

*Method & timeframe Used for monitoring*

Initial testing completed by UKAS accredited third party contractor. Sampling completed using a sampling system in accordance with BS EN ISO 16911-1:2013 & mid, and third part technical procedures (ECL/TPD/022A). Please refer to Document C3 4a Detailed Sampling Protocols for reports V7 & below.

**On commissioning the large scale shredder, emission monitoring will be completed and results reviewed / actions implemented.**

<i>Procedures followed</i>	<i>Parameter</i>	<i>Unit</i>
BS EN 13284-1:2017 & MID	Total particulate matter (dust)	mg/m <sup>3</sup>
BS EN 12619:2013	Total VOCs	mg/m <sup>3</sup>
BS EN 14385:2004 & MID	Ni, Cd	mg/m <sup>3</sup>
BSEN 14385:2004 & MID	As, Co, Cr, Cu, Mn, Pb, Sb, Se, Ti, V	mg/m <sup>3</sup>
BE EN14791:2017	SO <sub>2</sub>	mg/m <sup>3</sup>
BS EN 1911:2010	HCl	mg/m <sup>3</sup>
PD CEN/TS 17340:2020	HF	mg/m <sup>3</sup>
BS EN 1948-1:2006 & MID	Brominated flame retardants	ng/m <sup>3</sup>
BS EN 1948-1 & 4:2010	Dioxin-like PCBS	ng/m <sup>3</sup>
BS EN 1948-1:2006 & MID	PCDD/F	ng/m <sup>3</sup>
BS EN 13284-1:2017 & MID	Total particulate matter (dust)	mg/m <sup>3</sup>
BS EN 12619:2013	Total VOCs	mg/m <sup>3</sup>
BS EN 14385:2004 & MID	Ni, Cd	mg/m <sup>3</sup>
BSEN 14385:2004 & MID	As, Co, Cr, Cu, Mn, Pb, Sb, Se, Ti, V	mg/m <sup>3</sup>
BE EN14791:2017	SO <sub>2</sub>	mg/m <sup>3</sup>

BS EN 1911:2010	HCl	HCl
PD CEN/TS 17340:2020	HF	HF
BS EN 1948-1:2006 & MID	Brominated flame retardants	Brominated flame retardants
BS EN 1948-1 & 4:2010	Dioxin-like PCBS	Dioxin-like PCBS
BS EN 1948-1:2006 & MID	PCDD/F	PCDD/F

Initial Performance Tests (including above):

1. Stack NO<sub>x</sub>/O<sub>2</sub>/CO<sub>2</sub>/Moisture.
2. Stack Total Particulate/Fine Particulate (say PM<sub>10</sub> and/or PM<sub>2.5</sub>).
3. Stack Total Hydrocarbons (THC).
4. Stack Total Volatile Organic Compounds (VOC, as a subset of THC).
5. Stack Speciated VOCs.

Initial Control Device Efficiency Tests:

1. Baghouse (Particulate).

Scrubber (VOCs)

2. Periodic Compliance Tests (once a year or perhaps more frequently):

VOC/Speciated VOC.

Any other frequency deemed necessary following testing or as requested by the Environment Agency.