Hampton - EA/EPR/WE6112AA/A001

Generic comment: "It is not sufficient to just refer to the hierarchy. You should explain why it is not possible to carry out monitoring of actual emissions, for example due to the age of the plant, the configuration of the vent/stack etc. You should then explain why you have provided the emissions data in the form that you have and why this fits with the hierarchy, for example it is the next one down after actual monitoring data and is the most representative data after actual data".

Specific comment: E-mailed letter received from **Andrew MacDonald** on 11/12/2019 containing the query being responded to in this request.

Response:
The air quality modelling report for the Hampton site refers to a hierarchical approach to characterising NOx emissions from each combustion unit. This is designed to reflect equipment and fuel used, using the following data sources in descending order of preference:

a. Emissions measurements from the unit
b. Emissions data for the specific model as identified on the manufacturer's specification data sheet, accounting for any likely degradation in performance (e.g. in older plant) if needed
c. Emissions measurements from similar units in the TWUL portfolio
d. Emission factors taken from the US EPA Compilation of Air Pollutant Emission Factors (AP-42), using data relevant to the specific type of plant
e. Emission factors taken from the EMEP-EEA Air Pollutant Emission Inventory Guidebook2016 Section 1.A.4 "Small Scale Combustion", using data relevant to the specific type of plant, and taking any assumed abatement into account (emission factors from the Emission Inventory Guidebook typically refer to plant with a relatively high standard of control and abatement which would need to be taken into account when applying to plant installed at TWUL sites. As a result, emission factors from this source are lower in the hierarchy than option d (USEPA AP-42 guidebook)
f. Emissions data for a comparable model, as identified on a specification data sheet
g. Emissions limits expected to be specified in the permit (unlikely to be directly relevant, however, as would not be expected to reflect current operational conditions)

The application of this hierarchy to calculating NOx emissions from combustion plant at Hampton is set out in the following table:

Data source	Diesel fired generators
a. Emissions measurements from the unit	No emissions measurements available: refer to Hampton entry in tabulated response to Q2.
b. Emissions data for the specific model from manufacturer's data sheet.	No datasheet available
c. Emissions measurements from similar units	No emissions measurements from similar units available, for similar reasons at other sites to that set out under point a above.

d. Emission factors from US EPA AP-42	Emissions estimated based on appropriate factor from US EPA AP-42
e. Emission factors taken/adapted from EMEP-EEA Guidebook	Not applicable
f. Emissions data for a comparable model from manufacture's data sheet	Not applicable
g. Emissions limits expected to be specified in the permit	Not applicable