

ENVIRONMENTAL EFFECTS OF FORESEEABLE EMISSIONS

It is assessed that no foreseeable emission will have the potential to cause a significant local environmental effect, nor will effect human health.

As detailed in Document 4 Foreseeable Emissions, the concentration of emissions will be no greater than the limits as specified by PG5/2 (12) Table 4 and will normally be significantly lower, as indicated by the extractive emission monitoring test results carried out by Davies & Co at Vale Royal, Aylesbury and Langstone Vale Crematoria. ([see Document 4](#))

As thermal NO_x is minimal due to the secondary chamber temperature and because combustion is staged over primary and secondary temperatures, no control technique nor monitoring of NO_x is required by the Process Guidance Note PG5/2 (12).

However, at Sirhowy Valley Crematorium the cremation and abatement system will be supplemented with a NO_x reduction system, comprising a control panel and bespoke compressed air fluid injection nozzle which will inject a mist of proprietary urea solution into the gas stream within the secondary chamber at a rate of approximately 1 litre per cremation cycle.

The testing of this system has shown to significantly reduce the level of NO_x emissions from the cremation process by at least 65%.

There is no history of complaints.

The installation is not in an air quality management area.