Aire Valley Against Incineration (AVAI) response to the Environment Agency Draft Decision Document

Waste Feedstock and the Proportion of Plastics Waste

In the 4th EA Schedule 5 notice to the Applicant dated 19.09.20 Question 8 asked for the following information:

Confirmation whether a large amount of plastic waste will be received and burned or whether plastic waste will be a relatively small amount of the total waste.

The applicant's relatively lengthy reply detailed below does not actually fully answer the question

The facility will accept mixed waste derived from commercial and industrial sources. No separately collected plastic waste will be accepted unless in exceptional circumstances. The quantity and concentration of plastic waste in mixed loads cannot be determined in advance.as it will be specific to each waste delivery and dependent on waste producers. However, waste producers must comply with their duty of care and the requirement to ensure that their waste is treated towards the top of the waste hierarchy. That being the case all customers will be encouraged to sort waste and to segregate plastics at source ready for recycling where practical. Customers will be required to confirm on their waste transfer note that they have recycled as much waste as possible, in accordance with the Waste Regulations 2011.

By encouraging waste producers to comply with their statutory duty it is not anticipated that significant quantities of plastic waste will be processed. Indeed, the financial model for the plant is based on burning mixed wastes. High volumes of plastic would have a negative impact on finances as the high calorific value would mean reduced throughput and therefore reduced gate fees.

All wastes will be blended in the bunker through mixing to ensure that concentrations of all feed material are evenly distributed and as homogenous as possible with no excess plastic. If waste acceptance procedures identify significant deliveries of plastic material, where plastic constitutes the most prominent waste fraction, these may be rejected and the waste-producers will be asked to improve their segregation procedures.

Essentially the first paragraph relies on the efforts of others. The second paragraph explains the financial benefits to the Applicant of not burning excessive plastics but does not improve any of the related control systems. The final paragraph relies on a yet to be determined waste acceptance procedures and a qualified statement that some waste **may** be rejected.

These answers appeared to satisfy the EA as no further questions were asked on this topic before the draft decision document was issued in June 2020.

The Applicant has stated that the categories of waste to be incinerated will be predominantly Refuse Derived Fuel and Municipal Solid Waste so we consider that it was relatively easy for them to estimate the the proportion of plastics that that is likely to be in the feedstock. The

information on the percentage composition of these types of waste have previously been published by operators of other incinerators.

Could their failure to properly address the EA's question be indicative of the fact that the Applicant has no experience of running an incinerator?

Why didn't the EA resubmit the question to the Applicant to get more detailed information?

The composition of the toxic emissions resulting from the incineration of plastics is highly dependent on what types of plastic are burnt and the quantity of each type present. Of the pollutants emitted by incinerators the ones with the highest toxicity are the Persistent Organic Pollutants (POPs) including the dioxins and furans. These compounds are a bi-product of incineration when polyvinyl chloride (PVC) based products are burnt.

Why doesn't the EA put a limit on the proportion of PVC allowed to be burnt as these polymers are the primary source of dioxins, furans and other POPs which are the most toxic of all the pollutants that will be emitted by the incinerator?

12.08.20