



Environmental Protection Agency Headquarters, PO Box 3000, Johnstown Castle Estate, Co. Wexford, Ireland.

29/11/2014

Reg. No. W0167-03

Dear Sirs,

I refer to the Agency's proposed determination on the licence review application from Indaver Ireland Ltd..

Veolia Environmental Technical Solutions Ltd. Corrin, Fermoy, Co.Cork object to the proposed determination and furthermore request an oral hearing on this matter to discuss our objection in more detail. The grounds and reasons for the objection are discussed overleaf. Moreover, Veolia believe that the Agency should give further considerations to the arguments made in its orignal objection (23/03/2013) to this application.

Furthermore, Veolia is concerned that the Agency is succumbing to pressure to ensure Ireland becomes self-sustainable in the management of hazardous waste over ensuring that the Best Available Technologies are applied. Although other countries in Europe are permitting hazardous waste into MSW incinerators, these permissions are derived from historical situations and should not be used as a defence to grant similar permissions in Ireland to a new facility.

I enclose a cheque for €226 to cover the objection fee and the oral hearing fee.

I await the Agency's response on this matter.

Yours Sincerely,

Kieran Mullins General Manager ENVIRONMENTAL PROTECTION AGENCY

-5 JAN 2015

1. Fly Ash

a. Condition 3.9 of the proposed determination requires the licensee to provide a minimum storage capacity of 420m³ for the fly ash/ flue gas cleaning ash.

As the Agency is aware fly ash is eco-toxic as a result of the concentrations of metals present such as lead, mercury, cadmium, molybdenum, selenium, chromium, cobalt, zinc, etc.. According to the Seveso Directive 96/82/EC and subsequent amendments a facility having a capacity of 420m³ brings that site into an Upper Tier Seveso site as the facility will have a potential to store more than 200 tonnes of fly ash on-site. There is no mention of the site being a Seveso site in the proposed determination, a matter that must be rectified by the Agency.

b. Schedule C.4 Monitoring of Incinerator Residues has stipulated that the licensee should classify the Flue gas treatment residues as hazardous/non-hazardous on an annual basis.

According to the European Waste Catalogue and Hazardous Waste List all Air Pollution Control residues are absolute entries (i.e. they are classified as hazardous) and there is no option for the licensee to reclassify them as non-hazardous. The EWC codes and descriptions for these materials are

19 01 05*	filter cake from gas treatment
19 01 06*	aqueous liguid wastes from gas treatment and other aqueous liquid
wastes	C ^o
19 01 07*	solid wastes from gas treatment
19 01 10*	spent activated carbon from flue-gas treatment
19 01 13*	fly ash containing dangerous substances

All are marked hazardous. As a result this reclassification option must be removed from the licence.

2. On-site Laboratory

a. A major concern in the proposed determination is the fact that there is no requirement for an on-site laboratory. This is a point that Veolia raised in its original objection (20/03/2013) to the licence application and it appears to have gone unheeded by the Agency. Veolia, hence reiterates its position on this matter hereunder and requests that the Agency take more heed of the requirement for the licensee to have an on-site laboratory and furthermore put a specific condition in the licence requiring an on-site laboratory.

Peaks and variability in the composition of the hazardous streams listed in the proposed determination and licence application are very common and therefore necessary upstream controls in terms of acceptance criteria are essential (including CI analysis to ensure that the operating temperature of 850°C is sufficient to comply with the Waste Incineration Directive, WID).

As stated in BAT 69 of the Waste Incineration BREF, the facility therefore must be fitted with a laboratory capable of analysing incoming waste streams. In general equipment is required to test:

- the calorific value
- the flashpoint
- PCBs
- Halogens (e.g. Cl, Br, F) and sulphur
- heavy metals
- waste compatibility and reactivity

Without analytical capabilities there is no control on incoming waste and no opportunity to address the risk associated to variability in the waste and incompatibility of waste streams. The licensee cannot rely on customers analyses (this is well known in the industry), third party laboratories nor any other off-site laboratories. Analysis of incoming waste must be real time.

Condition 3.28 of the licence requires the licensee to ensure that the net calorific value of wastes entering the incinerator does not exceed 18MJ/kg. It is difficult to see how the licensee can prove this without having on-site laboratory capabilities.

All hazardous waste treatment facilities have their own laboratories on-site - this facility should be no different. The Agency is effectively allowing 10,000tonnes of hazardous waste to be accepted at the facility for treatment where the licensee is relying on the analyses of 3rd parties. That is a significant decision by the Agency.

3. Chemical Limits for Hazardous Wastes

In the list of Chemical Limits for Hazardous Wastes, in Schedule A of the Proposed Determination there are no limits set for chlorine. In Condition 1.3 there are limits set for halogenated (< 1%) organic compounds (expressed as chlorine). This does not however refer to inorganic chlorine. Veolia request that a chlorine limit be put into the table in Schedule A.

In addition to the above there is no mention of pH range, flammability or flash point limits in the Proposed Determination.

It also misses radioactivity controls as listed in BAT 69 of the Waste Incineration BREF.

4. Recovery and Disposal.

Condition 7 of the proposed determination refers to the Energy efficiency of the facility and the calculation to be used.

"The calculation shall be in accordance with the European Commission's Guidelines on the Interpretation of the R1 Energy efficiency Formula for Incineration Facilities Dedicated to the Processing of Municipal Solid Waste According to Annex II of Directive 2008/98/EC on Waste".

Veolia is at a loss as to how the Agency can consider that this calculation is applicable on several grounds.

- i) Municipal waste is defined in Chapter 20 of Commission Decision 2000/532/EC. Furthermore, mixed municipal waste is defined in Art 3(3) WID as waste from households as well as commercial, industrial and institutional waste, which because of its nature and composition is similar to waste from households,... The proposed determination is allowing the licensee to accept up to 10,000tonnes of hazardous waste which by no stretch of the imagination can be considered as municipal waste, or similar. As an example 070511* Sludges from on-site effluent treatment containing dangerous substances which is from the MFSU of pharmaceuticals. Other examples include 070101* and 070501* aqueous washings and mother liquors from the MFSU of basic organic chemicals and pharmaceuticals(which in many cases include Active Pharmaceutical ingredients(APIs).
- ii) Secondly the facility will be licensed to accept up to 18,000 tonnes of liquid waste both hazardous and non hazardous this is not a facility dedicated to solid waste.

It is therefore, Veolia's contention (a point also made in its original objection) that the facility cannot be classified as an R1 facility when it is accepting hazardous waste that is not municipal solid waste/ or similar nor when it is accepting aqueous waste. By not taking into account the aqueous / hazardous waste the calculation may hold through. In this case the treatment of the hazardous and aqueous waste must be considered disposal.

5. CVs of Waste Streams

a. Schedule A.2 of the Proposed Determination details the CV ranges of the hazardous wastes proposed. They are certainly quite all encompassing. Veolia has carried out analysis of its on some of the proposed waste streams and the CVs permitted give cause for concern. For instance, the average CV of contaminated packaging and clothing has been determined to be well in excess of the maximum permitted value of 30MJ/kg. It is closer to 40MJ/kg. Based on the proposed determination the licensee could not accept

this material. Were the final licence to allow the higher CV then it is contended that the energy derived from the incineration of the waste is not being optimised. In fact, it is being diluted by other wastes as Condition 3.28 of the proposed determination requires the licensee to ensure that the net CV of wastes entering the incinerator does not exceed 18MJ/kg. Indeed the same can be said for all the higher CV waste streams proposed.

b. The liquid waste, according to condition 3.20.12 of the proposed determination shall be introduced to the furnace by way of direct injection. The proposed CV range of the hazardous aqueous waste is between 0 and 12MJ/kg. This means that the organic solvent concentration in the aqueous waste streams can vary between 0 and c. 60%. This would not be unexpected from aqueous washings from pharmaceutical or chemical manufacturing facilities. Furthermore, the solvent can be either miscible or immiscible in water. If the solvent is immiscible then layering will occur in the delivery tanker, as the licensee would be well aware, resulting in a layer of water at the bottom of the tanker with minor quantities of solvent present and an associated CV close to zero MJ/kg, and a high solvent concentration upper layer with a CV of up to 30MJ/kg. It is difficult to see in situations like this how the licensee can ensure that the Net CV of the wastes entering the incinerator does not exceed 18MJ/kg.

6. Addition of hazardous waste to incinerator

- a. Condition 8.4.4.3 of the proposed determination states that the licensee shall use a feed equalization system for solid hazardous waste, which is an absolute requirement. Yet in the inspectors report (p54) it states that "hazardous waste streams will go directly into the bunker" and is accepted by the Inspector. There appears to be confusion here. This is an extremely important point as the Inspector has also stated that there is no need for additional storage / waste reception areas due to the fact that the waste will be tipped directly into the bunker. For an effective and efficient feed equalization system to operate there has to be storage of wastes so that sufficient volumes of waste can be present to ensure that the correct mix are be made, particularly if the net CV of 18MJ/kg is not to be exceeded. The Agency must insist on the feed equalization system and the corresponding storage requirement.
- b. The equalization system should also take into consideration the verification of the waste compatibility and reactivity in order to avoid any fire, explosion or emission of dangerous substances at this stage (BAT 69 and 70)

7. Hazardous Waste Volumes

 A common theme throughout the inspectors report is that the quantity of hazardous waste that the licensee will manage is not significant compared to the overall tonnage

accepted at the incinerator. Furthermore, this appears to be, in some cases, a justification for allowing the licensee to accept and treat hazardous waste. However, whereas percentage wise this may be low it is still 10,000tonnes of hazardous waste that must be managed. This is not an insignificant quantity and in terms of volume can be even more significant. To give an example a 40ft container full of empty plastic drums can weigh less than 4 tonnes only. Similarly a 40ft container with contaminated packaging and clothing can weigh less than 3 tonnes. This further brings into question the requirement for storage, etc.

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