

EPA ORAL HEARING ON WASTE LICENCE FOR A WASTE
MANAGEMENT FACILITY NON-HAZARDOUS WASTE INCINERATOR AT
CARRANSTOWN, CO. MEATH

STATEMENT ON BEHALF OF NON INCINERATION ALLIANCE

FEARGAL DUFF

Introduction

My name is Feargal Duff. I am an environmental consultant. In 1999 I retired from the United Nations Environment Programme (UNEP) after working for more than 17 years on the management of global biodiversity projects. I was a member of the UNEP biodiversity team which advised and assisted governments during the negotiations leading up to the adoption of the Convention on Biological Diversity (CBD).

I have represented UNEP at many international biodiversity meetings and conferences and have contributed to biodiversity policy - making at national and international levels. I was a member of the international peer - review which reviewed the *National Biodiversity Planning Guidelines Based on Early Experiences Around the World*¹. As a member of the UNEP biodiversity unit I was chosen by the government of Norway to assist them and advise them during the Trondheim Conference on Biodiversity.

Preamble

The main responsibilities of the EPA include *inter alia*:

Promoting environmentally sound practices:

- Improving overall compliance with environmental protection legislation in Ireland;
- Raising awareness about the importance of environmental protection legislation in Ireland;
- Assisting local authorities to improve their environmental protection performance on a case-by-case basis, through the establishment of an enforcement network to promote information exchange and best practice, and by the provision of appropriate guidance.

THE EPA'S MISSION IS: TO PROTECT AND IMPROVE THE NATURAL ENVIRONMENT FOR PRESENT AND FUTURE GENERATIONS, TAKING INTO ACCOUNT THE ENVIRONMENTAL, SOCIAL AND ECONOMIC PRINCIPLES OF SUSTAINABLE DEVELOPMENT

¹ World Resources Institute in cooperation with United Nations Environment Programme and The World Conservation Union (IUCN)

It is therefore surprising that the proposed development is inconsistent with the EPA Guidelines on the Information to be contained in Environmental Impact Statements, the Convention on Biological Diversity (CBD) (principally with respect to the following articles: Articles 8(c, d, e, f, h, i, j, k, l) art 10, (a, b, c, d, e,) Article 14 1(a) and (b) plus the last paragraph of the preamble to the CBD

Article 8 of the CBD sets out the major POLICIES for effective conservation of biodiversity, giving states a set of goals against which to match their own laws and policies. Article 10 does the same for unsustainable use of biological resources and article 14 for environmental impact assessment

National Guidelines

EPA Guidelines on the Information to be contained in Environmental Impact Statements

The guidelines are designed to ensure that the EIA is primarily and effectively directed towards the care for, and improvement of the environment during and after the development.

In paragraph 1.6 of the guidelines: *The existing environment and the impacts of the development are explained by reference to its possible impact on a series of environmental topics:*

- *Human Beings*
- *Fauna and Flora*
- *Soil*
- *Water*
- *Air*
- *Climatic Factors*
- *The Landscape*
- *Material Assets, including the Architectural and Archaeological Heritage, and the Culture Heritage*
- *The Inter-Relationship between the Above Factors*

Impacts should address direct, indirect, secondary, cumulative, short, medium, and long-term, permanent, temporary, positive, and negative effects as well as impact interactions.

It is clear that the Flora and Fauna Survey (Attachment 10) of the EIS is a limited survey and does not address direct, indirect, secondary, cumulative, short, medium, and long-term, permanent, temporary, positive, and negative effects on the local environment as well as impact interactions during the operation of this proposed incinerator.

In response to this survey I ask the EPA to refer to paragraph 2.48 (Terrestrial Ecosystems: Agriculture) of the National Biodiversity Plan which stipulates *inter alia* that “*In order to conserve biodiversity, as well as for other social and economic reasons, it is necessary to maintain and support extensive farming systems.*”

The ecosystem approach as required by **Decision V/6** The Conference of the Parties to the CBD, (See annex 2) does not appear to have been following in undertaking the survey. Nor does it appear that any consideration was given to the protection of the marine environment from land-based activities from degradation by persistent organic pollutants {Chapter 17 (Protection of the oceans) of Agenda 21, which identifies reduction, and elimination of emissions of persistent organic pollutants as priority action, nor the POPS or CBD conventions.

An ecosystems management approach is one way of ensuring healthy ecosystems. It must be flexible, as it is only partly about ecosystem science and, must take into account socio-economic factors, and allow for the participation of stakeholders.

“Ecosystem- based management attempts to regulate the use of ecosystems so that we can benefit from them while at the same time modifying the impacts on them so that the basic ecosystem functions are preserved. In other words use them but don’t lose them.” (IUCN WORLD CONSERVATION UNION Lessons from around the World page ix)²

Furthermore, it is worth noting in this regard the advice contained in page 12 paragraph 1 of WHO pamphlet no 6:

In the process of locating and planning an incineration plant an overall environmental and health impact assessment should be carried out to establish any potential threats to either the local or the global environment.

This has not been done and as the EPA has stressed that EIA is a dynamic process of environmental protection the EIA/ EIS must be redone.

An EIA is a full- scale assessment in which the (true) cost of a project will be estimated by taking externalities into account. An example of an externality would be the effects of dioxins on marine biodiversity due to incinerator emissions at either nearby or distant locations.

The costs here include the cost of biodiversity loss. The costs of biodiversity loss and consequent ecological degradation are not distributed equally. Biodiversity loss raises issues of both intra-generational equity and inter- generational equity. The poorest individuals and societies often face the largest relative losses from biodiversity loss and ecosystem degradation.

An EIA is a procedure typically used to identify the effects on the environment of a proposed project and to plan appropriate measures to plan or eliminate its adverse effects. The “environment” here should be considered in the widest sense, including effects on human health, property, and local livelihoods, as well as on society at large. In relation to biological diversity, three purposes of an EIA would be to identify in advance:

² IUCN Switzerland and Cambridge UK 2000

- ❖ What aspects of the project are likely to have adverse effects on biological diversity at the genetic, species and ecosystems levels
- ❖ What steps could be taken to avoid or minimize adverse effects
- ❖ Whether the proposed project complies with existing environmental legislation.

Site selection for a project is particularly important for biodiversity conservation; unlike other environmental impacts which can to some extent be minimized such as air or water pollution, once a site is chosen it will be difficult, if not IMPOSSIBLE, to reduce substantially the projects direct effects on biodiversity. Avoiding a particular site is the only sure way of minimizing adverse effects on biodiversity.

An EIA's objectives are twofold:

- ❖ To provide decision makers with information on a proposed project's environmental effects, to permit an informed decision on whether the project should go ahead
- ❖ To produce environmentally sound projects whenever possible

The EIA is an environmental equivalent of an economic analysis or an engineering feasibility study and should be started early in the design stage of the project. In this way it can influence all the stages of the project i.e. 1) needs identification 2) pre feasibility study 3) feasibility study 4) appraisal and 5) approval. EIA reports should incorporate recommendations, institutional and technical capacity, as well as public participation. A feed back mechanism is also needed to ensure deficiencies are corrected.

And finally, an audit should be undertaken after the project has been completed to ensure the full application of provisions agreed and to learn lesson for the future. Public participation in the EIA process can ensure many aspects of this.

TO COMPLETE THE EIA LATE IN THE DESIGN STAGE OF THE PROJECT - AFTER THE MAIN OUTLINE OF THE PROJECT IS DESIGNED ADDS UNNECESSARY COSTS TO THE PROJECT, AS A DECISION TO REDESIGN OR NOT TO PROCEED MAY HAVE TO BE TAKEN. Such an approach would be uneconomic, not in accordance with the concept of sustainable development AND WOULD BE A WASTE OF TAXPAYERS MONEY.

WHERE IS THIS EIA? HAS IT BEEN PREPARED AND BY WHOM? DOES THE EPA INTEND TO CARRY OUT THE EIA? WHERE ARE THE TERMS OF REFERENCE FOR IT? THESE QUESTIONS MUST BE ADRESSED IN A TRANSPARENT AND HONEST MANNER. IT WOULD APPEAR THAT WHAT WE HAVE IS A LIMITED ENVIRONMENTAL IMPACT STATEMENT.

Furthermore, it would appear that the preparation of this statement commenced after the site identification took place. This is not consistent with the EPA guidelines. Moreover, as the proposed incinerator will produce dioxins, which are extremely hazardous, it would be prudent to adhere to the WHO guidelines on **SITE SELECTION FOR NEW HAZARDOUS WASTE MANAGEMENT FACILITIES** in particular exclusionary factors in site selection as listed in Table 2 on page 34 of the guidelines. Reference is made in particular to paragraphs 4, 6, 10, 11, 12, 13, and 14. With reference to paragraph 14 of the WHO guidelines on **SITE SELECTION** I would like to emphasise that the peoples of Co. Meath and the surrounding area have been the custodians of their environment for centuries. It is largely due to them and their ancestors that the habitats, which they occupy, are still relatively unspoilt. They enjoy and have the right to enjoy a quiet unpolluted rural landscape. They have the **RIGHT AND OBLIGATION** to pass this on to their children what they inherited and worked for i.e. a habitat, which has not been degraded by unsustainable development. They do not generate the thousands of tons p.a. of waste, which will be hauled through their peaceful rural setting and incinerated near them.

There is little doubt that the proposed incinerator will have detrimental effects on the ecology and rural landscape character of the area. Furthermore it will be difficult to minimise impact to cultural heritage, character and setting of the villages. **IT WOULD THEREFORE BE UNETHICAL AND INEQUITABLE TO ALLOW THIS DEVELOPMENT PROCEED AND IT WOULD RESULT IN AN IMBALANCE OF UNWANTED FACILITIES.**

International Agreements

As a member of the global community Ireland participates in making and influencing policy at an international level. When policy leads to commitment and calls for action we, like other members of the global community, are bound nationally and internationally to honour our commitments and we expect others to do the same.

At the 1992 Earth Summit in Rio de Janeiro, world leaders agreed on a comprehensive policy and strategy for "sustainable development" -- meeting our needs while ensuring that we leave a healthy and viable world for future generations.

One of the key agreements adopted at Rio was the Convention on Biological Diversity. This pact among the vast majority of the world's governments sets out commitments for maintaining the world's ecological underpinnings as we go about the business of economic development.

The Convention establishes three main goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources.

Ireland was the 139th nation to sign the CBD on the 13 June 1992. Ireland subsequently ratified the CBD on the 22 March 1996.

Ireland reaffirmed its commitment to the principles agreed at RIO when it signed the Stockholm Convention On Persistent Organic Pollutants on the 23 May 2001. The policy underpinning the Stockholm Convention On Persistent Organic Pollutants (POPS CONVENTION) is to *inter alia* end the release and use of 12 of the most dangerous Persistent Organic Pollutants (POPS) and to protect human health and the environment from the harmful impacts of persistent organic pollutants. These POPS include dioxins and furans.

The major sources of these dioxins and furans in industrialised countries are combustion processes of any type. Examples are incineration of municipal, hazardous, and clinical waste; and smaller sources, such as automobiles (especially when run on leaded gasoline), home heating, open garbage burning and landfill fires.³ Dioxins and furans are the most potent cancer-causing chemicals known to man; they gained world wide attention when they were found to have contaminated chicken meat in several European countries (UNEP 2002 [online].)⁴

IT WOULD BE IRRESPONSIBLE TO ALLOW A DEVELOPMENT, WHICH WILL SOON HAVE TO BE PHASED OUT. IT IS WORTH NOTING THAT THE UNITED NATIONS SYSTEM WIDE EARTH WATCH REPORTED IN APRIL 2003 THAT :

RECENT WORK HAS ALSO FOUND THAT WASTE INCINERATION CONTRIBUTES A SUBSTANTIAL AMOUNT OF THE LEAD FALLOUT OVER URBAN AREAS (CHILRUD ET AL, 1999). MOST INCINERATORS HAVE BEEN SHUT IN EUROPE AND NORTH AMERICA, BUT THEY ARE INCREASINGLY USED IN DEVELOPING COUNTRIES, INCLUDING CHINA AND PAKISTAN, WHICH MAY HELP ACCOUNT FOR THE INCREASES... IN LEAD POISONING IN CHILDREN.⁵

The Irish government has committed itself to reduce the release of dioxins, furans, hexachlorobenzene and PCBs as by products of industrial combustion, with the goal of their continuing minimization and, where feasible, ultimate elimination. The incinerator as proposed for Carranstown is not consistent with this commitment.

The first meeting of the Conference of the Parties (COP) to the POPS convention will be held in Punta del Este, Uruguay, 2-6 May 2005. In reporting to the COP, how will the Irish delegation reconcile the approval of this proposed facility with the objectives of the POPS convention?

What will the government report in the National Implementation Plan required under article 7 of the convention. It is worth noting paragraphs 2 and 3 of this article:

2. The Parties shall, where appropriate, cooperate directly or through global, regional and subregional organizations and consult their national stakeholders, including women's groups and groups involved in the health of children, in order to facilitate the development, implementation and updating of their implementation plans.

³ UNEP Chemicals Information on Dioxins July 1999

⁴ UNEP Chemicals *Ridding the World of Pops: A Guide to the Stockholm Convention on Persistent Organic Pollutants.*

⁵ <http://earthwatch.unep.ch/toxicchem/heavymetals.php>

3. The Parties shall endeavour to utilize and where necessary, establish the means to integrate national implementation plans for persistent organic pollutants in their sustainable development strategies where appropriate.

I have heard references to the World Health Organisation (WHO) by John Ahern of Indaver, which might be construed to mean that WHO approve of this proposed facility at Carranstown. I must point out that WHO, as a member of Inter-Organisation programme for the sound Management of Chemicals (IOMC), participated in the making of the Stockholm Convention. As the principle aim of this convention is to rid the world of P.O.Ps, I would be astonished if WHO approved of this proposed facility.

I would be willing to participate in a mission to UNEP and WHO with Mr John Ahern to seek expert opinion on this proposed facility.

The Minister of the Environment is quoted in the Sunday Tribune of 7 November 2004 as saying:

“that it was not honest of anybody to suggest that Ireland could have a coherent waste management policy that did not include incineration”.

I ask the Minister, is it honest to go ahead with incineration plans, which are inconsistent with national waste management policies, and our obligations under international agreements?

In the same paper, the Minister is quoted as saying:

“The big issue is how we conduct the debate on incineration. If we can have a debate in which all the facts are put before the people and considered in a calm fashion, I believe it will be widely accepted that there is no way of dealing with the issue without using incineration”. The paper went on to say:

The minister said the public health was a prime concern of the government.

I welcome the minister's suggestion on a public debate and have personally offered to help him organize this debate. Furthermore, I believe we must use the organizations we subscribe to and seek expert advice from the UNEP, WHO, the Inter-Organization Programme for the Sound Management of Chemicals (IOMC), the Inter-governmental Forum on Chemical Safety (IFCS) and other relevant organizations and stake-holders on this issue.

Sadly, all too often it is left to private individuals to ensure that governments and their agencies fulfil their environmental obligations and live up to their commitments made at Rio and elsewhere

THE TIME HAS COME FOR THE EPA TO LIVE UP TO ITS MISION: I.E TO PROTECT OUR ENVIRONMENT FOR US AND FOR FUTURE GENERATIONS, RATHER THAN TAKING THE APPROACH OF ENDEAVOURING TO LIMIT DAMAGE TO IT.

IT IS NOT GOOD ENOUGH TO ASSUME THAT ONCE CERTAIN STANDARDS AND OR EMISSIONS LEVELS ARE MET THERE WILL NOT BE DAMAGE TO HUMAN HEALTH OR THE ENVIRONEMENT. STANDARDS MAY LIMIT HARM BUT DO NOT ELMINATE IT. THE PRINCIPLE AIM OF THE POPS CONVENTION IS TO RIDD THE WORLD FROM POPS.

In this connection I would like to draw your attention to the CHARTER OF FUNDAMENTAL RIGHTS OF THE EUROPEAN UNION. ARTICLE 37:

Environmental Protection

A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.

AND THE EUROPEAN CONVENTION ON HUMAN RIGHTS, ARTICLE 8:

1. *Everyone has the right to respect for his private and family life, his home and his correspondence.*
2. *There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.*

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ANNEX 1

Article 8 of the CBD sets out the major POLICIES for effective conservation of biodiversity, giving states a set of goals against which to match their own laws and policies. Article 10 does the same for sustainable use of biological resources and article 14 for environmental impact assessment.

ART 8

(c) Regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas with a view to ensuring their conservation and sustainable use.

The paragraph obliges parties to ensure that the use or management of a biological resource is carried out sustainably and does not harm the resource concerned. These provisions are independent of their location, and apply to all areas within a Party's jurisdiction not just protected areas.

The scope of the paragraph is very wide as "Regulate or manage" implies control of all activities that could effect the resources concerned. Use is obviously included, but so also are habitat destruction, pollution and other impacts not specific to that resource which WOULD BE THE CASE IN CARRANSTOWN

ART 8

(d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings.

Under this paragraph, Parties are asked to encourage the protection of ecosystems and species. These should be protected in nature "natural surroundings" By implication; the paragraph includes genetic resources, since in nature they would occur as "viable populations". Furthermore the paragraph refers to all areas i.e. inside and outside protected areas, on both public and private land. Rather than doing this, the proposal looks for ways to mitigate damage, for example, pollution to the Nanny.

ART 8

(e) Promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering the protection of these areas;

This paragraph commits parties to promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas. It also commits Parties to ensure that whatever development occurs around protected areas and by implication the whole management of zones around protected areas- it does not undermine conservation within the protected area. To achieve this, therefore, the development has to be environmentally sound and sustainable. Constructing an incinerator of such proportions can hardly be construed as environmentally sound development.

ART 8

- (f) *rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies.*

Most areas important for biodiversity are not pristine in the strict sense but have been affected by humans often in a way that is unsustainable. To bring areas back to productivity and to secure the survival of the biodiversity that remains, damaging external influences like pollution (incinerator) or excessive and inappropriate use first have to be stopped. Then the process of rehabilitation and restoration can begin: Natural succession has to be allowed to take place but in some cases active intervention may also be needed such as planting appropriate trees, removing introduced species, etc.

So in this case of Carranstown Irish authorities are obliged to restore and rehabilitate and not to further degrade the area and adjacent proposed designate areas. The commitment to promote recovery is an important one and it will of course be aided by the measures to rehabilitate and restore degraded ecosystems, since most species extinctions are due to habitat destruction.

ART 8

- (j) *Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practises of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices;*

Traditional and local communities have much to contribute to the conservation of biological diversity. Local knowledge and traditions often enable communities to husband their biological resources in a manner that no institution or government body can match.

Local communities should be able to continue their lifestyles without hindrance and it should be noted that most of these communities cannot continue such practices in isolation from the land and from the biological resources they need.

Local authorities should be on tap not on top!

ART 8

- (l) *Where a significant adverse effect on biological diversity has been determined pursuant to article 7, regulate or manage the relevant processes and categories of activities;*

The combined effect of articles 7(c) and 8 (l) is very wide. Many factors lead to significant adverse effects on biological diversity including pollution from incinerators, the building of transport links, plantation forestry. The obligation to determine the processes and activities could be far reaching.

Article 10 (CBD)

ART 10

Each contracting party shall, as far as possible and as appropriate:

(a) *Integrate consideration of the conservation of biological resources into national decision-making;*

This repeats article 7(b), where the conservation and sustainable use of biological diversity (biological resources) has to be integrated into relevant sectoral or cross-sectoral plans programmes or policies. Integrating it into national decision-making as well strengthens that provision making it clear that such matters should be considered at a variety of points in the decision – making and planning cycle. This is important, since at times government policies, such as land clearance for incinerators, or roads may not be compatible with the principles of sustainable use. In such cases it may be assumed that the CBD requires governments to reconsider such policies.

(b) *Adopt measures relating to the use of biological resources to avoid or minimize adverse impacts on biological diversity*

Because, of the interlinked nature of biological resources and biodiversity, this paragraph taken together with Art 8(c) in effect means States have to regulate and manage the use of all their biological resources so that (a) it is sustainable and (b) does not harm other elements of biodiversity.

(c) *Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with sustainable use requirements.*

Virtually all communities that embody traditional lifestyles depend on biological resources for their survival. (To be read in conjunction with article 8 (j)).

ART 10

(d) *Support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced; and*

This paragraph recognizes the vital point that it is usually local communities, which actually manage wild populations and have the capacity to restore ecosystems and species to former levels. The task of government is to provide the legal, administrative and fiscal framework where such action can take place and then provide whatever encouragement – technical, financial or whatever the communities want and need to enable them to restore the species and ecosystems concerned.

This paragraph also reflects the belief that biodiversity conservation and sustainable resources are not only about looking after famous wildlife sites (for example e.g. Glenveagh National Park or The Maasai Mara game reserve) or remote and relatively untouched areas. It is also about restoring flora and fauna to a large portion of the World where human impact has removed it. Such a high proportion of the land surface of the earth has been wasted that pressure on particularly wild places could be eased if the damaged areas are brought back to productive health, benefiting nature, biodiversity and above all the communities who live on the edge of those degraded areas

(e) Encourage cooperation between its governmental authorities and its private sector in developing methods for sustainable uses of biological resources.

Many in the industrial and business sectors now are taking initiatives/ measures individually and jointly to produce goods and services in environmental ways. There is a common recognition that the sustainable use of biological resources is desirable for the country – socially, economically and environmentally. Governments can play their part to influence this.

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ANNEX 2

Decision V/6 The Conference of the Parties to the CBD SPELLS OUT CLEARLY THE ECOSYSTEM APPROACH EXPECTED FROM THE PARTIES INCLUDING IRELAND.

Ecosystem approach

Calls upon Parties, other Governments, and international organizations to apply, as appropriate, the ecosystem approach, giving consideration to the principles and guidance

contained in the annex to the present decision, and to develop practical expressions of the approach for national policies and legislation and for appropriate implementation activities, with adaptation to local, national, and, as appropriate, regional conditions, in particular in the context of activities developed within the thematic areas of the Convention;

A. Description of the ecosystem approach

1. The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Thus, the application of the ecosystem approach will help to reach a balance of the three objectives of the Convention: conservation; sustainable use; and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

2. An ecosystem approach is based on the application of appropriate scientific methodologies focused on levels of biological organization, which encompass the essential structure, processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of many ecosystems

All proposed projects must ensure that the goods and services provided by the ecosystem are available on a sustainable basis. Until this can be guaranteed the precautionary principle should be applied.

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FINAL SUBMISSION**INTRODUCTION:**

First, neither Indaver nor the EPA have attempted to offer any real alternative to incineration, as required by various EU/UN documents presented in evidence.

This community should have been presented with at least 2 options – incinerative and non-incinerative -, with their costs and environmental impacts (including health impact) properly assessed. Then a consensus may have been achievable.

Second, Indaver have, albeit inadvertently, identified a number of fundamental flaws and limitations in their own case.

They have noted that proper procedure for wastes treatment is segregation and waste-specific treatment, optimised for the individual waste stream. This they are not doing – they are recombining wastes and using a non-optimal treatment.

They have also noted that materials recovery is preferable to any destructive process. I have identified a veritable plethora of recycle opportunities, including:

- biosludges, for the phosphate content
- MBM biosludge and fractions of MSW, for both materials and energy recovery in cement kilns
- MSW physico-chemical treatment for recovery of further plastics, metals, glass, etc.

There would be little left worth incinerating.

Third, alternative thermal treatments have not been properly considered.

But, over and above this, Indaver have not complied with any of the requirements for a proper examination – whether options for treatment, site selection or environmental impact.

Perhaps the worst abuse has been the arrogant and negligent omission of any assessment of human health impact. They were not even able to quote the basic assessment of the UK wastes industry, but have relied upon outdated, unproven assessments that one may suspect owe much to political bargaining or industrial pressure groups.

BELGIAN INCIDENT

It is worth reviewing the Belgian incident again.

It would now appear that a far more serious blunder was made.

Indaver, its consultants and an incinerator vendor appear to have specified, designed, constructed, commissioned and operated an incinerator, without the facility to monitor the most obvious and critical parameter – the flame temperature. For it is this temperature which determines whether the feed PCBs, dioxins and other POPs are efficiently and effectively degraded.

This parameter is easily monitored – but is, by no means, the only parameter requiring monitoring. Failure to monitor this parameter does not mean, of course, that the incinerator was not functioning correctly – only that it could not be seen to be functioning correctly, in real time. Dioxin monitoring provided the evidence of correct or incorrect operation – but only intermittently (at 4 – 6 weeks intervals apparently). Thus substantial variations could occur within that period, which would not be detected.

This weakness must have passed numerous design checks and safety or risk assessments (such as HAZOPS) – an occurrence which should raise serious questions alone.

The problem was then exacerbated by a further extraordinary failure – the specification, design, installation, and commissioning of an incorrect replacement burner. Again, a number of check stages, including further HAZOPs or risk assessments, failed to detect the problem.

(The assessment of possible health impact then consisted only of a few soil samples – this is neither an accepted nor scientific measure of health).

Such failures should be surprising – but they are not.

It was not a simple error – or mistake – but rather the result of a sequence of failures, generally attributable to poor management and inadequate attention to proper procedures. (I would consider it gross negligence or incompetence.)

If the authorities have accepted this as a simple error, they also can be regarded as complicit in the failure.

The real concern, however, is that the underlying structures and attitudes have clearly not been changed – evidenced by Indaver's attempts to dismiss the problem. Such failures must be regarded as inevitable in the Meath facility – especially if an organization with even less experience and competence is to be given any significant role.

TECHNICAL EVIDENCE

The only comment that needs to be made regarding Indaver's evidence is that it was largely presented by personnel with no or minimal relevant experience and, in some cases, with no corroborative evidence.

- the various ashes could be highly contaminated for a short period
- there may be radioactive materials released in the stack gas for a period
- the incinerator system may become heavily contaminated, presenting a hazard to operators and maintenance crews

I would recommend:

Either – monitoring of ash and stack emissions for radioactivity and personal radiation badges for all personnel.

Or - a full quantitative risk assessment be carried out (by a reputable international organization – with the report available for public review).

CONTAINMENT AND AQUIFER CONTAMINATION

The bunkers are simple concrete structures.

Liquids will accumulate in the bunkers through a number of mechanisms, including:

- fire water
- MSW associated water
- Biological degradation of organic wastes
- condensation of atmospheric moisture
- etc

These liquids may be corrosive due to organic or inorganic acids and bases.

In addition, the concrete may crack through a number of mechanical or thermal mechanisms, including:

- thermal cycling
- incorrect curing of the concrete
- differential drying of the concrete
- impact stresses
- subsidence and microquakes
- etc

Inspection of the bunkers is a complex and time consuming activity, involving total emptying, cleaning and hazardous entry permits. Leak testing is also a laborious and uncertain activity.

The use of boreholes to detect contamination necessarily implies an “open stable door” approach.

It is far better to install a double bottom, for collection and analysis of any leakage.

This is recognized worldwide as a standard practice for regions where water resources are of value – eg, South Africa, USA – and has been used in Ireland.

FINAL WARNING

Evidence regarding dioxins and modelling has to be considered in the context of limited measurements, contentious emission scenarios and models that cannot predict with any degree of accuracy – unless the field data is first battered into shape.

I have noted health impacts at levels below AQS, in terms of pulmonary impairment etc, by noting that there is no safe level.

I have also challenged all, so-called experts, both at oral hearings and in submissions – but, in truth, I have not yet heard or seen evidence of any such experts on behalf of Indaver.

In the last resort, if the Agency were to be disposed towards incineration, this project can be considered if and only if:

- the stack is raised to some 110 –150 metres
- there is double containment of bunkers
- there is reclassification as upper tier Seveso
- there is a proper and competent safety study
- SCR is employed in place of SNCR
- vitrification is employed for ash
- there is real time monitoring of dioxin precursors
- the EIS (including human health) is properly completed
- etc.

In other words, there is a complete and proper re-design.

Of course, it should not even be considered at all – the EPA is, in fact, being courteously requested to revoke the licence.

RADIOACTIVE CONTAMINATION:

I am currently carrying out research for a paper on radioactive contamination of wastes and assessment of the need for mitigation.

Whilst this work is incomplete, a number of points can be made.

Indaver are proposing radioactivity monitoring for incoming waste:

However the following should be considered:

- failure of the instrument, or human error, may allow contaminated waste to pass.
- low level wastes may be missed but will be concentrated by incineration and may make the ash more hazardous
- high level sources should not enter but may do so by several routes. These will generally be in their shielded containers and thus probably missed by the monitor. The shielding will be removed in the incinerator (and possibly before, if there is mechanical shredding)

If such materials pass into the incinerator there are three concerns:

The EPA and the HSA are well aware (and have noted this many times off the record) that every facility breaks some of the rules all of the time and all of the rules some of the time. In other words, if the rules were strictly enforced, no facility could continue to operate.

This, of course, is partly because some of the rules are stupid or unnecessary – however, they are the rules.

Indaver must be warned that it will be required to adhere to all of the rules all of the time and the agencies should expect to have an inspector on-site virtually 24 hours/day, 7 days/week. (There will be several thousand environmental guardians and monitors surrounding the facility at all times.)

Furthermore, the agencies, when investigating any incident, either cooperate with, or are altogether too easily persuaded by, the facility to accept a plausible (but not necessarily correct) explanation, provided that there is no obvious remnant hazard. This permits the facility to return to operation as quickly as possible.

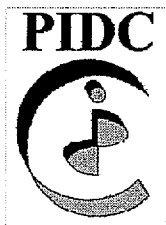
However, a proper investigation, requiring some proof of primary cause, or elimination of all reasonable alternatives, could take 12 – 24 months.

Indaver should be aware that incidents will require a proper and full investigation.

It is no longer acceptable to gloss over incidents and put them down to some trivial error – what Indaver describes as “a mistake”.

Indaver should therefore consider the commercial risk inherent in a potentially lengthy shutdown of the incinerator. In fact, I doubt that it will operate for more than a few weeks at a time.

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Peter H North March 2005

ENVIRONMENTAL PROTECTION AGENCY

ORAL HEARING

CORK

MARCH 1, 2005

CHAIRMAN DR. JONATHAN DERHAM

ASSISTED BY MR. MICHAEL OWENS

REFERENCE 186-1

CLOSING SUBMISSION

ON BEHALF OF

MARY O'LEARY & OTHERS KNOWN AS 'CHASE'

BY

JOE NOONAN

Solicitor

Noonan Linehan Carroll Coffey

54 North Main Street

This has been an extraordinary hearing. The Applicant has in effect boycotted the proceedings. The Applicant is a Belgium company. Nobody from the Belgian company either director or employee has attended or given evidence. We have had two employees of an Irish subsidiary, a company which is not engaged in incineration, neither of whom has any experience of running an incineration plant. We have had three outside consultants operating to very limited briefs. It appears the Applicant sees this process as something to avoid.

As you know, the EPA is entitled to refuse a licence if the Applicant is not a fit and proper person. Here I refer to Section 40(7)(b). No-one from the Applicant company has come here to satisfy the Agency that they have the requisite technical knowledge or qualifications to carry out the activity. The Application said that the operations manager who would be responsible for getting the project up and for running it was Laura Burke.

She has since left the company. Despite our best efforts at this hearing, we are none the wiser as to who will be the responsible person for bringing the project into operation. We know that the Applicant has no previous experience of running the proposed type of incinerator it wants to build in Ringaskiddy. Mr. Ahern for some reason gave us interesting pen pictures of the staff of Indaver Ireland Ltd. That company is according to himself, a waste broker. It is not the Applicant. In any case, none of its staff as described by Mr. Ahern, possesses the technical qualifications or expertise to carry out incineration activities.

Furthermore, we know that the Applicant has seriously breached its operating conditions at its Antwerp incineration plant. Had that breach happened in Ireland, it would have rendered the Applicant liable to prosecution under the Waste Management Act, and on conviction, the Applicant would no longer have been considered a fit and proper person by virtue of Section 40(7)(a).

There is no basis therefore, I submit, on which the Agency can reasonably form the opinion required under Section 40(7)(b).

One of the necessary qualifications in this case is an ability to relate fully and frankly with the Agency, and with the public concerned. The Applicant's conduct throughout this oral hearing does not demonstrate such an ability.

There have been many instances of company testimony proving in my submission to be completely unreliable and in some cases positively misleading. This has emerged under questioning when time and again the company position on examination has changed or been shown to be untenable. Examples include the company's general manager insisting that the EIS contained a statement in the form set out in the EPA guidelines for the information to be contained in EIS's on the impact of a major accident on the site on people. The witness claimed that if given time he could find the material in the EIS. He was given time. He did not produce it. He was given more time overnight. He claimed not to have been given sufficient notice. He was reminded that he had made a similar assertion that the material was in the EIS at the Bord Pleanala oral hearing in October 2003. Eventually he declared that he was refusing to answer any more questions about the EIS. Chairman I invite you to look closely at this exchange between myself and Mr. Ahern and to also look at the transcript of the same issue before Mr. Philip Jones, Senior Planning Inspector. I invite you to conclude that Mr. Ahern was in fact aware that the relevant material was not in the EIS.

Another example of unsatisfactory evidence was Mr. Ahern's claim that the County Manager had told him that HRB Report cleared the way for the plant to receive planning permission, or words to that effect. Only after close questioning, did Mr. Ahern finally admit that he had no conversation whatsoever with the County Manager about the HRB Report.

The integrity of the licensing system relies on the Applicant to a large degree. The obligations to self-monitor and self-report are central to the successful operation of the system. You have heard Mr. Conor Jones describe how the management team on site would have to decide whether or not a given event had caused significant pollution requiring reporting to the EPA. The licence is a privilege which carries with it heavy responsibilities. Failure to demonstrate openness, frankness and candour in this part of the licensing process in my submission must be seen in a very grave light by the Agency. If an Applicant does not behave in a forthright and candid manner when in full public view, how will they behave in less public circumstances?

One notable feature about the Applicant's participation in this hearing is that it felt no need to give any explanation as to why the Agency should weaken its draft licence conditions as demanded by the Applicant's objections. It is unprecedented in my experience that a party

seeking to change licence conditions would remain completely silent on the matter at an oral hearing into the licence.

HEALTH

The purpose of licensing is to protect public health including the health of the workforce, and of the wider community. From the evidence tendered by Dr. Anthony Staines, a leading national figure in the field of public health, and co-author of the HRB Report, and by Dr. Gavin Ten Tusscher PhD of the University of Amsterdam and the renowned Emma's Childrens Hospital, member of the EU Technical Group on Bio-monitoring of Children, and a doctor of science as well as of medicine, three undeniable truths emerge:

1. The operation at this site will release harmful pollutants.
2. It would be wise to assess the extent of the harm those pollutants would cause to people's health before deciding to grant a licence.
3. This assessment has not been carried out.

The only proper conclusion to draw from these facts is that the EPA cannot grant a licence. There is a legal reason for this conclusion. The Agency is prohibited under Section 40(4)(b) of the Waste Management Act 1996 – 2003 from granting a waste licence unless it is satisfied that the activity concerned, carried on in accordance with such conditions as may be attached to the licence, will not cause environmental pollution. Having regard to the definition of environmental pollution in the Act, and to the only medical evidence before it, the Agency has no power to grant a licence.

It is impossible to understand Mr. Ahern's claim that the HRB Report is some kind of Health Impact Assessment of what he calls "the policy" relevant to this application. Equally mystifying is Mr. Ahern's claim that the HRB Report somehow recommends incineration. It is plain that the Report does no such thing.

Dr. Mary Kelly does not dispute any of the HRB Report findings. Her March 2003 letter to the Secretary-General of the Department of Health, explicitly endorses the HRB findings about the lack of capacity to monitor the health of the population near incinerators. She claims the EPA is not responsible for meeting that need. She claims it is the responsibility of

the Department of Health or the Health Boards. In March 2004, Minister for Health, Micheal Martin wrote expressing concerns about Indaver's application to the EPA. You will recall the contents of his letter. You will recall that his concerns were dismissed by your colleague Kieran O'Brien. We therefore have a very disturbing scenario indeed. The Head of the EPA acknowledges deficiencies in the system which is supposed to protect public health and attempts to shift responsibility for this from her desk to that of the Minister's desk. But when the Minister writes to her Agency exercising his public function of protecting public health he is in effect completely disregarded. She cannot have it both ways. Either the Minister is responsible for protecting the public's health with regard to incinerators, in which case, his views must be respected, or he is not, in which case it is the Agency's responsibility.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

The obligation to carry out an EIA stems from the EC Directives on environmental impact assessment.

You are very familiar with the difficulties posed by the outdated legislation governing this application as it relates to the critical question of Environmental Impact Assessment. Put briefly this application is being decided under the law that applied before the enactment of the Planning and Development Act 2000. That Act was intended to try to remedy the previous failure to implement properly the provisions of the Environmental Impact Assessment Directive (as amended). The EIA Directive as you know requires that before development consent is given to certain projects which are described as being likely to have significant effects on the environment, those projects must undergo environmental impact assessment by a competent authority or authorities in each member state. As part of the assessment the developer must submit sufficient data to enable an assessment to be made by the competent authority or authorities of the main effects the project is likely to have on human being, flora and fauna, natural heritage, cultural heritage, material assets and the interaction of effects between a number of those entities. The public concerned must be given an opportunity to express their opinion as part of the process. Development consent is defined to include any intervention in the natural environment which would include for example any construction work. The Directive does not distinguish in its definition of project between construction and operation. It speaks in terms of a single assessment and

the clear intention is that there should be an integrated independent assessment prior to any consent issuing.

The thoroughly disintegrated approach taken by Ireland to implementation of the Directive poses notorious difficulties for everyone involved. These difficulties bedevil the present application. This leads to a serious risk that my clients may be the final victims of the old regime, unless the Agency takes great care.

An Bord Pleanála has given planning permission. Bord Pleanála took the view that it could only consider impacts from construction of the plant. Under pressure part way through its oral hearing, the Board changed its position and grudgingly conceded that it would allow evidence to be tendered relating to impacts from major accidents at the plant in the context of the Seveso Directive. It proceeded to completely disregard that expert evidence. It specifically prohibited the tendering of medical evidence relating to so-called normal operation of the plant. Before the hearing began it failed to reply to a written invitation made by me to assist appellants by specifying what parts of the material received from the Applicant it believed to be ineligible for consideration by it. This confusion was never removed at any stage by the Board. To this day my clients do not know what parts of the EIS, for example were considered to be admissible in the eyes of the Board. While this obviously hampered my clients' ability to participate in the proceedings before Bord Pleanála, it has also hampered my clients in their attempts to participate in these proceedings before the EPA.

These difficulties are further intensified by the fact the Applicant sought planning permission for one hazardous waste incinerator only while its EIS purports to deal with two incinerators. In its planning application furthermore the Applicant referred to the very significant issue of energy generation from the incineration process and said that this would be the subject of a "separate application". No such application for planning permission has yet been made and the planning permission granted to date therefore is solely for the incineration facility which in waste management terms therefore is considered to be disposal only, i.e. not waste to energy or energy recovery (I am of course leaving aside the fact that the planning permission includes the waste transfer station and so-called recycling facility which are not relevant to this point). The application submitted to the planning authority was accompanied by an EIS which said that the Applicant intended also to install a second municipal solid waste

incinerator in the building. The building intended to house both incinerators has planning permission. The Applicant claims it believes it will have to apply for planning permission to install the second incineration plant in the building. In which case the task of performing an integrated Environmental Impact Assessment becomes even more ^{unobtainable}, if that is possible.

The Applicant then proceeded to seek a licence from the Agency for both incinerators submitting exactly the same EIS.

The Board and the Agency have not to our knowledge availed of the consultation option open to them under their respective statutes. They are not it seems, on speaking terms. That frosty silence is not unique to this application but it is particularly dangerous here. That failure to consult can only increase the risk of misunderstanding between the two bodies as to what task each is undertaking with regard to this plant. The concept of an integrated Environmental Impact Assessment is lost.

We urge you therefore to examine on your own initiative the material presented to An Bord Pleanála in its entirety. We believe this is essential so that you can form your own view and in turn advise your Board of the matters already considered and not considered by An Bord Pleanála. There is no simple dividing line between what falls to be considered by the Board and what falls to be considered by the Agency in the context of assessing environmental consequences, risks or implications of this project. The legislation is extremely unhelpful and in our submission does not enable an integrated assessment of the environmental impacts to be carried out. Without prejudice to that view we ask that you review the material on Bord Pleanála's file, including the Inspector's Report and his summary of the evidence. Because of the importance of the Applicant's character for the reasons described earlier, we also urge you to pay particular regard to the evidence given by all parties at the Bord Pleanála oral hearing. We understand this evidence is available from the Board in audio disk form but not in written transcript form. We hope that An Bord Pleanála will give you a transcript. Otherwise you will have to get their disks transcribed. Among the sections of evidence particularly important in this regard are the testimony of Mr. John Ahern and Ms Laura Burke on site selection, and the testimony of Mr. Ahern on the content of the EIS from the point of view of human health.

To further compound the difficulties, please note that the EPA has refused to tell me whether

it sees it as its function to carry out an EIA within the meaning of the Directive. This refusal has meant that we do not know what we are participating in. We literally do not know the legal basis for the process we are attempting to engage with because the Agency will not tell us what it is. By definition this damages the quality of our participation and our ability to express our opinion to best effect.

If the Agency believes it is not involved in an EIA, then it is beyond question that the Agency must take the view that the project is not being subjected to an environmental impact assessment as required by the Directive because An Bord Pleanála has stated it has only considered construction related impacts. Without an EIA, the project must not be permitted to proceed. The Agency as a statutory body with public responsibilities is obliged as a matter of EC law to ensure whatever is within its power to support the provisions of the EIA Directive. In this case, that means withholding a licence in the absence of an EIA.

(Note that this is without prejudice to my clients' view that planning permission constitutes 'development consent' for the purpose of the EIA Directive.)

In any event, it is not open to the Agency in this case to conduct an EIA *inter alia* because of the Agency's refusal to liaise with An Bord Pleanála, and because the EIS is invalid.

INVALIDITY OF EIS

While the Agency is considered to be expert in its field, the Agency must still respect the legal rules. These rules are contained in and derived from the EIA Directive. They are amplified helpfully in the EPA's own EIS guidelines published in accordance with the EPA Act. You are familiar with the very sensible methodical and practical approach required in the drafting of an EIS. The EIS must meet the requirements of the Directive. This means it must provide the data required by the Directive. If there are gaps, it is not the job of the Agency to help the Applicant fill those gaps. The Agency is supposed to protect the public: that means rejecting an application if the EIS is legally invalid. To do otherwise is to side with the Applicant and to break the law. Deprived of any data on odour impact from transport of target waste streams such as meat and bonemeal, sewage sludge and specified risk materia, the Agency simply has nothing to go on under this heading. There is nothing in the EIS relating to light pollution. Yet this is a visually sensitive location and one of the

few in the Harbour which remains dark at night. Again the Agency is deprived of the data relating to this impact. The EIS section on flora and fauna is quite straight about its consultants' brief: construction impacts only. There is nothing before the Agency to enable it to consider operational impacts on flora or fauna. Deprived also of any data on the nature and extent of harm to human health from accidental or authorised emissions and releases of toxic substances from the plant, the Agency is in a very clear position. It simply cannot discharge its statutory duty to satisfy itself on two essentials: that it has a legally valid EIS, and that there will be no environmental pollution from the activities. I could go on. It should not be up to my clients to point this out. This is the EPA's job. This is what the taxpayers pay for. Yet the EPA has issued a draft licence. How can this be? The EPA declines to answer but the question remains.

It is no surprise that Mr. Ahern eventually declared at this hearing that he was refusing to answer any more questions about the EIS. The position is truly embarrassing. Even Mr. Ahern can no longer defend it. Neither can the Agency. The EPA's EIS guidelines are generally very sensible. They help us to check the developer's EIS in a methodical way. We can see if we follow the guidelines whether the developer is attempting to blind us with science in one area while neglecting or ignoring entirely other significant areas. The developer in this case has laid heavy emphasis on air monitoring and air modelling. Even these areas are handled in a way which is very unsatisfactory but at least some effort has been made to present original data. To a certain extent the same can be said about soil sampling. But even these areas suffer from the fatal weakness which pervades the entire EIS, namely the absence of any consideration of the worst case scenarios. This weakness was exposed in spectacular fashion in relation to a further topic; the susceptibility of the site to flooding. Despite Mr. Ahern's claims at this hearing, flooding of the kind seen on October 27th is nowhere predicted in the EIS. As a result of course there is no discussion of the impacts of such flooding had it occurred while the plant was operational. I have referred you to the EPA study published by Dr. J. McSweeney on the impact of climate change in Ireland. It is clear that if Mr. McSweeney's report is to be heeded, this site is absolutely unsuitable for this activity. The forces of nature demonstrated that to us on October 27th emphatically endorsing the wisdom of Dr. McSweeney's conclusions. How can the EPA ignore its own expert consultant's findings?

SITE SUITABILITY

The Agency must examine whether this is a suitable site for these activities.

Because the Planning Authority has given planning permission for the location of this building at this site, does not mean that the Agency can absolve itself of responsibility for considering the suitability of the site. The suitability of the site has not been considered by An Bord Pleanála from the perspective of environmental impacts it believed to come within the remit of the EPA, as An Bord Pleanála took the view that it was precluded by statute from considering any matter relating to such impacts. So far as we can ascertain, in making its decision Bord Pleanála only had regard to what it considered purely planning matters such as some visual impact, traffic safety (excluding vehicle emissions and cargo odours), and zoning.

The principal purpose of examining and testing the suitability of the site is to ensure maximum protection for the population at risk from the operation. The process of examining site selection and testing site suitability is not merely a paper exercise satisfied by demonstrating that the particular site has been chosen from a list of potential sites. The very reason the WHO has issued site selection guidelines is to ensure that sites are selected which are as safe as possible. The WHO approach is further consistent with the approach required by the Seveso II Directive (which we say the EPA must respect). The EPA must proceed on the basis that the first guarantor of public safety is selection of an objectively suitable site.

A site which the Applicant deems for subjective reasons to be suitable may or may not meet this test. In our submission this particular site is clearly unsuitable.

We would urge the EPA to look closely at the subjective nature of the Applicant's justification for selecting this site, as set out in the EIS. It says it wanted a site close to Cork and industrially zoned. The Applicant justifies the Ringaskiddy site on the grounds that it is on hilly terrain and in an industrial zoned area. This is in sharp contrast to the claims made by the same Applicant in relation to its intended incineration plant at Carranstown, Co. Meath. In its EIS for that plant, which the Agency has, the Applicant claims that the Carranstown site is suitable because it is on level terrain in an agriculturally zoned area.

We submit that on a fair reading of the evidence, it must be concluded that a decision was taken by the Applicant at the outset to site this plant in Ringaskiddy and that everything that followed was a justification for that decision. The scientific approach prescribed by WHO was not adopted.

To site a plant like this across the road from a national third level college, demolishes the notion that any rational criteria intended to preserve public health and safety were applied.

Part of the reason it is so important for the Agency to examine the transcript and other material relating to the Bord Pleanala oral hearing, relates to the role played by the Health and Safety Authority to date (HSA). The Applicant claims (and has persuaded Bord Pleanala) that because the HSA did not "advise against planning permission", that the site is somehow suitable from a health and safety point of view. This is a false claim. The HSA witness admitted that he was unaware of the existence of the WHO site selection guidelines. He did not take the WHO guidelines into account. The HSA came to its conclusion regarding planning permission as found by the Inspector from An Bord Pleanala on the basis of flawed assumptions, inaccurate information and incomplete knowledge of relevant material including the WHO guidelines. Even ignoring those findings as An Bord Pleanala did, the fact remains that the view expressed by the HSA to the local authority in 2002 had further profound and self declared limitations which excluded the HSA's letter from the category of material which the Agency is entitled to rely upon. These limitations include:

1. The fact that the HSA "did not advise against" planning permission was declared by the HSA to be in the context of providing land use planning advice within the mean of the Seveso Directive. Having regard to the distinction in the legislation between the roles of An Bord Pleanala and the EPA, land use planning as such is not within the Agency's remit. It cannot therefore rely on the HSA letter but must form its own independent view based on an objective assessment of the matters within its remit.
2. The HSA letter expressly stated that it was based on the information in the possession of the HSA at the time. Significant new information (including modifications to the planning application) have occurred since that date rendering the HSA letter redundant.

UNFAIRNESS

As an additional barrier to participation, it follows from the detailed and complex nature of the proposed development that my clients have had to expend very great resources both personal and financial in preparing their case. Those resources have had to stretch across two separate processes before two separate statutory bodies. They have at times been stretched beyond breaking point. I will give two examples. Many people gave evidence to An Bord Pleanála which the Board it seems may have disregarded as being more appropriate to be heard by the Agency. Some of those people have not been able to take further time off work or family commitments to appear a second time at an oral hearing. Financially in the absence of any provision for legal aid or any assistance from the Board or the Agency, it has not been possible for my clients to retain full time legal representation at this hearing. Neither of these difficulties apply for obvious reasons to the Applicant. It follows that there has been an inequality of arms and a breach of my clients' rights under Article 6 of the European Convention on Human Rights, which rights your Agency is obliged to safeguard by virtue of the European Convention on Human Rights Act 2003. My clients rely on similar rights flowing from the principles of natural and constitutional justice.

This licensing procedure including the oral hearing is inherently unfair. The Agency has already prejudged the issue. It says it still has an open mind, but having prepared the Proposed Determination, it quite naturally has a vested interest in standing over it. To compound the matter, the Agency then refuses to participate in the oral hearing or to offer any reasons for its proposal to grant a licence, or any reasons for the proposed terms of the proposed licence.

I have mentioned how many people have been unable to take part actively in a second oral hearing for the same project. Many others have been deterred by their experience at the Bord Pleanála stage knowing that the same thing could happen with the Agency, that is that the deciding body appears to have the right to disregard its own expert advisers conclusions and recommendations for the flimsiest of reasons.

You have heard how people do not understand or accept that the Agency has stayed away from this hearing. The decision-makers i.e. the directors have rejected this opportunity for dialogue. They have refused to listen to my clients. My clients have a right to be heard.

This arises from our system of constitutional justice and from the European Convention on Human Rights. The Agency wants to give Indaver the right to pollute my clients' environment, the environment that sustains their life and the lives of their families. My clients were appalled that the Agency's Director-General who was in Cork on Friday to discuss sustainable development at CIT, ten minutes down the road, would not honour us with her presence. We think she would have gained a better understanding of the issues than will be possible no matter how clear your report may prove to be. In turn my clients would have perhaps been able to learn from Dr. Kelly. We would have liked to ask her why it is that she feels that the findings of the HRB Report need not be implemented before further incinerators are licensed; whether she really believes that her Agency must license incineration because it is in her words very hard to show "to show cause and effect" in terms of human health damage. And most importantly, why it is that she feels that a standard based approach on its own is adequate protection for human health against the evidence of Dr. Anthony Staines and against basic commonsense.

STANDARDS BASED APPROACH

We are grateful to Dr. Kelly for setting out the Agency's approach to its duties quite clearly in her March 2003 letter to the Secretary-General of the Department of Health. I would ask you to read that letter again closely when you are considering my clients' case. This letter is central to our case. This letter is very revealing. It explains that the Agency believes that once certain standards are applied and in the opinion of the Agency are capable of being met, then the Agency assumes that there will be no adverse human health impact. That belief is a cornerstone of the Agency's decision-making process. It is wrong. This is why:

1. The standard setting documents themselves explain clearly the nature and purpose of the standards they set. They leave no doubt in anyone's mind that the reason for standards is to limit harm, not to eliminate it. The language of the incineration directive could not be clearer in this respect. This is understandable. Standards are set in a spirit of compromise between experts drawn from many disciplines. The compromise is struck between taking action that would eliminate risk of harm and at the same time recognising the economic reality that existing operations may not survive if they are subjected to limits they cannot achieve. If existing operations go broke harm may be caused through loss of employment. In the case of Indaver as a

new operator that is not a worry of course. The compromise is struck between the economic benefit and the cost to public health. There is nothing radical about this concept. For some reason it seems to be a concept that we do not like to speak about in this country. By contrast the US EPA recognises explicitly that for every pound of a given pollutant emitted to atmosphere, there will be a certain quantifiable cost in terms of human death or illness, or mortality and morbidity as Dr. Ten Tusscher and Dr. Staines outlined. No-one with any credibility advances the case put forward by the Applicant here, that once we meet the standards, no harm will be done. Yet that is the case expressly made by Dr. Kelly in her letter. This is irrational.

2. Emission limit values are one kind of standard. These values are products of compromise as stated above. In addition compliance with these values is defined in an artificial way. An operator can be in full compliance even though the operator occasionally breaches emission limit values. In other words, limits are not limits and compliance is not compliance as ordinarily understood. In terms of protecting public health, limits have their limits.
3. You have the direct testimony of Dr. Ten Tusscher that he and his medical colleagues are already seeing adverse health effects in patients with less than the level of exposure deemed tolerable by the standards.
4. You have the direct evidence of Dr. Staines, a national expert in the field, that the standards approach must be only a beginning not an end. Dr. Staines is no extremist. He admires the EPA. He simply does not understand why human health impacts are not assessed. They can be and they should be. Only then may a rational basis exist for a decision be taken to grant a licence.
5. The EPA has immense power. It is presumed by the Courts to be an expert body. Dr. Kelly and her colleagues on the Board have no medical expertise. The Applicant has offered no medical evidence supporting its assertion that it will do us no harm of any kind to this hearing and none is contained in its application documentation or its EIS. The only medical evidence before the Agency is that of Dr. Ten Tusscher, Dr. Staines, Dr. Vyvyan Howard, and Dr. George Howard and the HRB Report. All of these witnesses (Dr Howard and Dr. Fitzgerald attended the Bord Pleanala oral hearing and

their witness statements are part of our clients' written submission to the Agency) endorse the findings of the HRB Report. They endorse the wisdom of applying the WHO site selection guidelines. They understand that what standards are about in dealing with industrial air pollution licences is an exercise in damage limitation. That is the case both in regard to permitted or licensed emissions and in regard to prevention and minimisation of damage to people in the case of accidents and other emissions which are unlicensed.

6. Because we are engaged in a damage limitation exercise, it is all the more important to hold on to the safeguards inherent in the WHO site selection guidelines. The guidelines are intended to keep these inherently dangerous facilities from being located in places which are inherently unsuitable for them. Suitability is assessed on a number of criteria. These begin with exclusionary criteria: physical dangers to the integrity of the plant such as risk of flooding, risk of earth movement. Further exclusionary criteria are those guarding against factors that would aggravate the harm caused by the plant to the local population in the event of an accident such as proximity to homes, schools and other areas of "static" populations like Spike Island prison which is currently being refurbished and expanded. A third set of exclusionary criteria in the WHO approach is intended to keep these plants away from areas which for site specific reasons may not allow the harmful emissions to disperse properly. Thermal inversions and proximity to fisheries are two of these. Only if a site survives the exclusionary criteria do you move it on to the next stage which involves implying the ranking criteria. Indaver skipped the exclusionary criteria stage entirely. They try to deny that here but they were forced to admit it at the an Board Pleanala hearing as you will see when you read Inspector Jones' Report. The Seveso Directive's approach has also been shaped, like the WHO guidelines, by bitter experience. We are supposed to learn from experience not ignore it. You keep Seveso plants away from people.

It is bad enough limiting oneself to a standards based approach. It is even worse to do so in the selective and piecemeal fashion that the Applicant has followed in this case and that it hopes the Agency will continue to endorse. If you are applying standards, you apply all of the applicable standards and you apply them consistently. With this project, an early question is, does it conform with the National Hazardous Waste Management Plan, in particular, the

targets set by the Plan and the priority actions listed as methods for achieving those targets? The key target against which this application for a hazardous waste incinerator must be judged is the target to keep hazardous waste going to incineration down to a maximum of just over 18,000 tonnes per annum. That is a maximum figure. Remember that the priority actions are intended to secure that target. That is what the priority actions are for. That simple fact may help us to see through the semantic argument of the Applicant that against commonsense, and the wording of the Plan itself, the priorities are simply a list from which one may cherry-pick in whatever the Applicant chooses and regardless of the effect that has on meeting the targets identified in the plan. This approach fooled An Bord Pleanála whose confusion is evident from their own stated reason for departing from Inspector Jones' interpretation of the Plan. An Bord Pleanála said the priority actions could be implemented "in parallel" and not "in any particular sequence". But even if we were to accept that the priority actions could be implemented in parallel, the reality is that even this is not happening. Parallel implementation would mean that all of the priority actions were being pursued simultaneously, which is not the case. The Plan says that the National Prevention Programme is its cornerstone. The Implementation Committee (which included Laura Burke as industry representative, then project manager for this Application) reported in August 2004. The Committee was careful to point out that its terms of reference as laid down by the Minister specifically excluded it from considering a National Prevention Programme. We are now five years into the term of the Plan and we have no cornerstone, and undeniably even parallel implementation is not happening. Now Indaver want to build a 50,000 tonne hazardous waste incinerator and say that this conforms with the Plan. In the Alice in Wonderland world of implementation committees who are told to ignore the cornerstone of the plan they are implementing, building a 50,000 tonne hazardous waste incinerator as a way of helping Ireland reduce its hazardous waste going to incineration to 18,000 tonnes per annum makes perfect nonsense.

If the operation were in compliance with the relevant Statutory Plan you would then move on to test it against top level site selection standards such as are described in the WHO guidelines and referred to in the Seveso Directive. Only if it fulfilled those, do you move on to apply operation specific standards.

We have had a revealing discussion at times here on the issue of operational standards for this plant. Some examples: Dr. Porter told us he applied certain US EPA models to assist in his

calculations. He said the Agency told him it approved of the model in question, I believe. But when questioned by Marcia Dalton, it emerged that the same model requires certain calculations to be made if there is for example, a Special Area of Conservation within a certain distance of the site. That is the case here. Dr. Porter did not do those calculations. I believe he said in effect that one could not do everything and it was a matter of judgement as to what you did and what you left out. That is not good enough and it is certainly not good enough only to be told this in cross-examination (by a non-expert) but it is revealing nonetheless. Another example relates to nickel. Nickel was found during on-site baseline monitoring in 2001 to be greatly in excess of the relevant proposed air quality standards (always remembering that these standards are as stated before the products of compromise). In a breathtaking instance of unscientific special pleading, we are asked to believe that we should overlook that finding. We are told without a scintilla of evidence that the nickel probably came from Irish Steel/Irish ISPAT which has since ceased operation.

Irish Steel/Irish ISPAT may have ceased operating but its legacy has not gone away. Toxic dust mounds remain on site and are blown in the wind as we speak. Anyhow, in a further attempt to support their assertion that we need not worry about nickel anymore, we are given some findings from an EIS in 2003 for Pfizer Loughbeg which we are told did not find excess nickel at Loughbeg. That is completely irrelevant by any scientific standard. It might have had some possible relevance if we had seen comparable figures for either Loughbeg in 2001 or figures from the Indaver site in 2003. They are comparing oranges and apples and in this case there is a large hill in between the oranges at Indaver and the apples at Pfizer.

We then move from deficient baseline investigation and dodgy science to the next shaky assumption. This is that one can assess air quality impacts by adding to the dodgy baseline the presumed emissions of a perfectly operated plant in full compliance at all times with all its emission limit values. We do not know if such a plant exists anywhere in the world. We do know that Indaver's incinerator in Antwerp is not that plant. Even when he apologises for their incredible dioxin blunder continuing undetected over several weeks, Mr. Ahern claims here that the incident caused no harm. It is worth remembering that when you ask yourself how fast Indaver's Management team would be to decide to report itself for an unauthorised emission of environmental significance.

I have tried to be fair in describing the weaknesses in an exclusively standards based

approach. I want to suggest that the Agency is in fact legally required to follow instead the approach contended for by Dr. Staines and others. I will call this for convenience the evidence based approach.

EVIDENCE BASED APPROACH

The Agency is prohibited from granting a licence in certain specified circumstances. These include where to grant a licence would lead to breach of applicable air quality standards or emission limit values. The Act goes further but this is where the Agency unfortunately seemed to have stopped reading. The Act also provides that the Agency is prohibited from granting a licence if the licensed operation would cause environmental pollution.

Environmental pollution is defined in the statutes (see Appendix). There is nothing whatever in these definitions that allows the Agency to limit its role to a mere mechanical application of standards on their own. The Agency must do much more than that. It must consider the evidence. It must ask itself will there be environmental pollution? In this case the evidence from the medical experts is all on one side. The Agency cannot meet its statutory obligation if it disregards that evidence. The Agency may well have a custom and practice of treating medical evidence as being of relevance only to other bodies such as the Department of Health or the Health Boards (now the Health Service Executive). That practice is dangerous.

(*Roche .V. Peilow*). The Agency has the benefit of statutory immunity under Section 15 of the EPA Act. Why is that immunity there? It is there I think in recognition of the fact that the Agency is dealing with very dangerous matters indeed. It has a quite awesome power. It may allow a company to inject poisonous substances into the environment which sustains all life. It may make mistakes. People may die or be injured. If that happens, the Agency has been given immunity from legal action. But significantly, the very next section of the EPA Act which deals with the position of employees of the Agency, is couched in very different terms. Employees are not immune from the consequences of their actions as employees of the Agency. If they blunder, and if people are hurt as a result, they may be sued. All Section 16 offers them by way of comfort, is the possibility that the Agency (which in this context means the directors) may in its discretion give the employee an indemnity. Even that discretion is limited to circumstances where the Agency decides that the employee has acted bona fide and in conformity with his or her duties under the statute. So, even if the Agency chooses at Board level to ignore the evidence which under the statute it is obliged to consider, the employees are running unlimited personal risk if they behave in

the same way. We have presented certain evidence to you. It is your unenviable task to prepare a fair and accurate report to the Board, regardless of the Board's current attitudes and practices.

Having read the material, listened to the witnesses and walked through the flood waters on site, our clients are frankly unable to discern any rational basis for the EPA's decision to issue a Proposed Determination in favour of the Applicant. Candidly, it appears to us as if the EPA thought it was under an obligation to say yes once it had been asked for a licence, and that its only additional function was to impose certain operating conditions. The EPA has power to say no, although it seems almost never to use that power. More than simply having the power to say no, in certain circumstances it has a duty to say no and in this case, that duty is inescapable in our view.

Ireland has fudged the question of waste management for many years. It has belatedly passed laws and adopted plans which should help us to change our ways. My clients are happy to do what they can to support that effort. They will not however accept that an Agency like the EPA can act in flagrant breach of the rules laid down in statutes, and in directives, and of the principles set out in the relevant plans and policy documents. It is fine for Mr. Ahern to say "we must have an incinerator somewhere". He is entitled to his view. It is not acceptable for the EPA to behave as if it not only agrees with him on that, but also believes that because this is "somewhere", therefore "we must have an incinerator here. And while you're at it, you can only put it here if you put a second one beside it".

It is intriguing that the Agency in its Proposed Determination seeks to force the developer to build a second incinerator before the developer himself wishes to do so. This betrays an agenda within the EPA to force incineration ahead even at a faster pace than the incineration operators themselves are comfortable with. The impropriety of this approach is self-evident. It is particularly blatant in this case when one looks at the established and democratically adopted County Development Plan and Waste Management Plan for the Cork area. The County Development Plan outlaws contract incineration at this location. The current Waste Management Plan rejects incineration as part of its strategy. Instead Cork City and County Councils have decided to take a different approach by combining to establish a five million tonne capacity at Bottlehill near Mallow to take their waste over the next twenty years. We have shown by reference to the EPA's national waste database 2001, how this landfill has sufficient capacity to take Cork's municipal waste over the next twenty years. Similarly,

Waterford County Council has secured planning permission for a large landfill within its jurisdiction. There is therefore no demand whatever from any local authority, anywhere in this area for a municipal solid waste incinerator. Having decided that landfill is its preferred strategy (a decision which is completely consistent with the WHO advice contained in its pamphlet number 6, advice which was apparently overlooked by Mr. Ahern who has frequently and selectively cited one other section of that document) the EPA is trying to force the people of Cork to accept incinerators they have no use for and do not want. The people of Cork will be placed in the bizarre position, having made proper and expensive provision for dealing with their own waste by way of landfill, of being forced to take into their county the toxic emissions and nuisance resulting from an incinerator burning municipal solid waste imported from who knows where. This in a way simply mirrors the outlandish decision by the EPA to permit construction of a hazardous waste incinerator three times larger than any envisaged by its own National Hazardous Waste Management Plan. What is going on here?

At present much of Ireland's hazardous waste requiring incineration is already incinerated in Ireland. There are seven hazardous waste incinerators in the Cork Harbour area alone. The remainder is incinerated overseas. There is currently an excess of incineration capacity in Europe and so at present our waste is readily acceptable at these facilities. We have therefore at present a choice of facilities and we also have a choice of exporters in the Irish market. This means that disposal costs are kept competitive for the benefit of Irish industry. The current excess capacity in Europe means that we still have time to continue with the implementation of all of the measures prioritised in the National Hazardous Waste Management Plan. However, if Indaver get their licence, all this will change abruptly. Under the Basel Convention, Article 4.9(a) provides that states may only import hazardous waste from states which do not themselves have adequate facilities within their own territories to dispose of it.

"Article 4.9

Parties shall take the appropriate measures to ensure that the transboundary movement of hazardous waste and other wastes only be allowed if:

(a) The State of export does not have the technical capacity and the necessary facilities, capacity or suitable disposal sites in order to dispose of the wastes in question in an environmentally sound and efficient manner;"

If the EPA licenses this hazardous waste incinerator, the much feared withdrawal of the existing outlets for our hazardous waste exports will be triggered immediately. Ireland will

be the loser and Indaver the winner. Indaver will become the monopoly operator in a key infrastructural sector. This would be a national scandal. Perhaps this is why the letter Indaver solicited from its own industry lobby group is so late and so lukewarm. The EPA is on the brink of sacrificing a strategic advantage of national importance - the ability of our industrial base to export some hazardous waste and to choose between a range of service providers for that purpose. This licence comes at a very high price. Too high a price for industry. And too high a price for the people of Cork.

CONCLUSION

My clients request the Agency to refuse the Application on the following grounds:

1. The Application if granted would breach my clients' rights to bodily integrity.
2. The Application if granted would breach my clients' right to respect for their family life and for the proper determination of their civil rights under the principles of natural and constitutional justice and under the European Convention on Human Rights.
3. The Application if granted would cause environmental pollution.
4. The Application is invalid as it has not been accompanied by a valid EIS.
5. The Application has not been subjected to an EIA in accordance with the Directive.
6. The Applicant is not a fit and proper person.
7. The Application breaches the WHO guidelines on site selection.
8. The Application does not fulfil the requirements of the Seveso II Directive relating to site suitability and separation from population centres or areas of public amenity.
9. The Application is in conflict with the targets and provisions of the National Hazardous Waste Management Plan.
10. By reason of the appointment as a director of the EPA of Laura Burke, formerly operations manager for this project, it is not possible for the Agency to be seen to be acting in a fair and impartial manner if it decides to grant a licence.
11. The Application is inconsistent with the provisions of the Stockholm Convention which provisions Ireland and Irish public authorities are required to promote.
12. The Application is inconsistent with the provisions of the Convention on Biodiversity which provisions Ireland and Irish public authorities are required to promote.

13. The Application breaches the precautionary principle, the proximity principle and the polluter pays principle and is inconsistent with the provisions of the EC Treaty.
14. The Application if granted will interfere with commercial freedom of existing hazardous waste producers and exporters and will result in the creation of a monopoly and damage to Ireland's strategic interests.

End.

1st March 2005

Joe Noonan. Solicitor. Noonan Linehan Carroll Coffey. Cork.

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APPENDIX

Environmental Protection Agency Act 1992

Original Section 4(2) In this Act "environmental pollution" means—

- (a) "air pollution" for the purposes of the Air Pollution Act, 1987,
- (b) the condition of waters after the entry of polluting matter within the meaning of the Local Government (Water Pollution) Act, 1977,
- (c) the disposal of waste in a manner which would endanger human health or harm the environment and, in particular—
 - (i) create a risk to waters, the atmosphere, land, soil, plants or animals,
 - (ii) cause a nuisance through noise or odours, or
 - (iii) adversely affect the countryside or places of special interest,or
- (d) noise which is a nuisance, or would endanger human health or damage property or harm the environment.

Section 4(2) (as substituted by the Protection of the Environment Act 2003)

4 (2) In this Act '**environmental pollution**' means the direct or indirect introduction to an environmental medium, as a result of human activity of substances, heat or noise which may be harmful to human health or the quality of the environment, result in damage to material property, or impair or interfere with amenities and other legitimate uses of the environment, and includes—

- (a) 'air pollution' for the purposes of the Air Pollution Act 1987,
- (b) the condition of waters after the entry of polluting matter within the meaning of the Local Government (Water Pollution) Act 1977,
- (c) in relation to waste, the holding, transport, recovery or disposal of waste in a manner which would, to a significant extent, endanger human health or harm the environment and, in particular—
 - (i) create a risk to the atmosphere, waters, land, plants or animals,
 - (ii) create a nuisance through noise, odours or litter, or
 - (iii) adversely affect the countryside or places of special interest,
- (d) noise which is a nuisance, or would endanger human health or damage property or harm the environment.

Waste Management Act 1996 -2003

Section 5

“**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 human health or harm the environment, and in particular—

- (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;

Air Pollution Act 1987.

4.—“Air pollution” in this Act means a condition of the atmosphere in which a pollutant is present in such a quantity as to be liable to—

- (i) be injurious to public health, or
- (ii) have a deleterious effect on flora or fauna or damage property, or
- (iii) impair or interfere with amenities or with the environment.

Local Government (Water Pollution) Act 1977

Section 1

“**polluting matter**” includes any poisonous or noxious matter, and any substance (including any explosive, liquid or gas) the entry or discharge of which into any waters is liable to render those or any other waters poisonous or injurious to fish, spawning grounds or the food of any fish, or to injure fish in their value as human food, or to impair the usefulness of the bed and soil of any waters as spawning grounds or their capacity to produce the food of fish or to render such waters harmful or detrimental to public health or to domestic, commercial, industrial, agricultural or recreational uses: