

BEST AVAILABLE TECHNIQUES

Best Available Techniques will be used to prevent or, where that is not practicable, reduce emissions from the installation in respect to any aspect of the operation of the installation.

Good combustion will be achieved by ensuring a minimum of 800°C temperature and 2 seconds residence time in the secondary combustion chamber, combined with Oxygen at a minimum average of 6% and minimum of 3%, measured wet or dry.

SUMMARY OF PROPOSED BEST AVAILABLE TECHNIQUES

SOURCE	SUBSTANCE	CONTROL TECHNIQUES
FLUE GAS	MERCURY and its compounds	Activated Carbon and Abatement System. Emissions of mercury will not exceed 50 micrograms/M ³
FLUE GAS	HYDROGEN CHLORIDE	Avoid the use of chlorinated materials within the coffin. Avoid excessive primary chamber temperature. Emissions of hydrogen chloride will not exceed 30mg/m ³ hourly average. Abatement further minimises HCl emissions.
FLUE GAS	PARTICULATE MATTER	Good combustion and a secondary combustion zone held at 800°C minimum with a 2 second residence time. Emissions of particulate matter will not exceed 20mg/m ³ hourly average. Abatement further minimises particulate emissions.
FLUE GAS	CARBON MONOXIDE	Good combustion and a secondary combustion zone held at 800°C minimum with a 2 second residence time. Emissions of carbon monoxide will not exceed 100mg/m ³ reported as 2 x 30 minute averages.
FLUE GAS	VOLATILE ORGANIC COMPOUNDS	Good combustion and a secondary combustion zone held at 800°C minimum with a 2 second residence time. Emissions of volatile organic compounds will not exceed 20mg/m ³ hourly average.
FLUE GAS	PCDD/F	Good combustion and low particulate matter emissions. Avoid the use of PVC and chlorinated materials. Abatement further minimises emissions.
FLUE GAS	ODOUR	Good combustion and a secondary combustion zone held at 800°C minimum with a 2 second residence time. Olfactory checks will be recorded in the log book daily.
FLUE GAS	CARBON DIOXIDE	Measure, record and monitor quarterly gas consumption and convert into CO ₂ equivalent.
FLUE GAS	NITROGEN OXIDES	No control technique is required by PG5/2 (12). <i>However the system will be supplemented with a NOx reduction system, comprising a bespoke compressed air and fluid injection nozzle and control panel.</i> <i>The nozzle will inject a mist of proprietary urea solution into the gas stream within the secondary chamber.</i> <i>Testing of this system has shown that a 50% – 65% reduction of NOx emissions is achievable.</i>
CREMULATOR	PARTICULATE MATTER	Integral filtration filters out all airborne particulates.
SPENT CARBON	PARTICULATE MATTER and ADSORBED MERCURY	Spent carbon reagent is kept in tightly lidded drums. Collected by licensed waste carrier for recycling.