Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

R.S. Bruce (Metals & Machinery) Limited

March Street Site
March Street
Sheffield
South Yorkshire
S9 5DQ

Variation application number

EPR/GP3536VT/V003

Consolidated permit number

EPR/GP3536VT

March Street Site
Permit number EPR/GP3536VT

Introductory note

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

The following notice gives notice of the variation of environmental permits A and B referred to in the status logs below and the replacement of those permits with a consolidated environmental permit.

The schedules specify the changes made to the permit.

We consider that in reaching our decision to vary the permit we have taken into account all relevant considerations and legal requirements. We are satisfied that the permit will ensure that a high level of protection is provided for the environment and human health and that the activities will not give rise to any significant pollution of the environment or harm to human health.

The installation and waste operations shall continue to operate as follows:

The site is located at national grid reference SK 38918 89156 in an industrial area with residential receptor located to the south and south east. Located in Sheffield Citywide AQMA for NO2 and PM10.

There are 14 local wildlife sites and 2 ancient woodland site located within 2km of the site.

R. S. Bruce currently operates a number of waste recovery processes, storage of chemicals pending disposal and a chemical manufacturing plant used for the production of a metal salt solution resulting from the reaction of a mix of metal oxides with dilute nitric acid. The installation operates under an ISO 14001:2015 Environmental Management system.

The permitted activities are as follows:

Installation activities under Schedule 1 of the EPR including

- Section 4.2 Part A (1) (a) (v) - processing of metal oxide by rotary kiln.
- Section 4.2 Part A1 (a) (v) - producing inorganic chemicals such as non-metals, metal oxides, metal carbonyls or other inorganic compounds

Waste operations including

- Treatment and storage of waste electrical equipment (WEEE) for recovery
- Storage of hazardous waste <10 tonnes for disposal and recovery
- Treatment of hazardous waste <10 tonnes for recovery
- Storage and treatment of non-hazardous and inert waste for recovery

Emissions from the process include two air emissions points from the rotary kiln burners, extraction from the battery shredding process via a bag filter and emissions to sewer from general site cleaning.

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

Status log of permit A: EPR/GP3536VT		
Description	**Date**	**Comments**
Application EAWML 65511 (under EPA90)	29/03/06	
Waste Management Licence EAWML 65511 issued	10/11/06	
Notice of modification issued to include WEEE Directive requirements	07/11/08	
Application for variation EPR/PP3396ZP/V003	10/06/09	
Additional information received ("Email#1") clarifying application detail	20/08/09	
Additional information received ("Email#2") clarifying application detail	25/08/09	
Permit EPR/PP3396ZP (formerly referenced EAWML 65511) issued	15/09/09	
Application for variation EPR/PP3396ZP/V004	01/12/11	
Duly made date	18/01/12	H1 received
Further information received re site drainage/discharge consent.	24/01/12 25/01/12	
Further information received re new raw material to be processed on site	22/02/12	
Variation EPR/PP3396ZP/V004 issued *(HP3533CT)*	27/02/12	
Application for variation EPR/PP3396ZP/V005		
Duly made date	24/01/13	
Variation EPR/PP3396ZP/V005 issued *(AP3832ZU)*	21/02/13	
Application EPR/GP3536VT/T001 (full transfer of permit EPR/PP3396ZP)	Duly made 27/06/14	Application to transfer the permit in full to R.S Bruce (Metals and Machinery) Limited
Transfer determined EPR/GP3536VT *(Billing ref: GP3536VT)*	02/07/14	Full transfer of permit complete.
Application EPR/GP3536VT/V002 (variation and consolidation)	Duly made 03/10/19	Application to add waste operations including battery processing and distillation, increase annual raw material use for schedule activity AR2, extend the permitted boundary, add air emissions point, remove reference to wet scrubber and update the permit to modern conditions.
Response to Schedule 5 Notice dated 07/11/2019	26/11/19	Low impact installation demonstration, Site plans, operating techniques, revised fire prevention plan.

Status log of permit A: EPR/GP3536VT		
Description	**Date**	**Comments**
Response to Schedule 5 Notice dated 04/12/2019	10/01/20	Site layout, site drainage, operating techniques, revised fire prevention plan.
Additional information response	13/05/20	Revise noise impact assessment.
Additional information response	05/06/20	Further justification for whole installation as low impact installation.
Additional information response	11/06/20	Clarification on water use, exhaust locations, air emissions points, tank pressure release, Fire prevention plan versions and complete improvement conditions.
Additional information response	20/07/20 23/07/20	Removal of waste codes, assessment of shredding plant dust extraction emissions and request for tonnage increase.
Variation determined EPR/GP3536VT Billing references: PAS CP3835QM and EAWML 65511	24/09/20	Varied permit issued.
Environment Agency initiated variation	23/05/22	Consolidation of permits
Variation determined and consolidation issued. EPR/GP3536VT/V003 Billing reference PAS - EP3048QY EAWML - 65511	22/06/22	Varied and consolidated permit issued

Status log of permit B: EPR/MP3998ZZ		
Description	**Date**	**Comments**
Licence issued WD20S455	18/02/85	
Permit Variation EAWML 61659	07/11/08	Compliance with WEEE directive
Environment Agency initiated variation	23/05/22	Consolidation of permits.
Variation determined and consolidation issued. EPR/GP3536VT/V003	22/06/22	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 regulations 18 and 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates environmental permits

Permit numbers

EPR/GP3536VT
EPR/MP3998ZZ

Issued to

R.S. Bruce (Metals & Machinery) Limited ("the operator")

whose registered office is

March Street
Sheffield
South Yorkshire
S9 5DQ

company registration number 01916945

to operate a regulated facility at

March Street Site
March Street
Sheffield
South Yorkshire
S9 5DQ

to the extent set out in the schedules.

The notice shall take effect from 22/06/2022

The number of the consolidated permit is EPR/GP3536VT.

Name	Date
Vicky Patchett	**22/6/2022**

Authorised on behalf of the Environment Agency

Schedule 1 – changes in the permit

Note: The conditions numbers used in this schedule refer to those in the consolidated permit.

No conditions were varied 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/GP3536VT

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/GP3536VT/V003 authorising,

R.S. Bruce (Metals & Machinery) Limited ("the operator"),

whose registered office is

March Street
Sheffield
South Yorkshire
S9 5DQ

company registration number 01916945

to operate an installation and waste operations at

March Street Site
March Street
Sheffield
South Yorkshire
S9 5DQ

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

Name	Date
Vicky Patchett	**22/06/2022**

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.

1.1.4 The operator shall comply with the requirements of an approved competence scheme or other approval issued by the Environment Agency.

1.2 Energy efficiency

1.2.1 For the following activities referenced in schedule 1, table S1.1, AR1 and AR2, 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 For the following activities referenced in schedule 1, table S1.1, AR1 and AR2, 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 green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

2.3.1 For the following activities referenced in schedule 1, table S1.1, A1 to A2, the activities shall, subject to the conditions of this permit, be operated in accordance with the Low Impact Installation criteria specified in the Environment Agency's Environmental Permitting application form at the time the permit application was duly made.

2.3.2 For the following activities referenced in schedule 1, table S1.1, AR3 – AR8, 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 to S1.4, unless otherwise agreed in writing by the Environment Agency.

2.3.3 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 to S1.4 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.

2.3.4 Any raw materials or fuels listed in schedule 2, table S2.1 shall conform to the specifications set out in that table.

2.3.5 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2, tables S2.2, S2.3, S2.4 and S2.5; and

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

2.3.6 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.

2.3.7 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.4 WEEE storage and treatment

2.4.1 Spillage collection facilities and, where appropriate, decanters and cleanser-degreasers shall be provided and used as necessary.

2.4.2 WEEE (disassembled spare parts, components and residues) shall be stored in areas provided with a weatherproof covering where appropriate or in containers providing a weatherproof covering where appropriate.

2.4.3 WEEE shall be treated using best available treatment, recovery and recycling techniques (BATRRT).

2.4.4 All fluids contained within any WEEE shall be removed prior to further treatment.

2.4.5 As a minimum, the substances, preparations and components specified in table S1.3 shall be removed from any separately collected WEEE.

2.4.6 Separately collected components of WEEE specified in table S1.4 shall be treated in accordance with the methods specified in that table.

2.4.7 Any liquids including those in disassembled spare parts, batteries, capacitors containing PCBs/PCTs and any other hazardous waste shall be stored in suitable sealed and labelled containers.

2.4.8 Equipment shall be provided and used to record the weight of untreated WEEE accepted at, and components and materials leaving the site.

2.5 Waste battery and accumulator treatment

2.5.1 Treatment of waste batteries and accumulators must meet the minimum requirements set out in Annex III, Part A of Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC.

2.6 Hazardous waste storage and treatment

2.6.1 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.

2.7 Improvement programme

2.7.1 The operator shall complete the improvements specified in schedule 1, table S1.5 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.7.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

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 Pests

3.5.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.5.2 The operator shall:

(a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;

(b) implement the pests management plan, from the date of approval, 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.

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 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.

4.2.3 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 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.

4.4 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 reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
AR1	S4.2 A1 (a) (iv)	Producing inorganic chemicals such as salts, silver nitrate.	From receipt of dry mixed metal oxides, nitric acid and other raw materials, to the storage, ready for despatch, of the product salts.
AR2	S4.2 A1 (a) (v)	Producing inorganic chemicals such as non-metals, metal oxides, metal carbonyls or other inorganic compounds.	Limited to 900 tonnes raw material per year. From receipt of raw material to the storage and despatch of product.
Directly Associated Activity			
None	-	-	-
Activity reference	**Description of activities for waste operations**	**Limits of activities**	
	For all waste activities listed below: maximum storage times	1 year prior to disposal or 3 years prior to recovery	
	For all waste activities listed below	Treatment consisting only of cleaning, sorting, dismantling, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation, or cutting of waste into different components for recovery.	
AR3	R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	<u>In respect of WEEE</u>: Treatment of WEEE • shall be carried out within a building provided with a weatherproof covering; • shall be carried out on an impermeable surface with sealed drainage system with provision of spillage collection facilities and, where appropriate, decanters and cleanser degreasers. Storage • WEEE, disassembled spare parts, components or residues shall be stored on an impermeable surface with sealed drainage system with provision of spillage collection facilities and, where appropriate, decanters and cleanser degreasers; • WEEE, disassembled spare parts, components or residues shall be stored in areas provided with a weatherproof covering where appropriate or in containers providing a weatherproof covering where appropriate; • disassembled spare parts containing liquids shall be stored in appropriate containers; • Batteries, PCBs/PCTs containing capacitors and other hazardous wastes must be stored in dedicated, labelled and appropriate containers. Buildings, covered areas or containers shall meet the following requirements:	

Table S1.1 activities		
		• buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water; • rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids; • containers shall be stored on an impermeable surface with sealed drainage system. • Lead acid batteries shall be stored in containers with an impermeable, acid resistant base and a lid that prevents ingress of water. Waste types suitable for acceptance are limited to those specified in Table S2.4.
	R3: Recycling/reclamation of organic substances which are not used as solvents, including composting and other biological transformation processes. R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	<u>In respect of WEEE (cont.)</u>: Treatment of WEEE • shall be carried out in areas provided with a waterproof covering where appropriate; • shall be carried out on an impermeable surface with sealed drainage system with provision of spillage collection facilities and, where appropriate, decanters and cleanser degreasers Buildings, covered areas or containers shall meet the following requirements: • buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water; • rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids; • containers shall be stored on an impermeable surface with sealed drainage system. • There shall be no treatment of lead acid batteries, other than sorting and separating from other wastes, and repackaging for third party processing. Waste types suitable for acceptance are limited to those specified in Table S2.4.
AR4	D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced) R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	<u>In respect of other hazardous waste</u>: • Maximum storage of hazardous wastes subjected to D15 operations shall be limited to <10 tonnes. • Maximum storage of hazardous wastes (including WEEE) subjected to R13 operations shall be limited to 150 tonnes. • Any hazardous waste storage activities shall be carried out only within a building. <u>In respect of non-hazardous waste</u>: • Maximum storage of non-hazardous wastes subjected to D15 or R13 operations shall be limited to 940 tonnes. • Any non-hazardous wastes stored outside shall be contained in closed vessels, covered skips, designated bays or on securely stacked pallets suitable for that purpose. <u>In respect of inert waste</u>: • Maximum storage capacity 20 tonnes, stored and treated on areas, bays or containers of hard standing or impermeable surface with a sealed drainage system.

Table S1.1 activities		
		Waste types suitable for acceptance are limited to those specified in Table S2.5
AR5	R3: Recycling/reclamation of organic substances which are not used as solvents, including composting and other biological transformation processes. R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials R7: Recovery of components used for pollution abatement. R8: Recovery of components from catalysts.	<u>In respect of hazardous waste</u>: • Maximum treatment capacity of hazardous wastes subjected to R5 operations shall be limited to <10 tonnes per day*. • Maximum treatment capacity of hazardous wastes subjected to R7 operations shall be limited to <10 tonnes per day*. • Maximum treatment capacity of hazardous wastes subjected to R8 operations shall be limited to <10 tonnes per day*. • There shall be no treatment of clinical waste. <u>In respect of non-hazardous waste</u>: • No limit to treatment capacity • There shall be no treatment of clinical waste <u>In respect of inert waste</u>: • No limit to treatment capacity <u>In respect of all wastes</u>: • Treatment consisting of sorting, dismantling, cleaning and testing shall be carried out only within a building. Waste types suitable for acceptance are limited to those specified in Table S2.5.
AR6	R3: Recycling/reclamation of organic substances which are not used as solvents, including composting and other biological transformation processes. R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	<u>In respect of Battery Treatment</u> Treatment operations shall be limited to: • Treatment consisting only of sorting, dismantling, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation, repair or refurbishment, or cutting of waste into different components for recovery. • Treatment in shredders of waste on site for recovery (no more than 75 tonnes per day). • The maximum quantity of hazardous waste (in aggregate) that can be stored at the site shall not exceed 50 tonnes at any one time. • There shall be no treatment of hazardous waste other than for sorting and separation from other waste streams • There shall be no treatment of lead acid batteries, other than sorting and separating from other wastes, and repackaging for third party processing. • Lead acid batteries shall be stored in containers with an impermeable, acid resistant base and a lid that prevents ingress of water. • Treatment of batteries shall be carried out within a building provided with a weatherproof covering. Buildings, covered areas or containers shall meet the following requirements: • buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water; • rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;

Table S1.1 activities		
		• containers containing waste shall be stored on an impermeable surface with sealed drainage system. Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR7	D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12	pH adjustment of battery rinse water.
AR8	R5: Recycling/reclamation of other inorganic materials R2 solvent reclamation/regeneration	Treatment operations shall be limited to distillation. Treatment of hazardous waste shall not exceed 10 tonnes per day. Waste types suitable for acceptance are limited to those specified in Table S2.3.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application for WML65511	The techniques described in the application	29/03/06
Application for variation EPR/PP3396ZP/V003	The techniques described in the application	10/06/09
Additional information	The techniques described in the additional information in "Email #1"	20/08/09
Application for variation EPR/PP3396ZP/V004	The techniques described in the application	18/01/12
Additional information	The techniques described in emails re discharge to combined sewer and water usage. Also restriction on 500 Tonnes of Copper Carbonate per annum, and restrictions of raw material used by agreement with Agency.	24/01/12 & 25/01/12
Additional information	Introduction of new raw material to be processed on site as per email	22/02/12
Application	Section 3 of Part C3 and Section 3 of Part C4 of the application form technical standards.	03/10/19
Sector Guidance Note IPPC S5.06: Guidance for the recovery and Disposal of Hazardous and Non Hazardous Waste	Reference all parts	03/10/19
Response to Schedule 5 Notice dated 07/11/2019	Response to all questions Confirmation the dust extraction is discharged into an enclosed filter bag.	26/11/19
Response to Schedule 5 Notice dated 04/12/2019	Response to all questions	10/01/20
Addition information response to RFI dated 09 June 2020	Responses to questions 1 – 8 (emission points, burst discs and waste water) Fire Prevention Plan reference EA/V002/009 date 04/12/2019	11/06/20

Table S1.3 Substances, preparations and components to be removed from separately collected WEEE
• Capacitors containing polychlorinated biphenyls in accordance with Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT) • Mercury-containing components, such as switches or backlighting lamps • Batteries • Printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimetres • Toner cartridges, liquid and paste, as well as colour toner • Plastic containing brominated flame retardants • Asbestos waste and components which contain asbestos • Cathode ray tubes • Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC), or hydrocarbons (HC) • Gas discharge lamps • Liquid crystal displays (together with their casing where appropriate) of a surface greater than 100 square centimetres and all those back-lighted with gas discharge lamps • External electric cables • Components containing refractory ceramic fibres as described in REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. • Components containing radioactive substances with the exception of components that are below the exemption thresholds set in Article 3 of and the Annex I to Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation • Electrolyte capacitors containing “substances of concern” (height > 25mm, diameter > 25mm or proportionately similar volume)

Table S1.4 Specified Treatment Methods for separately collected components of WEEE	
Component	**Specified Treatment**
Cathode ray tubes	The fluorescent coating shall be removed
Gas discharge lamps	The mercury shall be removed
Equipment containing gases that are ozone depleting or have a global warming potential (GWP) above 15 such as those contained in foams and refrigeration circuits	The gases must be properly extracted and properly treated. Ozone depleting gases must be treated in accordance with Regulation (EC) No 1005/2009.

Table S1.5 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC 1	The operator shall submit a report to the Environment Agency for written approval outlining a review of all site surfacing and bunding. The report shall demonstrate • that existing impermeable surfaces and bunding are in a good state of repair and meet the standards outlined in CIRIA C176. • That any additional surfacing works undertaken to activities added under variation EPR/GP3536VT/V002 have been completed to an appropriate standard.	24/03/2021
IC2	The operator shall submit a report to the Environment Agency for written approval outlining a review of noise emissions from the site and review whether any further noise management measures are required. The report shall demonstrate: • That noise levels at peak operation reflect those predicted in the noise assessment. • Noise complaints. • Any further works required. • Timescale for implementation of further works.	24/03/2021

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
Copper hydroxy-carbonate, (or otherwise agreed with the Agency).	As referenced in Part 2 Section 2 of the application dated 1/12/2011
Copper zinc hydroxyl-carbonate	As referenced in email dated 22/02/12

Table S2.2 Permitted waste types and quantities for activity AR6 – non-hazardous battery treatment	
Maximum quantity	**The total quantity of waste accepted at the site under activity AR6 shall not exceed 10,000 tonnes per year**
Exclusions	**Wastes having any of the following characteristics shall not be accepted:** **Consisting solely or mainly of dusts, powders or loose fibres.**
Waste code	**Description**
16	**Wastes not otherwise specified in the list**
16 06	**batteries and accumulators**
16 06 05	other batteries and accumulators
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 34	batteries and accumulators other than those mentioned in 20 01 33

Table S2.3 Permitted waste types and quantities for activity AR8 – Distillation	
Maximum quantity	**The total quantity of waste accepted at the site under activity AR8 shall not exceed 400 tonnes per year Treatment of hazardous waste shall not exceed 10 tonnes per day**
Exclusions	**Wastes having any of the following characteristics shall not be accepted:** **Consisting solely or mainly of dusts, powders or loose fibres.**
Waste code	**Description**
07	**Wastes from organic chemical processes**
07 05	**wastes from the MFSU of pharmaceuticals**
07 05 04*	other organic solvents, washing liquids and mother liquors
07 07	**wastes from the MFSU of fine chemicals and chemical products not otherwise specified**
07 07 04*	other organic solvents, washing liquids and mother liquors

Table S2.4 Permitted waste types and quantities for activity AR3	
Maximum quantity	**For activity AR3, AR4 and AR5 the total quantity of waste accepted at the site shall not exceed 24,999 tonnes per year.** **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Exclusions	**Wastes having any of the following characteristics shall not be accepted:** **Consisting solely or mainly of dusts, powders or loose fibres.**
Waste code	**Description**
16	**Wastes not otherwise specified in the list**
16 02	**wastes from electrical and electronic equipment**
16 02 09*	transformers and capacitors containing PCBs
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 12*	discarded equipment containing free asbestos
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 15*	hazardous components removed from discarded equipment
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
01	**Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals**
01 03	**wastes from physical and chemical processing of metalliferous minerals**
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 07*	other wastes containing dangerous substances from physical and chemical processing of metalliferous minerals
01 03 08	dusty and powdery wastes other than those mentioned in 01 03 07
06	**Wastes from inorganic chemical processes**
06 01	**wastes from the manufacture, formulation, supply and use (MFSU) of acids**
06 01 01*	sulphuric acid and sulphurous acid
06 01 02*	hydrochloric acid

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
06 01 04*	phosphoric and phosphorous acid
06 01 05*	nitric acid and nitrous acid
06 01 06*	other acids
06 02	**wastes from the MFSU of bases**
06 02 04*	sodium and potassium hydroxide
06 03	**wastes from the MFSU of salts and their solutions and metallic oxides**
06 03 11*	solid salts and solutions containing cyanides
06 03 13*	solid salts and solutions containing heavy metals
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
06 03 15*	metallic oxides containing heavy metals
06 03 16	metallic oxides other than those mentioned in 06 03 15
06 04	**metal-containing wastes other than those mentioned in 06 03**
06 04 03*	wastes containing arsenic
06 04 04*	wastes containing mercury
06 04 05*	wastes containing other heavy metals
06 05	**sludges from on-site effluent treatment**
06 05 02*	sludges from on-site effluent treatment containing hazardous substances
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02
06 07	**wastes from the MFSU of halogens and halogen chemical processes**
06 07 04*	solutions and acids, for example contact acid
06 10	**wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture**
06 10 02*	wastes containing hazardous substances
06 13	**wastes from inorganic chemical processes not otherwise specified**
06 13 02*	spent activated carbon (except 06 07 02)
06 13 03	carbon black
07	**Wastes from organic chemical processes**
07 01	**wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
07 01 01*	aqueous washing liquids and mother liquors
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 10*	other filter cakes and spent absorbents
07 01 11*	sludges from on-site effluent treatment containing dangerous substances
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
07 02	**wastes from the MFSU of plastics, synthetic rubber and man-made fibres**

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
07 02 01*	aqueous washing liquids and mother liquors
07 02 10*	other filter cakes and spent absorbents
07 02 11*	sludges from on-site effluent treatment containing dangerous substances
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11
07 02 13	waste plastic
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 02 17	waste containing silicones other than those mentioned in 07 02 16
07 03	**wastes from the MFSU of organic dyes and pigments (except 06 11)**
07 03 10*	other filter cakes and spent absorbents
07 03 11*	sludges from on-site effluent treatment containing dangerous substances
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11
07 04	**wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides**
07 04 10*	other filter cakes and spent absorbents
07 04 11*	sludges from on-site effluent treatment containing dangerous substances
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
07 05	**wastes from the MFSU of pharmaceuticals**
07 05 01*	aqueous washing liquids and mother liquors
07 05 03*	organic halogenated solvents, washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 07*	halogenated still bottoms and reaction residues
07 05 08*	other still bottoms and reaction residues
07 05 09*	halogenated filter cakes and spent absorbents
07 05 10*	other filter cakes and spent absorbents
07 05 11*	sludges from on-site effluent treatment containing dangerous substances
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 05 13*	solid wastes containing dangerous substances
07 05 14	solid wastes other than those mentioned in 07 05 13
07 06	**wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics**
07 06 10*	other filter cakes and spent absorbents
07 06 11*	sludges from on-site effluent treatment containing hazardous substances
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
07 07	**wastes from the MFSU of fine chemicals and chemical products not otherwise specified**
07 07 01*	aqueous washing liquids and mother liquors

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
07 07 04*	other organic solvents, washing liquids and mother liquors
07 07 10*	other filter cakes and spent absorbents
07 07 11*	sludges from on-site effluent treatment containing hazardous substances
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
08	**Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks**
08 01	**wastes from MFSU and removal of paint and varnish**
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 02	**wastes from MFSU of other coatings (including ceramic materials)**
08 02 01	waste coating powders
08 02 02	aqueous sludges containing ceramic materials
08 02 03	aqueous suspensions containing ceramic materials
08 03	**wastes from MFSU of printing inks**
08 03 07	aqueous sludges containing ink
08 03 08	aqueous liquid waste containing ink
08 03 12*	waste ink containing dangerous substances
08 03 13	waste ink other than those mentioned in 08 03 12
08 03 15	ink sludges other than those mentioned in 08 03 14
08 03 17*	waste printing toner containing hazardous substances
08 03 18	waste printing toner other than those mentioned in 08 03 17
08 04	**wastes from MFSU of adhesives and sealants (including water proofing products)**
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11
08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
08 05	**wastes not otherwise specified in 08**
08 05 01*	waste isocyanates
09	**Wastes from the photographic industry**
09 01	**wastes from the photographic industry**
09 01 06*	wastes containing silver from on-site treatment of photographic wastes
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 13*	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
10	**Wastes from thermal processes**
10 02	**wastes from the iron and steel industry**
10 02 10	mill scales
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 15	other sludges and filter cakes
10 03	**wastes from aluminium thermal metallurgy**
10 03 02	anode scraps
10 03 05	waste alumina
10 03 19*	flue-gas dust containing hazardous substances
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 21*	other particulates and dust (including ball-mill dust) containing hazardous substances
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 04	**wastes from lead thermal metallurgy**
10 04 01*	slags from primary and secondary production
10 04 02*	dross and skimmings from primary and secondary production
10 04 03*	calcium arsenate
10 04 04*	flue-gas dust
10 04 05*	other particulates and dust
10 04 06*	solid wastes from gas treatment
10 04 07*	sludges and filter cakes from gas treatment
10 04 09*	wastes from cooling-water treatment containing oil
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
10 05	**wastes from zinc thermal metallurgy**
10 05 01	slags from primary and secondary production
10 05 03*	flue-gas dust
10 05 04	other particulates and dust
10 05 05*	solid waste from gas treatment
10 05 06*	sludges and filter cakes from gas treatment
10 05 08*	wastes from cooling-water treatment containing oil
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 10*	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 06	**wastes from copper thermal metallurgy**
10 06 01	slags from primary and secondary production

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
10 06 02	dross and skimmings from primary and secondary production
10 06 03*	flue-gas dust
10 06 04	other particulates and dust
10 06 06*	solid wastes from gas treatment
10 06 07*	sludges and filter cakes from gas treatment
10 06 09*	wastes from cooling-water treatment containing oil
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
10 07	**wastes from silver, gold and platinum thermal metallurgy**
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 07*	wastes from cooling-water treatment containing oil
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 08	**wastes from other non-ferrous thermal metallurgy**
10 08 04	particulates and dust
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 15*	flue-gas dust containing dangerous substances
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 08 17*	sludges and filter cakes from flue-gas treatment containing dangerous substances
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 09	**wastes from casting of ferrous pieces**
10 09 03	furnace slag
10 09 05*	casting cores and moulds which have not undergone pouring containing hazardous substances
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 07*	casting cores and moulds which have undergone pouring containing hazardous substances
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 10	**wastes from casting of non-ferrous pieces**

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
10 10 05*	casting cores and moulds which have not undergone pouring, containing dangerous substances
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 07*	casting cores and moulds which have undergone pouring, containing dangerous substances
10 11	**wastes from manufacture of glass and glass products**
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 11*	waste glass in small particles and glass powder containing heavy metals (for example from cathode ray tubes)
10 11 12	waste glass other than those mentioned in 10 11 11
10 12	**wastes from manufacture of ceramic goods, bricks, tiles and construction products**
10 12 05	sludges and filter cakes from gas treatment
10 13	**wastes from manufacture of cement, lime and plaster and articles and products made from them**
10 13 09*	wastes from asbestos-cement manufacture containing asbestos
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 14	waste concrete and concrete sludge
11	**Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy**
11 01	**wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)**
11 01 05*	pickling acids
11 01 06*	acids not otherwise specified
11 01 07*	pickling bases
11 01 09*	sludges and filter cakes containing dangerous substances
11 01 11*	aqueous rinsing liquids containing dangerous substances
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11
11 01 16*	saturated or spent ion exchange resins
11 01 98*	other wastes containing dangerous substances
11 02	**wastes from non-ferrous hydrometallurgical processes**
11 02 02*	sludges from zinc hydrometallurgy (including jarosite, goethite)
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 05*	wastes from copper hydrometallurgical processes containing hazardous substances

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 02 07*	other wastes containing dangerous substances
12	**Wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01	**wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01 01	ferrous metal filings and turnings
12 01 02	ferrous metal dust and particles
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 05	plastics shavings and turnings
12 01 13	welding wastes
12 01 16*	waste blasting material containing dangerous substances
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 18*	metal sludge (grinding, honing and lapping sludge) containing oil
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
15 01 10*	packaging containing residues of or contaminated by dangerous substances
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	**Wastes not otherwise specified in the list**

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
16 01	**end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 20	glass
16 01 21*	hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
16 01 22	components not otherwise specified
16 03	**off-specification batches and unused products**
16 03 03*	inorganic wastes containing dangerous substances
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 05*	organic wastes containing dangerous substances
16 03 06	organic wastes other than those mentioned in 16 03 05
16 06	**batteries and accumulators**
16 06 01*	lead batteries
16 06 02*	Ni-Cd batteries
16 06 03*	mercury-containing batteries
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
16 07	**wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)**
16 07 09*	wastes containing other dangerous substances
16 08	**spent catalysts**
16 08 01	spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)
16 08 02*	spent catalysts containing hazardous transition metals or hazardous transition metal compounds
16 08 03	spent catalysts containing transition metals or transition metal compounds not otherwise specified
16 08 04	spent fluid catalytic cracking catalysts (except 16 08 07)
16 08 05*	spent catalysts containing phosphoric acid
16 08 06*	spent liquids used as catalysts
16 08 07*	spent catalysts contaminated with hazardous substances
16 10	**aqueous liquid wastes destined for off-site treatment**
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 03*	aqueous concentrates containing dangerous substances
16 10 04	aqueous concentrates other than those mentioned in 16 10 03

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
16 11	**waste linings and refractories**
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 03*	other linings and refractories from metallurgical processes containing dangerous substances
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 05*	linings and refractories from non-metallurgical processes containing hazardous substances
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 03	tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 03	**bituminous mixtures, coal tar and tarred products**
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 04	**metals (including their alloys)**
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 09*	metal waste contaminated with hazardous substances
17 04 10*	cables containing oil, coal tar and other hazardous substances
17 04 11	cables other than those mentioned in 17 04 10
17 06	**insulation materials and asbestos-containing construction materials**
17 06 01*	insulation materials containing asbestos
17 06 03*	other insulation materials consisting of or containing hazardous substances
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	construction materials containing asbestos
18	**Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)**
18 01	**wastes from natal care, diagnosis, treatment or prevention of disease in humans**

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
18 01 01	sharps (except 18 01 03)
18 01 06*	chemicals consisting of or containing hazardous substances
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 09	medicines other than those mentioned in 18 01 08
18 01 10*	amalgam waste from dental care
18 02	**wastes from research, diagnosis, treatment or prevention of disease involving animals**
18 02 01	sharps (except 18 02 02)
18 02 05*	chemicals consisting of or containing hazardous substances
18 02 06	chemicals other than those mentioned in 18 02 05
18 02 07*	cytotoxic and cytostatic medicines
18 02 08	medicines other than those mentioned in 18 02 07
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 01	**wastes from incineration or pyrolysis of waste**
19 01 02	ferrous materials removed from bottom ash
19 01 10*	spent activated carbon from flue-gas treatment
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 15*	boiler dust containing hazardous substances
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 05*	sludges from physico/chemical treatment containing hazardous substances
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 07*	oil and concentrates from separation
19 02 08*	liquid combustible wastes containing dangerous substances
19 02 09*	solid combustible wastes containing dangerous substances
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 02 11*	other wastes containing dangerous substances
19 03	**stabilised/solidified wastes**
19 03 04*	wastes marked as hazardous, partly (5) stabilised

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 06*	wastes marked as hazardous, solidified
19 03 07	solidified wastes other than those mentioned in 19 03 06
19 04	**vitrified waste and wastes from vitrification**
19 04 01	vitrified waste
19 04 04	aqueous liquid wastes from vitrified waste tempering
19 05	**wastes from aerobic treatment of solid wastes**
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 06*	saturated or spent ion exchange resins
19 08 07*	solutions and sludges from regeneration of ion exchangers
19 08 08*	membrane system waste containing heavy metals
19 08 11*	sludges containing dangerous substances from biological treatment of industrial waste water
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 13*	sludges containing dangerous substances from other treatment of industrial waste water
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**
19 09 04	spent activated carbon
19 09 05	saturated or spent ion exchange resins
19 09 06	solutions and sludges from regeneration of ion exchangers
19 10	**wastes from shredding of metal-containing wastes**
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 11	**wastes from oil regeneration**
19 11 03*	aqueous liquid wastes
19 11 05*	sludges from on-site effluent treatment containing dangerous substances
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 01	paper and cardboard
19 12 02	ferrous metal

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
19 12 06*	wood containing hazardous substances
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	**wastes from soil and groundwater remediation**
19 13 01*	solid wastes from soil remediation containing dangerous substances
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 03*	sludges from soil remediation containing dangerous substances
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing dangerous substances
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 10	clothes
20 01 11	textiles
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 27*	paint, inks, adhesives and resins containing hazardous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29

Table S2.5 Permitted waste types and quantities for activities AR4 and AR5	
Maximum quantity	**Annual tonnage for activity AR3, AR4 and AR5 shall not exceed a combined 24,999 tonnes**. **Treatment of hazardous waste shall not exceed 10 tonnes per day.**
Waste code	**Description**
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 40	metals
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	**other municipal wastes**
20 03 03	street-cleaning residues

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**
Stack emission RK1 on site plan in schedule 7	Rotary Kiln Burners	Oxides of Nitrogen	No limit set	-	-	-
		Particulates	No limit set	-	-	-
		Carbon Monoxide	No limit set	-	-	-
		Sulphur Dioxide	No limit set	-	-	-
Stack emission RK2 on site plan in schedule 7	Rotary Kiln Bag filter	Particulates	No limit set	-	-	-
B1	Battery Shredder air extraction system	Particulates	No limit set	-	-	-
D1	Distillate process Pressure relief burst disc	-	-	-	-	-

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
S1 on site plan in schedule 7 emission to Yorkshire water effluent treatment plant	Arising from demin water resin regeneration and general cleaning operations	-	No limit set	-	-	-

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.	-	-	-

Table S4.2: Annual production/treatment	
Parameter	**Units**
Metal Salts production (in total)	tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes
Waste brine disposal	Annually	tonnes

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	24/09/2020
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	24/09/2020
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	24/09/2020

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.

“best available treatment, recovery and recycling techniques” shall have the meaning given to it in the document published jointly by the Department for Environment, Food and Rural Affairs, the Welsh Assembly Government and the Scottish Executive on 27th November 2006, entitled “Guidance on Best Available Treatment, Recovery and Recycling Techniques (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE).

“building” means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

“D” means a disposal operation provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“disposal”. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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 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

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

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

Pests” means Birds, Vermin and Insects.

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

“R” means a recovery operation provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

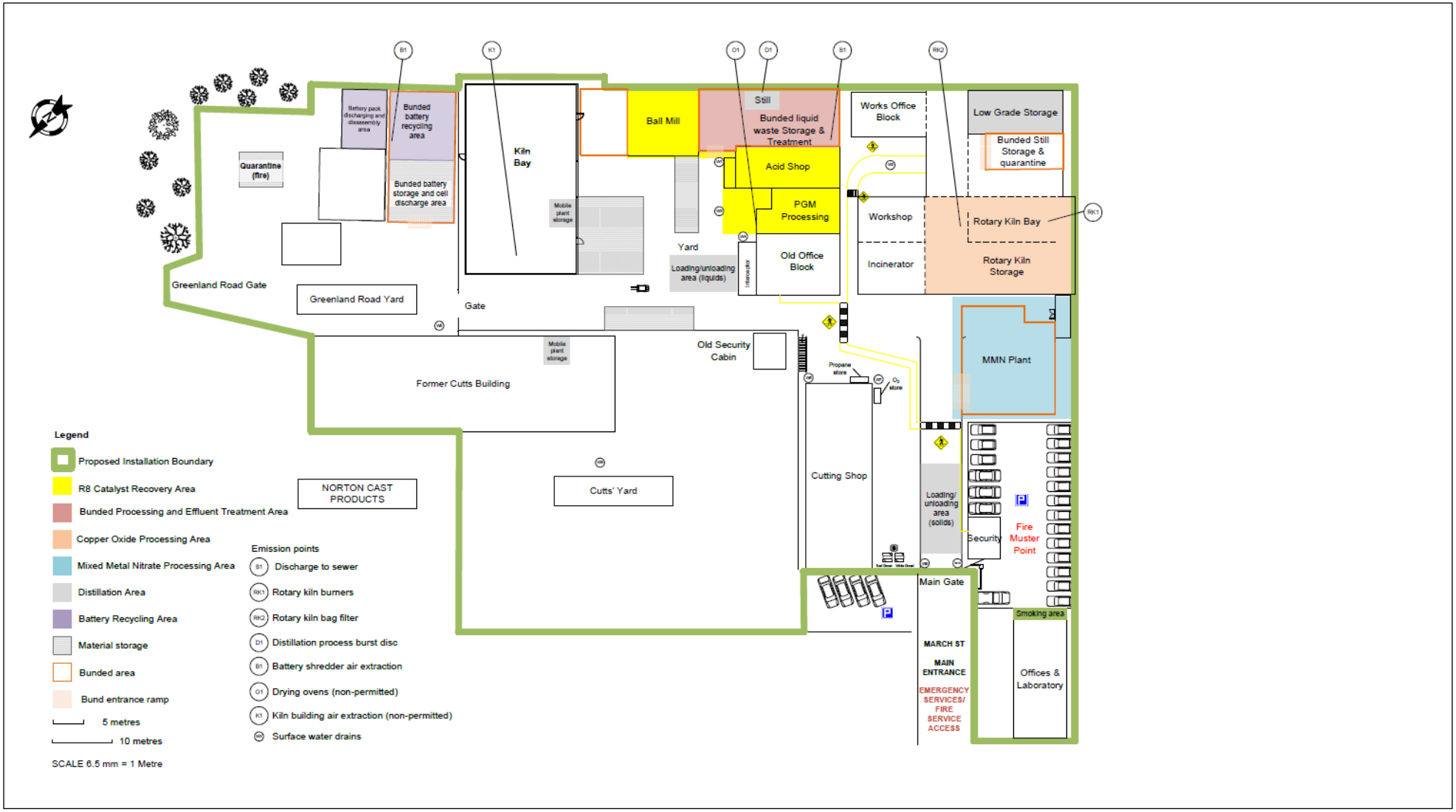
“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

“WEEE” means waste electrical and electronic equipment.

“WEEE Directive” means Directive 2012/19/EU of the European Parliament and of the Council of 4th July 2012 on waste electrical and electronic equipment (WEEE).

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT