

Biochar – Modern Regulation

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Where are we now?

- ➔ What is a waste
- ➔ Permits
- ➔ Exemptions
- ➔ Waste Trials Panel
- ➔ Low Risk Activities Pane
- ➔ Other Options



What is a waste?

- ➔ Always a gritty question
- ➔ Biomass e.g. wood chips, manure and bedding matter, paper sludges, garden waste and crop residues are waste
- ➔ In line with our position on AD - Manures and slurries destined for biochar production would be controlled waste.
- ➔ Where non-waste biomass is mixed with waste biomass the resulting mixture will all be controlled waste.

Permits

- ➔ Part A1 (Environment Agency)
- ➔ and A2(Local Authority)
- ➔ Part B(LA)



EA Part A1 permits

- ➔ Waste Incinerator Directive may apply (schedule 1, chapter 5).
- ➔ Waste Incineration or co-incineration
- ➔ >3MW and <50MW
- ➔ Each proposed scenario should be discussed with EA to determine appropriate permit at this stage. Further guidance in future

WID exemptions

- ➔ Some wastes are exempt from full WID requirements
- ➔ The 'excluded plant' wastes are:
 - ➔ vegetable waste from agriculture and forestry
 - ➔ vegetable waste from the food processing industry (providing the heat generated is recovered)
 - ➔ fibrous vegetable waste from pulp making (provided this happens on the site of waste generation and the heat generated is recovered)
 - ➔ wood waste (with the exception of wood waste which has been treated with wood preservatives or coatings)

WID cont

- ➡ Wastes like manures, slurries, treated wood wastes, are not covered by exemptions
- ➡ Co-incineration of waste gases or recovered oils would potentially be covered by WID requirements Part A1 or A2, depending on size of installation.
- ➡ Excluded plant include experimental plants used for research, development and testing in order to improve the incineration process. This is because of the nature of the plant, not because of the waste it burns, only if less than 50 tonnes of waste per year are treated.

Part A2/Part B

- ➡ <3MW to fall under Local Authority control, WID requirements apply unless exempt materials are feedstock
- ➡ Non-hazardous waste in an excluded plant with a capacity of one tonne or more per hour will be regulated under Part A
- ➡ Incineration of non-hazardous waste in an excluded plant with a capacity of 50 kg or more per hour but less than one tonne per hour, regulated under Part B

cont

- ➔ The incineration of hazardous waste in an excluded plant, regardless of the quantities or capacities involved, is regulated under Part A



Waste to Land

- ➔ Site Permit if not covered by an exemption
- ➔ Exemptions Listed wastes for certain scenarios only; para 7, and 9
- ➔ Para 9 for improvement of previous industrial land
- ➔ Para 7 spreading on agricultural land

Biochar and exemptions

- ➔ Use of Biochar on land is currently not covered by para 7
- ➔ Para 9 lists bottom ash and pyrolysis, but biochar applications not likely to fit under this
- ➔ Biochar production would not fall under para 29, 30, or 37; burning at site of production or in the open or deposit of agri wastes on land where it arises as it involves pre-treatment .

Other options

- ➡ Waste Trials panel –pyrolysis already trialled for organic wastes so may not apply but ask re any specific proposals that are innovative.
- ➡ Proposal going to panel next week
- ➡ Low Risk Panel option for trials as applying biochar to land for research on productivity, moisture retention etc.



Other options cont/

- ➔ Regulatory Position statement **Spreading waste to agricultural land**
- ➔ Biochar not currently included in annex 1 list
- ➔ with respect to any of above re biochar, there needs to a detailed assessment by technical experts as to the benefits and risks of applying biochar to land.

Other future options

- ➔ Protocols like Compost Protocol allows the use of compost as non waste if quality protocol in place in production process
- ➔ Could Industry/WRAP/EA develop protocol for biochar
- ➔ Industry input into current consultation on exemptions and Standard rules permits
- ➔ Research evidence on benefits needed
- ➔ Develop Guidance like sludge to land doc's

Quality is the key

- ➔ “Rubbish in rubbish out”
- ➔ Control of quality paramount
- ➔ Avoid treated materials and contaminant problems
- ➔ Ensure technology development provides appropriate plant for specific uses
- ➔ Develop Relevant permits/protocols/exemptions



Way Forward

- ➔ All need to work together
- ➔ Research - clear objectives
- ➔ Trials - good controls and evidence collection
- ➔ Formal proposals consult EA/LA
- ➔ Funding – EEDA/SEEDA/NERC/EU
- ➔ Industry, LA and EA working together to develop protocols, Codes of Practice and relevant SR permits or bespoke permits



END