Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

M L Operations Ltd

Lead Works
Kiln Way
Woodville
Swadlincote
Derbyshire
DE11 8ED

Variation application number

EPR/UP3138ZQ/V003

Permit number

EPR/UP3138ZQ

Lead Works, Kiln Way
Permit number EPR/UP3138ZQ

Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Changes introduced by this variation notice/statutory review

This variation has been issued to update some of the conditions following a statutory review of the permits in the industry sector for non-ferrous metals. The opportunity has also been taken to consolidate the original permit and subsequent variations.

The Industrial Emissions Directive (IED) came into force on 7th January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. The BAT Conclusions (BATc) for the non-ferrous metals industries were published on 30th June 2016 in the Official Journal of the European Union (L174) following a European Union wide review of BAT, implementing decision (EU) 2016/1032 of 13th June 2016. The BATc for this installation which apply from 30th June 2020 are 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 18, 19, 92, 93, 96, 97, 98, 99 and 107. The operator is already compliant with the BATc.

The scheduled activities and directly associated activities outlined in the Table S1.1 of this permit have also been updated. This is to capture changes in the regulations since the last permit variation. These changes also ensure and a consistent approach has implemented across the sector in regards to the scheduled activities and directly associated activities.

The schedules specify the changes made to the permit. Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

Brief description of the process

Lead Works, Kiln Way (the installation) is operated by M L Operations Limited. The installation is located in Swadlincote, West Midlands, and England.

The principle activity is the treatment of up to 20,000 tonnes of secondary (scrap) lead retrieved from the building demolition industry and converting this material into new lead sheet for the construction industry.

Scrap Reception

Scrap material is delivered by road and unloaded from heavy goods delivery vehicles into a receiving bay adjacent to the scrap melting kettle. At this stage, the material is manually sorted to remove any non-lead/contaminated scrap that may be present. Also at this point a sample may be taken and sent to the on-site laboratory to check for metallic impurities such as antimony that would cause a metal refining problem inhibiting the achievement of the desired final product quality standard

Scrap Melting

The sorted scrap lead is then transferred by overhead grab crane to the scrap kettle for melting. The scrap kettle has a maximum capacity of 120 tonnes and a working capacity of approximately 100 tonnes. It is indirectly fired with natural gas to a temperature of 450°C. Combustion gases are released via the 15m stack designated A2.

Gases produced during the scrap melting stage are extracted from the kettle by an LEV system and bag filter plant. Following treatment by the bag plant gases are subsequently released to atmosphere via the 43m high stack designated as A1.

Dross (oxides of lead and other metals) is produced on the surface of the molten lead in the scrap melting kettle. This is removed by ladle and deposited into a dross bin for on-site recycling as it has a high lead content.

The lead from the scrap melting kettle dross combined with the lead trimmings, and dross (skimmings) from the sand casting process and imported lead dross is recovered on site using a compact gas-fired rotary furnace (the MLR). The MLR is classified as an “oven” not a “furnace” with a capacity of 1500Kg. The MLR is permanently connected to the fume extraction and filtration plant and is subject to the permit requirements. Molten lead is tapped off into ingots which are then used as feedstock for the lead melting and casting process. The dross formed MLR process is removed and deposited into dross bins for off-site recycling.

Refining Process

The molten lead from the scrap melting kettle is transferred to the refining kettle (an identical one to the scrap melting kettle) but exclusively used for metal refining process. Tin and antimony (impurities often found in lead) are removed in the refining kettle by addition of caustic soda or sodium nitrate. The dross formed during refining is removed by ladle and deposited into dross bins for off-site recycling. The emissions from the refining kettle are extracted via the LEV system and are also discharged via the 43m stack through a fabric filtration plant.

Lead Sheet Production

The site operates a continuous lead casting process. The molten lead is transferred via insulated pipes to the electrically heated continuous casting machine. This machine can hold up to 50 tonnes of molten metal heated to a temperature of 370 0C. The casting process is continuous and involves the take up of a film of lead onto a water cooled drum which has a variable speed and height adjustment. This produces rolled lead sheet.

Alternatively, the site can produce a single flat lead sheet produced via a sand casting process. The molten lead is poured into the sand bed, and skimmed to remove any impurities that are on the surface. The metal is then left to cool. The skimmings are high in lead which is recovered in the MLR.

The site operates an Environmental Management System that is compliant with ISO 9001:2015, ISO 14001:2015 and OHSAS 18001. All three documented systems are accredited by BSI and form the Documented Process Control System and an Energy Management System compliant with ISO 50001.

There is no discharge of process water to either public foul sewer or surface water.

All activities are carried out on a sealed concrete base with no discharges impacting on land.

All site drainage is directed to an on-site lagoon via an oil interceptor.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	**Date**	**Comments**
Application BJ9851 (EPR/BJ9851/A001)	Duly made 24/12/01	Received 17/12/01
Response to request for information	Response dated 15/10/02	Request dated 10/05/02
Request by Agency to extend determination to31/12/03	Request accepted 14/08/03	Request dated 13/08/03.
Permit BJ9851 (EPR/BJ9851IG/A001)	Determined 09/03/04	Permit issued 09/03/04
Variation KP3031LG (EPR/BJ9851IG/V002)	Received 09/06/06	
Variation KP3031LG	Determined 30/09/06	Issued to Midland Lead Manufacturers Limited

Status log of the permit		
Description	**Date**	**Comments**
(EPR/BJ9851IG/V002)		
Variation RP3031UQ (EPR/BJ9851IG/V003)	Received 06/09/07	
Variation RP3031UQ (EPR/BJ9851IG/V003)	Determined 31/10/07	Issued to Midland Lead Manufacturers Limited
Application EPR/BJ9851IG/V004	Received 16/03/2011	Variation to extend the site boundary to include unused part of building
Additional Information	Requested 21/03/11	Received 22/03/11
Variation EPR/BJ9851IG/V004	Issued 29/03/11	Issued to Midland Lead Manufacturers Limited
Application EPR/BJ9851IG/V005	05/04/11	Variation issued corrected errors in previous version V004
Variation EPR/BJ9851IG/V005	Issued 15/04/11	Issued to Midland Lead Manufacturers Limited
Variation EPR/BJ9851IG/V006	Duly made 07/10/11	Variation to add directly associated activity, casting of molten lead onto sand bed
Variation issued EPR/BJ9851IG/V006	12/10/11	Permit issued to Midland Lead Manufacturers Limited
Application EPR/UP3138ZQ/T001 (full of permit EPR/BJ9851IG)	Duly made 20/12/12	Application to transfer the permit in full to M L Operations Limited.
Transfer determined EPR/UP3138ZQ	15/01/13	Full transfer of permit complete.
Agency variation determined EPR/UP3138ZQ/V002	20/01/14	Agency variation to implement the changes introduced by IED
Regulation 60 Notice dated 16/12/16 (Notice requiring information for statutory review of permit)	Response received 03/05/2017	Technical standards detailed in response to the information notice. Information to demonstrate that relevant BAT Conclusions are met for the non-ferrous metals industries as detailed in document reference L174.
Regulation 61 Notice dated 27/10/2017 (Notice requiring information for statutory review of permit)	Response received between 15/12/17-23/02/18	Further information / clarification with regard to BAT conclusions 2-10, 12-14, 16, 18, 19, 90-94, 98 and 107.
Environment Agency initiated variation EPR/UP3138ZQ/V003 (variation and consolidation) Variation determined EPR/UP3138ZQ/V002 (PAS / Billing Ref: FP3835JP)	03/05/18	Statutory review of permit – Non-ferrous metals BAT Conclusions published 30/06/16 Varied and consolidated permit issued

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates

Permit number

EPR/UP3138ZQ

Issued to

M L Operations Ltd

whose registered office is

Kiln Way
Woodville
Swadlincote
Derbyshire
DE11 8ED

company registration number 08291106

to operate an installation at

Lead Works
Kiln Way
Woodville
Swadlincote
Derbyshire
DE11 8ED

to the extent set out in the schedules.

The notice shall take effect from 03/05/2018

Name	Date
Tom Swift	03/05/2018

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/UP3138ZQ

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/UP3138ZQ/V003 authorising,

Issued to

M L Operations Ltd

whose registered office is

Kiln Way
Woodville
Swadlincote
Derbyshire
DE11 8ED

company registration number 08291106

to operate an installation at

Lead Works
Kiln Way
Woodville
Swadlincote
Derbyshire
DE11 8ED

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Tom Swift	03/05/2018

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, 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.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

1.2.1 The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in red on the site plan at schedule 7 to this permit.

2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.3.3 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 table S2.2; and

(b) it conforms to the description in the documentation supplied by the producer and holder.

2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

(a) the nature of the process producing the waste;

(b) the composition of the waste;

(c) the handling requirements of the waste;

(d) the hazardous property associated with the waste, if applicable; and

(e) the waste code of the waste.

Hazardous waste storage and treatment

2.3.5 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 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.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.3.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;

(b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1,

(b) surface water or groundwater specified in table S3.2;

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, and S3.2 unless otherwise agreed in writing by the Environment Agency.

3.6 Fire prevention

3.6.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.

3.6.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;

(b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;

(b) the annual production /treatment data set out in schedule 4 table S4.2; and

(c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(a) in respect of the parameters and emission points specified in schedule 4 table S4.1;

(b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

4.3.1 In the event:

(a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform the Environment Agency,

(ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and

(iii) take the measures necessary to prevent further possible incidents or accidents;

(b) of a breach of any permit condition the operator must immediately—

(i) inform the Environment Agency, and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

(a) any change in the operator's trading name, registered name or registered office address; and

(b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

(a) any change in the operator's name or address; and

(b) any steps taken with a view to the dissolution of the operator.

In any other case:

(a) the death of any of the named operators (where the operator consists of more than one named individual);

(b) any change in the operator's name(s) or address(es); and

(c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:

(a) a decision by the Secretary of State not to re-certify the agreement;

(b) a decision by either the operator or the Secretary of State to terminate the agreement; and

(c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately" in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity**
Section 2.2 A(1)(b):	Melting, including making alloys of, non-ferrous metals, including recovered products and the operation of non-ferrous metal foundries where- (i) the plant has a melting capacity of more than 4 tonnes per day for lead or cadmium or 20 tonnes per day for all other metals, and (ii) any furnace (other than a vacuum furnace), bath or other holding vessel used in the plant for the melting has a design holding capacity of 5 or more tonnes	From receipt of the furnace charge to to the production of cast lead sheet. [Lead sheet cast by either sand bed casting or continuous casting of rolled lead sheet.] Waste types as specified in Table S2.2
Directly Associated Activity		
Raw materials storage and handling	Receipt, handling and storage of lead scrap, lead ingot and all process substances	Receipt of raw materials until used in the process
Off-gas collection, abatement and discharge systems.	Localised extraction hoods, ducting, bag filter and stacks,	Collections of air emissions to exit points
Recovery of Lead (MLR)	The recovery and casting of lead by melting of high lead content drosses and secondary materials in a rotary furnace (oven) to be used as a raw material in the scrap melting kettle. Feedstock to include: dross from the scrap melting kettle; dross (skimmings) and trimmings from the sand box casting and imported lead drosses.	Receipt of rotary oven charge to production of lead ingot for use at the installation Recovering lead by melting from on-site and imported dross
Storage and handling of solid and liquid wastes	Handling, storing and removal of all wastes from site	From separation of wastes to despatch from installation

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application EPR/BJ9851IG	The response to questions 2..3 given in section 2.3 of the application	17/12/01
Response to Schedule 4 Part 1 Notice	Response to questions 2.3.1 to 2.3.6, 2.3.8 to 2.3.11 inclusive	15/10/02
Variation application EPR/BJ9851IG/V004	Documents VSD01 – Summary of variation VSD07 – Lead dross -Addition Information	24/02/11 22/03/11

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Variation application EPR/BJ9851IG/V006	Document VSD01 – Making Lead sheet by sand-casting method	02/09/11
Response to Regulation 60 Notice – request for further information dated 06/12/16	Technical standards detailed in response to BAT Conclusions 1-10, 12, 13, 14, 16, 18, 19, 90, 91, 92, 93, 94, 96-99 and 107 of the notice provided under Regulation 60(1) of Environmental Permitting Regulations. Best available techniques as described in BAT Conclusions under Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions for non-ferrous metals industries	Received 24/03/17
Response to Regulation 61 Notice – request for further information dated 27/10/17	Further information and/or clarification on BAT Conclusions 2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 14, 16, 18, 19, 90, 91, 92, 93, 94, 98 and 107of the notice provided under Regulation 61(1) of Environmental Permitting Regulations.	Received 15/12/17
Response to emails dated 09/01/17	Further information and/or clarification on above items from incomplete response received on 15/12/17. Specifically BAT 13 with regards to NOx emissions, including email from Site Officer dated 17/01/2018	Received 09/01/18
Response to emails dated 14/02/2018	Clarification of compliance with BAT 2 and BAT 6 and details of monitoring carried out to confirm compliance with BAT 10	Received 16/02/2018 and 23/02/2018

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
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Table S2.2 Permitted waste types and quantities for melting of non-ferrous metals.	
Maximum Quantity	**20,000 tonnes per annum**
Waste code	**Description**
17	**Construction and Demolition Wastes (including excavated soil from contaminated sites**
17 04	**metals (including their alloys)**
17 04 03	lead from construction and demolition waste
10	**Thermal processes**
10 04	**Lead (thermal metallurgy)**
10 04 02*	dross and skimmings from primary and secondary production

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 (as shown on site plan at Schedule 7)	Exhaust from melting and refining kettles and casting processes	Particulate matter	4 mg/ Nm^3	Monthly average or extractive sample (min 4 hour)	Once a year	BS EN 13284-1 and MID
		Hydrogen chloride	10 mg/ Nm^3	Average over sampling period	Once a year	BS EN 15267-3[2]
		TVOC (as C)	40 mg/ Nm^3	Average over sampling period	Twice a year	BS EN 12619
		PCDD/F (ITEQ)	0.1 ng/ Nm^3	Average over sampling period	Once a year	BS EN 1948 and MID
		Lead (as Pb) [1]	1 mg/ Nm^3	Average over the sampling period	Once a year	BS EN 14385 and MID
		Copper and its compounds expressed as Cu [1]	No limit set	Average over the sampling period	Once a year	BS EN 14385 and MID
		Antimony and its compounds expressed as Sb [1]	No limit set	Average over the sampling period	Once a year	BS EN 14385 and MID
		Cadmium, and its compounds expressed as Cd [1]	No limit set	Average over the sampling period	Once a year	BS EN 14385 and MID
		Arsenic and its compounds expressed as As[1]	No limit set	Average over the sampling period	Once a year	BS EN 14385 and MID
		Tin and its compounds expressed as Sn[1]	No limit set	Average over the sampling period	Once a year	BS EN 14385 and MID

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A2 (as shown on site plan at Schedule 7)	Exhaust from gas fired combustion chambers	Carbon monoxide	150 mg/ Nm^3	--	Twice a year	BS EN 15267-3[2]
1. Metals include both gaseous, vapour and solid phases as well as their compounds (expressed as the metal or total as specified). 2. Certification to the MCERTS performance standards indicates compliance with BS EN 15267-3						

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1[1]	Site drainage from scrap/dross storage area to site lagoon	Total Hydrocarbon oil	3 mg/l	Spot sample	Every six months	BS EN 872
		Total suspended solids	5 mg/l	Spot sample	Every six months	BS EN 872
		Lead and its compounds (as Pb)	0.3 mg/l	Spot sample	Every six months	BS EN 17294
W2	Site drainage from cutting shop area to soakaway	No limits set				
1. Monitoring requirements to be reviewed following receipt of 2 sets of results, with any amendments to be agreed in writing.						

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.5.1.	A1 and A2,	Every 12 months	1 January
Emissions to water Parameters as required by condition 3.5.1	W1	Every 6 months	1 January, 1 July

Table S4.2: Annual production/treatment	
Parameter	**Units**
Lead products	tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	Cubic metres/tonne product
Energy usage – electricity	Annually	MWh/tonne product
Energy usage – natural gas	Annually	MWh/tonne product
Total annual waste production	Annually	tonnes
Total annual emissions of particulates from emission points A1 and A2	Annually	kg per year
Total annual emissions of lead from emission point A1	Annually	Pb kg per year
Total annual emissions of carbon monoxide from emission point A2	Annually	CO kg per year
Total annual emissions of lead and its compounds (as Pb) from emission point W1	Annually	Pb kg per year

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	03/05/18
Water	Form water 1 or other form as agreed in writing by the Environment Agency	03/05/18
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	03/05/18
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	03/05/18
Waste Return	Form performance 1 or other form as agreed in writing by the Environment Agency	03/05/18
Annual emissions	Form performance 1 or other form as agreed in writing by the Environment Agency	03/05/18

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	**Notification period**

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency 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(4) of that Act.

“average over the sampling period” means the average value of three consecutive measurements of at least 30 minutes each, unless otherwise stated, as defined in the *General Considerations* section of the Non-Ferrous Metals BAT Conclusions. For batch processes, the average of a representative number of measurements taken over the total batch time or the result of a measurement carried out over the total batch time can be used.

“BAT-AELs” means BAT-associated emission levels, i.e. the emission levels associated with the best available techniques for emissions to air and/or water, as set out in the Non-Ferrous Metals BAT Conclusions.

“daily average” means the average over a period of 24 hours of valid half-hourly or hourly averages obtained by continuous measurements, as defined in the *General Considerations* section of the Non-Ferrous Metals BAT Conclusions. A half-hourly or hourly average shall be considered valid if measurements are available for a minimum of (a) 20 minutes during the half hour, or (b) 40 minutes during the hour. The number of half-hourly or hourly averages so validated shall not exceed 5 per day.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Hazardous property” has the meaning in Annex lll of the Waste Framework Directive.

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- in relation to emissions from combustion processes and not subject to BAT-AELs for air emissions, the concentration in dry air at a temperature of 273.15K, at a pressure of 101.3 kPa, and with an oxygen content of 3% dry for liquid and gaseous fuels and 6% dry for solid fuels; and/or

- in relation to emissions from non-combustion sources and not subject to BAT-AELs for air emissions, the concentration at a temperature of 273.15K and at a pressure of 101.3 kPa, with no correction for water vapour content; and/or

- in relation to emissions from non-combustion sources subject to BAT-AELs for air emissions, the concentration in dry air at a temperature of 273.15K and at a pressure of 101.3 kPa; and/or

- in relation to emissions from combustion processes subject to BAT-AELs for air emissions, the concentration in dry air at a temperature of 273.15K and at a pressure of 101.3 kPa, and with an oxygen content of 3% dry for liquid and gaseous fuels and 6% dry for solid fuels.

For the determination of the toxic equivalence (I-TEQ) value stated as a release limit the mass concentrations of the following dioxins and furans have to be multiplied with their equivalence factors before summing.

Equivalence factor:

Dioxins

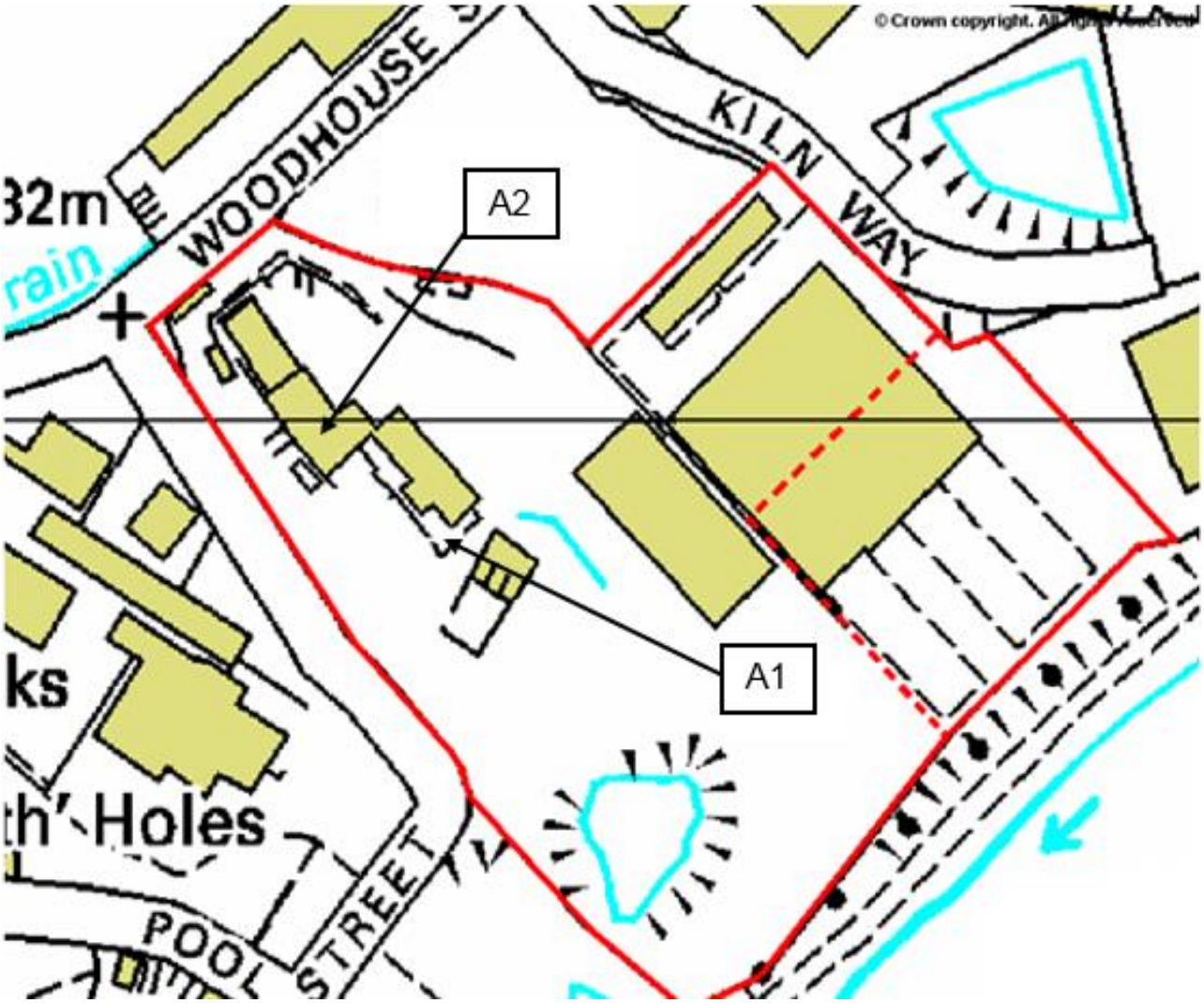
2,3,7,8 Tetrachlordibenzodioxin (TCDD)	1
1,2,3,7,8 Pentachlordibenzodioxin (PeCDD)	0.5
1,2,3,4,7,8 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,7,8,9 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,6,7,8 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,4,6,7,8 Heptachlordibenzodioxin (HpCDD)	0.01
Octachlordibenzodioxin (OCDD)	0.001

Furans

2,3,7,8 Tetrachlorodibenzofuran (TCDF)	0.1
2,3,4,7,8 Pentachlorodibenzofuran (PeCDF)	0.5
1,2,3,7,8 Pentachlorodibenzofuran (PeCDF)	0.05
1,2,3,4,7,8 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,7,8,9 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,6,7,8 Hexachlordibenzofuran (HxCDF)	0.1
2,3,4,6,7,8 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,4,6,7,8 Heptachlordibenzofuran (HpCDF)	0.01
1,2,3,4,7,8,9 Heptachlordibenzofuran (HpCDF)	0.01
Octachlordibenzofuran (OCDF)	0.001

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT