



POLLUTION PREVENTION & CONTROL ACT 1999
Environmental Permitting (England and Wales) Regulations 2016
Statutory Instrument 2010 No. 1154

Barnsley Metropolitan Borough Council
Barnsley Crematorium

Permit Reference PPC/B/29/2017/V1

Summary of Permit

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Introductory Note

The following Permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016, ("the EP Regulations") to operate an installation carrying out an activity, or activities covered by Part 2 to Schedule 1 of the EP Regulations to the extent authorised by the Permit.

Public Registers

Considerable information relating to Permits, including the application, is available on public registers in accordance with the EP Regulations. Certain information may be withheld from the public registers where it is commercially confidential, or in the interest of national security to do so (subject to the local authority agreeing to a specific application for exemption made by the operator).

Variations to the Permit

The Permit may be varied in the future by the Regulator, by serving a variation notice on the Operator. Should the Operator require any of the conditions of the Permit to be changed, a formal application must be submitted (the relevant forms are available from the Regulator).

Surrender of Permit

Where the Operator ceases or intends to cease operation of a permitted activity, they may notify the local authority of the action that has been taken or is intended. Such a notification must include: -

- (a) the Operator's telephone number and address and, if different, any address to which correspondence relating to the notification should be sent;
- (b) in the case of a partial surrender of a permit applying to Part B mobile plant, a list of mobile plant to which it applies and;
- (c) the date on which the surrender is to take effect, which shall be at least 28 days after the date on which the notice is served on the regulator.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another Operator, an application to transfer the Permit has to be made jointly by the existing and proposed Operators.

A transfer will not be approved if the Regulator is not satisfied that the proposed Permit holder will be the person having control over the operation of the installation, or will not comply with the conditions of the transferred Permit.

Process Changes

The Operator is obliged to notify Regulatory Services (within a minimum of 14 days) of any proposed changes to the operation of the installation which may have a negative effect on the environmental impact of the installation. The notification shall include an assessment of the effect of the proposed changes and list any alternative strategies that may have been considered. The Operator will be liable to enforcement action if a change is made without approval which is such

that the installation (as changed) is not permitted, or a condition of the Permit is not being complied with as a result of the change being made.

Annual Subsistence Fee

The annual subsistence fee is payable on 1st April every year. An invoice will be sent to every process operator (in April) stating the amount payable and where payment should be made. A Permit may be revoked if the appropriate fee is not paid.

Powers of Entry

In order for the Council to discharge its functions under the Environmental Permitting Regulations, authorised persons have powers of entry to premises at any reasonable time, or in a situation in which in the officer's opinion there is an immediate risk of serious pollution of the environment, at any time. Where entry has been refused, a warrant may be obtained to effect entry. The full powers of officers are stated in Section 108 of the Environment Act 1995.

Offences

Examples of offences under the Environmental Permitting Regulations are to;

- operate an installation or mobile plant without a Permit.
- operate an installation or mobile plant in breach of a Permit condition.
- fail to notify of a change in the operation of an installation
- fail to comply with the requirements of an Enforcement or Suspension Notice.
- fail to comply with a request for information.
- intentionally make a false entry in any record required to be kept under a condition of a permit
- make a statement which is known to be false or misleading in a material particular in order to obtain a permit, variation, transfer or surrender

The fines and penalties for these offences vary up to a maximum of a fine not exceeding £50,000 on summary conviction and an unlimited fine and/or up to five years imprisonment on conviction on indictment

Correspondence Address

Barnsley Metropolitan Borough Council
Regulatory Services
PO Box 634
Barnsley
S70 9GG

Telephone Number: 01226 773843

Fax Number: 01226 775699

Email: PollutionControl@Barnsley.gov.uk

Outside normal working hours contact should be made on the following number - 01226 775672



BARNSLEY

Metropolitan Borough Council

Regulatory Services

Pollution Prevention & Control Act 1999

The Environmental Permitting (England and Wales) Regulations 2016 Statutory Instrument 2010 No. 1154

Permit To Operate A Scheduled Installation

Deemed Application 1st April 2003

Reference No. PPC/B/29/2017/V1

Barnsley Metropolitan Borough Council is hereby permitted to operate an installation for the cremation of human remains as defined in Schedule 1, Part 2, Section 5.1, Part B (b) the Environmental Permitting (England & Wales) Regulations 2016, as described below and in accordance with the attached conditions.

Operator Name & Address

Barnsley Metropolitan Borough Council
Church Street
Barnsley
S70 2TA

Address of Permitted Installation

Barnsley Crematorium
Doncaster Road
Ardsley
Barnsley
S71 5EH

Signed:

Phillip Spurr
Service Director
Culture, Housing & Regulation

Dated; 16th March 2017

Barnsley Metropolitan Borough Council,
Planning & Regulatory Services,
PO Box 634,
Barnsley
S70 9GG
(the address for all correspondence in relation to this permit)

1.0 Description of Process

- 1.1 The activities at the Installation shall include the cremation of human remains in four gas fired cremators followed by the size reduction of the cremated remains in a cremulator.
- 1.2 Each cremator shall have a primary combustion zone, into which coffins are charged, and a secondary combustion zone which deals with the combustion of flue gas.
- 1.3 The cremations shall take place in the four double ended Evans Universal Series 300/2 cremators and the emissions shall be abated by the two Facultatieve Technologies flue gas cooling mercury abatement systems. Each mercury abatement system shall serve 2 cremators.
- 1.4 The flue gases shall pass through a gas-water heat exchanger to the treatment plant which is designed to reduce levels of mercury, chlorides, dioxins and particulates. The first section of the flue gas treatment plant, the heat exchanger, cools the flue gas where an activated carbon/sodium bicarbonate mix (Factivate) is added. This absorbs the relevant pollutants before all the flue gases including this pass through a bag filter where all the carbon and pollutants are caught.
- 1.5 All 4 cremators shall accept a maximum coffin size of 810mm wide, 610mm deep and a length of 2260mm.
- 1.6 The process shall be carried out within the process boundary as marked in red on attached plan, ref. PPC/B/29/2017/V1 Plan1.

2.0 Operating Conditions

2.1 Emissions Limits

- 2.1.1 The following emission limits as listed in table 1 shall not be exceeded when carrying out the Cremation of Human remains Process.

Table 1

Source	Substance	Emission Limit
Cremation Emissions (from point as marked S1 and S2 on plan reference PPC/B/29/2017/V1 Plan 2)	Mercury	50 micrograms/m ³
Cremation Emissions (from point as marked S1 and S2 on plan reference PPC/B/29/2017/V1 Plan 2)	Hydrogen Chloride (excluding particulate matter)	30 mg/m ³
Cremation Emissions (from point as marked S1 and S2 on plan reference)	Total Particulate Matter	20mg/m ³

PPC/B/29/2017/V1 Plan 2)		
Cremation Emissions (from point as marked S1 and S2 on plan reference PPC/B/29/2017/V1 Plan 2)	Carbon Monoxide	100mg/m ³
Cremation Emissions (from point as marked S1 and S2 on plan reference PPC/B/29/2017/V1 Plan 2)	Organic Compounds (excluding particulate matter) expressed as total carbon	20mg/m ³

- 2.1.2 All pollutant concentrations shall be expressed at reference conditions: 273K, 101.3Kpa, and 11% oxygen dry gas.
- 2.1.3 Emissions from the cremators shall in normal operation (including start up and shut down), be free from visible smoke and no emission from the cremators shall exceed the equivalent of Ringelmann Shade 1 in accordance with British Standard BS 2742:2009.
- 2.1.4 All emissions to air, other than steam or condensed water vapour shall be colourless and free from visible mist. All emissions to air shall be free from visible fume and free from droplets.
- 2.1.5 The cremulators shall be provided with local exhaust ventilation systems that are ducted to and contained by the dust filtration system. The total particulate matter content of air discharged from the filtration systems shall not exceed an emission concentration limit of 50 mg/m³. The dust filtration system shall be serviced on a 6 monthly basis. Details of the servicing shall be recorded and be made available to the Regulator on request.

2.2 Emission Monitoring

- 2.2.1 The monitoring points S1 and S2 shall be monitored in compliance with the main procedural requirements of the following standard methods as specified in Table 2 below.

Table 2

Emission	Type of Monitoring	Frequency of Monitoring	Methodology
Mercury	Extractive	Annual	BS EN 13211
Hydrogen Chloride (excluding particulate matter)	Extractive	Annual	BS EN 1911
Total Particulate Matter	Extractive	Annual	BS EN 13284
	Continuous	Continuous	
Carbon Monoxide	Extractive	Annual	BS ISO 12039
	Continuous	Continuous	
Organic Compounds	Extractive	Annual	BS EN 13526

(excluding particulate matter) expressed as total carbon			
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- 2.2.2 The Operator shall notify the Regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limit values. The Operator shall state the provisional time and date of the monitoring, pollutants to be tested and methods to be used.
- 2.2.3 The results of the sampling as required by conditions 2.2.1 and 2.2.2, above, shall be received by the Regulator not later than eight weeks from the date of sampling.
- 2.2.4 Any deviation from the standard methods detailed in condition 2.2.1 above, shall be notified to the Regulator prior to a different method being implemented. Justification for a deviation shall also be provided to the Regulator.
- 2.2.5 The introduction of dilution air to achieve the concentration limits shall not be permitted.
- 2.2.6 Visual and olfactory assessments shall be made once a day from a suitable location (depending on weather conditions) on the site boundary as indicated in red on plan ref. PPC/B/29/2017/V1 Plan 1. The assessments shall be carried out when the cremators are in use and the extraction equipment is in operation. These assessments shall be recorded and all entries shall include;
- (a) details of the observation
 - (b) the identity of the person carrying out the observation
 - (c) in the case of abnormal emissions, detail the nature of the emission, its source, and the cause
 - (d) details of any corrective actions taken
 - (e) the date and time the observation was made
- 2.2.7 Remedial action shall be taken immediately where any abnormal emissions (visual or odorous) are noted. In the case of arrestment plant failure the Operator shall cease operations immediately until the fault has been rectified and operations can be returned to normal. Details of abnormal events, along with the actions taken, shall be recorded.
- 2.2.8 The Operator shall notify the Regulator within one hour of;
- (a) any emission that is likely to have an effect on the local community
 - (b) the major failure of key arrestment plant, for example afterburner failure.
- 2.2.9 Emissions shall be quantitatively monitored at least once every 12 months for particulate matter. The test method shall be by isokinetic sampling and be capable of achieving an overall accuracy of +/- 10%. The method chosen shall be capable of collecting particulate matter of 0.1 microns diameter or less with an efficiency of at least 75%.

2.2.10 Emissions shall be tested quantitatively, at least once a year, for carbon monoxide, hydrogen chloride and organic compounds excluding particulate matter, using methods previously agreed with the Regulator.

2.3 Continuous Monitoring of Emissions

2.3.1 Emissions from the cremators shall be continuously monitored for particulate matter, using the PCME instrument fitted with a visual and audible alarm which shall activate whenever the emission limit is being exceeded. Details of all alarm events shall be recorded.

2.3.2 Emissions shall be continuously monitored and recorded for carbon monoxide using analysers dedicated to each cremator. The data shall be acquired on a continual basis.

2.3.3 The oxygen concentration at the outlet from the secondary combustion zone of each cremator shall be continuously monitored and recorded using a dedicated analyser. The oxygen concentration shall also be determined as part of the non continuous monitoring requirement.

2.3.4 All continuous monitoring readings namely carbon monoxide, oxygen concentrations, particulate matter, afterburner temperature and residence time shall be on display to appropriately trained staff during the cremation process.

2.3.5 All continuous monitoring instruments shall be fitted with audible and visual alarms to warn the Operator of malfunction.

2.3.6 The activation of alarms shall be automatically recorded.

2.3.7 All continuous monitors shall be operated, maintained and calibrated in accordance with the manufacturers instructions. The Manufacturers instructions and records of maintenance and calibration shall be made available to the Regulator upon request.

2.3.8 The continuous monitor alarms shall be set to trigger at 75% of the emission limit values which are the following levels;

- (i) Particulate 15mg/M³
- (ii) Carbon Dioxide 75 mg/M³
- (iii) Oxygen minimum 3%

2.3.9 Emission concentrations may be reported as zero when the plant is off and there is no flow from the stack. If required a competent person should confirm that zero is more appropriate than the measured stack concentration if there is no flow.

2.3.10 All continuous monitors shall provide reliable data for at least 95% of the operating time. A manual or automatic procedure shall be in place to detect instrument malfunction and to monitor instrument availability.

2.3.11 Every 6 months a report shall be submitted to the Regulator containing the following continuous monitoring data for carbon monoxide. The data shall be submitted covering each period of either 4 weeks or a calendar month;

- a) Values that exceed the 95% limit for carbon monoxide in that period
- b) 60-minute mean emission values that exceed the 100% limit for carbon monoxide in that period
- c) A list of the highest 60-minute mean emission value for each period
- d) The 95th-percentile value for each period

2.3.12 For temperature and oxygen, the Operator shall report the following continuous monitoring values to the Regulator every 6 months;

- a) secondary chamber start temperature (⁰C) 4 weekly/monthly maximum and minimum (of 5 minute averages)
- b) secondary chamber exit temperature (⁰C) 4 weekly/monthly maximum and minimum (of 5 minute averages)
- c) oxygen concentration, 4 weekly/monthly maximum and minimum (of 5 minute averages)
- d) Where any values have been exceeded in any 4-weekly/monthly or 6-monthly reporting period, records shall be kept that identify the number of times that the limit was exceeded during the reporting period, the levels of the exceedance, and the time, date and cremation reference. This data shall be submitted to the Regulator once every 6 months and shall cover each period of either 4 weeks or calendar months.

2.4 Sampling Provisions

2.4.1 The Operator shall ensure that relevant stacks or ducts are fitted with facilities for sampling which allow compliance with the sampling standard.

2.5 Abnormal Events

2.5.1 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the Operator shall;

- 2.4 investigate and undertake remedial action immediately
- 2.5 adjust the process or activity to minimise those emissions
- 2.6 promptly record the events and actions taken

2.5.2 The Regulator shall be informed without delay, whether or not there is related monitoring showing an adverse result;

- a) If there is an emission that is likely to have an effect on the local community
- b) In the event of failure of key arrestment plant, e.g. bag filtration plant
- c) In the event of use of the bypass system

2.5.3 The Operator shall have a list of key arrestment plant which shall be provided to the Regulator on request.

2.5.4 The Operator shall have in place procedures for dealing with key arrestment plant failure and alarm events. These shall be made available for inspection by the Regulator upon request.

2.6 Gas Usage

2.6.1 The Operator shall keep records of quarterly gas consumption for inspection by the Regulator. Consumption shall be converted into CO₂ equivalent emissions using the following conversion equation;

$$\text{Gas Usage (kWh)} \times \text{conversion factor} = \text{kgCO}_2\text{e}$$

2.7 Emergency bypass

2.7.1 In the event of the use of the abatement plant bypass system during cremation the failure, its cause, and any remedial action shall be recorded in the site log book.

2.7.2 In the event of the use of the abatement plant bypass system during cremation the Regulator shall be notified immediately by email, fax or telephone.

2.7.3 The abatement plant bypass system shall only be used during warm up and shutdown, provided that compliance with the carbon monoxide limit is demonstrated. Or the abatement plant bypass system shall only be used when the heat removal plant has failed and the abatement would be damaged.

2.8 Waste Materials

2.8.1 Dusty materials, dusty wastes and wastes containing mercury shall be kept in tightly lidded containers.

2.9 Odour

2.9.1 All emissions shall be free from offensive odour outside the process boundary as outlined on attached plan, ref. PPC/B/29/2017/V1 Plan1.

3.0 **Control Techniques**

3.1 Coffin Materials

3.1.1 The Operator shall take appropriate steps to ensure that coffins do not contain any PVC, melamine, pitch, tar, lead, zinc and chlorinated plastics. Cardboard coffins shall not contain chlorine (such as polyamidoamine-epichlorhydrin resins (PAA-E)) in the wet strength agent. Details of steps taken to ensure this shall be provided to the Regulator at least once every 3 years.

3.1.2 Packaging for still birth, neonatal and foetal remains shall not include any chlorinated plastics. Details of steps taken to ensure there are no chlorinated plastics shall be provided to the Regulator at least once every 3 years.

3.2 Combustion Conditions

3.2.1. The cremators shall be designed to ensure complete combustion and shall be fitted with a secondary combustion zone. The temperature of gases after the last admission of secondary air and at the exit from the secondary combustion zone shall be continuously monitored, displayed and continuously recorded.

3.2.2. The gases shall be held at 1073K (800°C) for a minimum (at all times) of 2 seconds in the secondary combustion zone. The residence time shall be determined by direct measurement of the volume rate of the flue gases throughout the cremation cycle at the cremator exit with appropriate corrections made for changes in temperature and oxygen. The concentration of oxygen at the outlet of the secondary combustion zone shall not be less than 6% by volume with a minimum of 3% by volume if measured dry. The term “secondary combustion zone” shall be taken to mean the volume where the above conditions are met.

3.2.3 The charging system shall be interlocked to prevent the introduction of a coffin to the primary combustion zone unless the secondary combustion zone temperature exceeds that specified in condition 3.2.2.

3.2.4 The cremators shall be fitted with audible and visual alarms that shall be triggered when the temperature in the second combustion zone falls below 1073K (800°C).

3.2.5 Residence time in the secondary combustion zone shall be demonstrated continuously when the cremators are in use. The residence time shall be determined from the volume of the secondary combustion chamber and either;

- direct measurement of flowrate with pitot tube or similar and continuous correcting for temperature, oxygen and pressure measured alongside the flowrate and/or
- calculated continuously throughout the cremations using measured combustion gas flows.

3.2.6 The Cremator shall be designed and operated in order to prevent the discharge of smoke or fumes during charging.

3.2.7 When re-bricking a cremator, the convolutions of the secondary combustion chamber shall be maintained and the volume of the chamber recalculated. The Operator shall provide the Regulator with the results of the calculations no later than 1 month following the completion of the re-bricking works.

3.3 Cremated Remains

3.3.1 Cremated remains shall only be removed from the cremator once the calcination process is completed.

- 3.3.2 The removal of ash and non combustible residues shall be undertaken carefully so as to prevent dust emissions via the flue.
- 3.3.3 The cremated remains shall be moved and stored in a covered container.
- 3.3.4 Dust emissions from the cremulation of cremated remains shall be ducted and collected in the arrestment plant to meet the requirements of condition 2.1.5.
- 3.3.5 The performance of the cremulator particulate arrestment plant shall be demonstrated indicatively, by the use of pressure drop indicators on the bag filter unit exhausts.

3.4 Chimneys and Associated Ductwork

- 3.4.1 All emissions from the cremators shall be discharged, via the secondary combustion chamber, through a chimney marked C1 on plan reference PPC/B/29/2017/V1 Plan 1. The chimney shall have a minimum height of 16.63 metres.
- 3.4.2. The chimney shall be free from any restrictions at the final opening with the exception that a cone may be fitted to the chimney exit to increase efflux velocity.
- 3.4.3 The stack and associated ductwork shall be adequately insulated to minimise the cooling of waste gases and prevent the liquid condensation of the exhaust gases above the dew point.
- 3.4.4 The cremator and all ductwork shall operate under negative pressure and be leak proof.
- 3.4.5 The exhaust gases discharged through the stack, marked C1 on plan reference PPC/B/29/2017/V1 Plan 1, shall have a minimum efflux velocity of 15m/second in order to ensure that emissions are adequately dispersed.
- 3.4.6 Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.

3.5 Abnormal Events

- 3.5.1 All malfunctions or breakdowns leading to visible emissions to atmosphere shall be investigated and dealt with immediately and process operations adjusted until normal operation is restored. Details of the malfunction/breakdown along with actions taken shall be recorded.

4.0 **Management**

4.1 Environmental Management System

- 4.1.1 The Operator shall implement a management system for ensuring effective management of the permitted process. This shall provide an effective technique

for ensuring all pollution prevention and control techniques are delivered reliably and shall include but not be limited to:-

A documented preventative maintenance schedule, covering all plant whose failure could impact on the environment.

Documented procedures for controlling and monitoring of emissions

Records of checks made, maintenance etc. (log books etc.).

Records of abnormal events (include a review following any abnormal events/incidents).

Auditing systems in place for ensuring procedures are followed, maintenance carried out, records kept up to date etc.

A documented training system (including awareness of the regulatory implications of the permit, awareness of all operating procedures, awareness of potential environmental impacts under normal and abnormal circumstances, prevention of accidental emissions, action to be taken when accidental emissions occur and awareness of procedures for dealing with a breach of permit).

- 4.1.2 The management system, detailed in condition 4.1.1, shall be reviewed on an annual basis. The management system review shall be available at the installation for inspection by the Regulator upon request.

4.2 Emergency Planning

- 4.2.1 The Operator shall have in place an emergency plan for dealing with incidents that result in mass fatalities. The plan shall include but not be limited to;

- a) The holding of spares and consumables
- b) Training of suitable staff
- c) Maintenance and repairs by the manufacturer

- 4.2.2 The Operator shall provide the Regulator with a copy of the emergency plan as detailed in condition 4.2.1 upon request.

4.3 Training

- 4.3.1 All staff whose functions could impact on the environment from the activity shall receive appropriate training on these functions. This shall include;

- a) awareness of their responsibilities under this permit
- b) steps that are necessary to minimise emissions during start up and shut down
- c) actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions.

- 4.3.2 The Operator shall maintain a statement of the training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. The records of training shall be made available to the Regulator upon request.
- 4.3.3 All operating staff shall hold certification of their proficiency in operating cremators or be under the direct supervision of an experienced certified technician.
- 4.3.4 A list shall be displayed at or near the cremator control panel which identifies all operators holding the certification and shall include the dates on which the training was given, certificate issued and the identity of the instructor.

4.4 Maintenance

- 4.4.1 The Operator shall have a list of key arrestment plant which shall be provided to the Regulator on request.
- 4.4.2 The Operator shall have in place procedures for dealing with key arrestment plant failure and alarm events. These shall be made available for inspection by the Regulator upon request.
- 4.4.3 The Operator shall have a detailed written maintenance programme for all pollution control equipment. This shall be available to the Regulator upon request.
- 4.4.4 The Operator shall have written records of all maintenance carried out on all pollution control equipment. This shall be available to the Regulator upon request.
- 4.4.5 The continuous particulate monitoring instrument shall be calibrated at least once annually in accordance with manufacturers instructions. A calibration certificate shall be obtained and kept for a minimum of 2 years and shall be available for inspection by the Regulator.
- 4.4.6 Continuous monitoring instruments for carbon monoxide and oxygen shall be checked for correct functioning and calibrated in accordance with manufacturers instructions at least once every thirteen weeks. A copy of the calibration certificate shall be obtained and kept for a minimum of 2 years and shall be available for inspection by the Regulator.
- 4.4.7 The Operator shall have a detailed written maintenance and cleaning programme relating to pollution control equipment, including control instrumentation, the cremator secondary chamber, ducts and flues, and mercury abatement plant.

4.5 Mercury Abatement/Burden Sharing

- 4.5.1 The Operator shall provide the Regulator by the 1st April each year with a certificate from the CAMEO (Crematoria Abatement of Mercury Emission Organisation) organisation or appropriate evidence from a comparable audited burden sharing arrangement or scheme which specifies;

- (a) The total number of cremations in the past 12 months

- (b) The number of cremations undertaken in cremators fitted with operational mercury abatement equipment in the previous 12 months; or
- (c) The number of cremations undertaken in the previous 12 months and the proportion of those subject to burden sharing arrangements under which money is paid for the benefit of abated crematoria; or
- (d) In cases where mercury abatement is fitted but fewer than 50% of cremations at the installation were undertaken in cremators fitted with it in the previous 12 months, the relevant information in both (b) and (c).

5.0 Record Keeping

- 5.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Process shall:
- (a) be made available for inspection by the Regulator on request at any reasonable time;
 - (b) be supplied to the Regulator on demand and without charge;
 - (c) be legible;
 - (d) be made as soon as reasonably practicable;
 - (e) indicate any amendments which have been made and shall include the original record wherever possible, and;
 - (f) unless otherwise stated be retained at the Permitted installation, or other location agreed by the Regulator in writing, for a minimum period of 2 years from the date when the records were made, unless otherwise agreed in writing.

6.0 Notifications

- 6.1 The Operator shall notify the Regulator **without delay** of:-
- (a) The detection of an emission of any substance, which exceeds any limit or criterion in this Permit, specified in relation to the substance;
 - (b) The detection of any fugitive emission that has caused, is causing or may cause significant pollution, unless the quantity emitted is so trivial that it would be incapable of causing significant pollution;
 - (c) The detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution, and;
 - (d) Any accident, which has caused, is causing or has the potential to cause significant pollution.
- 6.2 The Operator shall give written notification as soon as practicable (and at least 30 days) prior to any of the following:-

- (a) Permanent cessation of the operation of part or all of the Permitted installation;
- (b) Cessation of operation of all or part of the Permitted installation for a period likely to exceed 1 year, and;
- (c) Resumption of the operation of part or all of the Permitted installation after a temporary cessation of activities as above.

6.3 The Operator shall notify the following matters to the Regulator in writing within 14 days of their occurrence:

- (a) Any change in the Operator's trading name, registered name or registered office address;
- (b) Any change to the particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary);
- (c) Any steps taken by the Operator going into administration, entering into a company voluntary arrangement, being wound up or bankruptcy' and;
- (d) Any death of any of the named Operator (where the Operator consists of more than one named individual).

End of Permit Conditions

Interpretations and Explanatory Notes

In relation to this Permit, the following expressions shall have the following meanings:-

“Application” means the application for this Permit, together with any response to a notice served under Schedule 5 to the EP Regulations and any operational change agreed under the conditions of this Permit.

“EP Regulations” Means the Environmental Permitting (England and Wales) Regulations 2016 and words and expressions defined in the EP Regulations shall have the same meanings when used in this Permit save to the extent they are explicitly defined in this Permit.

“Permitted Installation” means the activities and the limits to those activities described in this Permit.

“Monitoring” includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

“Regulator” means any officer of Barnsley Metropolitan Borough Council who is authorised under Section 108(1) of the Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in Section 108(1) of that Act.

“Best available techniques” shall mean the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole.

“Techniques” shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

“Available” techniques shall mean those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator.

“Best” shall mean most effective in achieving a high general level of protection of the environment as a whole.

“Fugitive Emission” means an emission to air from the Permitted installation that is not controlled by an emission limit imposed by a condition of this Permit.

Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the document with the most recent publication date shall be taken to be the most appropriate document to be used.

Any person who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for Environment, Food & Rural Affairs. Appeals must be received by the Secretary of State no later than 6 months from the date of the decision (the date of the Permit).

Appeals relating to installations in England should be received by the Secretary of State for Environment, Food & Rural Affairs. The address is as follows:-

The Planning Inspectorate
Environment Team, Major & Specialist Casework
Room 4/04 Kite Wing
Temple Quay House
2 The Square
Temple Quay
Bristol
BS1 6PN

The appeal must be in the form of a written notice or letter stating that the person wishes to appeal and listing the condition(s) which is/are being appealed against. The following five items must be included:-

- a) A statement of the ground of appeal;
 - b) A copy of any relevant application;
 - c) A copy of any relevant Permit;
 - d) A copy of any relevant correspondence between the person making the appeal ("the appellant") and the Council, and;
 - e) A statement indicating whether the appellant wishes the appeal to be dealt with by a hearing attended by both parties and conducted by an inspector appointed by the Secretary of State; or by both parties sending the Secretary of State written statements of their case (and having the opportunity to comment upon one another's statements).
- At the same time, the notice of appeal and documents (a) and (e) must be sent to the Council, and the person making the appeal should inform the appropriate Secretary of State that this has been done.

An appeal will not suspend the effect of the conditions appealed against; the conditions must still be complied with.

In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the local authority to either vary any of these conditions or to add new conditions.

Appendix 1

Notification of Abnormal Emission or Malfunction

Nature of Emission or Malfunction	
Time, date and location of the incident	
Quantity of the substance released or the date of release and the time during which the release took place (where applicable)	
Measures taken or intended to be taken, to stop the release and rectify any environmental damage which has been or may be caused by the release	
Dates of similar releases which have taken place in the last 2 years	
If the information supplied in the notification is considered confidential, a statement of which information this applies to and the reasons why	

APPENDIX 2

BS2742:2009

Notes of the Use of the Ringelmann and Miniature Smoke Charts

BS2742: 2009 is a method for the visual assessment of smoke emission by comparison of the darkness of the smoke with standard shades of grey on a chart known as a Ringelmann chart. A corresponding number, the Ringelmann number, is assigned to describe the best match; the numbers range from 0 (white) to 5 (black).

Notes on the use of the Standard Ringelmann Chart (BS2742C)

A clean chart should be used under daylight conditions and held, or fixed, facing the observer at a sufficient distance for the lines to appear to merge into a uniform shade. For most observers the distance is in excess of 15 metres.

Observations should be made outdoors under general daylight conditions. Under hazy conditions readings should not be taken at extreme distances, as there will be a tendency for the readings to be low.

The angle of view of the chart and smoke should be as low as possible: observations at a steep angle should be avoided.

Compare the darkness of the smoke at the point where it leaves the chimney with the chart. Determine the number of the shade that appears most closely to match the darkness of the smoke, and note the time and duration of this emission. Shades may be estimated to the nearest quarter Ringelmann number in favourable conditions.

The BS Miniature Smoke Chart

In situations where a standard BS Ringelmann chart cannot conveniently be used the British Standard miniature smoke chart, BS 2742 M, may be more appropriate.

The miniature chart is designed for use at less than 2 metres from the observer's eye. It is to be used under the conditions of illumination described above. As the card on which the chart is printed is slightly translucent, the chart should be backed by a sheet of white opaque material or inserted in a holder.

Preferably the chart should be held approximately 1.5 metres from the observer's eye, fixed to the end of a rod. The chart may also be held at arm's length, but observers are likely to find that readings are less easy to obtain this way.