

27th May 2010

Rathcoole Against Incinerator Dioxins (RAID)
C/O Rathcoole Community Centre,
Main Street,
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**Environmental Policy Section,
Dept. of the Environment, Heritage & Local Government,
Newtown Rd.,
Wexford,
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Email: epa_review@environ.ie**

Re: Review of the Environmental Protection Agency,

Dear Sir / Madam

Introduction

This submission represents the views of members of a community group known as RAID (Rathcoole Against Incinerator Dioxins). We wish to make this submission in relation to the Review of the Environmental Protection Agency (EPA). Our group was formed in 2008 as a result of planning permission being sought by Energy Answers for a municipal waste incinerator (MWI) processing 365,000 tonnes of mainly municipal waste (Ref: PA0006 An Bord Pleanala).

This application was rejected by An Bord Pleanala in February 2009 on a number of points but one of the main objections was in relation to the facility exceeding the capacity outlined in the Waste Management Plan for the Dublin Region (2005-2010). The inspector also cited air and water pollution as primary concerns in his rationale for refusal *'The proposed development would cause serious air pollution connected with the disposal of waste, and would, therefore, be prejudicial to public health and animal health.'*

One cannot begin to describe the huge financial burden the local community had to undertake to obtain experts to fight our case with ABP. At present it has cost the local community in excess of €90K. We have been awarded €12K by ABP but at the time of writing this still remains unpaid by Energy Answers. For local communities who are left to fight these private incinerator companies, with huge financial resources at their disposal, this represents a complete inequality of arms. The incinerator companies then employ a strategy of re-applying for planning, even after a planning permission has been refused, when the local community groups are exhausted and financially drained. This has been the case for other anti-incinerator groups around the country who have been fighting these facilities for over 10 years.

We welcome the opportunity to comment on this review and hope that our concerns are taken into account. We will try to address our concerns under the relevant sections outlined in the consultation document.

Comments on the Strategic Themes for the Review Process

1. The Legislative framework governing the EPA

Ireland has a terrible record in relation to waste mismanagement. The fact that Ireland has signed up to many of the European initiatives regarding environmental protection, such as the Stockholm Convention and the UNECE Convention on Long-range Transboundary Air

Pollution protocol on Persistent Organic Pollutants (POPs), but has not yet ratified them some 11 years later speaks volumes about the previous administration's lack of commitment in relation to environmental protection.

We note that the EPA is now only currently a National Implementation Plan (NIP) to comply with EU regulation (EC) No. 850/2004 in relation to POPs some 5 years after the regulation entered into force. We look forward to the adoption of this policy as the EPA in considering any proposals for incinerators are required to:

'give priority consideration to alternative processes, techniques or practices that have similar usefulness but which avoid the formation and release of PCDD/PCDF, HCB AND PAHs'. We look forward to the enforcement of this plan.

2. EPA track record in preventing or controlling environmental harm through licensing & permitting activity.

Whether the perception is misguided or not we feel the need to inform the review that our committee felt that if our case ever got to the EPA licensing stage that it was a case of rubber stamping any permission given by An Bord Pleanála. We believe that we are not alone in our belief as this is the view of other anti-incinerator groups. Our concerns were particularly with SOLUS agreement of present and former EPA employees but we will deal with those issues later in this document.

3. EPA track record in ensuring compliance?

Monitoring however is useless unless proper compliance is enforced. The EPA, as the enforcement agency with responsibility in this regards, has the authority to shut down a facility in the case of consistent non-compliance. However the EPA does not have the power to act immediately for non-compliance. Instead the EPA has to pursue offenders through the courts. The majority of incinerators in the US are closed due to non-compliance with the Clean Air Act, and all of them claimed in their applications that they would meet these standards.

We note that this lack of appetite and legislative capability in dealing effectively with enforcement has been highlighted in relation to Standish sawmills in Co. Offaly in 2006. This sawmill which had been fined twice for discharging Chromium VI, a cancer-causing chemical, into the local water subsequently got their licence renewed by the EPA, the same agency which brought the prosecution. To restore any level of public confidence we feel the EPA must ensure more stringent enforcement procedures than that displayed in the past. We would support the creation of a specialised environmental court or tribunal for dealing with such issues.

4. Stakeholder Relationships

In December 2009 we made a submission to South Dublin Draft Development Plan specifically in relation to the Environmental Services section. While researching information regarding waste prevention we contacted the EPA. Our query was dealt with in a friendly and efficient manner and the information was extremely useful for our submission.

However the discussions with the EPA revealed that SDCC have not participated in their National Waste Prevention Programme (LAPD) even though they were substantially grant aided by the EPA. In fact the EPA was offering 75% of the salary for a waste prevention officer which is funded by the Environment Fund (i.e. plastic bag levy). Fourteen local authorities are participating to date receiving €885,000 in grant aid to allow dedicated staff to work on local prevention projects. Dun Loaghaire / Rathdown were the only Local

Authority in Dublin that participated and they have now withdrawn from the programme. This leaves us with the unenviable position that not one Waste Prevention Officer is working on waste minimisation within Dublin. We are not sure whether the fault lies in a lack of communication between the EPA and the Local Authorities (LAs) or whether the LAs do not wish to engage with the EPA but a more co-ordinated approach is required between the various agencies to ensure a better delivery of services to the public. LAs should not be able to opt out of important projects such as waste prevention. Again from our experience of the draft development plan there are a number of areas that the EPA designate the LAs to administer but in reality the LAs do not even take these on board resulting in important policies falling between the cracks.

The same problem we feel exists between An Bord Pleanála and the EPA. The two processes of granting planning permission for a waste facility and the licensing of that facility should not be two separate entities as conditions attached to the granting of a license by the EPA may alter the basis on which planning permission was granted by An Bord Pleanála. This point was clearly demonstrated in our oral hearing with An Bord Pleanála when the inspector noted the following in relation to the incinerator stack; *'The Board is concerned that, notwithstanding a grant of planning permission for an 84m high stack on this site (extending to 224m OD), a requirement of the Environmental Protection Agency to increase the height of the stack, by way of any licence granted, would endanger or interfere with the safety of aircraft or the safe and efficient navigation thereof in relation to Casement Aerodrome, Baldonnell.'*

We also feel that there should be greater interaction between the Health Research Board (HRB) and the EPA. There is an obvious interconnection between human health and the protection of our air and water quality. However there is a perception within our group that human health falls between the cracks. In 2003 the Health Research Board (HRB) published a comprehensive study analysing the health effects of incineration and landfill. In relation to incineration, this study notes that *'a number of well-designed studies have reported associations between developing certain cancers and living close to incinerator sites.'* It further urges for the urgent routine monitoring of the health of people living near waste sites. It comments on the *'serious deficiency of baseline environmental information in Ireland'* and calls for improved monitoring of all potential pollutants. The study concludes that *'further research, using reliable estimates of exposure, over long periods of time, is required to determine whether living near ...incinerators increase the risk of developing cancer'*. We are now six years on from this report having been published and to date no baseline study has been undertaken. This level of inaction is of considerable concern to this group and does not instil any level of confidence in the determination of the government to protect the health of communities affected by waste facilities.

The HRB report comments on the lack of resources available to monitor the impacts on human health of populations living in the vicinity of waste facilities when it states *'Ireland presently has insufficient resources to carry out adequate risk assessments for proposed waste management facilities. Although the necessary skills are available, neither the personnel nor the dedicated resources have been made available'*. So we would ask the question whether resources will be made available to either the EPA or the HRB to monitor the human health impacts of incinerators. If possible there could be a sharing of expertise and resources between these two groups in order to facilitate baseline studies.

5. Environmental Monitoring and Research

At the moment the EPA only monitor biannually and the companies are informed of the impending visit. Two six hour grab samples are simply not representative of the emissions coming from an incinerator stack. To establish any deterioration in air quality surrounding waste facilities one must first establish baseline levels. The recent review of waste

management in Ireland states in its report that it is a *'requirement of the EPA and the local authorities to monitor air quality in general, and emissions resulting from the operation of specific waste facilities'*. Collecting reliable data is the first step in determining any changes in air quality and safeguarding the health of the Most at Risk Individuals (MARIs) like our families that may live under the shadow of the incinerator plants.

The authors of the same report suggest that some of the incinerators planned for Ireland have continuous monitoring of emissions. This was not the case with Energy Answers and if left up to private companies they will take easiest course of action. It is therefore incumbent on the EPA to ensure that continuous monitoring of stack emissions becomes the minimum standard required for incinerator plants. This is the only way to provide confidence in incinerator plants. Best available technology (BAT) is often quoted by incinerator companies to argue the case for plant design. Continuous monitoring is best available technology and one that will ensure that waste management facilities are well managed 24/7 and not just for 12 hours of the year when an EPA inspection is being performed. Such monitoring equipment is cheap in comparison to the huge capital investment involved in building an incinerator plant. As it is stated in the report that typically European incinerator facilities have continuous monitoring we would only be keeping in line with best practice by replicating this model in Ireland.

The authors of the report quotes the UK Committee on Toxicology within the report the following regarding brominated dioxins;

'This is of concern because the exposure for breast-fed infants is already too high and brominated dioxins could increase it to unacceptable levels. Lorder estimated a dose of 242 pg TEQ/Kg/Day. These exposure limits are hundreds of times higher than the WHO target. Incinerator may be a major contributor to the environmental and human burden of brominated dioxins.'

Given the concerns raised within the report regarding brominated dioxins we would ask that any assessment of air or residues would also determine levels of these compounds. This is also in line with the WHO 2005 review that these compounds should also be considered for inclusion in the Toxic Equivalency Factor (TEF) concept. As these compounds are used in brominated flame retardants in common items such as furniture, electronic equipment, textiles, building material, cars etc – the likelihood of brominated dioxins being produced during incineration is high. Given that brominated dioxins are only destroyed at 1,100oC we would advocate both of the following in order to protect both public health and the environment;

- a) Introduce a strong policy on waste separation with appropriate enforcement
and / or
- b) Ensure all incineration is carried out at 1,100oC

On a separate but related point states the following the waste review stated that;

'Local authorities and the Agency should ensure the carrying out of monitoring of relevant pollutants in the vicinity of major waste facilities to ensure that predicted environmental quality levels are met and to establish data for epidemiological analysis.'

Such policies in no way go towards addressing the effects of emissions from waste facilities on animal health, flora and fauna, landscape or biodiversity. Although it is regarded these issues are site specific, and therefore should be dealt with at the planning stage, we feel that a policy to protect and preserve these should be at national level. Of particular concern is the lack of monitoring at the low level organisms. These are our 'canaries down the mines' scenario and as such provides an early warning system that something is amiss in the local environment. By the time epidemiological studies have relevant data to critically analyse the damage done to the local and wider population it will be too late. As human are the top of the food chain we must ensue that the species lower down the food chain are at least monitored, if not to ensure their survival, then to ensure the health of our own species.

Some of the incinerators that have been granted approval by the EPA are located in

agricultural areas. This is critical as most of our dioxins come from a dietary source. As dioxins can accumulate in the fatty tissue of meat and milk products, analysis of dioxins in meat and dairy products around incinerators should be monitored on an on-going basis to ensure the food safety for the entire population and to protect our international reputation for producing high quality produce.

On a separate note we would ask the EPA to interpret BAT as implying the use of Selective Catalytic Reduction (SCR) for removal of nitrous oxide and dioxins in relation to incineration facilities. Typically incinerators details Selective Non-Catalytic Reduction (SNCR) technology which reduces nitrous oxides by ammonium injection into post combustion flue gas. The review on waste management in Ireland states that SCR results in lower emissions of NO_x, SO_x and dioxins than SNCR. It also states that this technology is widely used in Europe. We suggest therefore that this option should be adopted as it represents best practice.

6. EPA's Performance as a provider of environmental information.

As stated above our experience with dealing with any queries has been a positive experience. In relation to the quality of public access to monitoring and research data, I would think that access to the emissions from any waste facility would be of paramount concern to citizens in the vicinity of such facilities. As stated above the monitoring must be continuous and real time in order to have any relevance.

We note that the EPA intends to assess the hazardous nature of incinerator bottom ash. We would be particularly interested in reviewing the full report on any such research including testing methods, sample selection etc. given the information outlined in the international review on waste management. The authors of the international review conclude that there is an *'increasing body of evidence supporting the view that if bottom ash is not always hazardous, the presumption should certainly not be that it is not hazardous'*. The authors also quotes the United Nations Environmental Programme (UNEP) review in 2005 which states *'in industrialised countries, the most prevalent method of management is disposal of the ash in lined landfills to control the risk of underground pollution by soluble toxic chemicals leached out of the ash. Both fly and bottom ash contain chemical constituents that pose potential serious risks to operating personnel and the public. The chemical constituents of concern include heavy metals, dioxins and furans.'*

The environmental report (ER) states that the UK's Environment Agency has admitted it does not have 100% confidence in its classification of bottom ash as non-hazardous waste. We sincerely hope that the EPA will not make the same mistake in relation to classification of bottom ash especially in light of zinc oxide, a compound found in ash, being reclassified as ecotoxic. The ER has confirmed our view that the bottom ash is hazardous and is therefore unsuitable material to use in road construction projects or in the case of Energy Answers concrete blocks for the construction industry.

One of the biggest shames regarding incineration of municipal waste is that you initially have an inert, non-toxic starting material and in the process of incineration you end up with hazardous residues that then have to be dealt with appropriately. The other shame is that it destroys materials and their intrinsic embedded energy. The ER estimates that a quantity of 300,000 tonnes of hazardous waste would be produced by the incinerators that have already been licensed. This figure does not allow for any additional capacity in Regional Plans. The ER continues that *'This figure would double the quantity of hazardous waste generated in Ireland'*. The ER also states that *'As a general rule, Member States are allowed to prohibit the import of residues from incinerators.'* The ER concludes that we will need to dispose of this ash in Ireland.

We are therefore looking at the inevitable disposal of this hazardous ash in hazardous landfill sites. This poses another problem, as the EPA has recognised, that there is insufficient capacity at present. The location of the hazardous waste landfill site in relation to the incinerator site is important in relation to carbon emission of trucks and safety implication and must be addressed in any co-ordinated strategy for waste management.

7. EPA's Role in environmental Assessment.

We could like to address the future planning of the EPA and their long-term investment strategy in this section. We are particularly concerned how the EPA is planning to manage flood and coastal risk management in Ireland.

The latest climate change predictions indicate that flooding and coastal erosion are likely to increase in the future. Any long-term investment strategy sets out the scale of the investment needed to meet this challenge over the next 25 years.

We would like to know if such modeling has been undertaken in relation to the required investment in building and maintaining of flood defenses needed. We would also question if the cost of managing the risk of surface and ground water flooding and other activities such as flood warning and development control has been investigated given the amount of flooding the country has experienced over the last year.

8. Is the internal structure and governance of the EPA 'fit for purpose'

The review seeks to determine whether the EPA is *'sufficiently accountable and transparent; whether arrangements to ensure the independence of the Agency are sufficiently robust; whether the criteria and procedures for appointments to key positions are appropriate'*.

This is a major bone of contention that our organisation has with the EPA. We regard the EPA with some scepticism in relation to the independence of some of its staff. The lack of a SOLUS agreement for EPA employees has resulted in a lack of confidence and concern within the community, given that one of the employees from Energy Answers was a previous employee of the EPA. Another individual who worked in Indaver while they were applying for planning permission for an incinerator in Cork was subsequently hired by the EPA. We feel that individuals with previous experience working within incinerator companies compromise their independence and seriously undermine public confidence in the system.

9. Evaluation of resource allocation in light of current and future obligations

We recognise the challenges that face the EPA in light of steadily increasing number of statutory functions assigned to it and the difficulties that arise resulting in reduced staffing levels. We also recognise that other public sectors have been similarly affected and one would question why for example filling of front line staff is health or education should not be given a priority. We would answer that without an effective guardian of the environment all our health is at risk.

Also we must recognise the importance of protecting of our Agri-food industries in our economy. We do not need to re-iterate the concern raised over the recent Dioxin scare in

relation to the pork products and the associated cost to the Pork Producers. The Agri-food industry represents 10% of GDP. Ireland is the fourth largest food exporter in the EU and it exports to over 130 countries worldwide. Irish milk has for example the lowest levels of dioxins in the EU. This is something we need to market and protect rather than compromising. We cannot protect our Agri-food industries unless we provide adequate monitoring and compliance with environmental standards.

In line with the 'polluter pays principle' we suggest that some of the funding from the proposed levies imposed on waste facilities should be used to fund the EPA, particularly any associated cost of monitoring and waste prevention schemes. It should be seen as the 'cost of doing business' in this industry.

Conclusion

Overall we are heartened by the direction of policy within the DOEHLG and we hope that some of our comments on the EPA will be taken on board. In addition, a number of complimentary initiatives are required to ensure real change within the system. These include;

- National educational program targeted at primary school level in order to educate our future policy makers in sustainability.
- Proper resourcing of public bodies dealing with the human health impacts surrounding incinerators i.e. HRB and the EPA.
- Integrated waste minimisation policy between local authorities and the EPA.

We are also disappointed that six years after the HRB report was published there is still a '*serious deficiency of baseline environmental information in Ireland*' as no such study has been undertaken. If this baseline study has not been completed, it will be difficult to see how epidemiological analysis can proceed. This level of inaction is of considerable concern to this group and does not instil any level of confidence in the determination of the government to protect the health of communities affected by waste facilities. We would look for a more joined up approach between the EPA and both the HRB, An Bord Pleanála, the Local Authorities and the Department of Agriculture and Food.

At the end of reading through this environmental report we are still no clearer if any of the recommendations or concerns raised within the SEA will be addressed or how they will be addressed. It is also unclear whether any of the recommendations will be used to change policy directly or if they will be used to strengthen the implementation of the policies.

We hope that concerns in relation to SOLUS arrangements within the EPA can be addressed to safeguard the integrity of the decision making process within the EPA remains fair to all sides concerned but particularly should support local communities with limited funding available to them. We would support the idea of appointing individuals from environmental NGOs to sit on advisory boards with the EPA as they can be the eyes and ears of concerned groups such as ourselves. We would hope that some funding mechanism could be put in place to support the expenses involved in hiring particular expertise in the areas of human health etc.

We also hope that our concerns regarding the continuous monitoring of waste facilities will be reviewed along with classification of bottom ash from incineration plants as hazardous waste.

We look for to a more inclusive EPA which will have the power to effect rapid enforcement. We would support the creation of a specialised environmental court or tribunal for dealing with such issues.

Kind Regards

Deborah Mac Dermott
Secretary RAID