Environmental Visage

AIR QUALITY ASSESSMENT SUMMARY

AMP CLEAN ENERGY, ELECTRIUM, SHARSTON ROAD, SHARSTON INDUSTRIAL AREA, WYTHENSHAWE

1. Summary

Environmental Visage Limited was commissioned to undertake a detailed air quality assessment of pollutant emissions from a 995 $kW_{th(output)}$ biomass boiler, which is proposed to be installed at the Electrium Sales Limited site in the Sharston Industrial Area of Wythenshawe, Manchester. The installation will comprise of a Hargassner HPKI-R 995, 1.07 $MW_{th(input)}$ biomass boiler, supplying approximately 995 $kW_{(output)}$ of thermal energy to on-site space heating applications. The waste wood boiler constitutes a Part B activity under the Environmental Permit Regulations and, as the thermal input capacity of the boiler is greater than 1 MW_{th}, the unit is also classed as a Medium Combustion Plant (MCP). An air quality assessment has been prepared to support an application for an Environmental Permit, and details the impact of the boiler operations on local air quality.

Detailed iterative modelling suggested that increasing in stack height from an initial suggested height of 12 m to 14 m would improve dispersion and reduce the resultant impact on local air quality.

The results from the detailed atmospheric dispersion modelling at the proposed stack height of 14 m have confirmed that the impact of the emissions from the boiler on local air quality will be low and can generally be screened as insignificant across the modelled grid and at specific sensitive receptors identified in the local area. This includes receptors in and around the Electrium site, with elevated concentrations reducing rapidly from the maximum, and almost exclusively being screened as insignificant at the secondary assessment stage where they cannot be immediately screened during the initial assessment.