

Durham Crematorium  
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FAO Alan José FICCM

4<sup>th</sup> September 2012

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Dear Alan,

### **Review of Emissions from Durham Crematorium, following the IFZW Abatement Installation**

As discussed, I have compared the results of the monitoring we undertook at your site in 2011, prior to the installation of the IFZW abatement system, with the results of the recent monitoring undertaken on the newly installed abatement system.

<b><u>Pollutant</u></b>	<b><u>2011 (without Abatement)</u></b>	<b><u>2012 (with Abatement)</u></b>	<b><u>Reduction</u></b>
Mercury	1.0 g/hr*	0.014 g/hr	99%
Particulate Matter	120.3 g/hr	2.5 g/hr	98%
Hydrogen Chloride	45.7 g/hr	1.5 g/hr	97%
VOCs	8.3 g/hr	6.0 g/hr	28%
Carbon Monoxide	41.7 g/hr	33.0 g/hr	21%

The above results are the average result, per cremator, measured during the respective annual monitoring exercises, in February 2011 and July/August 2012.

\*The mercury result for 2011 is simply a typical value seen from unabated cremators, as under the previous, PG5/2(04) guidance note, there was no requirement to test for mercury at crematoria.

### **Conclusion**

The installation of the IFZW abatement system has resulted in a massive (97%-99%) reduction in the levels of mercury, particulate matter and hydrogen chloride being emitted from Durham Crematorium, so it should be considered a resounding success and great news for everyone in Durham.

Such reductions will impact very positively on the surrounding air quality and will demonstrate to other crematoria that it is possible to reduce the emissions of mercury, particulate matter and hydrogen chloride from the cremation process to negligible levels.

Smaller reductions were seen in the level of VOCs and Carbon Monoxide emitted, as the presence of these substances is to a large extent linked to the way the cremators are operated.



I trust that the above is welcome news and that it proves to be a useful independent confirmation of what the new abatement system has achieved.

In the meantime, thanks for your continued custom, and if I can ever be of any further help, at any time, feel free to call or email me.

Kind regards,

A handwritten signature in blue ink, appearing to read 'Alastair Wolff', is positioned below the text 'Kind regards,'.

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