it will not result in "environmental pollution".

It is important to remember that the emission limit values have been set not by some bureaucrat in Brussels but by the Technical Working Group, comprising, among others, health experts, and are based on European health impact assessment studies.[1] It is submitted that the Agency should give great weight to the fact that the limits are based on such studies. Equally, the Agency should, it is submitted, have regard to the fact that the Health Research Board Report did not recommend a moratorium on the licensing of waste incineration. Indeed, it appears to have been accepted by Dr. Anthony Staines, one of the authors of the Report, that although policy matters were outside the brief of the authors, the Report effectively comprised the *first* part of a health impact assessment on the policy of waste incineration, a policy that has been endorsed by the Government since the publication of that Report. In particular, as discussed in the evidence of John Ahern, the Department of Health and Children have set up the Health Information and Quality Authority ("HIQA") to promote the quality of health information and to ensure its relevance to strategic priorities. There are already in existence a number of data sources including, *inter alia*, National Cancer Registry, Hospital In-Patient Enquiry system, SLAN, National Disease Surveillance Centre, the Perinatal Reporting System, the Congenital Birth Anomalies Registries in Ireland, and the Public Health Information System produced by the Department of Health and Children.

A criticism has been made as to the manner in which the health impacts of the proposed development were dealt with in the initial environmental impact statement. This criticism is not accepted. First, it is submitted that it is based on a misconception as to role of the Agency on an application for a waste licence. This point has been discussed already above, and need not be repeated here. Secondly, it is submitted that the environmental impact statement, the material contained at Attachment H of the waste licence application and the evidence adduced at this oral hearing by Dr. Fergal Callaghan more than adequately address the human health impacts. In particular, the potential impacts on the hypothetical "Most At Risk Individual" were modelled following US EPA Methodology (Human Health and Ecological Risk Assessment Support to the Development of Technical Standards for Emissions from Combustion Units Burning Hazardous Waste, EPA Contract No. 68 – W6 – 0053, US EPA, Washington, July 1999) and using the Dutch Government Approved Model RISC Human 3.1. This evidence was not seriously challenged, with Dr. Paul Connett conceding that he was not qualified to carry out such modelling himself.

[1] Draft BREF Note, Waste Incineration, March 2004, page 418

Alleged transboundary effect

It has been suggested by some objectors that the proposed development would have adverse transboundary effects, and that there has, in some way, been a breach of the environmental impact assessment directive or of the 1979 Convention on Long-Range Transboundary Air Pollution. It is submitted that these arguments are not borne out on either the evidence nor the law.

Dr. Edward Porter gave evidence that insofar as air emissions from the proposed development were concerned, the peak ambient concentration would occur within 1.5km of the source, and that by 5km ambient concentrations would be almost imperceptible above background levels. Thus it is submitted that there are no likely significant effects on another member state *i.e.* effects beyond the border between the Republic of Ireland and Northern Ireland, some 40km away.

Moreover, it is submitted that the objection made that there was no *official* consultation with Newry & Mourne District Council is an entirely formalistic or technical one. Aside from the fact that a presentation was made by Indaver Ireland to the local authority, it is also a fact that the local authority were aware of the application for a waste licence in sufficient time to allow them to make a written objection and to attend at the this oral hearing to make whatever substantive submissions they wished to do so.

Insofar as the 1979 Convention is concerned, the requirement under the convention to use "best available technology" is met by the proposed use of, *inter alia*, an advanced flue-gas cleaning system.

The position in relation to greenhouse gas emissions has been dealt with in Dr. Porter's submission.

Visual amenity

Condition 3.19 of the proposed decision requires that the stack height of the incineration plant be at minimum of 95.3mOD. In effect, this involves an increase in stack height from 40m to 65m. In circumstances where the Agency proposes to attach a condition to a waste licence which requires "development" which is not the subject of a planning permission, it must consult with the relevant planning authority: Section 54 of the Waste Management Act, 1996. In the present case, the Agency wrote to the planning authority in January, 2004. The planning authority required Indaver Ireland to carry out further steps to assess the visual impact of the higher stack, including a test involving the floating of an industrial balloon at the proposed height of the stack.

By correspondence in June 2004, the planning authority confirmed that it had fully considered and assessed the proposed increase in stack height; the planning authority concluded that should the Agency consider such an increase in stack height to be necessary there would not appear to be an overriding argument against such a proposal, from a planning point of view.

> "Further to your letter Reg. No.167-1, and my recent e-mail to yourself regarding this matter, I wish now to officially advise you that Meath County Council has fully considered and assessed the EPA comments regarding the proposed increase in stack

height at the Invader Waste facility, whereby the stack would be increased from c.40m to 65m.

In particular, our assessment focussed on an extensive visual impact appraisal in respect of any potential impact on the World Heritage site at Newgrange/Bru na Boinne. The visual impact of the proposed stack (at 65m) was considered from sites at Newgrange passage graves, Knowth, Dowth and Bellewstown ridge. Meath County Council planning authority would generally be satisfied that the proposed increase in stack would not materially impact on same, as it is not considered to be visible from these sites. At locations where the stack would be visible, for example along the RI50 or M1, etc. it is considered that it would be viewed within the context of Platin cement works, thus reducing any undue adverse visual impact.

Having regard to the above, Meath County Council's view is that if the EPA consider such an increase in stack height to be necessary from an environmental safety point of view, there would not appear to be an overriding argument against such a proposal, from a planning point of view."

In addition, Indaver Ireland had further photomontages prepared reflecting the increased stack height, and these were furnished to the Agency in or about April 2004. Moreover, Jackie Keaney gave evidence in respect of the various exchanges between Indaver Ireland and the UNESCO delegation.

In the light of this evidence, Mr. Jack O'Sullivan, on behalf of the Drogheda Borough Council, Dundalk Town Council, Louth County Council and An Taisce, accepted that any marginal additional impact arising as a result of the increase in stack height was "a very small element". In fairness to Mr. O'Sullivan, he did make the point (as did Ms. Áine Walsh of the No Incineration Alliance) that the relative visual impact of the entire stack was small when compared to the existing cement plant.

In all the circumstances, it is submitted that the Agency should be satisfied that any marginal impact caused by the increase in stack height is not such as to impact to a "significant extent" on the countryside or places of special interest (including, for example, visual impact on the UNESCO site at the Bends of the Boyne). In carrying out its assessment, the Agency is entitled to have regard to the response of the planning authority to the consultation under Section 54 of the Waste Management Act, 1996.

Impact on water

Evidence was adduced by Ria Lyden and Teri Hayes on the issue of impact on water. The principal point emerging is that, under typical operating conditions, there will be no direct discharge to ground water from the activity (other than from the domestic water sewerage during facility operation, which will be treated with a Puraflo Liquid Effluent Treatment System prior to discharge).

The objection has been made that the proposed development is located over a regionally important karstified limestone acquifer. It is obviously not the case that no development can ever be carried out in such a location; rather, the assessment of the appropriateness of the development requires consideration of (i) the vulnerability rating and (ii) the nature of the proposed activity. In making this assessment, it is also relevant to consider the results of the

boreholing and testing carried out on the site. Indeed, the Geological Survey of Ireland makes in it clear in its publication on Groundwater Protection Schemes that where actual site testing has been carried out, it is appropriate to have regard to this data rather than the general regional maps prepared under the Geological Survey of Ireland, which, be definition, cannot be site specific. The evidence of Teri Hayes was that no response levels have been developed for incineration activities and that comparison to those for landfill activities was not appropriate. The fact that, unlike landfill, the proposed activity does not involve the long-term (*i.e.*, indefinite) storage of waste and that any underground pipes will contain only water are relevant in this regard.

Some suggestion has been made that a planning permission granted to Irish Cement Ltd. at the Platin Cement Works may pose a risk in terms of damage to any underground structures. (An Bord Pleanála Reference PL17.125322/Meath County Council Register Reference 01/4136). In fact, as appears from the plans and drawings submitted by Indaver Ireland with the applications for planning permission and the waste licence, there are very limited underground pipes proposed and these will contain only water (so that any difficulty monitoring such site infrastructure could not present a significant issue). Moreover, the planning permission referred to by the objectors is located further away from the proposed incinerator than the current quarry activities (to the west of the existing quarry), and An Bord Pleanála's inspector found there to be no adverse impacts for groundwater from blasting. In passing, it is worth noting that Mr Tom Burke confirmed under cross examination that the existing Platin Cement Works and the neighbouring quarry are both located on the same regionally important karstified limestone aquifer as the proposed incinerator.

Ash classification and disposal

There has been a contention that Decision 2000/532/EC[2] requires that all ash be classified as hazardous. This is not so. The European Waste Catalogue (established by these Decisions) permits of two different scenarios, depending on whether or not the residues have certain properties. The ash will be tested and if non-hazardous will be classified as such before disposal to non-hazardous landfill. Certain non-hazardous residues may also be suitable for use as aggregate in construction.

The boiler ash (if classified as hazardous) and flue gas cleaning residues will be sent abroad for disposal to hazardous landfill or to an Irish hazardous waste landfill, should one become available.

Licence conditions

It is submitted that many of the concerns sought to be raised by the objectors are dealt with in the licence conditions set out in the proposed decision. The conditions under a waste licence are legally enforceable, and in the event that they are breached, the activity is liable to enforcement action. In the circumstances it is submitted that licence conditions represent a real protection.

Under the proposed decision, certain conditions deal directly with concerns raised. For example, Condition No. 2 lays down a series of safeguards in relation to the management of

2 As amended.

the facility, thus addressing any concerns as to company competency. Condition No. 3 provides, *inter alia*, for monitoring of groundwater (3.2).

Future of licence

As the objectors do not seriously contend that the proposed licence limits are not within the waste incineration directive, they have focussed their objections not on the proposed licence but on the directive limits, which it has variously been suggested are too low or are likely in the near future to be changed. As to the former, it is submitted that the Agency should not impose emission limit values which are more stringent than the directive limits. These are the limits applied throughout the Community and these limits are, as the preamble to the waste incineration directive states, expressly set having regard to the precautionary principle.

As to the latter, the Agency must review the licence if (among others)[3]

- It considers that substantial changes in best available techniques make it possible to reduce emissions from the activity significantly without imposing excessive costs.
- It considers that the operational safety of the activity requires the use of new techniques.
- New requirements whether in the form of standards or otherwise are prescribed by or under any enactment or community act.

In reviewing the licence the Agency must have regard to

- any change in the quality of the environment in the area, and
- the quality of technical knowledge in relation to environmental pollution and the effects of such pollution.

It is submitted that the foregoing powers and obligations of the Agency[4] underscore the fact that in considering the application before it the Agency must have regard to current Best Available Techniques[5] and current emission limit values and not some projected techniques or limits which may never become recognised or standard.

First party appeal/objection

Indaver Ireland has suggested a number of minor modifications to licence conditions under the proposed decision in its written response/objection to the proposed decision. A number of these relate to the practical consideration that the implementation of the proposed development has been delayed as a result of judicial review proceedings. In addition, certain clarification is sought in relation to water drainage arrangements. These were explained in the evidence of Ria Lyden.

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3 Section 46, 1996 Act.

4 It is of course also within the power of the Agency to review the waste licence pursuant to section 46 of the 1996 Act at a time not less than 3 years from the date on which the licence was granted. The Circuit or High Court can make the relevant orders under section 57 or 58.

5 Defined in section 5(2), 1996 Act (as inserted by section 20 (3) of the Protection of the Environment Act 2003).

Amendments are also sought to clarify the emission limit values and (to bring the terminology of same into line with the waste incineration directive); to revise the natural gas main wayleave to reflect the requirements of Bord Gáis Éireann; and, subject to Agency agreement, to provide flexibility both in terms of waste inputs and control and monitoring systems

Control of Major Accident Hazards

Certain objections have been raised to the classification of the proposed facility under the directive and national regulations on major accident hazards involving dangerous substances (also known as the Seveso II directive/regulations). Byrne Ó Cleirigh, Engineers and Consultants, have provided their technical opinion that the directive and regulations do not apply to the proposed facility. This was first provided in October 2001 (see Attachment No. B9 to the waste licence application) and was updated in July 2002 (see Attachment No. 15 to the response to third party submissions 1 – 23, provided to the Agency in August 2002). It is clear that the existing gas main under the site (the diameter of which was confirmed to be 200mm) was taken into account in this technical opinion. In addition, the relevant elements of the process residues have also been taken into account. It is submitted that there is no error in the classification of the site for the purposes of the directive and regulations. In any event, it is submitted that no issue for the Agency arises, as the matter is one within the competence of the relevant planning authority and the National Authority for Occupational Safety and Health (otherwise the Health & Safety Authority).

Dated 15th March, 2005.

Oral Hearing into the Carranstown Waste Management Facility

Dr Fergal Callaghan
AWN Consulting

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References

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