

Local Air Pollution Prevention and Control, (LA-IPPC)

New CDC Ref No: H418/1/1/18/VAR



A 2 - P E R M I T

CDC Ref No.: H418/1/1 (Ch 3.6)
New CDC Ref No: H418/1/1/18/VAR
Guidance :- PG 2/4 , PG 2/6 , IPPC SG7

Issued by:
CHILTERN & SOUTH BUCKS DISTRICT COUNCILS

Incorporating the updated 4 Yearly Review for LA-IPPC (January 2018)

Pollution Prevention and Control Act 1999
Pollution Prevention and Control (England & Wales) Regulations 2000
Part 2 of schedule 3 of the PPC Regulations, SI 2000/1973
Environmental Permitting (England & Wales) Regulations 2016



| | | | | | |
|---------------------------|--------------------|--|--------|--|-------------|
| Health & Safety Executive | Environment Agency | Public Register, Env. Services Reception | Health | | Office File |
| | | | | | |

Previously LAPC Authorised, Original application received : 30/9/91
This IPPC Permit final draft Feb 2005. Revised Aug 2005. Revised April 2012, Last Revised January 2018

TO: H G Matthews, Bellingdon Brickworks, Chesham, Bucks HP5 2UR

(Name and registered office of operator (hereinafter referred to as "the Operator"))

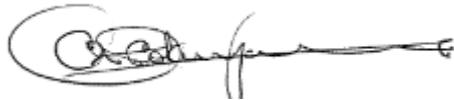
RE: H G Matthews, Bellingdon Brickworks, Chesham, Bucks HP5 2UR (the premises in which the permitted process is carried out are identified on the various plans outlined on Schedules 1 -10 as attached to and forming part of this Permit)

(Address of permitted process (hereinafter referred to as "the premises"))

The named company is permitted by Chiltern & South Buck District Councils (hereinafter referred to as "the Council") to operate a prescribed process designated for local control within the meaning of Local Air Pollution Prevention & Control Act 1999 (LAPPC) namely:

**CERAMIC PRODUCTION
Section 3.6 Part A (2) a**

**Directly Associated Activities –
(None)**



Signed:

Date: 6th June 2018.

Senior Environmental Protection Officer



Signed...

Date.....6th June 2018.....

Environmental Health Manager

Introductory Note

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I 2000 No.1973), as amended, ("the PPC Regulations") to operate a scheduled installation carrying out an activity, or activities covered by the description in section 3.6 A2 (a) in Part 1 to Schedule 1 of the PPC regulations, to the extent authorised by the Permit.

Aspects of the operation of the installation that are not regulated by conditions in this Permit are subject to the condition implied by regulation 12(10) of the PPC Regulations, i.e. the Operator shall use the best available techniques for preventing, or where that is not practicable, reducing emissions from the installation.

In some sections of the Permit, conditions require the Operator to use Best Available Techniques (BAT), in each of the aspects of the management of the installation, to prevent, and where that is not practicable, to reduce emissions. In determining BAT, the Operator should pay particular attention to relevant sections of the IPPC Sector Guidance note (SG7), appropriate Horizontal Guidance, and any other relevant guidance. Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Note that the Permit may require the submission of certain information to the Regulator, and in addition, the Regulator has the power to seek further information at any time under Regulation 28 of the PPC Regulations provided that the request is reasonable.

Public Registers

Information relating to Permits, including the application, is available on public registers in accordance with the PPC Regulations. Certain information may be withheld from the public registers where it is commercially confidential, or if it is in the interest of national security to do so.

Variations to the Permit

The Regulator may vary the Permit in the future, by serving a variation notice on the Operator. Should the Operator want any of the conditions of the Permit to be changed, a formal application must be submitted to the Regulator (the relevant forms are available from the Regulator). The Status Log that forms part of this introductory note will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the Permit

Before this Permit can be wholly or partially surrendered, an application to surrender the Permit shall be made by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Regulator that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

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. In addition, if the Permit authorises the Operator to carry out a specified waste management activity, the transfer will not be approved if the Regulator does not consider the proposed Permit holder to be a 'fit and proper person' as required by the PPC Regulations.

Talking to us

Please quote the permit number if you contact the Regulator about this permit. To give a notification under a condition, the Operator should contact the Principal Environmental Protection Officer or any other number notified in writing by the Regulator for that purpose

Overview of the installation and the scheduled activities

Classification: OFFICIAL

The main activity carried out at the installation comprises of the annual manufacture of clay facing bricks of various sizes and shapes, using locally dug clay material.

The standard bricks are manufactured in accordance with relevant British standards which are shortly to be harmonised as a European Standard BS EN771-1.

The following describes the process specific to this site;

Clay is dug locally, blended and stockpiled on site. All the clay is entirely inert.

When it is wet obviously there is no dust problem and when dry the stockpiles form a hard crust and again there is no dust.

The clay is soaked using either mains water or stored rainwater, when this is available, and anthracite is added to aid firing in the kilns. The soaked clay or "pug" is then loaded into a single shaft mixer which blends the clay further before passing it up a conveyor belt and through two sets of rolls. The first set screws out large flints, which are in the clay, and the second and third set crushes the remainder of the flint to a particle size of a few millimetres.

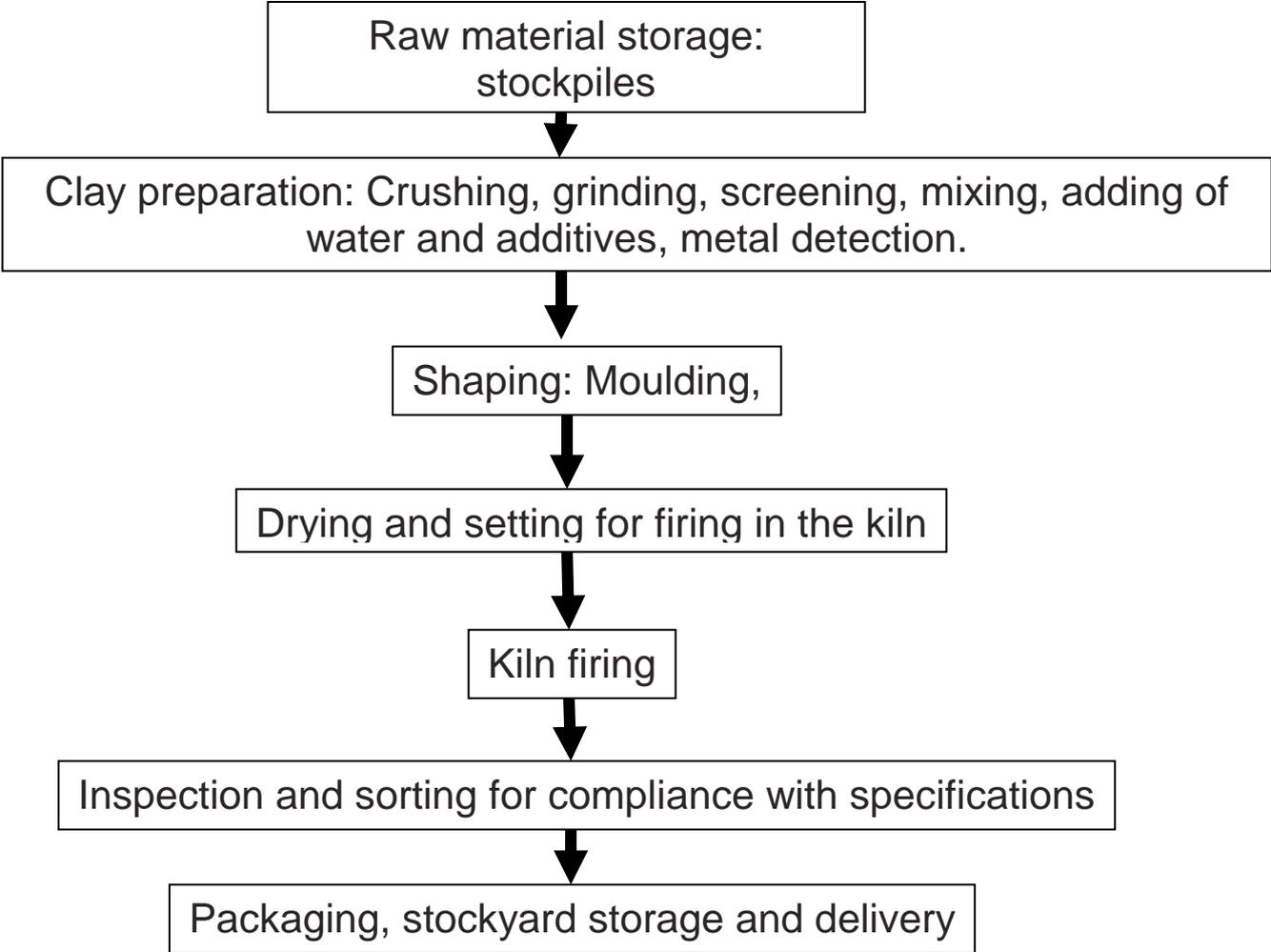
The clay now enters the "Berry" brick making machine or the "Bidmead" hand-making bench where the clay is moulded into bricks by machine or hand.

The bricks are then placed into drying rooms. The heat from these dryers is generated using "Eta Hack" biomass boilers fuelled via wood chips. After approximately five days, the bricks are then dry. No emissions with the exception of water vapour are given off.

Water vapour is emitted to atmosphere via the exhaust ducts in the roof of the drying shed.

The bricks are then set by hand into the kiln and the kiln fired for 24 hrs. The kiln continues to burn and then cool for approximately 70 hrs more. Combustion gasses from the gas oil and anthracite as well as water vapour are emitted from the kiln. The bricks are then hand drawn from the kiln being stacked on pallets of 500 ready for sale.

General Process Flow Diagram:



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Description of Process:

The manufacture of heavy clay goods, mainly bricks, by firing the raw material in one of 4 Scotch kilns fuelled by British Standard 2869:1988 Class A2 gas oil having a sulphur content no greater than 0.3% by mass; and the associated processes of blending, moulding and drying of mineral material.

Components of Process:

| Map Location | Quantity | Description |
|--------------|----------|--|
| | 1 | Volvo Penta TD100A diesel stand-by generator |
| | 1 | Volvo L45G Front loading shovel or similar |
| | 1 | Volvo L25B Dumper truck or similar |
| | 15 | Lift Trucks, various fuel types |
| | 1 | Premixer, electrically powered |
| | 1 | Stone Extractor Rollers |
| | 2 | Sets Crushing Rollers, (the 2nd being a Craven Fawcet model 20/20), both electrically powered |
| | 1 | Conveyor to 1 No. Berry Brick Making machine, electrically powered, providing extrusion, moulding and sand facing |
| | 1 | Conveyor to hand making of bricks |
| | 1 | Timber deck POSCH. |
| | 2 | Wood cutters 1 X Spaltfix S.350 1 X POSCH Split Master 30 |
| | - | Dust extraction to DCE Unimaster (self-cleansing) air cleaning equipment associated with the Berry machine. |
| | 8 | Drying Chambers, served by 8 Biomass burners |
| | 8 | Biomass burner 200kW With forced air supply to clay preparation area |
| | 3 | Brick built Scotch kilns (8.5m X 5.5m X 4m Height approximate external measurements) with ground level fire apertures and with compressed air supply |
| | 2 | Wood fired kilns |
| | 1 | 14 duty and 2 standby Swirlmaster pressure jet burners (burning oil to BS 2869 Class A2 • Gas Oil •) Burner set manually controlled. |
| | 1 | Shrink wrapping operation for all production. |

Installation Boundary:

All areas required for the brick making process are included. Areas used for maintenance, administration and welfare facilities have also been included. Please see Schedule 2.

Conditions

1. General

1.1 Permitted activities

1.1.1 The Operator is permitted to carry out the activities and/or associated activities specified in table 1.1.1 below:

| Table 1.1.1 | | |
|---|---|---|
| Activity listed in Schedule 1 of the PPC regulations / Associated activity | Description of specified activity | Limits of specified activity |
| Section 3.6 A2 (a) – The manufacture of ceramic products (brick) by firing in kilns | <ul style="list-style-type: none"> ▪ Storage of clay and raw materials ▪ Forming including mixing and shaping ▪ Drying ▪ Firing in gas and oil fired kilns ▪ Packing and storage of product ▪ Ancillary site plant and equipment. ▪ Utilities, technical, engineering and admin support. | Receipt of raw materials to dispatch of finished product. From receipt of fuel to dispensing to plant and equipment |

1.2 Installation

1.2.1 The activities authorised by this Permit shall not extend beyond the installation boundary that being the land shown as edged on the site plan of Schedule 10 to this Permit, and described in the Permit application.

1.3 Overarching management condition

1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a management system, organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

The management system shall include a specific Environmental Management System (EMS), which shall provide an effective technique for ensuring that all pollution prevention and control techniques are delivered reliably and on an integrated basis, and shall include but not be limited to:

- A documented preventative maintenance schedule, covering all plant, equipment whose failure could lead to significant impact on the environment;
- Documented procedures for visual monitoring of emissions;
- Records of checks made (the logbook) shall include the time, date, result and name of person undertaking the assessment, and where required, the location of the assessment;
- Records of breakdowns of key plant and abatement equipment capable of causing significant pollution (to be analysed by the Operator in order to eliminate common failures), and;
- A documented training system for all relevant staff (including awareness of the Regulatory implications of the Permit, awareness of all operating procedures, awareness of all potential environmental impacts under normal and abnormal circumstances, prevention of accidental emissions and action to be taken when accidental emissions occur, and awareness of the procedures for dealing with a breach of the Permit conditions).

1.4 Improvement programme

1.4.1 The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table, and shall send

written notification of the completion of each requirement to the Regulator within 14 days of the completion of each such requirement. Where a report is required, this shall also be sent to the Regulator by the date specified in the table:

| Table 1.4.1 | | |
|--------------------|--|--------------------------------|
| Reference | Requirement | Compliance date |
| IC5 | To complete and implement the Environmental Management System detailed in section B2.12.2 of the Permit application, and to meet the requirements of the overarching management condition (condition 1.3.1), to the satisfaction of the Regulator. | 31 st December 2005 |

1.4.2 Where the Operator fails to comply with any requirement by the specified date in Table 1.4.1, written notification of such failure shall be sent to the Regulator within 14 days of that date.

1.5 Operational changes

1.5.1 The Operator shall seek the Regulators written agreement under condition 1.5.2 to any operational changes to this Permit, by way of significant variation, and shall include:

- (a) A description of the nature of the proposed change;
- (b) Any increases in the storage of raw materials;
- (c) The nature and quantity of any emission;
- (d) Details of the technology being applied to reduce such emissions, and associated emissions monitoring;
- (e) Any other relevant information.

Minor modifications are permissible as long as they do not contravene the operational requirements of the application or the Permit and do not adversely affect releases to air.

1.6 Pre-operational conditions

1.6.1 There are no pre-operational conditions attached to this Permit.

1.7 Off-site conditions

1.7.1 There are no off-site conditions attached to this Permit.

2. Operating Conditions

2.1 In-Process controls

2.1.1 The Permitted installation shall, subject to the conditions of this Permit, be operated using the techniques, and in the manner described in the documentation submitted in the Permit application, or as otherwise agreed in writing by the Regulator in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

2.2 Emissions

2.2.1 Point source emissions to air

2.2.1.1 The limits for emissions to air for the parameters and emission points set out in table 2.2.1.1 shall not be exceeded.

| Table 2.2.1.1 | | | | |
|---------------------------------|--------------------|-------------------------------|--|--------------------------|
| Emission point reference | Parameter | Limit mg/m³ | Monitoring frequency | Monitoring method |
| | Oxides of nitrogen | Not applicable | | |
| | Particulate matter | No visible emissions | At least daily when kiln(s) in operation | Operator observations |

| | | | | |
|--|---|-------------------------|----------------|-----------------------|
| | Oxides of sulphur: (expressed as SO ₂) | Not applicable | | |
| | Chlorides (expressed as HCl) | Not applicable | | |
| | Fluorides (expressed as HF) | Not applicable | | |
| | Particulate matter | No visible emissions | At least daily | Operator observations |

2.2.1.2 Emissions to air from the specified sources in table 2.2.1.2 shall only arise from the specified emission points in that table. (Existing to be used with review by April 2006)

| Table 2.2.1.2 | | |
|---------------------------------|-----------------|-----------------------------------|
| Emission point reference | Source | Location of emission point |
| | Kilns | Exhaust from Kiln |
| | Biomass Burners | Chimney |

2.2.1.3 Gas Oil, when used as the primary fuel for the kilns, shall be Low Sulphur Gas Oil

2.2.1.4 The burning of waste oil is not permitted at any time.

2.2.2 Point source emissions to surface water and sewer

The schedule of point source emissions to surface water are shown in the following table:

| Ref | Source | Constituent | Quantification | Comments |
|------------|--------------------------|---|-----------------------------------|--|
| W1 | Installation Drainage | Rain Water from hard standing and Building Roofs | Entirely Dependant on Rainfall | Some drainage will join water from the clay pit site. Which runs across the installation. |
| W2 | Water Collection | Building runoff | Entirely Dependant on Rainfall | This is collected and recycled |

There are no significant emissions to water from the brick making process as any water added during the forming stage is evaporated during the drying stage or the first part of the kiln firing process. There is no connection to the mains sewer system at the installation, Soak aways and cesspits are used. Last year we installed water collection tanks (Also recycled) on the site. In addition, rain water is captured as it falls from the main drying rooms and brickmaking sheds and this is then fed and channelled into 2 large water tanks. (Approx. 60,000 litres). This collected water is then used in the preparation of the clay in a 'soft-mud' process. (Each brick contains a pint of water).

2.2.2.1 The emission of Trade Effluent to a sewer is not permitted unless the Operator is in possession of the relevant Trade Effluent Discharge Consent from the local water company.

2.2.3 Point source emissions to groundwater

2.2.3.1 No emission from the Permitted installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)). **(N/A No List I substances are used in this process)**

2.2.3.2 No emission from the Permitted installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)). **(N/A No List II substances are used in this process)**

2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) the Operator shall use BAT to prevent, or where that is not practicable, to reduce emissions to groundwater from the Permitted installation.

2.2.4 Fugitive emissions to air

2.2.4.1 The Operator shall use BAT so as to prevent, or where that is not practicable, to reduce fugitive emissions of substances, including particulates, to air from the Permitted installation, and in particular from:

- Storage areas and open surfaces (including uncovered outdoor stockpiles)
- Outdoor plant and equipment
- Buildings (including roof louvers)
- Pipes, valves and other transfer systems

2.2.5 Fugitive emissions to surface water, sewer, groundwater and land

2.2.5.1 The Operator shall use BAT so as to prevent, or where that is not practicable, reduce fugitive releases of substances to surface water, sewer, groundwater and land from the Permitted installation.

2.2.5.2 The Operator shall notify the Regulator, as soon as is reasonably practicable, of any information concerning the state of the site which affects or updates that supplied to the Regulator as part of the site report submitted as Section 3 (site Condition Report) of the Permit application.

2.2.5.3 The Operator shall notify the Regulator in writing of any area or zone within the boundary of the installation that has been subject to below ground remediation since the issue of the Permit. Subject to agreement in writing from the Regulator, any necessary analysis of sub-soil to re-establish baseline pollutant levels shall be undertaken.

2.2.6 Odour

2.2.6.1 All emissions to air from the installation shall be free from offensive odour, as perceived by the Regulator, beyond the installation boundary. The Operator shall not be taken to have breached this condition if the Operator has used BAT to prevent, or where that is not practicable, to reduce such odorous emissions.

2.2.7 Emissions to Land

Not applicable.

2.3 Raw Materials

2.3.1 Selection

2.3.1.1 The Operator shall maintain an inventory of the principal raw materials used, which shall include details of the quantities used and an assessment of their environmental impact.

The current inventory is detailed in Table 2-6 of the Permit application:

- o The inventory shall carry out a periodic review of raw materials used at least once every six years, or where changes to the raw materials have been made. Where a review identifies an acceptable less polluting raw material option, the Operator shall substitute that material within the review period.
- o Quality procedures to control the specification of raw materials used shall be implemented and maintained, in order to minimise any environmental impact, and these procedures, along with the inventory shall form part of the Environmental Management System required by condition 1.3.1.

2.3.1.2 Clay imported from off site sources should not give rise to a final clay mixture sulphur content greater than 2%. A statement demonstrating the sulphur content of new sources of clay shall be made available to the Regulator upon request

2.3.1.3 No waste or recovered oil shall be used in any part of the process

2.3.1.4 Anthracite used in the process shall have sulphur content no greater than 1% by mass when analysed in accordance with British Standard 1016:1991.

2.3.1.3 Fuel oil used on site shall comply with the Sulphur content of Liquid Fuels (England and Wales) Regulations 2000 (S.I 1460), or as amended by changes in legislation. A statement from the fuel supplier demonstrating the sulphur content of

Gas Oil shall be made available to the Regulator upon request.

2.3.2 Handling, storage, mixing and transfer

2.3.2.1 All equipment related to delivery, storage, mixing or transfer of raw materials shall be kept in good working order (where used) and serviced if applicable, and this shall form part of the Environmental Management System required by condition 1.3.1.

A visual assessment of all plant shall be undertaken daily. The extent of any emission and the steps taken to rectify the emission shall be recorded in the logbook kept in accordance with condition 1.3.1. Any faults or defects found shall be recorded in the logbook kept in accordance with condition 1.3.1, along with the action taken to rectify that fault or defect.

2.3.2.2 Buildings where such dusty operations are undertaken should be designed such that entrances and vents will as far as possible not be the source of fugitive emissions.

2.3.2.3 The receipt, handling and storage of materials likely to generate particulate matter shall be carried out in such a way that emissions of particulate matter to the air are minimised. In particular, storage of sand shall be in three-walled bays sheeted over when not in use.

2.3.2.4 Any spillages or accumulations of materials likely to generate particulate matter occurring at the premises shall be cleared up promptly and the substances cleared up, stored and handled so as to prevent emissions to the air prior to dispatch of the said material off the premises (if the material is not to be re-used in which case it shall be returned to storage in compliance with the preceding Condition). Spillages and accumulations described in this Condition shall be cleared up and handled in such a manner that they do not contribute to emissions to the air.

2.3.2.4 Stockpiles: Dust control water sprays shall be employed to control fugitive dust where and as required.

2.3.2.5 Additives/Oils/Lubricants and all other process related solutions shall be stored in an area designed or located such that any leakage or spillage in that area is contained or controlled so as to prevent, or where that is not practicable, minimise the risk of significant pollution.

2.3.2.6 Fuel Oil shall be stored in an area designed or located such that any leakage or spillage in that area is contained.

2.3.2.7 Site roads that are hard surfaced shall be swept as necessary using vehicles fitted with dust collection facilities in order to minimise the emission of dust.

2.3.3 Waste minimisation (optimising the use of raw materials)

2.3.3.1 Using information gathered from the periodic review of raw materials used in the process, the Operator shall investigate any opportunities for reducing waste and maximising recycling should be assessed and, where appropriate, should be carried out in accordance with a timescale approved by the Regulator. This shall form part of the Environmental Management System required by condition 1.3.1.

2.3.3.2 The Operator shall carry out a waste minimisation audit at least every six years. The methodology used and an action plan for optimising the use of raw materials should be submitted to the Regulator within 2 months of completion of the audit. Specific improvements resulting from the recommendations of audits should be carried out within a timescale approved by the Regulator.

Scrap metals will be recycled/ re-used where possible.

2.3.4 Water Use

2.3.4.1 The Operator shall carry out a periodic review of water use (water efficiency audit) at least once every 6 years, or where there is significant change to the water use at the installation. Using this information, opportunities for reduction in water use should be assessed and, where appropriate, should be carried out in accordance with a timescale approved by the Regulator. This shall form part of the Environmental Management System required by condition 1.3.1.

2.4 Waste storage and handling

- 2.4.1 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant, removal date of waste that is produced at the permitted installation. This does not need to include process waste that is re-cycled within the operation.
- 2.4.2 The Operator shall design, maintain and operate facilities for the storage and handling of waste such that there are no releases to water or land during normal operation, and that emissions to air and the risk of accidental release to water and land are minimised.
- 2.4.3 The waste handling arrangements shall form part of the Environmental Management System required by condition 1.3.1, and shall be periodically reviewed in order to demonstrate that the best environmental options are being used for dealing with waste from the installation.

2.4 Waste re-use, recovery, recycling or disposal

- 2.5.1 The Operator shall continue to implement the waste recovery, recycling and disposal arrangements detailed in sections 2.5 of the Permit application, which shall form part of the Environmental Management System required by condition 1.3.1.

2.6 Energy Efficiency

- 2.6.1 The Operator shall ensure that that all plant and equipment forming the installation is designed, operated and maintained to optimise the use and minimise the loss of energy as far as is reasonably practicable.
- 2.6.2 The Operator shall maintain and update annually an 'Energy Plan' to demonstrate condition 2.6.1 above. The effective management of energy efficiency matters shall be maintained as part of the Environmental Management System required by condition 1.3.1.

2.7 Accidents

- 2.7.1 The Operator shall maintain the accident management procedures referred to in section 2.8 of the Permit application, which shall form part of the Environmental Management System required by condition 1.3.1.
- 2.7.2 The plan shall be reviewed at least annually, or as soon as practicable after an accident, whichever is the earlier, and the Regulator notified of the results of the review within 2 months of its completion
- 2.7.3 In the case of abnormal emissions arising from an accident, the Operator shall:
- Investigate immediately and undertake remedial action as soon as practicable;
 - Promptly record the events in the site accident book, detailing actions taken, and
 - Ensure the Regulator is made aware, as soon as practicable.

2.8 Noise and Vibration

- 2.8.1 The Operator shall use BAT to prevent, or where that is not practicable, minimise emissions of noise and vibration from the permitted installation. The Operator shall maintain systems for the control of noise and vibration referred to in section 2.9 of the Permit application.
- 2.8.2

| Potential Source | Normal Operation | Abnormal Event | Comments |
|--|------------------|----------------|--|
| Loading raw materials into processing using mobile plant | Insignificant | Insignificant | na |
| Clay preparation and forming equipment | Insignificant | Insignificant | Operation enclosed within factory building |
| Fans and combustion systems serving dryers | Insignificant | Significant | 100mm celotex insulation |
| Brick handling and packing equipment | Trivial | Insignificant | na |
| Transport to product to stocking areas | Trivial | Insignificant | Forklift movements, Production hours only |
| Loading delivery vehicles | Trivial | Insignificant | Loading mainly During Office Hours only |
| Movement other delivery vehicles. | Trivial | Trivial | Minimal number of deliveries. |
| Maintenance activities | Trivial | Insignificant | Most activity carried out on plant inside factory. |

2.8.3 All clay preparation equipment shall be properly lubricated and maintained to minimise noise or vibration.

2.8.4 Generators shall be properly maintained and fitted with silencers. Operational hours of the site are generally between:

Mon-Fri 8.00 am to 17.30 pm

Kilns generally operate for 24hrs per week.

Please note this permit condition will be reviewed in light of ANY proven complaints and restrictions on the use of noisy equipment may be required. Currently the generator shall not be used outside of the above hours.

This also does not negate any requirements (past or future) under the Town & County Planning Act on site operational hours that can be imposed by the Planning Section.

2.8.5 All exhaust inlets and vents should be properly maintained to prevent corrosion or damage affecting their acoustic properties.

2.8.6 Noise impact must be considered when positioning any new or altered exhaust, inlet or vent.

2.8.7 Fans that have a direct external connection should be properly maintained, with particular attention to balance and bearings.

2.9 Monitoring

2.9.1 Emissions to air

2.9.1.2 Emissions from all Scotch Kilns tops shall be colourless, with exception for the evolution of steam and shall be free from significant visible smoke during normal operation, and a record of any abnormal emissions shall be recorded in the logbook kept in accordance with condition 1.3.1, along with its cause, and action taken to rectify the problem. On no occasion shall any emission exceed the equivalent of Ringlemann shade 1, as detailed in British Standard BS 2742:1969. A record of any such emission shall be recorded in the logbook kept in accordance with condition 1.3.1, along with its cause, and action taken to rectify the problem. The details of the person undertaking the monitoring and the date and time shall also be recorded, along with the location where the observation was made.

2.9.1.3 A visual assessment of all emissions shall be undertaken at least daily to ensure that final releases are colourless, free from persistent visible emissions, odour and free from droplets.

2.9.1.4 Emissions from the tops of operational kilns shall be observed during daylight hours once a day for a period of at least 5 minutes on each occasions at each location as indicated on the attached plan.

- 2.9.1.5 A visual assessment of dust on roadways and yards within the site, and of dust from all other sources on site shall be carried out not less than once per day.
- 2.9.1.6 A record of assessments and of corrective action taken, shall be made in the log book required to be kept in accordance with this permit.
- 2.9.1.7 An olfactory assessment of odours shall be carried out not less than once per day for a period of at least 5 minutes at each location as indicated on the attached. A record of these assessments and of corrective action taken, shall be made in the log book required to be kept in accordance with this permit. The record shall include the time and date of the assessment, the result, and the name of the person undertaking the assessment.
- 2.9.1.8 The log books shall be kept available for inspection by an authorised officer of the District Council on the premises occupied by the process, and shall contain at least the previous 2 years' records.

2.9.2 Emissions to Controlled Waters

- 2.9.2.1 Records of any monitoring, including analysis reports shall be made available for inspection by the Regulator.

2.10 Closure and decommissioning

2.10.1 The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.

2.10.2 The site closure plan shall be prepared in accordance with section 3 of the Permit application, and will refer to the site report submitted as Section 3 of the Permit application. The Operator shall minimise any pollution risk, including the generation of waste, on closure and decommissioning by:

- The maintenance of a record of any events which have, or might have, impacted on the condition of the site along with further investigation or remediation work carried out. This shall include and be a development of the initial site condition report submitted as section 3 of the Permit application; and
- Ensuring that the installation is decommissioned so as to avoid any pollution risk in returning the site of operation to a satisfactory condition.

The site closure plan shall be submitted to and approved by the Regulator before implementation.

2.10.3 The Operator shall give at least 30 days written notice to the Regulator before implementing the site closure plan.

3. Records

3.1 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 installation shall:-

- be made available for inspection by the Regulator at any reasonable time;
- be supplied to the Regulator if required and without charge;
- be legible;
- be made as soon as reasonably practicable;
- indicate any amendments which have been made and shall include the original record wherever possible; and
- be retained at the Permitted installation, or other location agreed by the Regulator in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing.
- Where they concern the condition of the site of the installation, be kept at the Permitted installation, or other location agreed by the Regulator in writing, until all parts of the Permit have been surrendered.

4. Reporting

- 4.1 All reports, and written and or oral notifications required by this Permit, and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Regulator using the contact address indicated on page 1 of this Permit.
- 4.2 The Operator shall, when required, submit reports of the monitoring and assessments carried out in accordance with the conditions of this Permit, unless otherwise agreed in writing.
- 4.3 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets, the Operator shall, no later than 31st January each year, provide a summary report of the previous years progress against such targets.
- 4.4 The Operator shall, within 6 months of receipt of written notice from the Regulator, submit to the Regulator a report assessing whether all appropriate preventative measures continue to be taken against pollution, in particular through the application of best available techniques at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement
- 4.5 You must respond to any Information Notice served on you for the purposes of complying with your obligation to report your pollutant releases and off-site waste transfers pursuant to the directly applicable EU duty in accordance with Article 5 of EC Regulation No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register. As a permit condition, your failure to respond in accordance with such annual E-PRTR Information Notice will hereby constitute a breach of your permit.

5. Notifications

- 5.1 The Operator shall notify the Regulator **without delay** of:-
 - The detection of an emission of any substance, that has caused, is causing, or may cause significant pollution and that exceeds any limit or criterion in this Permit, specified in relation to the substance;
 - The detection of any fugitive emissions 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;
 - The detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or may cause significant pollution; and
 - Any accident, which has caused, is causing or may cause significant pollution.
- 5.2 The Operator shall give written notification as soon as practicable (and at least 30 days) prior to any of the following:
 - Permanent cessation of the operation of part or all of the Permitted installation;
 - Cessation of operation of all or part of the Permitted installation for a period likely to exceed 1 year; and
 - Resumption of the operation of part or all of the Permitted installation after a temporary cessation of activities as above.
- 5.3 The Operator shall notify the following matters to the Regulator in writing within 14 days of their occurrence:
 - Any change in the Operators trading name, registered name or registered office address;
 - Any change to the particulars of the Operators ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary);
 - Any steps taken by the Operator going into administration, entering into a company voluntary arrangement, being wound up or bankruptcy;
 - Any death of any of the named Operator (where the Operator consists of more than one named individual).
- 5.4 Where the Operator has entered into a Climate Change Agreement with the government, the Operator shall notify the Regulator within one month of:
 - Any decision by the Secretary of State not to re-certify that Agreement.
 - A decision by either the Operator or the secretary of state to terminate that agreement.

- Any subsequent decision by the Secretary of State to re-certify that Agreement.

6. Interpretations and Explanatory Notes

6.1 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 4 to the PPC Regulations 2016 and any operational change agreed under the conditions of this Permit.

"PPC Regulations" Means the Pollution Prevention and Control (England and Wales) Regulations S.I. 2000 No.1973 (as amended) and words and expressions defined in the PPC 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.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"Sewer" Means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

"Fugitive Emission" means an emission to air or water (including sewer) from the Permitted installation that is not controlled by an emission limit imposed by a condition of this Permit.

"Groundwater" means all water that is below the surface of the ground in the saturation one and in direct contact with the ground or subsoil.

"Regulator" means any officer of Chiltern District 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.

"BAT" means 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 practical, generally to reduce emissions and the impact on the environment as a whole.

For those purposes:

"available techniques" means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the Operator;

"best" means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole;

"techniques" includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned. Schedule 2 of the Regulations shall have effect in relation to the determination of best available techniques.

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- 6.2 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.
- 6.3 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
Environmental Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol, BS1 PN

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;
- 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.

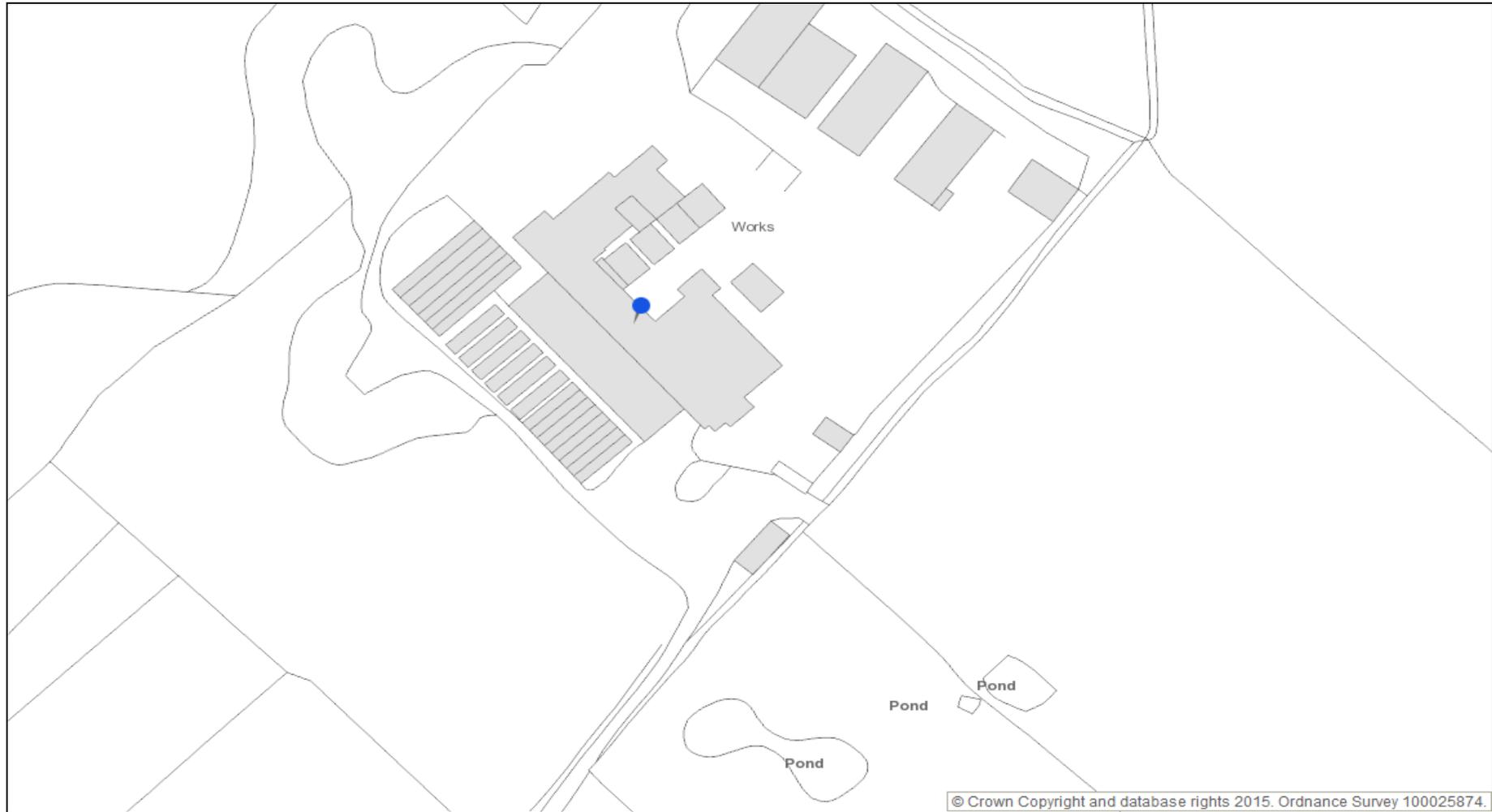
- An appeal will not suspend the effect of the conditions appealed against; the conditions must still be complied with.
- In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the local authority to either vary any of these conditions or to add new conditions.

Schedules

| | |
|-------------|---|
| Schedule 1 | Location of installation |
| Schedule 2 | Site layout and installation boundary |
| Schedule 3 | Emissions release points |
| Schedule 4 | Spatial Overview of site |
| Schedule 5 | HG Mathews Yard Plan List |
| Schedule 6 | Plant location and discharge points |
| Schedule 7 | Emissions monitoring (Emissions to controlled waters) |
| Schedule 8 | Emissions monitoring (Emissions to all media) |
| Schedule 9 | OS Site Plan/Map |
| Schedule 10 | Image of Wood Chip Boiler ETA HACK 200 |

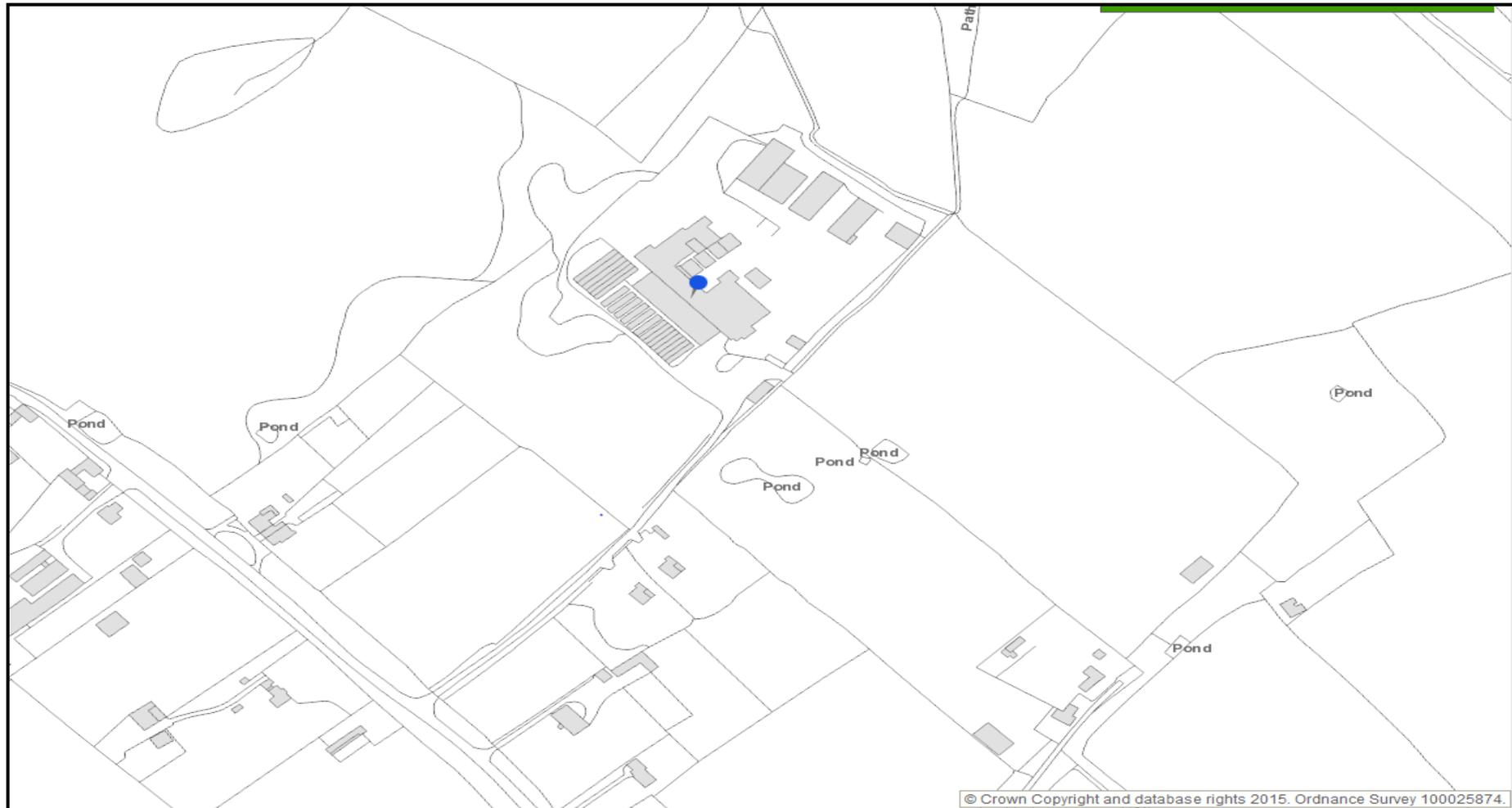
Schedule 1

Location of installation



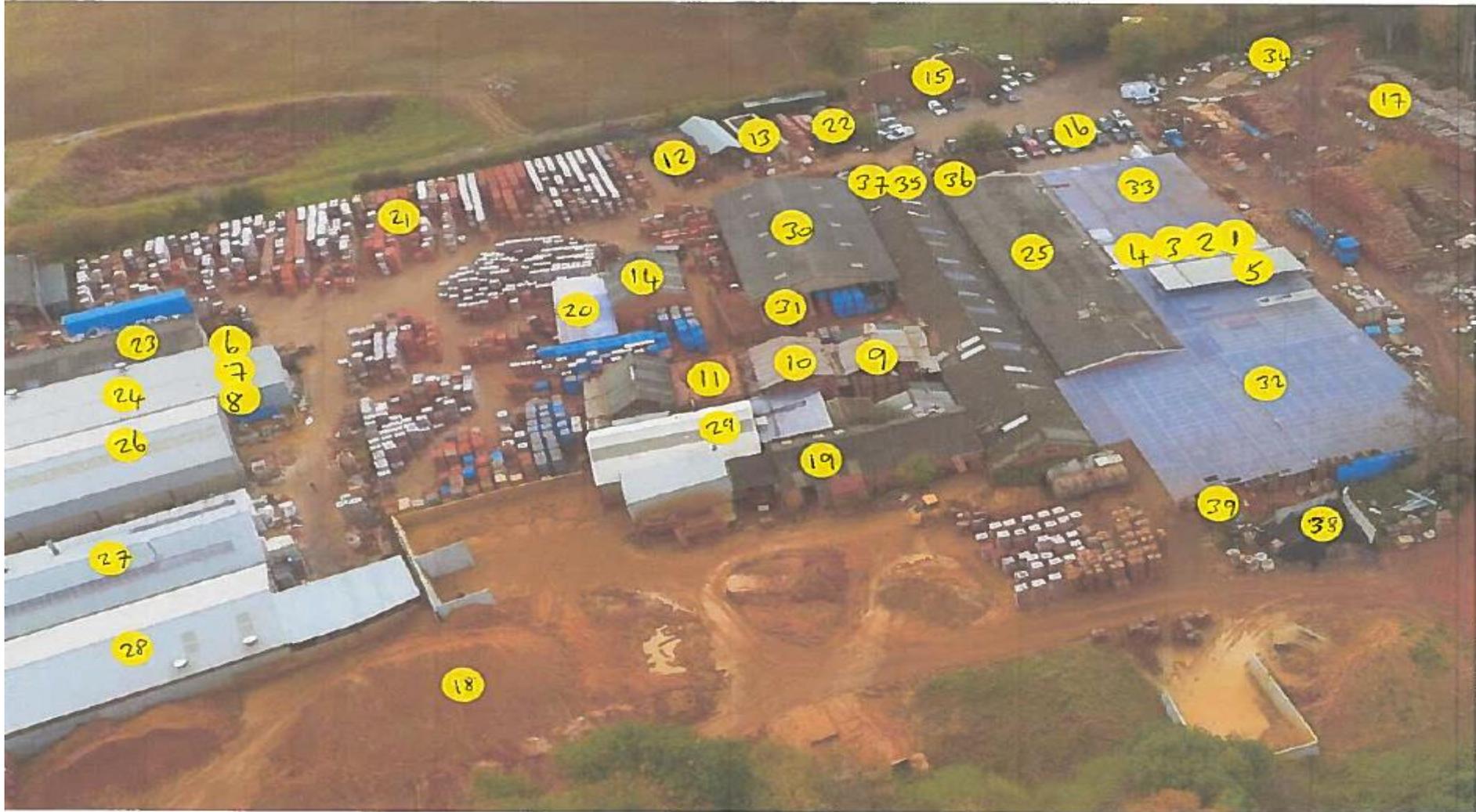
Schedule 2

Site layout and installation boundary



Schedule 3:

Emissions release point



Schedule 4:

Mathews Brickworks Permit
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A2 Permit (Ref: H418/1/1/18/VAR) Permit issued date: 06.06.18

Spatial Overview of site



Schedule 5:

Classification: OFFICIAL

H.G Mathews Yard Plan list (to link with Schedule 3)

H G MATTHEWS YARD PLAN January 2018

1. No 1 Boiler
2. No 2 Boiler
3. No 3 Boiler
4. No 4 Boiler
5. No 5 Boiler
6. No 6 Boiler
7. No 7 Boiler
8. No 8 Boiler
9. No 1 Oil Kiln
10. No 2 Oil Kiln
11. No 3 Oil Kiln
12. No 1 Wood Kiln
13. No 2 Wood Kiln
14. Work Shop
15. Fire Place Showroom
16. Car Park
17. Wood Storage Yard
18. Clay Storage Area
19. Clay Preparation Area
20. Brick Blending Area
21. Brick Storage Area
22. Oil Storage Tank
23. Fireplace Storage
24. Drying Cubicles Nos 6.7.8
25. Drying Cubicles Nos 1.2.3.4.5
26. Strock making Area
27. Ceramic Department
28. Cutting and Bonding Department
29. Tile making Area
30. Shrink Wrapping and Special Brick Shapes Storage
31. Mess Room/Cloakroom Area
32. Green Brick (unfired) Storage
33. Wood Chip Storage
34. 50 Tonne Weighbridge
35. Electric Distribution Area
36. Covered Transformer
37. Brick Yard Office
38. Anthracite Storage
39. Dry Sand Storage

Schedule 6:

Plant location and discharge points

| Ref | Source | Abatement Plant (Where Applicable) | Height | Discharge | | | | Constituents | Comments |
|-----|-------------------------|------------------------------------|--------|--------------------|----------------|------------------|----------------|--|----------------------------------|
| | | | | Impact | | Odour | | | |
| | | | | Normal Operation | Abnormal Event | Normal Operation | Abnormal Event | | |
| K1 | Scotch Kiln 1 | Not Applicable | 4.1 m | Minor Significance | Significant | None | Trivial | Products of combustion HF, SOx, NOx. Varies Over Firing Cycle. Water Vapour at start | Intermittent Kiln less than 2 MW |
| K2 | Scotch Kiln 2 | Not Applicable | 4.0m | Minor Significance | Significant | None | Trivial | Products of combustion HF, SOx, NOx. Varies Over Firing Cycle. Water Vapour at start | Intermittent Kiln less than 2 MW |
| K3 | Scotch Kiln 3 | Not Applicable | 4.1m | Minor Significance | Significant | None | Trivial | Products of combustion HF, SOx, NOx. Varies Over Firing Cycle. Water Vapour at start | Intermittent Kiln less than 2 MW |
| K4 | Wood Fired Kiln | Not Applicable | 4.0m | Minor Significance | Significant | None | Trivial | Products of combustion CO ₂ , H ₂ O. | |
| K5 | Wood Fired Kiln | Not Applicable | 3 m | Minor Significance | Significant | None | Trivial | Products of combustion CO ₂ , H ₂ O. | |
| | Chamber Dryer Exhausts | Not Applicable | 3 m | Trivial | Trivial | None | Trivial | Water vapour, Small amounts of Products of combustion | |
| A10 | General Air Ventilation | | 3.5 | Trivial | Trivial | None | Trivial | Ventilated Air, Very small Amounts of Dust | Mainly Run During Summer Months |

Schedule 7

Emissions to Controlled Waters (if applicable)

| Parameter | Consent limit / requirement |
|---|---|
| General requirement | Shall at no time contain any matter to such an extent as to cause the controlled water to be poisonous or injurious to fish, fish spawn or food of fish |
| Suspended solids | Shall at no time contain more than: 50mg/l suspended solids in emissions to controlled waters outside the installation boundary. This value is to be reconsidered on a yearly basis. |
| Biochemical oxygen demand (BOD ₅) | Shall at no time take up more than: 5mg/l dissolved oxygen in 5 days at 20°C in emissions to controlled waters outside the installation boundary |
| Oil and grease | No visible oil or grease |
| New or altered outlets | The outlet shall be so constructed and maintained that samples may be readily taken. The outlet shall be used for the discharge of surface water only |

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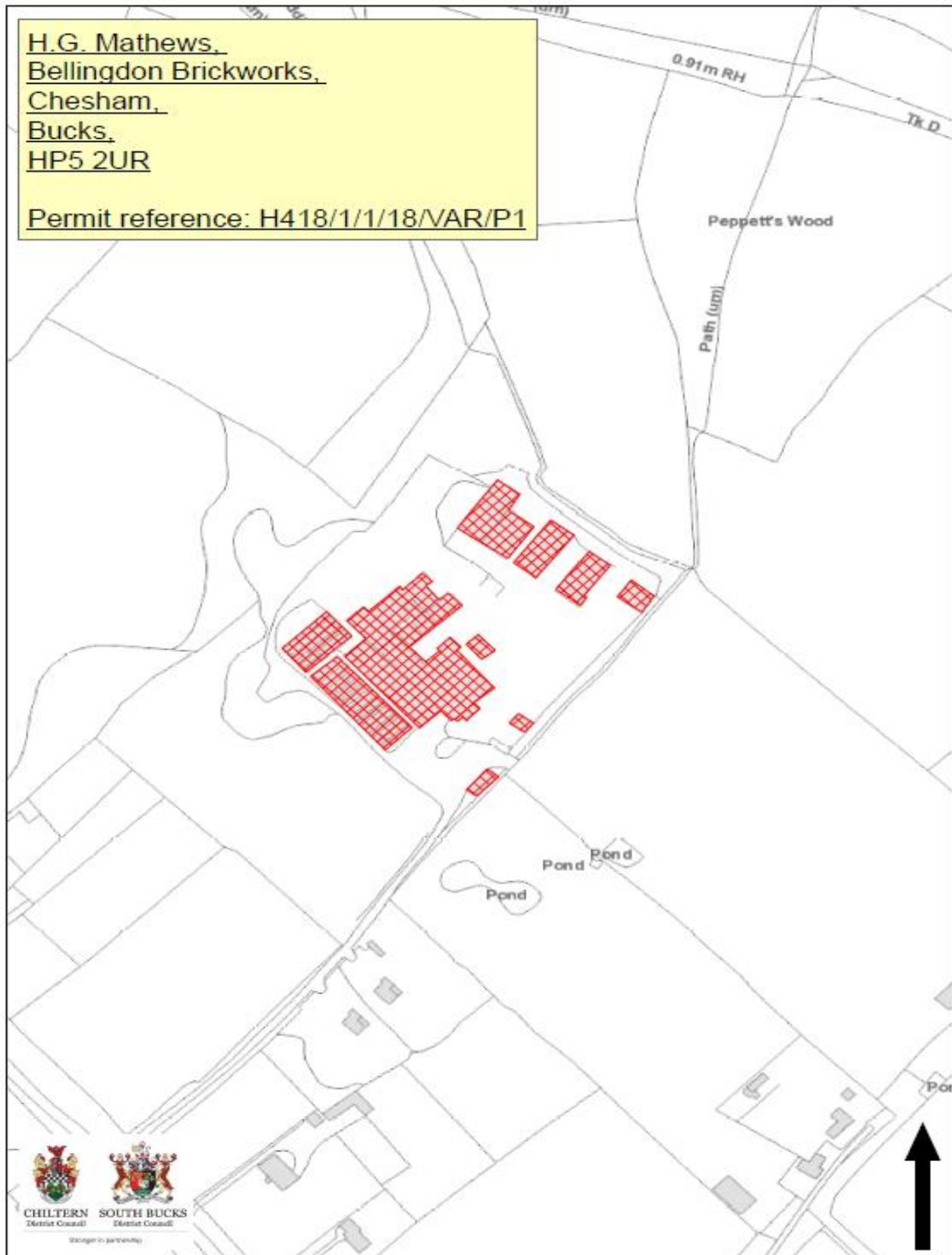
Schedule 8

Emission monitoring (All Media)

| Process | Air | Water | Land |
|--------------------------------|---|------------------------------|--|
| Raw material storage & loading | Fugitive emissions from stockpiles, bunkers Vehicle movements & Silo operation. | Spillage of liquid additives | Spillage of liquid additives. |
| Raw material preparation | Dust emissions from clay preparation and vehicle movements. | None | None |
| Drying | Exhaust of water vapour and warm exhaust gases | None | None |
| Firing | Exhaust of combustion products and evolved compounds from brick firing | None | None |
| Sorting and packing | Fugitive Dust | None | Waste packaging. |
| Stockyard and despatch | Vehicle emissions Dust from hard standing. | Vehicle fuel / oil Leakage | Damaged packaging materials. |
| General activities | Dust from Maintenance Activity | Spillages of oils and fuels | Spillages of oils and fuels. Used refractory materials. Scrap metal and other waste from maintenance activities. |

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Schedule 9: OS Map of site



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Schedule 10 – Image of Wood Chip Boiler – ETA HACK 200

BLT reference number: 170/07
(replaces BLT reference number: -/-)

BLT approval number: 034/08
(replaces BLT approval number: -/-)



**Wood chip boiler
ETA Hack 200**