R1 criteria guidance – Eurits response
June 2010

In the draft guidance (dated 11 May 2010) on the application of the R1 energy efficiency criteria for municipal waste incinerators (MWIs), DG Environment has posed the following question:

“Even if hazardous waste which may be accepted according to the permit of the MWI should not be excluded from the calculation of the factor Ew in the R1 formula the possible impact on the proper management of hazardous waste has to be considered. The incineration of hazardous waste usually requires according to the BREF on Waste Incineration (chapter 5.4) specific precautionary measures, including higher temperatures to ensure an efficient destruction level, which are provided by specialized facilities dedicated to the incineration of hazardous waste. The legislator restricted the scope of the R1 formula to ensure that the R1 status would not interfere with the sound treatment of hazardous waste in suitable incineration plants. Therefore it should be considered that hazardous waste which are incinerated in a MWI should not benefit from the R1 status of the MWI and not be regarded as recovered.”

Eurits position

Hazardous waste is classed as hazardous because it poses a risk to human health and to the environment. The number one priority must be to ensure safe, controlled management of hazardous waste in dedicated, high temperature facilities.

Eurits believes that the most appropriate management for hazardous waste is in a dedicated, high temperature facility with characteristics as described in the WI BREF. Hazardous waste incinerators have all the transportation, handling procedures, sampling and analytical requirements, storage infrastructure, and staff training designed to cater for the wide range of heterogeneous materials often present in hazardous waste. In addition the nature of a high temperature incinerator is to ensure greater destruction efficiency and burn out of materials than is the case for MWIs – this is particularly important given that MWIs frequently use their bottom ashes for commercial applications.

The allocation of an R code to all waste processed in a MWI will shift hazardous waste towards that waste management option. Eurits is concerned as to the movement of hazardous waste across Europe to municipal waste incinerators where the facility is not designed for the handle, store and treatment of hazardous wastes to the same high standards as those facilities dedicated to hazardous waste treatment.

MWIs that incinerate hazardous waste (ie as D10) should still have to comply with all the legislation and regulation of the design, monitoring and controls that a HW incinerator has to undertake. These controls should apply to ALL the waste the MWI is taking if it is combining hazardous waste with municipal waste.

It should not be forgotten that if the hazardous waste contains greater than 1% chlorine then the Waste Incineration Directive requires the incinerator to operate at 1100 °C.
Eurits proposal

Eurits suggests a slight amendment to the Commission’s proposal:

“Hazardous wastes would not count for formula calculations (input and output) and hazardous wastes would be D10 if used in a MWI.”

This is based on the Commission’s proposal but it is a more legally consistent approach. This solution is in line with the foot note of the annex 2 of the Waste Directive (that the R1 formula is applicable to incineration facilities dedicated to the processing of municipal solid waste only). The high calorific value of HW is not an argument for accepting HW in MWI because commercial wastes have themselves a high calorific value.

As the formula is a ratio, not counting the energy (both the input and output contributions) from HW is neutral except for the losses of energy which are constant. As the amount of HW is not the main input it should not be significant.

Other comments

In the longer term it would be possible to improve the Waste Incineration BREF to better distinguish the differences between HWIs and MWIs; there would be the opportunity to include more information on input controls and creation of input criteria, however given that the revision of the Waste Incineration BREF is not scheduled to start for at least 2 years this is a longer term solution.

The Oekopol report to the Commission contains the statement that:

“It should be avoided that wastes that are currently incinerated in other plants (e.g. incinerators for hazardous waste) are directed to R1-incinerators.”

This paragraph appears to be an incorrect translation of some work carried out by Oekopol for the AGS [German Association of Hazardous Waste Management Companies of the Bundeslaender] – this point does not make sense and the original sentence is much clearer.

Eurits looks forward to participating in discussions on this issue.

Eurits
2 June 2010