

Consultation Response from: KC Environmental Health (Pollution & Noise Control)
2021/92291 Highfields Centre, New North Road, Huddersfield, HD1 5LS
Variation of condition 2 (plans) of previous permission 2019/90467 for conversion of former college buildings into 33 apartments including demolition of link canopy, partial demolition of link building, erection of additional storey to link building, and internal and external alterations (Listed Building within a Conservation Area) - inclusion of wood pellet boiler, store and associated flue
**Date Responded:
10th January 2022**
**Responding Officer:
Rebecca Muff**
**Responding Ref:
WK/202140658**

In our previous comments on 18th August 2021, we raised the point that no information regarding the details of the proposed wood pellet boiler had been submitted with the application. We also had concerns regarding the impact that the proposed boiler would have on local air quality and recommended a condition for a Biomass Screening assessment to be undertaken. Since then, the following information has been submitted in support of the application:

- Biomass Screening Assessment by NJD Environmental Associates (ref: NJD21-0150-001R) (dated: November 2021)
- Product data according to EU Regulation 2015/1187 and 2015/1189 by ETA Boilers
- Acoustic emissions data sheet for pellet and woodchip boilers by ETA (dated: 9th December 2020)
- Emissions Certificate by Ofgem (dated: 24/04/2020)

We have reviewed the above information and make the following comments and recommendations which supersedes our previous comments of the 18th August 2021.

Air Quality

A Biomass Screening Assessment has been undertaken for the proposed 220kW woodchip fuelled biomass boiler. This was done in accordance with AEA Energy & Environment Technical Guidance: Screening Assessment for Biomass Boilers, which provides a methodology for determining the impact of biomass combustion in domestic and small-scale industrial usage on air quality.

Emissions from the boiler are to be vented by an external flue with a diameter of 330mm. The flue will rise to a point 2 metres above the roof of the building in which the plant is to be installed, which is located 10m above ground level. From this information the effective stack height was calculated as 3.32m. The threshold emission rates for PM₁₀, PM_{2.5}, hourly average and annual mean NO₂ were also calculated using 2018 Defra background concentration maps for the relevant grid square for the site. Background adjusted emission rates were then calculated and compared to the threshold emission rates as shown in 5.51 Table 6 of the assessment.

The assessment concludes that the background adjusted emission rates are below the threshold emission rates for all the emitted pollutants and the air quality effects are described as not significant.

Comment

We accept the approach and methodology of the Biomass Screening Assessment and agree with the conclusion that for a 220kW boiler the emitted pollutants will not have any significant impact on air quality. As such condition BSA1C Biomass Screening Assessment – Condition as per our previous comments is no longer necessary, and we make the following recommendation.

Recommendation

Implement agreed woodchip fuelled biomass boiler – Condition

The woodchip fuelled biomass boiler shall be installed and operated in accordance with the agreed:

- Biomass Screening Assessment by NJD Environmental Associates (ref: NJD21-0150-001R) (dated: November 2021)
- Product data according to EU Regulation 2015/1187 and 2015/1189 by ETA Boilers
- Acoustic emissions data sheet for pellet and woodchip boilers by ETA (dated: 9th December 2020)
- Emissions Certificate by Ofgem (dated: 24/04/2020)

and maintained thereafter.