

**FORESEEABLE EMISSIONS**

The point source of all emissions to atmosphere is solely confined to the chimney stack, the height of which has been calculated to provide sufficient dispersion and dilution in the atmosphere to ensure that they ground at concentrations that are deemed harmless.

The Stack Discharge Height has been calculated for the release of abated gases in accordance with HMIP Technical Guidance Note (Dispersion) D1 as required by PG5/2 (12) 5.39 (see Document 4b HMIP D1 Stack Height Calculation)

Emissions from the cremator in normal operation, including start-up and shut down, will be free from visible smoke, and all other releases to air (other than condensed water vapour) will be free from droplets and persistent visible emissions.

There will be no odorous emissions from any part of the process as perceived by the regulator, and there will be no burning of materials, including waste, in the open air, inside the building, or in any form of incinerator other than the cremator.

The concentration of emissions to atmosphere will not exceed the following limits as specified by PG5/2 (12) Table 4:

- Mercury 50 micrograms/m<sup>3</sup>
- Hydrogen Chloride 30 mg/m<sup>3</sup> *hourly average*
- Particulate Matter 20 mg/m<sup>3</sup> *hourly average*
- Carbon Monoxide 100 mg/m<sup>3</sup> *2 x 30 minute averages*
- Organic Compounds 20 mg/m<sup>3</sup> *hourly average*

**ANTICIPATED FORESEEABLE EMISSIONS**

No monitoring has been undertaken at Sirhowy Valley Crematorium as this a new site under construction, however, the cremation and abatement plant to be installed here is identical to that installed at our Vale Royal, Aylesbury and Langstone Vale (Newport) Crematoria.

I summarise below the results from the latest extractive emission monitoring test carried out at each of these three sites to give an indication of the emission levels that are realistically expected to be achieved at Sirhowy Valley Crematorium:

		<u>Vale Royal</u>	<u>Aylesbury</u>	<u>Langstone Vale</u>	
• Mercury	ave.	3.03	4.07	4.68	micrograms/m <sup>3</sup>
• Hydrogen Chloride	ave.	1.81	4.51	1.35	mg/m <sup>3</sup>
• Particulate Matter	ave.	2.06	0.92	2.13	mg/m <sup>3</sup>
• Carbon Monoxide	ave.	1.49	1.42	4.90	mg/m <sup>3</sup>
• Organic Compounds	ave.	0.00	0.00	0.10	mg/m <sup>3</sup>

The summary pages from the Langstone Vale (Newport) annual extractive monitoring test conducted on 9<sup>th</sup> December 2019 are included for reference (see Document 4a)