

Harlow Council

Environmental Permitting Regulations 2016 Regulated Facility Inspection



Inspection Report - The following information provides a formal record of the following inspection:

Site Reference:	EPR/B/5.1/PWC	Date Inspected:	17 th January 2018
Inspection Type:	Full Inspection	Person Seen:	Astrud Matanle
Site Name & Address:	Parndon Wood Crematorium, Parndon Wood Road, Harlow, Essex CM19 4SF	Inspected By:	Fay Rushby Steven Adams

1. Best available techniques

Condition 1.1 to 1.2: Residual BAT conditions:
➤ The residual BAT conditions do not need to be used at this time.

2. Extent of the installation

Condition 2.1: Installation boundary:
➤ All permitted activities are being undertaken within the installation boundary.

3. Combustion conditions

Condition 3.1 and table 3.1: Combustion parameters:
➤ Secondary combustion chamber temperatures are continuously monitored and recorded. Cremators are interlocked to prevent cremator loading if the secondary chamber is less than 800°C.
➤ Secondary combustion chamber oxygen % is continuously monitored and recorded.
➤ Secondary combustion chamber gas residence time has been confirmed as > 2 seconds.
➤ A summary of the parameters at the time of the inspection is as follows:

Parameter	Cremator 1	Cremator 2	Limit
Time into cremation	43 mins	63 mins	-
Primary chamber temperature	1004	894	-
Secondary chamber inlet temperature	919	846	>800°C
Secondary chamber outlet temperature	891	837	>800°C
Suction	4.5	4.0	-
Flue temperature	42	16	-

4. Emissions release points

Condition 4.1: Emissions release points
➤ Emissions release points remain as permitted.

5. Emission limits

Conditions 5.1 to 5.8: Extractive emissions monitoring was being undertaken at the time of the inspection
➤ Please ensure that the results are forwarded within 8-weeks of the testing.

A summary of the emissions at the time of the inspection is as follows:

Parameter	Cremator 1	Cremator 2	Limit
Time into cremation	43 mins	63 mins	-
%O ₂	16.3%		Min 3%
Particulate matter	0.0 mg/m ³		20 mg/m ³
Carbon monoxide	0.0 mg/m ³		100 mg/m ³

Conditions 5.1 to 5.8 (continued):

- Emissions were free from visible smoke.
- No odours (offensive or otherwise) were noted.
- There were no persistent visible emissions.
- Emissions were free from droplets.
- A record of gas consumption is kept. Quarterly figures are available for inspection on request.

6. Monitoring techniques

Conditions 6.1 to 6.10:

Continuous emissions monitors (CEMs) were operational at the time of the inspection:

- Readings were on clear display to operating staff.
- Alarm activations are automatically recorded.
- Analysers are maintained and calibrated. Service reports were reviewed at the time of the inspection.
- Ducts are fitted with sampling points.
- Each cremator has a gas meter.

7. Controlling techniques

Conditions 7.1 to 7.20:

Control techniques are designed to minimise emissions from the cremation process as far as practicable:

- Cremators appear to be designed and operated to minimise emissions during charging.
- The volume of the secondary combustion chamber is to be confirmed with the residence time calculation.
- Cremator charge systems are interlocked.
- Cremators and ductwork were gas-tight.
- It is recommended that funeral directors be periodically reminded about coffin construction.
- Construction standards for cardboard and wicker coffins are noted. Cardboard coffins in particular must not contain chlorine in the wet strength agent e.g. not using polyamidoamine-epichlorhydrin based resin (PAA-E).
- 100% of cremators are abated for mercury (single abatement plant serves multiple cremators).
- The by-pass system has been used, however the correct notifications were made, and the bypass event was less than 48-hours.
- Dusty filter wastes are contained.
- Calcination was complete on rake-out of remains.
- Dusty emissions from cremated remains were minimised as far as practicable.
- A simple plan for mass fatalities is in place.

Conditions 7.1 to 7.20:

8. Reporting and notifying

Conditions 8.1 to 8.12:

Reporting and notifications:

- The 2017 CAMEO certificate is awaited.
- Monthly cremation reports are received by email. Many thanks.
- Monthly reports indicate that few secondary combustion chamber temperature excursions are reported.

9. Maintenance

Conditions 9.1 to 9.3:

A maintenance programme for the cremators is in place.

- A maintenance programme is in place.
- A record of reagent use is kept.
- Cremator service reports are emailed on receipt.

10. Training

**Conditions
10.1 to 10.2:**

Training certificates for cremator operators are displayed in the crematory area.

11. Logbook

**Conditions
11.1 to 11.3:**

Records amounting to the logbook are generally available on site or on request.

Requirements for action - The following actions must be undertaken within any time specified:

1. Extractive Emissions Monitoring.

Please ensure that the emissions monitoring report is forwarded to me within 8-weeks of the sampling date (15th March 2018).

2. CAMEO Reporting.

The 2017 CAMEO report is due by 1st April 2018.

Signed:



Environmental Health Officer

Date of Report:

13th February 2018