

To Josepheine Lee
Programme Officer
Office of Climate, Licensing & Resource Use
EPA
Richview, Clonskeagh Rd
Dublin 14



Ref: **W0167-03**- Indaver Application to burn 20,000 tons of Hazardous Waste at Carranstown, Co Meath

Ref: Your letter to me on the 24th July 2012

Dear Josephine

I am sending you copies of the Submission and Summing up Statement that I made at the An Board Pleanála oral hearing in Drogheda between the 1st to the 4th October 2012 into the application by Indaver to incinerate 20,000 tonnes of hazardous waste.

I request that the EPA would take into account the issues that I have raised at the oral hearing, when you will be considering, what I am assuming to be, a joint EIA Environmental Impact Assessment with An Board Pleanála.

Among the various requests in the submission, I ask that the EPA would formally document and make transparent any advice being offered to the Board Pleanála inspector on waste minimization and waste avoidance policies, as well as working examples of alternative methods in Ireland, in Europe and around the world that safely manages waste, but that avoids incineration and the generation of dioxins. I ask that this be done in a transparent manner and in accordance with the Aarhus Convention. This Convention requires that information be made available to the public on the various methods that can be used to avoid pollution emissions.

Regarding Incineration I am anxious that you would implement the various obligations of the Stockholm Convention, particularly under Article 5. The internet for example has many web sites of new developments and alternative methods, strategies and policies in the medical waste sector that manage hospital waste without involving waste incineration. Many of these are driven by the new requirements to comply with the Stockholm Conventions.

Would you please acknowledge receipt of these documents that I am sending you?

Would you also send me as soon as it becomes available the "exact EPA web site address" where I will be able to find the listing and the consideration of your EPA waste management alternatives; that I hope will be made to An Board Pleanála?

Yours Sincerely

Ollan Herr

Zero Waste Alliance Ireland

Túr na Gaoithe

Philipstown

Castleblaney Rd

Dundalk

County Louth

042 9377689 mobile or 042 9377689 land line

Ollan Herr

9th October 2012

**Submission to An Board Pleanála Oral Hearing
Copy to be sent to EPA**

**Concerning the Indaver Planning Application to burn 20,000 tonnes
of Hazardous Waste - Ref W0167 – 03**

Location
The Boyne Valley & Country Club
Dublin Road
Drogheda

Date of Oral hearing 1st October 2012
This was orally delivered by Ollan Herr on the 2nd October

My Name is Ollan Herr. I'm resident in the Townland of Kilkerry, on the Castleblaney Rd, Dundalk in County Louth.

I am a member of the community group called Louth People against Incineration. This is a Community group who have been campaigning against Incinerators in Dundalk and in Carranstown. I was a Councillor on Dundalk Town Council for over a year during 2011. I'm now no longer involved in local politics. I am self employed as the director of Herr Ltd. This is a business involved in ecological water and waste water treatment for domestic houses and small communities. I'm also a director of the Zero Waste Alliance of Ireland who campaigns for and promotes alternative zero waste strategies to land filling and incineration. We believe that alternative recycling and clean technologies should be used, that the existing incinerators in Ireland should be phased out and that new incinerators should not be built in the first place.

I have already made a written submission to An Board Pleanála and as requested I will try not to repeat too much of what I have written about already.

Apart from the social and economic desirability of promoting a truly sustainable Zero Waste economy our outright opposition to the expansion of this Incinerator is also based on our concerns about the potential long term public health impacts from exposure to dioxins and micro particle pollutants in the local areas of Duleek, Carranstown and Drogheda.

Ratification of the Stockholm and Aarhus Conventions

When considering the previous planning applications by Indaver for the incineration of 200,000 tones of municipal waste An Board Pleanála and the EPA did not in our view give adequate consideration to the obligations of the Stockholm or the Aarhus Conventions. Now however both conventions are now properly ratified.

Ireland ratified the Stockholm Convention on 5 August 2010. It entered into force in Ireland on 3 November 2010.

Ireland only recently ratified the Aarhus Convention on the 20th June 2012. This Convention entered into force on the 18th September 2012.

See Circular letter from the Dept Environment, Community and Local Government
Ref Circular Letter EPS/2012 on 27th August 2012

In contrast to previous occasions where an Incinerator was being considered the obligations contained in these Conventions must therefore be very seriously considered by An Board Pleanála at this oral hearing.

Request No 1 We ask that when considering the application for the incineration of 20,000 tonnes of hazardous waste, that a review of conditions in the licence for the existing 200,000 tonne municipal waste facility as they apply to the two Conventions is also carried out. In doing so I ask that “all” of the requirements of the Stockholm and Aarhus conventions are properly taken into account and acted upon.

Priority consideration must be given to the prevention of specific hazardous waste streams so that they do not require to be incinerated

Stockholm Convention - Article 5 - Measures to reduce or eliminate releases from unintentional production

“Each Party shall at a minimum take the following measures to reduce the total releases derived from anthropogenic sources of each of the chemicals listed in Annex C, with the goal of their continuing minimization and, where feasible, ultimate elimination:

(b) Promote the application of available, feasible and practical measures that can expeditiously achieve a realistic and meaningful level of release reduction or source elimination;

(c) Promote the development and, where it deems appropriate, require the use of substitute or modified materials, products and processes to prevent the formation and release of the chemicals listed in Annex C, taking into consideration the general guidance on prevention and release reduction measures in Annex C”

The implication seems to me that there is now a new and very important formal procedural step that is required before any consideration can be given to increasing the allowable tonnage of waste to this incinerator.

REGULATION (EC) No 850/2004 - On persistent organic pollutants and amending Directive 79/117/EEC- Article 6 -Release reduction, minimisation and elimination

“3. Member States shall, when considering proposals to construct new facilities or significantly to modify existing facilities using processes that release chemicals listed in Annex III, (Dioxins& Furans) without prejudice to Council Directive 1996/61/EC, give priority consideration to alternative processes, techniques or practices that have similar usefulness but which avoid the formation and release of substances listed in Annex III.”

What type of anthropogenic source are they referring to? I don't think that they are referring to back yard burning, or open burning or accidental burning of houses or of cars; I submit that they can only be referring to the licensing of Incinerators by An Board Pleanála and the EPA where Indaver and its clients have the opportunity and can make a choice to consider substitute materials, alternative processes or recycling

strategies. I am of the view that there is now a legal obligation on decision makers in An Board Pleanála and the EPA to require of Indaver and their client to consider and prioritize alternative zero waste measures and strategies to avoid hazardous waste going to a licensed facility such as cement factory, a municipal waste incinerator or a hazardous waste incinerator.

Aarhus Article 6 -PUBLIC PARTICIPATION IN DECISIONS ON SPECIFIC ACTIVITIES

"6. Each Party shall require the competent public authorities to give the public concerned access, for examination, ... to all information relevant to the decision-making ...,

(c) A description of the measures envisaged to preventthe effects, including emissions;"

"Indaver NV Company Profile

Indaver NV, is the Flemish parent company of Indaver Ireland and Indaver Ireland Limited.... Indaver recycles, treats and disposes of both domestic and industrial waste. Advice on the prevention of waste is an integral part of the Indaver service."

Request No 2 I ask the Inspector to look for confirmation that the proper advice, consideration and prioritization has been given to alternative clean tech methods for each hazardous waste stream listed in the Indaver application in order to "prevent" the effects or "avoid the formation and release" of dioxin emissions.

In accordance with the requirements of the EU Regulation, Aarhus and the Stockholm Conventions, I ask that the Inspector's report to his Board will contain the following:

- His analysis of the documented formal procedures being used by Indaver and its clients for each waste stream where there has been an examination of the "substitute or modified materials, products and processes" that can be, or should be, considered by Indaver and its clients; in order to avoid hazardous waste for eventual incineration.
- I ask the inspector to confirm in his report that he has considered the documentation of the advice given on hazardous waste reduction, or recycling alternatives by Indaver as well as the responses between Indaver and the Client relating to the "alternatives, techniques or practices that have similar usefulness" that will not eventually result in Dioxin emissions.
- I ask the inspector's report to contain detail of his or the EPA's assessment of the effectiveness of efforts or lack of efforts made by Indaver and / or their clients to prioritise alternative processes, techniques or practices that have similar usefulness but which avoid the formation and release of Dioxins and Furans for each of the specific waste streams to be burned.
- I ask the inspector to estimate the time period for the implementation of any specific "substitute or modified materials, products and processes" for each specific hazardous waste stream in order that a time limit may be set by An Board Pleanála for the ending of incineration of that particular type of hazardous waste.

- I ask the Inspector to make an assessment of the possibility that, in granting planning approval to Indaver to incinerate, assuming little or no conditions are attached to prioritize and adopt “substitute or modified materials, products and processes” that the board will in effect delay or dis-incentivise any efforts by industry or householders to avoid producing waste that when burned will produce dioxins.
- I ask the Inspector to do the above in a transparent manner so that in An Board Pleanála’s EIA (Environmental Impact Assessment), it will be clearly seen to have considered and to have given priority to alternative processes, techniques or practices that have similar usefulness but which avoid the formation and release of dioxin emissions, as required by the Stockholm Convention as well as Regulation (EC) No 850/2004 Article 6, 3 above.
- I ask that this assessment be carried out for each type of the hazardous waste provided on a list by Indaver as follows:
<http://www.carranstownamendments.ie/documents/furtherinfo/Appendix%203%20Sources%20EWC.pdf> I ask the inspector to include in his report his considerations on the feasibility of alternative measures and options and specific zero waste strategies for the specific hazardous waste streams listed by Indaver in accordance with the relevant EWC code:

Request No 3. I ask the Inspector to recommend a rejection of the planning application by Indaver to burn any hazardous waste if the Inspector finds that Indaver and/ or the EPA has been lax, casual or heedless in promoting any clean teck or zero waste alternatives.

In the event that there continues to be inadequate efforts in promoting the prioritization or consideration of alternative clean teck or zero waste strategies by Indaver, their clients, or the EPA; then I ask An Board Pleanála to deny planning permission to burn that particular or specific hazardous waste stream.

If it appears to the Inspector that genuine efforts were or are indeed being made by the client to implement “modified materials, products and processes that will eventually prevent the formation and release of dioxins” then I ask that the burning of that particular waste stream be permitted only for a period up to an agreed set date; when the new alternative process is eventually set up and running and permission for the burning of that waste stream must from then on cease.

A decision by the Board to allow the burning of any particular waste stream must not become a long term or permanent disincentive or an impediment to the adoption “of substitute or modified materials, products and processes to prevent the formation and release” of dioxins and furans.

Request No 4- That the inspector in considering the granting of permission for any specific hazardous waste stream going to this hazardous waste incinerator will be careful not be in contravention with Ireland’s Sustainable Development Strategies

Stockholm Convention - Article 7, Implementation plans

“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.”

For information on Ireland's Sustainable Development Strategies please see:
<http://www.environ.ie/en/Environment/SustainableDevelopment/PublicationsDocuments/FileDownload,1825,en.pdf>

An action programme towards sustainable industry- Chapter 9 page 84

“Ireland will support international efforts to develop legally binding instruments for the reduction and/or elimination of emissions of persistent organic pollutants to the environment.

Sustainable Development and Economic Growth

The principle of sustainable development underpins Ireland's industrial policy.

The Plan noted that sustainable industrial development entails:

- Using cleaner technologies and production techniques to minimise emissions to air and water;*
- Preventing or reducing waste production and, where possible, increasing re-use or recycling activities;*

Accordingly, Government will pursue a broad range of policy instruments, which will include increasing the use of market-based instruments over time and using voluntary agreements with industry where appropriate. In addition, greater policy coordination at Departmental level in the areas of industry, environment and sustainability will be ensured through the development of the Green Network of Government Departments

For industry, the overall objective of this Strategy is to ensure that development:

- is environmentally sound, maximising advantage and maintaining quality;*
- optimises the use of natural resources;*
- minimises the production of waste and emissions;*
- uses chemicals and other substances with potentially adverse environmental impacts sparingly and safely; and*
- has a strongly defined clean production and clean technology ethos.*

The minimisation of industrial wastes is a major objective of national policy; measures such as cleaner production processes, life-cycle analysis and other eco-efficient approaches in the industrial sector will contribute to realising this objective.”

It is important that the decision to allow the incineration of Hazardous Waste by An Bord Pleanála does not as a side effect begin to undermine Ireland's long term efforts to promote the national sustainable development strategy as required in Stockholm Convention Article 7.3 above.

Concerns about long term public health in the locality

We refer to the 4th Report of the British Society for Ecological Medicine on the Health Effects of Incinerators.

http://www.ecomed.org.uk/content/IncineratorReport_v3.pdf The long term health issues that are discussed in this report were not acknowledged as being significant enough to be acted upon by An Board Pleanála or the EPA at the time of its previous decision to approve the 200,000 tonne municipal incinerator. At present there is no formal public health monitoring system in place for people living near or downwind of the incinerator that will quickly or reliably pick up illnesses that result from long term exposure to bio accumulating toxins such as dioxins. There has to our knowledge been no sampling of PM 2.5 particles by the EPA over the past year at ground level among the community in Carranstown.

Meath County Council had also at the time ignored the 5000 or so planning objections that were submitted to the Incinerator because they expressed concerns about public health protection.

The recent ratification of the Stockholm and Aarhus Conventions however require that the State Authorities take this emissions monitoring and health monitoring issue as a legal requirement much more seriously than it has done to date.

Request No 5. We request that research into the long term accumulation of dioxins and other toxic pollutants in humans living near the two large anthropogenic sources of dioxins and other pollutants at Caranstown and Platten be carried out irrespective of whether the stack emissions are within the emission standards; as required in the various articles of Conventions as listed below.

“Stockholm Convention - Article 11. Research, development and monitoring

“1. The Parties shall, within their capabilities, at the national and international levels, encourage and/or undertake appropriate research, development, monitoring and cooperation pertaining to persistent organic pollutants and, .. including on their:

- (a)*;
- (b) Presence, levels and trends in humans and the environment;*
- (c)*;
- (d) Effects on human health ..;”*

In accordance with Article 11 above, and irrespective of the measurements from the incinerator stack there is now a requirement to undertake monitoring of the actual build up of toxins in humans who are or who have been living in the locality.

“Historically, public health regulations have been based on theoretical risk calculations according to known levels of chemical substances in air, water, soil, food, other consumer products and other sources of potential exposure. Human biomonitoring offers the opportunity to analyze the actual internal levels of bodily substances from all potential routes of exposure at one time, which may contribute to improving risk assessments” Reference: <http://en.wikipedia.org/wiki/Biomonitoring>

Aarhus Convention - Introduction

“Recognizing also that every person has the right to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association

with others, to protect and improve the environment for the benefit of present and future generations,”

Aarhus Convention Article 1 Objective

“In order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each Party shall guarantee the rights of access to information”

Aarhus Convention Article 2 Definitions

3. *“Environmental information” means any information in written, visual, aural, electronic or any other material form on:*

(c) The state of human health and safety,”

5. *“The public concerned” means the public affected or likely to be affected by, or having an interest in, the environmental decision-making; for the purposes of this definition, non-governmental organizations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest.”*

Request No 6 We request that the pregnant mothers living in the local electoral areas of Duleek, Carranstown, Platten and S East Drogheda, their unborn babies, their infant children as well as pupils at the local national schools be defined as “Vulnerable Groups”.

EU Regulation 850 2004 - Article 10: Information exchange

2. *The Commission and Member States, as appropriate, shall promote and facilitate with regard to persistent organic pollutants:*

(a) Awareness programmes, including relating to their healthespecially for

(i) Policy and decision makers,

(ii) Particularly vulnerable groups;

Request No 7 With regard to reproductive health and in accordance with the requirements of regulation 850 2004, I ask the decision maker in this instance (An Board Pleanála) to facilitate mothers living in the area of Carranstown, Duleek and SE Drogheda who are members of a vulnerable group, to have measurements taken of any dioxins and heavy metal toxins in their breast milk and in the umbilical chord of their new born babies, in order to become aware of any pollutants that were absorbed in her body by living near an incinerator over the years. In addition we ask for a follow up analysis of any health impacts on the child over the following years of its life at primary school. Those children born to mothers with any unusual or above normal levels of toxins in her breast milk should be monitored over the following decade or so for any emerging abnormal health, intellectual, emotional, or unusual gender effects. We ask that this information shall be made available to the mother, her doctor and that statistics be compiled in subsequent “vulnerable group area” public health reports. For more information on why I am asking for this information and on the nature of bio monitoring please see:

http://www.cdc.gov/biomonitoring/biomonitoring_summaries.html

A short extract from the 4th Report of the British Society for Ecological Medicine on the Health Effects of Incinerators states as follows:

“In 2005, in a ground-breaking study (206), researchers at two major laboratories in the USA looked at the body burden in the foetus. They reported an average of 200 industrial chemicals and pollutants (out of 413 tested) in the umbilical cord blood of 10 randomly chosen babies. These included 180 carcinogens, 217 chemicals that are toxic to the brain and nervous system and 208 that can cause birth defects and abnormal development in animals. A statement by scientists and paediatricians said that the report raised issues of substantial importance to public health, showed up gaping holes in the government’s safety net and pointed to the need for major reform to the nation’s laws that aim to protect the public from chemical exposures.

Two months later, scientists at the University of Groningen, released the results of a European study, on the foetal body burden. They tested for the presence of 35 chemicals in the umbilical cord blood of newborns (207). At least five hazardous chemicals were found in all babies and some had as many as 14 different compounds. The report questioned the wisdom of allowing the foetus to be exposed to a complex mixture of persistent, bioaccumulative and bioactive chemicals at the most critical stage of life.

Incinerators can only have the effect of increasing the foetal body burden and their use is therefore a retrograde step for society. It is particularly important to apply the precautionary principle in issues that affect the foetus, infant and child.”

Request No 8 To our knowledge no monitoring of PM2.5 dust at ground level has been carried out over the past year at various local community locations in Duleek, Carranstown and SE Drogheda since the Indaver Municipal Waste Incinerator started over a year ago. Given that the State or Indaver seem not to have an interest in this we request that adequate and continuous funding be provided to an non profit non Governmental group such as the Zero Waste Alliance of Ireland who are concerned with protecting the environment, to collect and to analyse the PM 2.5 dust in selected houses and in up to 20 locations down wind of the incinerator.

The 4th Report of the British Society for Ecological Medicine on the Health Effects of Incinerators states as follows:

“3.1 Particulates

A large and growing body of literature has highlighted the dangers of particulates to health. Various studies have confirmed that the smaller the size of the particles the more dangerous the health effects (18-21). The data from the World Health Organisation illustrates that PM2.5 particles have a greater effect on daily mortality than the larger PM10s (18).

The smaller particles are not filtered out by the nose and bronchioles and their miniscule size allows them to be breathed deeply into the lungs and to be absorbed directly into the blood stream where they can persist for hours (22). They can then travel through the cell walls and into the cell nucleus affecting the cell’s DNA. The WHO state that there is no safe level of PM2.5s and health effects have been observed at surprisingly low concentrations with no threshold (23, 24). The smallest

particulates, particularly the ultrafine particulates (PM1) are highly chemically reactive, a property of their small size and large surface area (25). A further danger of the smallest particulates is that there are thousands more of them per unit weight. In incinerators heavy metals, dioxins and other chemicals can adhere to their surface (26) increasing their toxicity. The body does not have efficient mechanisms for clearing the deeper part of the lung as only a tiny fraction of natural particles will be as small as this.

As incinerators are effectively particulate generators and produce predominately the smaller particulates that have the biggest effect on mortality, it is clear that incinerators have considerable lethal potential.

a) Epidemiological Studies of Particulate Pollutants

Fine particulates have been associated with both respiratory and cardiovascular disease (27) and with lung cancer (19, 28).

Two large cohort studies in the USA showed increasing mortality with increasing levels of PM2.5 pollution. In the Six City Study published in 1993 (19), 8,111 individuals were followed for 14-16 years (1974-1991), involving a total of 111,076 person years, to examine the effect of air pollution, allowing for smoking and other individual factors. As expected, the greatest risk factor was smoking (adjusted mortality-rate ratio 1.59) but, after allowing for individual factors, mortality rates showed highly significant associations ($p < 0.005$) with the levels of fine particles and sulphate particles in the cities, with the most polluted city giving an adjusted all-cause mortality rate of 1.26 compared to the least. This related to a PM2.5 difference of 18.6mcg/m³: cardiopulmonary mortality was increased by 37% and lung cancer mortality was also 37% higher.

In the American Cancer Society study (20), 552,138 adults (drawn from the Cancer Prevention II study) were followed from 1982 to 1989 and deaths analysed against mean concentrations of sulphate air pollution in 1980 and the median fine particulate concentration from 1979-1983, both obtained for each participant's area of residence from Environmental Protection Agency (EPA) data. Again, the strongest correlation was between lung cancer and smoking (adjusted mortality risk ratio 9.73), but both pollution measures showed highly significant association with all-cause mortality and with cardiopulmonary mortality: sulphates were also associated with lung cancer. After adjusting for smoking and other variables, higher fine particulate pollution was associated with a 17% increase in all-cause mortality and a 31% increase in cardiopulmonary mortality for a 24.5 mcg/m³ difference in PM2.5s. These results are highly significant and led the EPA to place regulatory limits on PM2.5s, establishing the National Ambient Air Quality Standards in 1997. These regulations were challenged by industry but ultimately upheld by the US Supreme Court (29) after the data from all the studies had been subjected to intense scrutiny including an extensive independent audit and a re-analysis of the original data (30)."

Request No 9 We request that the extra additional funding for this testing for MP2.5 micro particles at ground level come from the Indaver incinerator company under the Indaver community funding scheme rather than from the State. We request that this monitoring be carried out over the full life of the Indaver incinerator and the cement factory

Request No 10 We request that the doctors of the people from this vulnerable group area be made aware of The 4th Report of the British Society for Ecological Medicine on the Health Effects of Incinerators so that they will be better informed of the possible causes of any unusual health problems among their patients.

http://www.ecomed.org.uk/content/IncineratorReport_v3.pdf

Some of its conclusions on the health issue from this report are worth noting:

- 1)
- 2) *Health costs should be routinely taken into account when deciding on waste disposal strategies.*
- 3) *The present limited method of risk assessment by which the safety of proposed installations is judged, is inadequate, cannot be relied on, and should be reviewed.*
- 4)
- 5) *The serious health consequences of fine particulate pollution have become apparent in the last ten years: incinerators are a major source and, in our considered opinion, incineration is the least preferred option for getting rid of waste. Taking account of all the information available, including research indicating that there are no safe levels for fine particulates, we can see no reason to believe that the next generation of incinerators would be substantially safer than the previous ones.*
- 6)
- 7)
- 8) *This report outlines the many deficiencies of present monitoring procedures. We recommend the introduction of a stricter and more comprehensive system for the monitoring of all waste burning plants by a fully independent body, including random unannounced visits: the monitoring should include:
 - a) *More monitors around incinerators to measure particulates and heavy metals*
 - b) *Periodic monitoring of the content of dust in homes in the locality*
 - c)
 - d) *A programme of monitoring the body burdens of some key pollutants in local inhabitants.**
- 9) *We recommend that no further waste incinerators be built."*

Request No 11 Under the polluter pays principle we request that the cost of the measurements of dioxins in human breast milk from vulnerable group areas as well as cost for the monitoring of toxins in the umbilical chord of new born infants be borne by the Indaver Incinerator Company and not by the State.

Bullet Points from the already submitted written submission

The granting of permission by An Board Pleanála to Indaver to burn an additional 20,000 tonnes of Hazardous Waste is in breach of Article 5 of the Stockholm Convention which requires reductions of Dioxin and Furan emissions; not an increase of these emissions. Hiding this local increase of dioxins inside the nationally falling dioxin figures can not hide the problem that the local people in Carranstown, Duleek and SE Drogheda will still be subjected to an increase of dioxin and other pollution emissions.

While I acknowledge the point made by the Inspector already that the national and international regulations are continuously evolving, nevertheless the excessive delays by Ireland relative to so many other EU states in ratifying Aarhus and the Stockholm Conventions should not become an excuse for failing to consider the National Implementation Plan due to be finalized in November 2012. This in my view is a most important benchmark for judging Ireland's compliance with the Stockholm Convention.

We request that funding be provided by Indaver to a not for profit community group such as the Zero Waste Alliance of Ireland under the Indaver community funding scheme to monitor PM 2.5 particle dust and analyse its toxic metal content.

Under the Aarhus Convention we have the right to ask questions and seek information about the long term bio accumulation of toxic metals, compounds and dioxins in human breast milk as well as in the umbilical cord of new born babies born to young mothers who will be living near this incinerator over the coming decades. An Board Pleanála has a duty to ensure that the funding of these measurements is made available through its discretion to allocate funding from the Indaver community funding scheme. This is probably the most effective way to assure the local community that the emissions from the Incinerator and the cement factory are causing no long term negative health impacts.

Given that there are already two large anthropogenic emitters of dioxins and other pollutants in the area I remain very concerned about the long term reproductive health impacts to young mothers and people in general who are living in this area.

Yours Sincerely
Mr Ollan Herr
Louth People against Incineration and
Zero Waste Alliance Ireland
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County Louth
086 1700569

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Summing up Statement

From Ollan Herr
Louth People against Incineration
Zero Waste Alliance Ireland
4th October 2012

For the oral hearing by An Board Pleanála concerning the application to burn 20,000 tonnes of Hazardous waste at Carranstown, County Meath.

To
Mr Keith Seargent
Inspector
An Board Pleanála

Dear Sir
I'm making a final summary to you as follows:

New Obligations

At this oral hearing Mr Chairman, I have brought to your attention the recent ratification by Ireland of the Aarhus Convention and the Stockholm Conventions. I have argued that these Conventions place various obligations on public authorities and bodies such as the EPA and An Board Pleanála in cases where an EIA is concerned.

Increasing Dioxin Emissions

I have highlighted the obligations under Stockholm Convention Article 5 (b) and (c) to reduce dioxin emissions and not to be increasing them. To date An Board Pleanála has granted permission to Indaver to burn 200,000 tonnes of municipal waste. Then on top of the emissions they were putting out for many years before, the neighbouring Platten Cement Factory also obtained a licence recently to burn meat and bone meal and refuse derived fuel. This therefore amounts to 3 consecutive increases in dioxin emissions already. If the Board grants permission for the incineration of a further 20,000 tonnes of hazardous waste then this will be a 4th increase.

I understand that the Indaver incinerator will still have spare burning capacity. They have made no secret of their interest in burning Dublin waste also. If this happens over the coming years then the people of Platten and Carranstown will have endured 5 stepped increases in dioxin emissions. Irrespective of the national decreasing trends these increases in this local are completely unjust and un-ethical. In consideration of Article 5 (b) and (c) of the Stockholm Convention we suggest that there is a requirement on the Board to stop permitting this further dioxin increase now.

Prioritising alternatives

We have under the Aarhus Convention also highlighted the obligation to be transparent when considering alternative processes such waste minimisation and recycling for each of the waste streams being considered for incineration. EU Regulation 850/2004 places a requirement on proposals for modifications to "existing

facilities” to consider alternative processes, techniques or practices that can avoid any unnecessary dioxin releases.

An important preliminary step before the decision to incinerate for each proposed waste stream

We have pointed out the importance of prioritising recycling and waste minimisation as a transparent and a formal process to be carried out in advance of the final decision by An Board Pleanála. The Aarhus Convention 6.6 (c) requires that the public should have access to information pertaining to the measures to prevent emissions and their effects. These include the measures to avoid any additional pollution emissions.

Without an easily available paper record of the alternative waste options considered and the rationale for the final decision it will be impossible for the public to have access to information on these decisions. An Board Pleanála must now document and record the justification process for the decision to incinerate, or the decision to avoid further incineration by adopting alternative waste minimisation methods or by recycling the waste resource. Our view is that “decision makers” such as An Board Pleanála in association with the EPA must form their own judgement based on an analysis of alternatives aimed at avoiding waste in the first place. This is probably best carried out through the EIS/ EIA process.

The EPA Guidelines: **GUIDELINES ON THE INFORMATION TO BE CONTAINED IN ENVIRONMENTAL IMPACT STATEMENTS**

http://www.epa.ie/downloads/advice/ea/guidelines/EPA_Guidelines_EIS_2002.pdf

“Avoidance of Impacts is principally achieved by two means; firstly, the consideration of alternatives (sections 2.4.3 and 3.2.2) and secondly the review of designs (section 3.1.3) in light of environmental constraints. When successfully practised, Impact

Avoidance can often lead to an EIS which predicts ‘no significant adverse effects. To avoid misinterpretation of this statement it is very important for the EIS to provide transparent, objective and replicable evidence of the evaluation and decision making processes which led to the adoption or selection of the final project configuration.

Such evidence should clearly highlight the considerations of environmental effects that influenced the evaluation of alternatives. It also shows how the design incorporates mitigation measures, including impact avoidance, reduction or amelioration. Such measures can help to explain how significant adverse effects were avoided.”

Although I had suggested in my submission that Indaver would play a significant part in proposing alternative zero waste methods to their clients, I’m now not so sure that their views alone should be considered by the Inspector. It has emerged during questioning that though they are aware that paint can be emptied from paint tins and be recycled; they have no plans to do so. I think that the inspector should seek written advice on each proposed waste stream from the EPA and possibly from other waste recycling firms currently operating in Ireland and in other Zero Waste countries abroad before finalizing his Environmental Impact Assessment.

Waste minimization is an important primary consideration under “*general guidance on prevention and release reduction measures*” as required under Stockholm Article 5, (c). It was a little un-realistic of me to expect a business so committed to incineration to change their stripes to become a recycler of hazardous waste. The claims by Indaver that they “*prevent waste as an integral part of the Indaver service*” is questionable regarding their proposal to incinerate old paint tins.

For an example of the paint recycling program in Halifax, Nova Scotia, Canada go to <http://www.rafb.com/paint-recycling.asp>
<http://reduceyourwaste.ca/paint.asp>

Recycling to the top of the waste pyramid or lower down the waste pyramid?

The claim by Indaver that they would use the collected waste oil from other Irish recycling companies raises another important policy question. Should a separated waste oil resource which can be re used go to the top of the waste pyramid or lower down on the waste pyramid? We would argue that if it can be used as heating oil then it should be used for a more socially beneficial value-added enhancing industry that creates quality jobs; rather than for a value destructive industry with fewer jobs such as a waste incinerator. The separation of waste for recycling should be required to support value adding industry that is resource sustainable rather than an industry involved in resource destruction.

National Sustainable Development Strategies

Stockholm Convention - Article 7, 3 talks about National Implementation Plans needing to support the national effort to create clean technology and sustainable industries that minimise the production of waste and maximises the recycling of resources. The incineration by Indaver of paint tins without as a first step the extraction of any remaining paint and the recycling of this paint is hardly in compliance with the Department of Environments policy to minimise waste and to increase recycling activities. This thoughtless proposal by Indaver to incinerate paint tins that are to be collected from Public Amenity Centres high lights the importance of An Board Pleanála to insist on formal procedures to be imposed so that proper prioritization and consideration can be given to waste minimization and recycling. For each of the waste streams that is approved for burning by An board Pleanála an opportunity may well be lost to recycle resources to a value adding enterprise and an opportunity may be lost for the economic opportunity to adopt alternative clean teck methods. It's unlikely that anyone will invest in a paint recycling enterprise if Indaver goes ahead and incinerates tins of waste paint.

The policy of allowing Indaver to burn a waste may well discourage the possibility for a small enterprise to create jobs in recycling with a separated resource.

Fussing the line between Recycling and Incineration

The issue of public confidence in recycling has been raised. We are concerned; the principle is an important one to highlight. We believe that the public's interest in recycling will be undermined by reports of bin lorries mixing green waste with brown waste, or the possibility that a segment of the green bin will end up as refuse derived fuel at the Platten cement factory, or that any waste stream segregated and left at public amenity centres for recycling would end up in an Incinerator. An Board

Pleanála need to play their part in ensuring that the public don't begin to make the mental connection that materials for recycling can also in the end become materials for incineration.

The measurement of bio accumulated toxins in mothers over the previous decades and who then pass onto their unborn children

It may be generally assumed that micro particles of dust in an urban area are comparable in toxicity to the dust from the stack of an Incinerator. This is however is not so, micro particle dust from incinerators even if they are within limits are potentially more toxic. The 4th report of the British Society of Ecological Medicine on the Health Effects of Incinerators explains why this is so. Their report underlines the importance of health monitoring among the vulnerable group.

The rare occasions when the un-dispersed plume descends down among the community resulting in worrying high exposures is a cause for concern.

Based on the epidemiological studies from other parts of the world referred in the report the evidence show how micro particles as PM2.5's or PM 1's coated in toxic metals and dioxins can enter the lungs and slowly accumulate and build up over years in the human body. The research indicates that there is no know lower limit where PM 2.5 particles that have no known health effect. Further to this health effect the report claims that modern waste Incinerators are emitters of fine dust particles containing a very wide range of toxic and potentially carcinogenic compounds. The wide range of toxins being carried on these micro particles are a worrying cause of concern for future generations of people living near two large point sources of potentially toxic pollutants. People want to be sure that the Government will act if there is any emerging evidence that vulnerable groups such as unborn babies are being born over the coming decades with health problems.

I have pointed out that the measurement of and the availability of information on the long term health effects for people living in the area is required under Stockholm Article 11, (b) and (c) and Aarhus 2, 3, (c). The funding for these bio monitoring studies must therefore by some means be made available.

I thank you for your consideration of the issues I have raised

Yours Sincerely
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Submission to EPA
Re Reference No WO167-03
Re: Indaver Incinerator Duleek, Co Meath
To incinerate 20,000 tonnes per annum of hazardous waste

From Mr Ollan Herr
"Zero Waste Alliance Ireland"
Túr na Gaoithe
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086 1700569

Original
Submission to
THE EPA

Date 25th June 2012

Dear Inspector

We Request that the EPA denies a licence to Indaver to burn an extra 20,000 tonnes of hazardous waste at the incinerator at Duleek.

This proposal to burn an additional 20,000 tonnes of waste is in contravention of Article 5 of the Stockholm Convention.

Shall we increase dioxin emissions or shall we reduce dioxin emissions

Article 5 of the Stockholm Convention
Measures to reduce or eliminate releases from unintentional production

Each Party shall at a minimum take the following measures to reduce the total releases derived from anthropogenic sources of each of the chemicals listed in Annex C, (Dioxins and Furans) with the goal of their continuing minimization and, where feasible, ultimate elimination:

Pretending that an increase in dioxin emissions is a reduction of emission will be illogical on the part of the EPA

The application to increase the tonnage of waste to the Duleek incinerator will certainly increase the emissions and the ash quantities of Dioxin and Furans rather than continuing to minimise or ultimately to eliminate them as required in Article 5 above. Adding 20,000 tonnes of any waste containing chlorine or bromine to a fixed licensed quantity already being burned can only increase the emissions of toxic emissions that will enter into the atmosphere.

It is not mathematically possible to add a positive number "A" (in this case the additional dioxins from the extra 20,000 tonnes/ annum) to another fixed number "B" (the present allowable dioxin emissions from 200,000 tonnes/annum) and get an answer that will be less than "B". It's not mathematically possible to continuously

minimise "B" by adding another positive number "A". It's certainly not possible to ever reach "ultimate elimination" or zero by adding a positive number.

20,000 tonnes of hazardous waste is a positive number and burning this in an Incinerator will not reduce or eliminate dioxin emissions from the incinerator as required under the convention; it will instead increase the emissions in contravention of Article 5. The Licence application should be rejected by the Irish EPA on the grounds that the increase in dioxin emissions from this facility will be in breach of Article 5 of the Stockholm Convention.

Shall we wait to consider and implement alternative methods, processes and technologies aimed at reducing dioxin emissions

- (a) *Develop an action plan The action plan shall include the following elements:*
- (b) *Promote the application of available, feasible and practical measures that can expeditiously achieve a realistic and meaningful level of release reduction or source elimination;*
- (c) *Promote the development and, where it deems appropriate, require the use of substitute or modified materials, products and processes to prevent the formation and release of the chemicals listed in Annex C taking into consideration the general guidance on prevention and release reduction measures in Annex C and guidelines to be adopted by decision of the Conference of the Parties;*

We believe that the issuing of a licence by the EPA in advance of the finalization of The National Action Plan would amount to contempt and a disregard of the goals of the Stockholm Convention by that agency of the State that is legally responsible for its proper implementation.

We Request that The EPA Licensing Department should delay or stop the consideration of this application for 20,000 tonnes until their EPA colleagues have completed and finalized the publication and consultation process of the National Action Plan (NIP)

It would be reasonable to expect that the goals, requirements and recommendations contained in NIP would kick start a legal requirement and a movement by Irish industry towards clean technologies and processes so that the quantities of hazardous waste which is the basis of this application will reduce considerably over the coming years.

Consideration by the EPA or An Board Pleanála of alternative substitute materials, products and processes as required under Article 5 (c) that contribute to the generation of hazardous waste which when burned will create dioxin emissions can not be considered until the National Implementation Plan is finalized.

In spite of the obligations of the Stockholm Convention, are we to make an exception to allow one favoured business to increase their dioxin emissions

We most strongly object to the special exception that would be granted to Indaver in this regard. Every other legal entity in the state including the State itself is required to effectively reduce the quantities, stockpiles and emissions of Persistent Organic Pollutants. Other Irish industries actually have to eliminate and stop the production or the supply of all of the various other toxic chemicals being banned in the Convention. Ordinary people cannot have bonfires and we cannot burn waste in our back yards, but Indaver is to be granted a special exemption and permission to further increase its quota of pollution emissions.

The application of best practice in the Incinerator process does not permit any increase of dioxin emissions, no matter how small.

When applying best available techniques and best environmental practices, Parties should take into consideration the general guidance on prevention and release reduction measures in Annex C (for dioxins & Furans)

We Request that this Application should be rejected on the basis that a dioxin emission increase no matter how small is in breach of Article 5 of Stockholm.

We request that the EPA fully implements the access to information and access to justice requirements of Aarhus Convention

Article 1 Aarhus Convention

OBJECTIVE

In order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each Party shall guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention.

The concern we have is that Indaver or any state body is unable to contribute to present and future generations in Duleek and the surrounding areas to live in an environment adequate to his or her health.

We are also concerned that access to Justice will not be effective without the capacity to collect the enough information on emissions and on public health trends in the local area that would necessary to facilitate the mounting of a legal challenge.

Article 2 Aarhus Convention

DEFINITIONS

(ii) The information is already publicly available in another form.

In the interest of transparency that "all" Dioxin samples, such as the 8 hour sample results, that are required under the EPA Emission Limits be listed and made available on the Indaver **and** on the EPA web sites. We request that they be made available along with the date and the time of the sample on the web sites also. Under Aarhus we believe that the reporting of average Dioxin values over a biannual period is far too infrequent and is contrary to the rights of people to know about pollution levels in their living area as soon as the individual measurements are available. People under Aarhus have a right to know of the times, dates and emission levels

We request that the figures for the individual metals are broken up individually and not be presented as the sum, as it is at present. The elements of Cd, and Ti should be presented separately. The elements of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, and V should also be presented separately. These should be presented as a long table of figures with dates and times.

We request the frequency of sampling for toxic metals be increased from quarterly to weekly

We believe that it would be impossible to be sure of the source of high levels of lead in a sick person's blood stream for example if the information is presented in this non specific way. It would be extremely difficult to achieve justice in environmental matters as required under Article 1 of Aarhus. If the legal team acting for a plaintiff was unable to prove or identify the source of lead, the time and dates of the emissions or the concentration of lead from the Incinerator stack over more accurate specific times of operation of the incinerator.

Article 5 Aarhus Convention
COLLECTION AND DISSEMINATION OF ENVIRONMENTAL INFORMATION

6. Each Party shall encourage operators whose activities have a significant impact on the environment to inform the public regularly of the environmental impact of their activities and products, where appropriate within the framework of voluntary eco-labelling or eco-auditing schemes or by other means.

As already stated the web sites of the Indaver and the EPA should have "all" of the necessary information on pollution made easily available without even having to formally request it.

Article 6 Aarhus Convention
PUBLIC PARTICIPATION IN DECISIONS ON SPECIFIC ACTIVITIES

6. Each Party shall require the competent public authorities to give the public concerned access for examination, upon request where so required under national law, free of charge and as soon as it becomes available, to all information relevant to the decision-making referred to in this article that is available at the time of the public participation procedure, without prejudice to the right of Parties to refuse to disclose certain information in accordance with article 4, paragraphs 3 and 4. The relevant information shall include at least, and without prejudice to the provisions of article 4:

- (c) A description of the measures envisaged to prevent and/or reduce the effects, including emissions;
- (D) A non-technical summary of the above;

We request in accordance with (C) above that the planning application by Indaver should include as further information an analysis of more environmentally friendly ways to avoid or to “prevent” hazardous waste being generated by their customers. Furthermore we believe that the EPA will be proposing clean tech measures in its National Implementation Plan, due in November 2012, so that industry does not produce toxic waste for disposal in the first place.

As the National Organization responsible for the Stockholm Convention we think that a submission from the EPA should be made to an Board Pleanála on the possible ways to prevent hazardous waste being generated and then to be burned.

We Request that since the EPA is the National implementation body for the Stockholm Convention then as stated in Article 5 section b and c then the EPA should:

Promote the application of available, feasible and practical measures that can expeditiously achieve a realistic and meaningful level of release reduction or source elimination

Promote the development and, where it deems appropriate, require the use of substitute or modified materials, products and processes to prevent the formation and release of (Dioxins and Furans) taking into consideration the general guidance on prevention and release reduction measures in Annex C and guidelines to be adopted by decision of the Conference of the Parties;

Article 9 Aarhus Convention
ACCESS TO JUSTICE

Each Party shall, within the framework of its national legislation, ensure that any person who considers that his or her request for information under article 4 has been ignored, wrongfully refused, whether in part or in full, inadequately answered, or otherwise not dealt with in accordance with the provisions of that article, has access to a review procedure before a court of law or another independent and impartial body established by law.

In the circumstances where a Party provides for such a review by a court of law, it shall ensure that such a person also has access to an expeditious procedure established by law that is free of charge or inexpensive for reconsideration by a public authority or review by an independent and impartial body other than a court of law.

Whether the decision is to grant permission or not; we believe that a commitment to “access to justice” be supported by the easy availability of all of the following:

- A full disclosure of the time day and date of “every” stack emission measurement as already stated above and including all of the measurements as required under Schedule B: Emission Limits
- More frequent weekly sampling and reporting of the various toxic metals
- “Easy” finding of this information on the web sites of Indaver and the EPA
- An individualised listing of the 11 or so elements and their sample results instead of being grouped together as 2 groups in a “sum” result, as it is at present.

- On the same EPA web site that all results of their own ground monitoring results and various food sampling results from hens and from milk at Duleek be made available
- That substantial funding is made available to measure the improvement or the dis-improvement of public health over a range of health symptoms for small areas based on electoral areas upwind and down wind of the incinerator stack.

Yours Sincerely
Ollan Herr
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