Telford & Wrekin COUNCIL

Pollution Prevention Control Act 1999

Environmental Permitting (England and Wales) Regulations 2016

Variation reference number: 468

Schedule 2

Operator	**Michelmersh Brick Holdings PLC**
Installation Address	Sommerfeld Road Trench Lock Telford TF1 5RY
Permit Reference	101/270325
Grid Reference	SJ685119
Registered Office	Michelmersh Brick Holdings PLC Freshfield Lane Danehill Haywards Heath Sussex RH17 7HH
Registration Number	03462378

Michelmersh Brick Holdings PLC ("The Operator") is hereby permitted by Telford & Wrekin Council ("The Regulator") to carry out the activity of; manufacturing ceramic products such as bricks, by firing in kilns, where the kiln production capacity is more than 75 tonnes per day and the kiln capacity is more than 4m^3 and the setting density is more than 300kg/m^3, as defined under schedule 1, Section 3.6, Part A(2) (a) (i) and (ii) of The Environmental Permitting (England and Wales) Regulations 2016 ("The Regulations"). To the extent authorised by and subject to the conditions of this Permit, and within the installation boundary outlined in red within Appendix 1 of this permit.

Signed: **Date: 27/03/2025**

Name: Clair Travis

Environmental Health Officer
Authorised by the Borough of Telford and Wrekin to sign in that behalf

Contact Details

The contact address, telephone number and email address for all correspondence in terms of the permit is as follows:

Public Protection
Telford and Wrekin Council
Darby House
Lawn Central
Telford
TF3 4JA

Telephone: 01952 381818

Email: environmentalprotectionteam@telford.gov.uk

CONTENTS

Introductory Note 4
Process Description 5
Permit Conditions 13
Regulated activity 13
General requirements 14
Records 14
Written environmental management systems 14
Emission limits and control – Air 15
Emissions to surface water, sewer and groundwater 17
Monitoring - air 18
Noise and vibration 19
Raw materials 19
Water use 19
Waste handling 19
Waste monitoring, audit and review 20
Energy 20
Accidents, incidents and non-conformance 21
Site closure plan 21
Interpretation of Terms 24

List of tables

Table 1 – Permitted activities parameters 13
Table 2– Emission limits and monitoring requirements 16

List of appendices

Appendix 1. Location of installation plan 22
Appendix 2. Site layout and stack plan 23

Introductory Note

This Introductory provides relevant information related to this Permit

The permit is issued on the basis that the information provided by the applicant in support of the application for a permit was neither false nor misleading. Any change affecting the accuracy of such information shall be promptly notified, in writing, to Telford and Wrekin Council at the contact address.

The permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by specific conditions are subject to the 'Best Available Techniques' condition placed within the permit. The operator shall use best available techniques for preventing or, where that is not practicable, reducing emissions from the installation. Please note that techniques include both the technology used and the way in which the installation is designed, built, maintained and operated.

Publications

The following Statutory publications are relevant to the installation:

a) The Environmental Permitting (England and Wales) Regulations 2016 SI 2016 No1154 (as amended).
b) The Pollution Prevention and Control Act 1999
c) Council Directive 2010/75.EU of the European Parliament and of the Council on 24 November 2010 on Industrial emissions (integrated pollution prevention and control) known as the Industrial Emissions Directive.
d) Council Directive 2008/98/EC of the European Parliament and of the Council on 19 November 2008 on waste.
e) Council Directive 2000/60/EC of the European Parliament and of the council on 23 October 2000 on establishing a framework for community action in the field of water policy (water framework directive).
f) The European Commission Reference Documents on the Best Available Techniques (BREF) in the Ceramic Manufacturing Industry.
g) Sector Guidance note SG7 Secretary of State's guidance the A2 Ceramics Sector Including Heavy Clay, Refractories, Calcining Clay and Whiteware.

Confidentiality

The permit requires the Operator to provide information to the Regulator. The Regulator will place the information onto the public register in accordance with the Regulations. If the Operator considers that any information provided is commercially confidential, they may apply to the Regulator to have such information withheld from the register as provided in the Regulations. To enable the Regulator to determine whether the information is commercially confidential, the Operator must clearly identify the information in question and must specify clear and precise reasons.

Appeals

The Operator can appeal against regulatory action and details can be found in Regulation 31 and Schedule 6 of the Regulations. Guidance on the appeal procedure can be found at:
Environmental permit - Guidance on the Appeal procedure - GOV.UK (www.gov.uk)

Status Log

Detail	Dates
Date Permit First Issued	10/10/2005
Date of Variations	25/04/2013
Date of Variations	26/01/2016
Date of Variations	03/03/2017
Date of latest Variation – operator application Permit conditions reviewed Permit reference number changed.	27/03/2025

Process Description

The installation produces standard and non-standard special shaped clay bricks, pavers and paving accessories.

Clay stockpiling

Clay is provided by the clay quarry located adjacent to the site. The clay is stockpiled on site within the process boundary until required. The quarry is not regulated by this permit. In prolonged dry spells there is potential for dust generation when removing clay from the stockpile and transporting to the process building via the box feeders. Consequently, water supply is available to dampen the stockpile and haul route in periods of dry weather and to minimise dust generation with the potential to traverse the site boundary. If stockpiling is undertaken in dry weather conditions, then precautions are taken for controlling dust, such as use of a water bowser for dampening.

The clay is fed into the box feeder known as Kibbler, which is enclosed on three sides with an overhead canopy. There is a high-level fence along the ramp to the Kibbler which is fitted with water suppression along the length. The suppression uses recycled quarry water. The drop height is minimised to reduce dust generation. The high-level fence is designed to reduce the noise impact to sensitive receptors along the boundary.

Additional raw materials

There are bulk tanks/ silos for additives, fuels and ground clays. Various transport methods are used. Liquid storage is within bunds and silos are fitted with high level sensors, probes, and level indicators. Deliveries are supervised. The raw materials are as follows:
Ground clay 3 x 80 tonne silos
Manganese oxide suspension, 1 x 25,000 litre tank
Barium carbonate suspension, 1 x 25,000 litre tank

Mould release oil, 1 x 6000 litre tank.
Lignosulphonate clay conditioner 1 x 30,000 litre tank.
Paraffin 1 x 1,200 litre tank
Ultra-low sulphur diesel 1 x 18,000 litre tank.

Materials that are stored in storage areas are:
Sand – 1 tonne bags
Non-organic aqueous suspended pigments – IBCs
Dry bagged facing stains – bags
Machine oils and lubricants - drums

Diesel storage is located outside, within a bunded area fitted with a canopy.

The storage locations are identified in the site layout plan in Appendix 2.

Clay preparation
Clay preparation has its own room within the building that is closed off to the main factory floor. The plant and equipment crushes, rolls, grinds, grades and mixes the hard clay to the required consistency. It is then stored in rotating silos until required. This is an area that produces significant dust levels which are contained within the housing to minimise dust releases when the main shutter door opens, which is kept to a minimum.

Brick forming and sand preparation
The forming of standard bricks, clay pavers, special shapes, and paver accessories are achieved by an extrusion process where clay from the preparation plant is fed into mixers. Water and clay are added and mixed to the required consistency with a moisture content of around 12%. Further additives such as Barium Carbonate, Lignosulphonate and Manganese Oxide are also mixed in with the clay. The clay is now at a moisture content and consistency where it is unlikely that dust generation will take place. There are two different extrusion production lines, the normal extrusion process, and the specials and accessories extrusion process.

Sands and stains used in the extrusion process are prepared in a separate enclosed building. Sand is delivered in bulk bags and deposited in storage areas within the manufacturing plant prior to it being used either in its original state or mixed with a dry powder stain to create a sand and stain mixture to the required colour. This is achieved in a free fall mixer. The sand and stain mixtures are stored in sealed bulk bags or enclosed bins prior to being used in the extrusion process. There is considered to be low potential for the generation of fugitive emissions from this part of the process.

Drying
The drying chambers are located adjacent to the extrusion area and 2 are located near the kilns for the ‘specials.’ Waste heat from the kiln is used in the main set of chambers along with a combination of humidity control and direct heat (gas). Gas

burners are used for the 2 specials. Product is dried over a period of at least 24 hours and the length of time is dependent on the product size and moisture criteria.

Dried products are then set in a specific way on to kiln cars to maximise firing and minimise faulty product. All dryers have stacks to emit water vapour/ steam.

Setting for kiln firing

Brick products are presented to the setting machine, and automatic grippers lift the product from the setting table and place the bricks on the kiln cars. All special products and paver accessories are set by hand due to the varying nature and size of products. These are set onto kiln cars which are designated for the intermittent kilns. There is potential for waste generation at this stage due to poor quality or wet bricks being identified by the Setting Machine Operator. If larger quantities are identified, then the Supervisor will decide whether to scrap them or track them through the process to be sold as downgraded products. Scrapped bricks will be used for hardcore on the quarry roads.

Firing process

The site has 1 continuous kiln tunnel (No:8 Kiln) and 2 intermittent batch kilns (No:9 and No:10 Kiln).

No: 9 and 10 kilns are used infrequently and for special orders. They are both less than 2MW. Both kilns extract waste gases through individual stacks directly to atmosphere. These are shown on the site plan in Appendix 2. Both have safety shut off valves to the main gas supply to the kiln should it be required.

No:8 kiln is a continuous kiln with ‘zones’ for pre-heat, firing and cooling. The kiln is fully automated. Once the kiln car has been set, it is automatically transported to the kiln pre-heater. The product is passed through the pre-heater, fed with waste heat recycled from the cooling zones of the kiln, before entering the tunnel kiln. Product entering the kiln is pushed through at a set time schedule (burn curve), the kiln car begins at the entrance vestibule before being pushed into the pre-heat zone inside the kiln.

The bricks are then gradually heated up, firstly by warm air being pulled back from the burner zones, then by direct heat induction via natural gas and air firing until a peak temperature of around 1150^{o}C is reached. The product is held at the peak temperature for a period of time (soak time) depending on product type, allowing the heat to uniformly penetrate the product on the kiln car. The product then enters the cooling zones where the cooling process is controlled to a set profile to avoid damaging the bricks and cooling air is recouped and used as detailed above for the pre-heating and drying processes.

The kiln is fitted with natural gas burners fed by combustion air fans which heat the zones. Temperature is automatically controlled in the kiln control room. Zones are pulse fired to aid temperature uniformity and are fuel efficient. The kiln is equipped with safety devices which automatically shut off in the event of power supply failure. There is also a back up diesel generator.

All gases are exhausted via a fanned exhaust which draws all waste gases down the tunnel kiln and out through the No.8 Tunnel Kiln chimney, via a gas scrubbing unit to control hydrogen fluoride, smoke, particulate matter, nitrogen dioxide, sulphur dioxide, hydrogen chloride and products of combustion emissions.

The abatement plant has an emergency by-pass stack which is unabated. The main kiln emissions are fed through the by-pass stack should it be required in an emergency.

The chimneys of the kilns are subject to regular visual checks and periodic extractive emission monitoring takes place on the abatement plant stack. Regular checks are undertaken on the kilns and burner systems, maintenance is undertaken when required.

Abatement plant

The site has installed outside, a Hellmich Fluorine Cascade flue gas dry scrubber which uses limestone (approximately 98% calcium carbonate) to 'scrub' the waste gases from the main kiln No:8. The limestone essentially 'scrubs' the waste gases to remove the following pollutants to a permitted level:
Sulphur dioxide, hydrogen fluoride, hydrogen chloride and particulate matter. Once scrubbed the gases are released via the stack detailed in Appendix 2.

The limestone is stored within a silo at the top of the abatement unit. Saturated limestone is processed through the peeling drum and spent media is transferred to the waste bag, with the remaining returning to the limestone storage unit for re-use.

Stacks to atmosphere

The following table details the stacks identified in Appendix 2 that emit to atmosphere:

Stack reference number	equipment	type	Stack Height (metres)
A1	No:8 tunnel kiln	Abatement plant	22
A2	No:9 shuttle kiln	unabated	13.5
A3	No:10 shuttle kiln	unabated	13.5
A5	No:8 dryer exhaust	unabated	-
A6	Specials dryer exhaust	unabated	10.5
A7	No:8 tunnel kiln emergency bypass	unabated	13.65
A8	Emergency bypass stack (kiln entrance vestibule	unabated	11
A9	LEV cabinet filter	Bag filter	3

Packaging and storage
After firing, the cured bricks are automatically transported to the de-hacking machine where they are sorted and packed ready for transfer to storage outside of the process buildings via Hybrid forklift trucks (FLT) to designated stockyards. Waste may be generated at this stage of the process if poor quality or damaged bricks are identified. Waste materials are used for hardcore on the quarry roads.

Waste storage
All clay based waste is recycled and used back on site, either within the process or as hardcore for quarry roads.

Waste material from the abatement plant is stored in enclosed bags and kept in a designated area next to the abatement plant until it is removed from site for neutralisation treatment and disposal.

Other site wastes generated such as metals, wood/pallets, oils, light bulbs / tubes, WEEE, general waste and degreasing wastes are all recycled off-site. All other wastes are sent for special waste disposal.

Waste is minimised where possible and stored appropriately prior to collection for removal off-site. Storage methods are suitable for the waste being stored, particularly where there may be a risk of contamination of land, and to ensure that waste is not blown around the site or across the site boundary

Waste transfers off-site are undertaken by appropriately licensed waste carriers with relevant documentation.

Energy
Energy efficiency is achieved by using inverters, variable speed drive units, high efficiency motors, LED lighting, low energy fluorescent tubes, heat recuperation from the kilns directed back to drying chambers and kiln preheater. Excess waste heat is also directed back to the kiln for recirculation and emissions reabsorption.

Noise and vibration
A number of the site activities will generate noise and vibration. This includes traffic movements and loading and unloading activities. The majority of processing is undertaken internally within the process buildings. However, the clay transfer from stockpile to box feeders via an elevated ramp will cause noise emission, along with the depositing of clay into the box feeder itself.

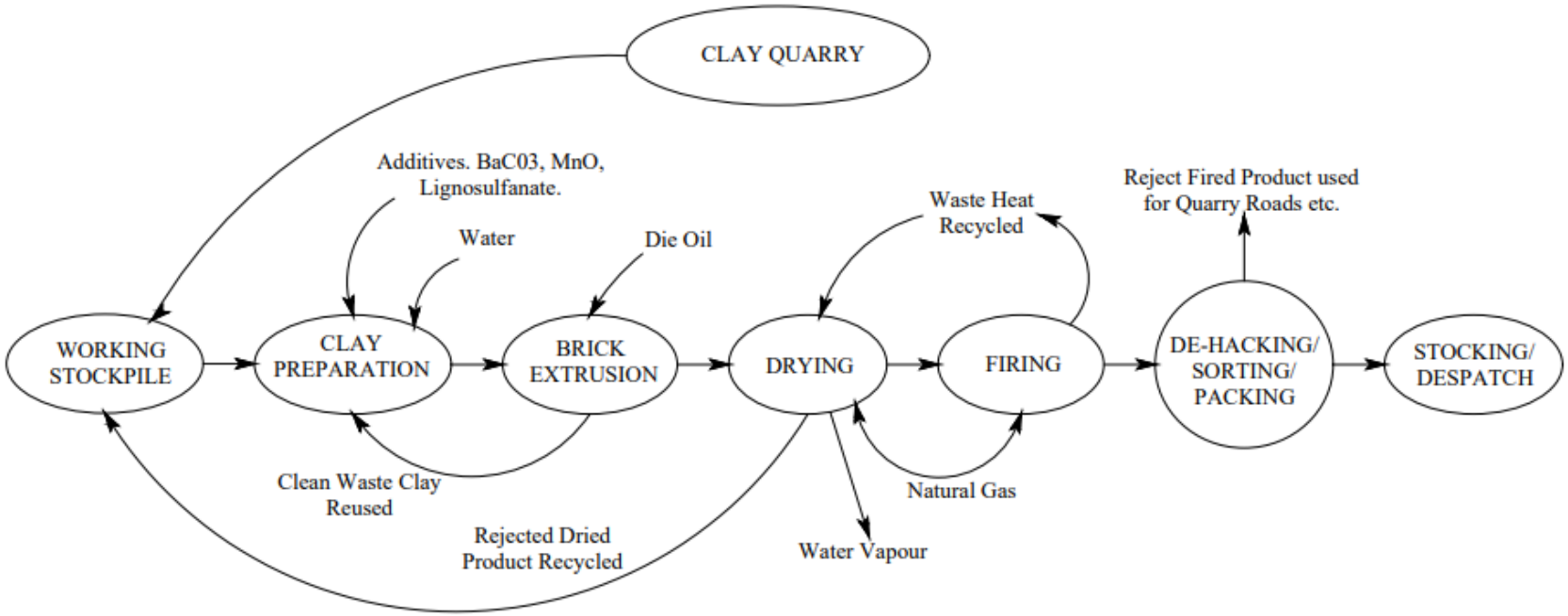
Noise monitoring is undertaken for the process and site activities. The site noise map is updated when necessary. In addition, Boundary environmental noise surveys are performed along with daily checks.

Odour
It is considered that the site activities and materials used pose little risk to odour generation. However, odour may arise from waste gas emissions and will be checked by the operator.

Water usage

Recycled quarry water or mains water is added in the manufacture of the bricks and is evaporated during the drying process. Water is used for dust suppression in the yard area from the quarry to the permitted facility. This is recycled water from the lagoon which is returned to the lagoon via the drainage system.

BRICK MAKING PROCESS FLOW CHART



Part A (1) assessment
The installation has been assessed and although a reducing atmosphere is used intermittently, it is only used for the purposes of colouration. Therefore does not fall into the Part A(1) permit requirement.

End of Introductory Note

Permit Conditions

Regulated activity

1. The Operator shall only carry out the permitted activities and associated activities within the parameters detailed within table 1 below.

Table 1 – Permitted activities parameters.		
Activities listed in Environmental Permitting (England and Wales) Regulations 2016	**Description of specified activity**	**Limits of specified activities**
Section 3.6, Part A(2)	The manufacture of heavy clay products by firing in kilns where: (i) the kiln production capacity is more than 75 tonnes per day, and (ii) the kiln capacity is more than 4m and the setting density is more than 300kg/m^3	The preparation, use and storage of heavy clay and all additives for the manufacture of bricks, using the installation plant and equipment, and within the boundary specified in Appendix 1. The drying of bricks within No:8 plant dryers and No:9 dryers. (abated) The firing of bricks within Kiln No: 8, No: 9 and No:10
Directly associated activities		
The storing and handling of raw materials	Working stockpile of clay is held within the boundary of the quarry known as Hadley Quarry. The storage of all other solid and liquid materials are in bulk storage tanks, drums, bags and other containers.	From the receipt, handling and storage of raw materials to the transfer to process areas.
Storage, handling and dispatch of intermediates, finished products, waste and other materials	Storage of intermediates and finished products. Process waste segregation and storage.	Internal & external storage of finished products, storage of waste in designated areas and loading for transit off site
Control of abatement systems for emissions to air	Abatement of releases to air and the control of unabated releases to air.	Extraction and treatment of waste gases from the tunnel kiln No:8, within the dry scrubber.
Control of unabated emissions to air	The firing within kilns with a net rated thermal input averaged weekly of less than 2MW. The drying of bricks before firing.	The observation and control of the release of unabated emissions from kilns No:8 and No:9. And from driers No:8 and No:9

General requirements

2. The best available techniques shall be used to prevent, or where that is not practicable, reduce the emissions from the installation in relation to any aspect of the activity which is not specifically regulated by any condition of this permit.

3. An appropriate person (and deputy) shall be appointed as the primary point of contact with the regulator. The regulator shall be informed in writing of the appointed person (and deputy). In the event of a different person being appointed, the regulator shall be informed without delay.

4. A copy of this permit shall be kept at the installation. All relevant staff shall be made aware of its content and shall be told where it is kept.

5. If the operator proposes to make a change in the operation of the installation, they must, at least 14 days before making the change, notify the regulator using the appropriate form. The notification must contain a description of the proposed change in operation. A 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

6. The Operator shall notify the Regulator in writing and within 14 days of their occurrence if they make:

a. Any change to the installation name, registered company name or company registered address.
b. A change to any particulars of the holding company (including details of any ultimate holding company where the Operator has become a subsidiary).

Records

7. All records required to demonstrate compliance with any conditions of this Permit shall be kept in an organised manner. The records shall be kept electronically or in paper form. Records:

a. Must be legible and any amendment entered into a record shall be made in such a way as to leave the original clear and legible. A valid reason for such an amendment shall be included.
b. Records shall be kept for a period of 2 years, unless otherwise stated.
c. Records shall be kept on-site for a minimum of 12 months and made available for inspection by the Regulator. Records kept off-site must be made available within 7 days of any request by the Regulator.

8. All documentation required to be submitted to the regulator to demonstrate compliance with relevant conditions shall be submitted in an electronic format and include the permit number and the Operator name. Submissions shall be sent to: environmentalprotectionteam@telford.gov.uk

Written environmental management systems

9. The regulated activity shall be managed, operated and maintained in accordance with a written environmental management system.

10. The environmental management system required in condition 9 shall include:

a. definition of an environmental policy for the installation by top management (commitment of the top management is regarded as a precondition for a successful application of other features of the EMS).
b. Planning and establishing the necessary procedures for operation of the activity.
c. Implementation of the procedures, paying particular attention to:
    i. structure and responsibility
    ii. training, awareness and competence
    iii. communication
    iv. employee involvement
    v. documentation
    vi. efficient operational control
    vii. maintenance programme
    viii. emergency preparedness and response
    ix. safeguarding compliance with environmental legislation.
d. checking performance and taking corrective action, paying particular attention to:
    i. monitoring and measurement.
    ii. corrective and preventive action
    iii. maintenance of records
    iv. independent internal auditing in order to determine whether or not the environmental management system conforms to planned arrangements and has been properly implemented and maintained.

11. The operator shall manage and operate the activities;

a. In accordance with a written environmental management system that identifies and minimises risks of pollution, noise and odour, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
b. using sufficient competent persons and resources.

12. Records demonstrating compliance with condition 9,10 and 11 shall be maintained.

13. The environmental management system shall be subject to regular independent external auditing.

Emission limits and control – Air

14. There shall be no visible emissions, other than steam or water vapour from the emission stacks detailed in Appendix 2, the installation or from the process buildings. Emissions shall be free from droplets and persistent fume.

15. Emissions from Kiln 8 shall be contained and adequately extracted to the abatement plant when in operation.

16. The abatement plant shall be fitted with audible and visual alarms to warn the operator of plant failure or malfunction. The activation of the alarm shall be automatically recorded, and readings shall be on display to appropriately trained staff.

17. The abatement alarm shall be maintained in accordance with the manufacturer's instructions. All maintenance shall be recorded.

18. The Operator shall undertake the monitoring specified in Table 2.

19. The Operator shall not exceed the emission limits in Table 2.

Table 2– emission limits and monitoring requirements

Appendix 2 site plan of emission points	Source	Parameter	Limit (including unit)	Monitoring frequency	Monitoring standard or method
Stack No: A1	Abatement plant stack to kiln 8	Particulate Matter	100 mg/m^3	Annual	BS 13284-1
		Hydrogen Fluoride	10mg/m^3	Annual	PD CEN TS 17340
		Sulphur Dioxide	500mg/m^3	Annual	EN 14791
		Nitrogen Oxides	500mg/m^3	Annual	EN 14792
		Hydrogen Chloride	50mg/m^3	Annual	EN 1911
Stack A2 and A3	Kiln 9 and 10	Particulate Matter	No visible emissions	At least daily when the kiln(s) is in operation	Recorded operator observations
Stack A7, A8 and A9	Emergency bypass stacks and LEV cabinet Stack	Particulate Matter	No visible emissions	At least daily when in operation	Recorded operator observations
Whole site	All external areas	Particulate Matter	No visible emissions	At least daily when in operation	Recorded operator observations
The reference conditions shall be applied: temperature 273.15K, pressure 101.3kPa, 18% oxygen measured dry, and averaged over the firing cycle of the kiln.					

20. Any bypass of the abatement plant shall be deemed an emergency and steps shall be taken to contain the unabated emissions. If the unabated emissions cannot be contained steps shall be taken to rectify this immediately, and if necessary, arrangement shall be made for a controlled process shutdown. The regulator shall be notified immediately of any such occurrence.

21. The operator shall ensure that water is available to control dust emissions from the main stockpile, the yard, and the ramp leading to the box feeder.

22. Exhaust flow rates of waste gases shall be consistent with the efficient capture of emissions. The introduction of dilution air to achieve emission concentration limits shall not be permitted.

23. External surfaces of the process building, ancillary plant and open yards and storage areas shall be inspected and cleaned as may be necessary to prevent the accumulation of dusty material in circumstances where the dust may become wind entrained. Particular attention shall be paid to roofs, guttering, roadways, external storage areas and yards. Cleaning operations shall be carried out by methods which minimise emissions of particulate matter to air.

24. Roadways and other areas where there are regular vehicle movements, shall have a consolidated surface which is capable of being cleaned. These areas shall be kept clean and in good repair.

25. Vehicles shall not track material from the site onto the highway.

Emissions to surface water, sewer and groundwater

26. The operator shall have a clear diagrammatic record of the routing of all installation drains, subsurface pipework, sumps and storage vessels including the type and broad location of the receiving environment.

27. All external operating areas shall drain to drainage systems discharging through interceptors. All interceptors for the site shall be emptied and inspected in accordance with the cleaning and maintenance schedule, or more frequently as may be necessary to ensure efficacy of the interceptor.

28. The operator shall identify the potential risk to the environment from drainage systems recorded by condition 26 and shall devise an inspection (being at least once every five years), and maintenance programme having regard to the nature and volume of waste waters, groundwater vulnerability and proximity of drainage systems to surface waters. A record of the drainage inspection and repair shall be made available for inspection.

29. All liquid storage tanks, including additives, oils and lubricants, shall be located within bunds that are designed, constructed and located away from watercourses and drains to appropriate standards and ensuring that the volume is more than 110% of the largest tank.

30. Fixed storage tanks for raw materials, shall be clearly labelled with its contents and maximum capacity and fitted with high-level alarms or volume indicators to warn of over-filling. Where practicable the filling systems shall be interlocked to the alarm system to prevent overfilling. Delivery connections shall be located within a bunded area, fixed and locked when not in use.

31. There shall be no process effluent emissions to sewer or surface water drainage without the prior consent of the regulator and the prior consent of Severn Trent Water or Environment Agency (as necessary). The operator shall make an application in writing to the regulator at least 28 days prior to any intention to discharge waste effluent to sewer or surface water drainage.

32. All raw material shall only be stored in their designated areas specified in Appendix 2.

33. Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil unless such monitoring is based on a systematic appraisal of the risk of contamination.

34. Any periodic testing method shall be submitted to the regulator for approval at least 28 days before the proposed monitoring is carried out.

35. There shall be no intentional emissions of hazardous substances or pollutant substances to groundwater.

Monitoring - air

36. Monitoring equipment, techniques, reports, personnel and organisations employed for the emissions monitoring requirements of Table 2, shall have either MCERTS certification or MCERTS accreditation (as appropriate), unless otherwise agreed in writing by the Regulator.

37. The operator shall notify the regulator at least 7 days before any periodic monitoring exercise to determine compliance with emission limits in table 2. The operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.

38. Monitoring reports to demonstrate compliance with Table 2 shall be submitted to the Regulator within 8 weeks of the completion of the sampling.

39. There shall be no visible or odourous emissions beyond the site boundary detailed in Appendix 1 as perceived by the regulator.

40. The Operator shall carry out daily visible and olfactory assessments at the boundary of the site to determine whether emissions are occurring beyond the site boundary that may affect sensitive receptors. Results of the assessments and any action taken shall be made available to the Regulator.

Noise and vibration

41. The regulated activity shall be free from noise and/or vibration that is likely to cause nuisance beyond the site boundary as perceived by the Regulator.

42. Where it has been found by the Operator and/or Regulator that activities are causing noise and/or vibration beyond the installation boundary, the Operator shall:

a. Submit for approval a noise and/or vibration management plan which includes an appropriate noise or vibration assessment based on current Standards, within a timeframe specified by the Regulator.
b. Implement the approved noise and/or vibration management plan within a timeframe specified by the regulator.
c. Forward an action plan including timescales for implementation, to abate the noise and/or vibration to the Regulator

43. Where a significant change to the installation is proposed, a noise and vibration assessment shall be undertaken and submitted to the Regulator prior to the completion of the significant change. The purpose of the assessment shall be to identify the potential noise and vibration impact and detail methods of reducing the identified noise and vibration emissions where required.

Raw materials

44. The operator shall adopt procedures to control the specification of those types of raw materials with the main potential for environmental impact, in order to minimise any potential environmental impact. An annual review of alternative raw materials shall be carried out with regard to environmental impact.

Water use

45. The operator shall carry out a regular review of water use (water efficiency audit) at least as frequently as the permit review period.

46. Using information from the water efficiency audit, opportunities for reduction in water use shall be assessed and, where appropriate, shall be carried out in accordance with a timescale approved by the regulator.

Waste handling

47. The operator shall produce an inventory of the quantity, nature, origin and where relevant, the destination, frequency of collection, mode of transport and treatment method of any waste which is disposed of or recovered.

48. The Operator shall segregate the main waste types:

a. Off specification product.
b. Scrubber waste.
c. Particulate waste.
d. Waste oils
e. General inert industrial waste.

49. The Operator shall ensure that wastes are stored in containers that are durable for the substances stored and that incompatible waste types are kept separate.

50. The Operator shall ensure that waste storage areas are clearly marked and signed, and that containers are clearly labelled.

Waste monitoring, audit and review

51. The operator shall record materials usage and waste generation in order to establish internal benchmarks. Assessments shall be made against internal benchmarks to maintain and improve resource efficiency.

52. The following shall be monitored and recorded for all waste which is consigned off-site:

a. Quantity nature and origin of the waste.
b. The physical description of the waste.
c. A description of the composition of the waste.
d. any relevant hazardous properties (hazard and risk phrases).
e. List of Waste code.
f. Handling precautions and substances with which it cannot be mixed.
g. Disposal routes for each waste category.

53. The operator shall carry out an annual review to demonstrate that the best environmental options are being used for dealing with the following waste streams:

a. Unfired waste.
b. Fired waste.
c. Collected dusts.
d. Waste water treatment sludge.
e. Scrubber waste.
f. Wood, cardboard and paper.
g. Oil and fuels.

54. The operator shall carry out a waste minimisation audit at least as frequently as the permit review period. The methodology used and an action plan for optimising the use of raw materials shall be submitted to the regulator within 2 months of completion of the audit. Specific improvements resulting from the recommendations of audits shall be carried out within a timescale approved by the regulator.

Energy

55. The operator shall produce a report annually on the energy consumption of the installation.

56. The operator shall monitor energy flows and target areas for reduction which shall be updated annually.

Accidents, incidents and non-conformance

57. The operator shall maintain an accident and incident management plan which shall include:

a. Identification of hazards.
b. Identification of risks.
c. A risk assessment.
d. Measures to reduce the risks.

The plan shall be made available for inspection by the regulator.

58. In the case of exceeding the emission limit value from any monitoring exercise, and/or abnormal emissions including persistent fume, and/or leaks and spillages, or from accidents and/ or incidents including abatement breakdown, the operator shall:

a. Investigate and undertake remedial action immediately.
b. Promptly record the events and actions taken.
c. Ensure the regulator is made aware without delay.
d. Re-test any exceedance with emission limits in Table 2.

59. In cases of non-compliance causing immediate danger to human health or threatening to cause an immediate significant adverse effect upon the environment, operation of the activity must be suspended.

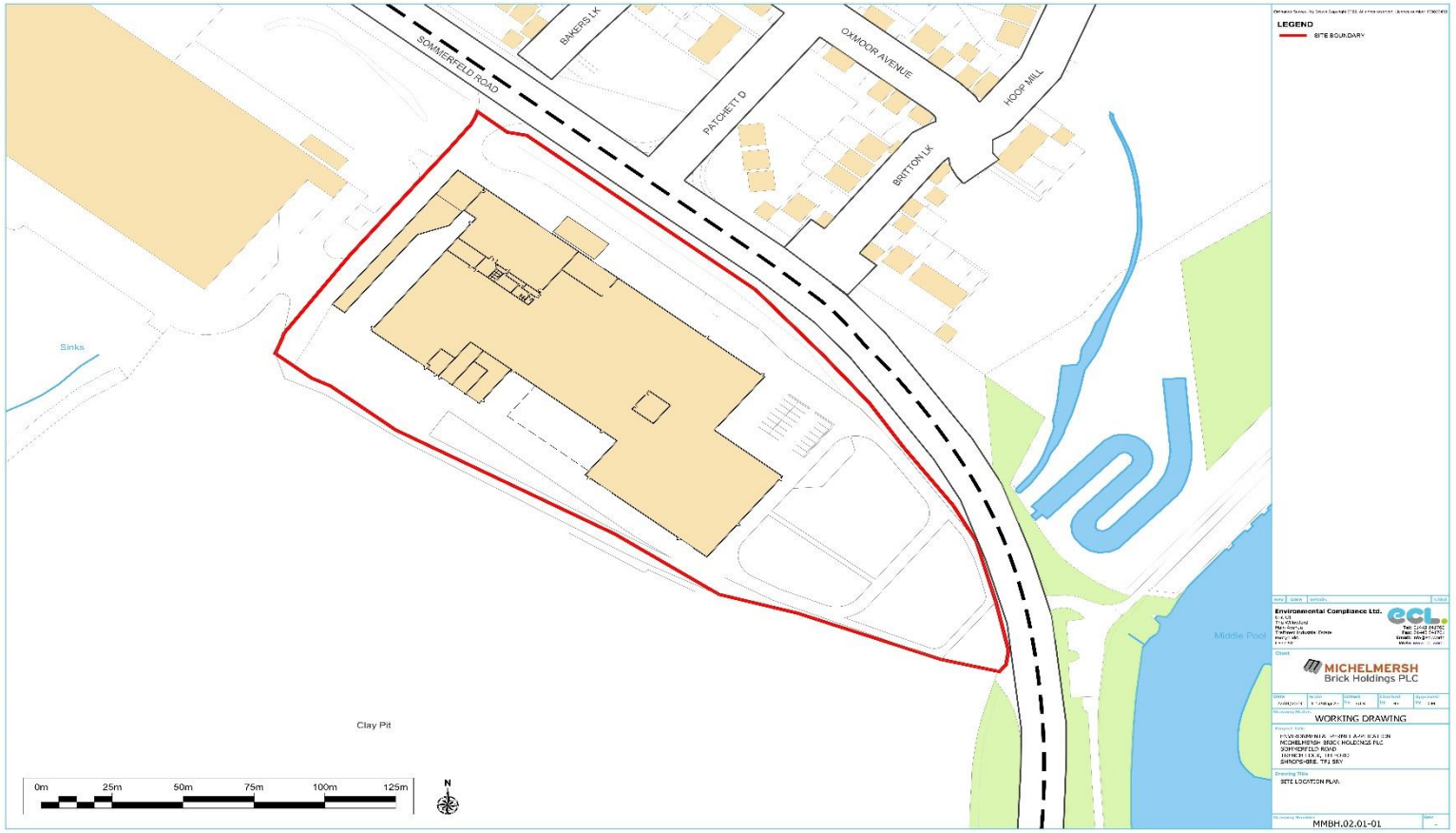
Site closure plan

60. The Regulator shall be given at least 14 days' notice before implementation of any part of the site closure plan.

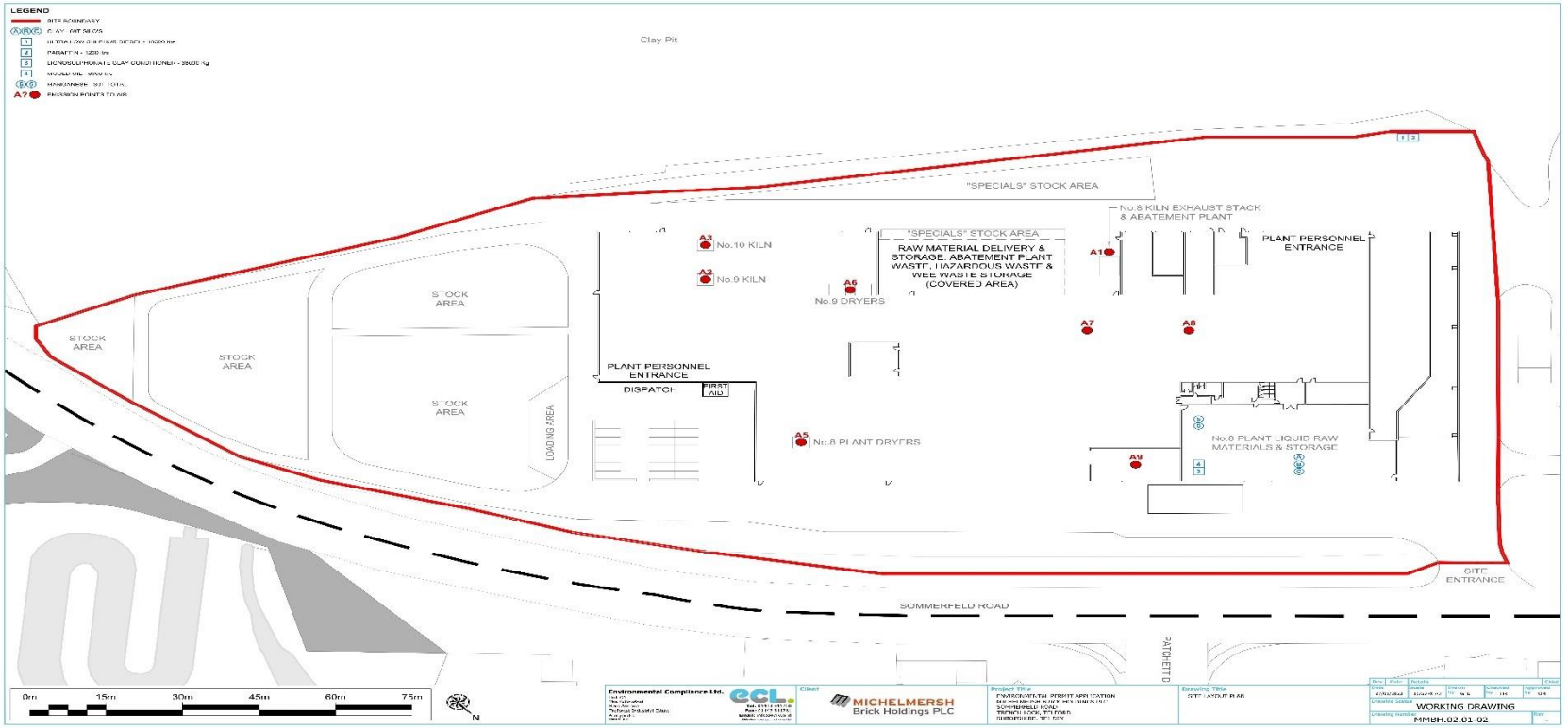
Improvement plan

61. The operator shall submit for approval a baseline report to both assess the state of the site of the installation and propose a satisfactory programme of monitoring and risk management where the process involves the use, production or release of hazardous substances as defined by Article 3(18) of the Industrial Emissions Directive. The report shall follow both the revised H5 guidance on Site Condition reports and the Defra guidance baseline report- Defra guidance – Industrial emissions Directive EPR guidance on Part A installations (section 5.10-5.15, pages 28-29). The baseline report shall be submitted no later than 31 December 2025.

Appendix 1. Location of installation plan



Appendix 2. Site layout plan and stack plan



End of Permit Conditions

Interpretation of Terms

For the purposes of this Permit and its conditions, the following interpretation of terms shall apply:

Annual/annually
Means the period 1 January to 31 December inclusive.

BAT (Best Available Techniques)
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 practicable, generally to reduce emissions and the impact on the environment as a whole.

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

“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, as long as they are reasonably accessible to the operator.

“techniques” includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Permit review date
means every 4 years from the date of issue of the permit.

Raw materials
Means the raw materials listed in the process description.