

Using the “HWF Capacity Need” Spreadsheet

The capacity need spreadsheet provides a tool to estimate the treatment capacity of hazardous wastes which are currently landfilled or handled via HTI. The spreadsheet is split into 4 worksheets:

Hazardous Waste Landfilled: Used to estimate the quantity of hazardous waste that is landfilled. The worksheet contains a breakdown of the special waste landfilled by 4 digit code (Columns C to F) along with the potential hazardous properties associated with those codes (Columns G to T). The quantity of hazardous waste landfilled is estimated by adding a percentage change in Column V (i.e. newly hazardous that is currently landfilled). Column U can be used to record assumptions. Column W provides the estimated quantity of hazardous waste landfilled.

Allocation Sheet: Used to allocate the hazardous waste landfilled between the alternative treatment options. Column C contains the values from Column W of the Hazardous Waste Landfilled worksheet for reference. Columns D to O contain the options on the likely alternative treatment options from:

- The Agencies: Guidance on the Waste Treatment Requirements of Article 6(a) of the Landfill Directive;
- EA R&D Technical Report P1-484/TR – Hazardous Waste Management Market Pressures and Opportunities: Background Paper; and
- Information gathered by ESA from it's members.

The hazardous waste landfilled is allocated between the alternative treatment options by entering a percentage to each route in Columns P to X. If Column Y states “OK” the percentage allocations add up to 100%. Column Z can be used to record assumptions.

Treatment Matrix: Used to estimate treatment needs. Columns A to Z mirror the columns in the Allocation Sheet, except that the percentages have been converted into tonnages.

Columns AA to AN then allow various assumptions to be made.

- Columns AA to AC allow a proportion of waste identified under the Solidification/Stabilisation/No Treatment to be allocated directly to landfill (e.g. bonded asbestos). The percentage is entered in Column AB and Column AA can be used to record assumptions.
- Columns AE and AF take account of the landfill requirements for residues from other treatment process. It is assumed that Solidification/Stabilisation will (through addition of cementitious material) increase the weight of waste by a factor of 2 and that Physico-chemical treatment will produce a residue equivalent to 75% of the input weight. These assumptions can be varied by changing the values in AE3 and AF3 respectively.

- Column AG gives the total landfill capacity required, either as hazardous waste landfill or separate cells in non-hazardous landfill. These have not been separated.
- Columns AH to AJ allow the waste identified under HTI/Co-incineration (Column U/V) to be allocated between the two routes by entering a percentage to HTI in Column AH (AI populates automatically). Column AJ can be used to record assumptions.
- Columns AK and AL allow the effect of the proposed amendment to Substitute Fuels Protocol (if adopted) to be assessed. Column AK contains the quantity of waste currently sent to HTI. Column AL allows a percentage to be transfer to Co-incineration. Column AJ can again be used to record assumptions.

Columns AO to AV present the resultant capacity needs, with the total for each alternative treatment in Row 131.

The “Available Capacity Estimate 2004” (AO132 to AV132) is derived from information gathered by Defra as summarised in the table below.

	Estimated Capacity in 2004	Capacity Currently Utilised	Available Capacity Estimate 2004
Stabilisation/Solidification	575,000	100,000	475,000
Physico-chemical	1,500,000	1,200,000	300,000
Solvent recovery	-	-	Unknown
Bio-remediation	-	-	Unknown
WWT	-	-	Unknown
HTI	110,000	N/a	110,000
Co-incineration	400,000	100,000	300,000
Landfill	400,000	-	400,000

Graph: Plots the capacity need against the Available Capacity Estimate 2004.