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Dear Helen

Firstly, thank you for the opportunity of responding to the draft of the Biomass and Air Quality Guidance for Local Authorities (England and Wales). This response is on behalf of the Institute of Air Quality Management (IAQM). The IAQM was launched in November 2002 to provide a focal point for all air quality professionals. The aim of the organisation is to be an authoritative voice on air quality issues through maintaining, enhancing and promoting the highest standards of practice in our field and for the professional development of all air quality practitioners.

The IAQM note that caution needs to be taken when considering the impact of biomass in terms of air quality. It is felt that the guidance currently has a slight anti-biomass bias and a more neutral tone would be preferable. IAQM acknowledge that it can be challenging to correctly site biomass boilers within urban areas to minimise the impact on air quality. However, with the use of an appropriately sized boiler, flue height and flue location biomass still provides a viable energy alternative across the UK. This does not come across in the guidance.

The guidance mentions the need to determine the correct height of the stack and potential abatement controls that may be suitable for biomass boilers. However, it would be useful to have more discussion of potential ways of reducing the impact of biomass emissions on air quality, for example, altering the location of the stack to minimise building downwash effects. If it is felt that lengthy discussions are not suitable within the guidance there should at least be acknowledgement that there are a range of measures which could be adopted to reduce air quality impacts.

There are a few references to the EPUK planning guidance (2006), particularly relating to the significance criteria. This document is shortly to be reviewed and it is anticipated that the significance criteria will be updated. This review should be noted.

The guidance implies that biomass within an AQMA is not acceptable. However, some large (eg borough-wide) AQMAs include areas where pollutant concentrations are below the NAQOs. It may therefore be possible to include biomass boilers without breaching the NAQOs. It should be made clear that biomass boilers may be appropriate within AQMAs. This may be particularly true within AQMAs declared due to high concentrations of NO₂, as opposed to PM₁₀.

Below are a few more specific comments:

- The suggestion at Chapter 1.10 that the majority of biomass plant installations will require regulatory approval may lead to the belief that individual plant operating at a site will need to be permitted under Environmental Permitting/PPC. However, in our experience, most biomass boilers included as part of larger developments are less than 20MW and will be regulated by the Clean Air Act. The developer will need to ensure that the appliance/fuel used are exempt/approved, but will not need to obtain a permit to operate the plant.
- Chart 4.2 does not include a path where the answer to the questions 'Burning at greater than 45.4kg/h' and 'Burning at greater than 366.4kW' is No.
- Chart 4.2 does not have an option to undertake more detailed modelling if a screening assessment suggests that there is a significant impact on air quality. If the answer to the question of significance is yes, screening should be followed by dispersion modelling before changes to plant type/abatement/chimney height.
- Table 4.3 suggests that 5 years of meteorological data should be used. It is suggested that one year of meteorological data would be sufficient for most boilers as the impacts are small. It may be necessary to consider the use of 3 years of meteorological data for larger boilers.
- Paragraph 4.44 suggests that dispersion will be enhanced by a lower discharge temperature, however a lower discharge temperature will result in a less buoyant plume and impaired dispersion.

We hope in this response you will find some positive suggestions. The overall opinion of the IAQM is that this is a useful document in what it is intending to set out to do.

Yours sincerely



Prof. Bernard Fisher (Chair) and Nicki Casley

on behalf of the Institute of Air Quality Management