



**Cyfoeth
Naturiol**
Cymru
**Natural
Resources**
Wales

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Real Alloy UK Limited

Waunarlwydd Works
Waunarlwydd
Swansea
SA5 4SF

Permit number
EPR/EP3935UC

Waunarlwydd Works

Permit number EPR/EP3935UC

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The operation is designed to recover aluminium metal from secondary sourced aluminium scrap materials and used beverage cans. The main raw materials are scrap aluminium and the sorbent additives lime/carbon and sodium bicarbonate (used for abatement of acid gases). The raw materials are melted in 2 oxy-fuel furnaces and the molten aluminium drained away into moulds. The remaining contaminants are removed from the base of the furnace and sent for re-processing to remove the remaining aluminium and recycle the salt flux.

The operation involves the processing of non-ferrous metals from secondary raw materials by metallurgical means.

The installation is located on an industrial estate on the western edge of Swansea, referred to as Waunarlwydd Works and has 8 European habitat sites within 10km.

Variation V002 allowed for a change in the combustion control and melting technologies on both rotary furnaces to include oxygen enriched (oxy-fuel) combustion systems. Oxy-fuel systems require the replacement of combustion air with pure oxygen. This change necessitated the addition of an oxygen plant to supply the combustion process adjacent to the furnace area. Emission limits for VOCs and SO₂ have been increased but remain within indicative BAT limits.

Also included was the replacement of the two existing bag house plants with the installation of one new, but similar bag house abatement plant with a 23m stack (A4). The emission point A3 associated with the old bag house plants was removed.

Variation V004 authorised the use of a 1.5 tonne single rotary furnace to be used for the sampling and analysis of batches of scrap aluminium. Emissions from this furnace will be captured via an extension to the existing local exhaust ventilation system and routed to the site's bag filtration plant.

Also included was reference to a revised version of the raw materials and wastes storage and handling section of the original permit, which was been updated in line with the changes that have occurred at the site since the permit was first issued in 2003. We have also specified areas within the installation boundary where the operator is permitted to store scrap aluminium and aluminium drosses.

The installation boundary has been increased twice in size since the original permit was issued. Firstly to include 1.25 acres of the former Alcoa extrusion plant for storage space for baled scrap aluminium feedstock. Secondly to increase raw material (scrap aluminium) storage as part of V004. Scrap aluminium will only be stored indoors within a building located within the extended area.

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

Status log of the permit		
Description	Date	Comments
Application BM 1384	Received 14/12/2001	
Additional information received	20/02/2002	Response to 1 st Schedule 4 notice.
Additional information received.	18/07/2002	Response to 2 nd Schedule 4 notice.
Additional information received.	18/07/2002	Response to 3 rd Schedule 4 notice.
Additional information received.	18/07/2002	Response to 4 th Schedule 4 notice.
Additional information received.	18/07/2002	Response to 5 th Schedule 4 notice.
Request by the Environment Agency to extend determination date from 27/08/02 to 27/11/02	Request dated 19/07/2002	Request accepted 24/07/2002
Request by the Environment Agency to extend determination date from 27/11/02 to 27/02/03	Request dated 28/10/2002	Request accepted 30/10/2002
Permit BM 1385	Granted 05/09/2003	
Variation notice BX1411	Effective 19/01/2004	Reduction in emission limits and addition of improvement condition 9.14
Variation notice WP3339SP	Effective 18/01/2005	Addition of 4 further Improvement Conditions (9.15 to 9.18) linked to raw material storage, unauthorised release of aluminium, furnace fumes on start-up and addition of a higher percentage of oily material/ thermal breaks to furnace. Setting of limits for ammoniacal nitrogen to water and sulphur dioxide to air.
Variation notice GP4232MN	Effective 29/06/2007	Amendment of SO2 limits for release point A4 and changes in sampling frequencies for some surface water determinands. Additional improvement items requiring investigation into site surface water also included. Schedule d1 has been renamed to Schedule 1.

Status log of the permit

Description	Date	Comments
Transfer EP3935UC (T001)	Received 01/03/2007 Effective 26/07/2007	Whole transfer from IMCO Recycling (UK) Ltd to Aleris Recycling (Swansea) Ltd. Consolidation of permit conditions.
Variation application EPR/EP3935UC/V002	Duly made 09/08/2013	Application to replace bag house plants and introduce an oxy-fuel combustion system.
Additional information received	17/10/2013	Revised Part A, Part C3 and updated emission point plan.
Additional information received	30/11/2013	Confirmation of monitoring standards and proposals for supplying baseline groundwater data.
Variation EPR/EP3935UC/V002	11/12/2013	Varied and consolidated permit issued in modern condition format.
Variation application EPR/EP3935UC/V003	Duly made 09/06/15	Administrative variation to reflect company name change.
Variation application EPR/EP3935UC/V003 determined	03/07/15	Variation issued.
Variation application EPR/EP3935UC/V004	Duly made 28/08/15	Application to increase installation boundary and include 1.5 tonne rotary furnace.
Additional information requested	11/11/15	Revised site plan and pollution control measures for additional aluminium scrap storage areas.
Additional information received	18/12/15	Revised site plan and information regarding storage pollution control received.
Additional information requested	17/11/15	Revised raw materials and wastes storage and handling description document, including plan showing storage locations for raw materials and wastes.
Additional information received	18/12/15	Raw materials and wastes storage and handling document and plan received.
Variation application EPR/EP3935UC/V004 determined	05/02/16	Variation issued.
Regulation 60(1) Notice of request for information	27/07/16	
Regulation 60(1) response received	31/10/16	Implementation of BAT conclusions under IED

Status log of the permit

Description	Date	Comments
Natural Resources Wales Non-Ferrous Metals Sector Review 2016 Permit EPR/EP3935UC Variation issued EPR/EP3935UC/V005	26/04/17	Varied and consolidated permit issued in modern IED condition format.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number
EPR/EP3935UC

The Natural Resources Body for Wales (“Natural Resources Wales”) authorises,
under regulation 13 of the Environmental Permitting (England and Wales)
Regulations 2016

Real Alloy UK Limited (“the operator”)

whose registered office is

**Westfield Industrial Park
Waunarlwydd
Swansea
United Kingdom
SA5 4SF**

company registration number **03221771**

to operate a regulated facility at

**Waunarlwydd Works
Waunarlwydd
Swansea
SA5 4SF**

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

Signed

Date

	26/04/2017
---	-------------------

Authorised on behalf of Natural Resources Wales

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-conformance, 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;

- (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
 - (a) 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 Natural Resources Wales.
 - (c) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales 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 Natural Resources Wales.
- 2.3.2 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.
- 2.3.3 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.

- 2.3.4 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 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.
- 2.4.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales 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 Total annual emissions from the emission point(s) set out in tables schedule 3 S3.1 and S3.2 of a substance listed in schedule 3 table S3.3 shall not exceed the relevant limit in table S3.3.
- 3.1.4 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 Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales 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 Natural Resources Wales.
- 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 Natural Resources Wales, 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 Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour; and
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales 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 Natural Resources Wales.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1 and 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 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.
- 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 Natural Resources Wales.

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 Natural Resources Wales, 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 Natural Resources Wales.

4.2 Reporting

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

4.2.2 For the following activities referenced in schedule 1, table S1.1 (A1 to A4 etc.) A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) 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 Natural Resources Wales, 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 Natural Resources Wales, 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 Natural Resources Wales 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, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

4.3 Notifications

- 4.3.1 (a) In the event 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 Natural Resources Wales,
 - (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) in the event of a breach of any permit condition the operator must immediately—
- (i) inform Natural Resources Wales, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) in the event 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 Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales 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.
- 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) Natural Resources Wales 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 Natural Resources Wales 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, Natural Resources Wales 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 "without delay", 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 and waste types
S2.2 A1(b)(i)	Melting, including making alloys, of non ferrous metals, including recovered products and the operation of non-ferrous metal foundries where 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.	<p>The limits of specified and associated activities collectively comprise all activities carried out in the installation between the receipt of raw materials and the supply of finished products.</p> <p>Waste types as specified in Table S2.2.</p>
Directly Associated Activity		
R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)		<p>The limits of specified and associated activities collectively comprise all activities carried out in the installation between the receipt of raw materials and the supply of finished products.</p> <p>Storage for secondary sources of aluminium scrap materials restricted to areas shown on Site layout plan in Schedule 7.</p>
Sampling and analysis of aluminium alloys and aluminium scrap material.		Batch melting of aluminium alloys and aluminium scrap material in a 1.5 tonne rotary furnace to produce samples for analysis.

Table S1.2 Operating techniques

Description	Parts	Date Received
Application	The response to question B2.1, B2.2, B2.3, B2.4 B2.5, B2.7, B2.8, B2.9, B2.10, B2.11 and B2.12 in the application.	14/12/2001
Response to 1 st Schedule 4 notice	Response to questions 2 to 19 inclusive.	20/02/2002
Response to 2 nd Schedule 4 notice	Response to questions 22, 23 and 26 to 46 inclusively.	18/07/2002
Response to 3 rd Schedule 4 notice	Response to question 54.	31/10/2002
Response to 4 th Schedule 4 notice	Response to questions 22.	18/12/2002
Variation application EPR/EP3935UC/V002	Sections 3.3, 4.1, 4.2, 4.3 and 4.4 in supporting document SOL0113AL01 Volume 1.	09/08/2013
Further information received	Confirmation of emission monitoring standards.	30/11/2013
Variation application EPR/EP3935UC/V004	Sections 2.3, 2.4 in supporting document SOL1503RA01.	28/08/2015
Response to Schedule 5 notice	Confirmation of pollution control measures in place for additional aluminium scrap storage	18/12/2015
Response to Schedule 5 notice	Report 'SOL1503RA01 Schedule 5 response' on raw materials and waste storage and handling.	18/12/2015

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC1	The Operator shall submit a report to Natural Resources Wales detailing proposals for the location of and installation of new monitoring wells. The report shall set out proposed timescales for obtaining soil and groundwater reference data to set a baseline for the additional area of land used for the storage of used beverage containers.	31/01/14
IC2	The operator shall submit to Natural Resources Wales a risk assessment including baseline data obtained as a result of investigations carried out in line with IC1. The risk assessment shall include an explanation for the potential for fugitive releases to ground and surface waters from the activity of storing the baled aluminium feedstock.	Within the assessment timescales agreed as a result of improvement condition IC1.
IC3	The operator shall submit, for approval by Natural Resources Wales, a report setting out progress to achieving the BAT Conclusions and BAT-AEL's where BAT is currently not achieved, but will be achieved by the 30th June 2020. The report shall include, but not be limited to, the following: 1. Current performance against the BAT Conclusions and BAT-AEL. 2. Methodology for reaching the AELs. 3. Associated targets / timelines for reaching compliance by 30th June 2020. The report shall address all of the relevant BAT Conclusions	1 year following the date of issue of this permit

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels

Raw materials and fuel description	Specification
None specified	-

Table S2.2 Permitted waste types for secondary aluminium accepted onto site

Maximum quantity *The maximum quantity for waste to be accepted on site shall not exceed 65,000 tonnes per year.*

Waste code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 10	waste metal
10	WASTES FROM THERMAL PROCESSES
10 03	wastes from aluminium thermal metallurgy
10 03 04*	primary production slags
10 03 05	waste alumina
10 03 09*	black drosses from secondary production
10 03 15*	skimmings that are flammable or emit, upon contact with water, flammable gases in dangerous quantities
10 03 16	skimmings other than those mentioned in 10 03 15
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
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 04	metallic packaging
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
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
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 04	Metals (including their alloys)
17 04 02	aluminium
17 04 05	iron and steel

Table S2.2 Permitted waste types for secondary aluminium accepted onto site

Maximum quantity *The maximum quantity for waste to be accepted on site shall not exceed 65,000 tonnes per year.*

Waste code	Description
17 04 07	mixed metals
17 04 09*	metal waste contaminated with dangerous substances
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 10	wastes from shredding of metal-containing wastes
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 02	ferrous metal
19 12 03	non-ferrous metal
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 40	metals

Schedule 3a – Emissions and monitoring - Emissions until 29th June 2020

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 ¹
A4 as shown on emissions plan in Schedule 7	Release from furnace, post bag house filter	Particulate matter	5 mg/m ³	Rolling 3 hour average	Continuous	BS EN 13284-1 and MID
		Oxides of Nitrogen (as NO ₂)	60 mg/m ³	Average extractive sample	Bi-annually (minimum interval between extractive monitoring 5 months)	BS EN 14792 and MID
		Hydrogen Chloride	10 mg/m ³	Average extractive sample	Quarterly (minimum interval between extractive monitoring 2 months)	BS EN 1911
		Volatile Organic Compounds (as carbon)	50 mg/m ³	Average extractive sample	Quarterly (minimum interval between extractive monitoring 2 months)	BS EN 12619

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 ¹
		Sulphur Dioxide	50 mg/m ³	Average extractive sample	Quarterly (minimum interval between extractive monitoring 2 months)	BS EN 14791
		Flourides (as HF)	2 mg/m ³	Periodic over minimum 1 hr period	Bi-annually (minimum interval between extractive monitoring 5 months)	BS ISO 15713 and MID
		Dioxins (ITEQ)	0.1 ng/m ³	Periodic minimum 6 hours, maximum 8 hour period	Annually (minimum interval between extractive monitoring 11 months)	BS EN 1948 Parts 1, 2 and 3 and MID

Note¹ Measurements for the determination of concentrations of substances specified in this Permit shall be carried out representatively. Where the activity giving rise to the substances measured is operated on a batch basis, extractive sampling shall be carried out to include the period of peak emissions and exclude periods outside the batch cycle.

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
WA1 as shown on emissions plan in Schedule 7	Site surface water drains discharge point after interceptor	Total suspended solids	50 mg/l	Spot sample	Monthly	BS EN 872
		Total dissolved solids	1,200 mg/l	Spot sample	Monthly	SCA blue book 105 ISBN 011751957X
		Oil and grease	10 mg/l	Spot sample	Monthly	Visual
		Copper and its compounds, expressed as copper (Total Cu)	0.25 mg/l	Spot sample	6 monthly	BS EN ISO 15586
		Lead and its compounds expressed as lead (Total Pb)	0.1 mg/l	Spot sample	6 monthly	BS EN ISO 15586
		Tin and its compounds expressed as tin (Total Sn)	0.1 mg/l	Spot sample	6 monthly	BS EN ISO 15586
		Zinc and its compounds expressed as zinc (Total Zn)	0.5 mg/l	Spot sample	6 monthly	BS EN ISO 15586
		Aluminium and its compounds expressed as aluminium (Total Al)	1.5 mg/l	Spot sample	Monthly	BS EN ISO 15586

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
		Mercury and its compounds expressed as mercury (Total Hg)	0.075 mg/l	Spot sample	6 monthly	BS EN ISO 17852
		Arsenic and its compounds expressed as arsenic (Total As)	0.1 mg/l	Spot sample	6 monthly	BS EN ISO 17852
		Nickel and its compounds expressed as nickel (Total Ni)	0.5 mg/l	Spot sample	6 monthly	BS EN ISO 17852
		Ammoniacal nitrogen expressed as Nitrogen (Total N)	1.5 mg/l	Spot sample	Monthly	BS 6068-2.7 ISO 5664
		pH	6.0 - 9.0	Spot sample	Monthly	BS ISO 10523

Table S3.3 Annual limits

Substance	Medium	Limit (including unit)
Particulate matter	Air	4,500 kg in a year

Schedule 3b – Emissions and monitoring - Emissions from 30th June 2020

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 ¹
A4 as shown on emissions plan in Schedule 7.	Release from furnace, post bag house filter.	Particulate matter	5 mg/m ³	Rolling 3 hour average	Continuous	BS EN 13284-1 and MID
		Oxides of Nitrogen (as NO ₂)	60 mg/m ³	Average extractive sample	Bi-annually (minimum interval between extractive monitoring 5 months)	BS EN 14792 and MID
		Hydrogen Chloride	10 mg/m ³	Average extractive sample	Quarterly (minimum interval between extractive monitoring 2 months)	BS EN 1911
		Volatile Organic Compounds (as carbon)	30 mg/m ³	Average extractive sample	Quarterly (minimum interval between extractive monitoring 2 months)	BS EN 12619

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 ¹
		Sulphur Dioxide	50 mg/m ³	Average extractive sample	Quarterly (minimum interval between extractive monitoring 2 months)	BS EN 14791
		Flourides (as HF)	1 mg/m ³	Periodic over minimum 1 hr period	Bi-annually (minimum interval between extractive monitoring 5 months)	BS ISO 15713 and MID
		Dioxins (ITEQ)	0.1 ng/m ³	Periodic minimum 6 hours, maximum 8 hour period	Annually (minimum interval between extractive monitoring 11 months)	BS EN 1948 Parts 1, 2 and 3 and MID

Note¹ Measurements for the determination of concentrations of substances specified in this Permit shall be carried out representatively. Where the activity giving rise to the substances measured is operated on a batch basis, extractive sampling shall be carried out to include the period of peak emissions and exclude periods outside the batch cycle.

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
WA1 as shown on emissions plan in Schedule 7	Site surface water drains discharge point after interceptor	Total suspended solids	50 mg/l	Spot sample	Monthly	BS EN 872
		Total dissolved solids	1,200 mg/l	Spot sample	Monthly	SCA blue book 105 ISBN 011751957X
		Oil and grease	10 mg/l	Spot sample	Monthly	Visual
		Copper and its compounds, expressed as copper (Total Cu)	0.25 mg/l	Spot sample	6 monthly	BS EN ISO 15586
		Lead and its compounds expressed as lead (Total Pb)	0.1 mg/l	Spot sample	6 monthly	BS EN ISO 15586
		Tin and its compounds expressed as tin (Total Sn)	0.1 mg/l	Spot sample	6 monthly	BS EN ISO 15586
		Zinc and its compounds expressed as zinc (Total Zn)	0.5 mg/l	Spot sample	6 monthly	BS EN ISO 15586
		Aluminium and its compounds expressed as aluminium (Total Al)	1.5 mg/l	Spot sample	Monthly	BS EN ISO 15586

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
		Mercury and its compounds expressed as mercury (Total Hg)	0.075 mg/l	Spot sample	6 monthly	BS EN ISO 17852
		Arsenic and its compounds expressed as arsenic (Total As)	0.1 mg/l	Spot sample	6 monthly	BS EN ISO 17852
		Nickel and its compounds expressed as nickel (Total Ni)	0.5 mg/l	Spot sample	6 monthly	BS EN ISO 17852
		Ammoniacal nitrogen expressed as Nitrogen (Total N)	1.5 mg/l	Spot sample	Monthly	BS 6068-2.7 ISO 5664
		pH	6.0 - 9.0	Spot sample	Monthly	BS ISO 10523

Table S3.3 Annual limits

Substance	Medium	Limit (including unit)
Particulate matter	Air	4,500 kg in a year

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 4.2.3	A4	Quarterly	05/09/2003
Emissions to water Parameters as required by condition 4.2.3	WA1	Monthly	05/09/2003

Table S4.2: Annual production/treatment

Parameter	Units
Aluminium recovered	tonnes

Table S4.3 Reporting forms

Media/parameter	Reporting format	Date of form
Air	Form A1 or other form as agreed in writing by Natural Resources Wales	11/12/2013
Water	Form W1 or other form as agreed in writing by Natural Resources Wales	27/07/2007
Waste subject to Condition 4.2.5	Waste returns spreadsheet from the Natural Resources Wales website or other form as agreed in writing by Natural Resources Wales	N/A

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 activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment	
To be notified Immediately	
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 permit condition	
To be notified immediately	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
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) In the event 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:

To be notified immediately	
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 Natural Resources Wales 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.

“emissions to land” includes emissions to groundwater.

“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.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“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.

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

“year” means calendar year ending 31 December.

“background concentration” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“hazardous property” has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

“Industrial Emissions Directive” means Directive 2010/75/EU Of The European Parliament and of the Council of 24 November 2010 on industrial emissions

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

“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 (Wales) Regulations 2005 and in relation to hazardous waste, includes the asterisk.

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:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

“dioxin and furans” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum.

TEF schemes for dioxins and furans				
Congener	I-TEF(1990)	WHO-TEF (1997/8)		
		Humans / Mammals	Fish	Birds
Dioxins				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0001	-	-
Furans				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.05	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.5	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0001	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF (1997/8)		
	Humans mammals	Fish	Birds
Non-ortho PCBs			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0001	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.01	0.00005	0.001
Mono-ortho PCBs			

2,3,3',4,4'-PeCB (105)	0.0001	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.0005	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.0001	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.0001	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.0005	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.0005	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00001	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.0001	<0.000005	0.00001

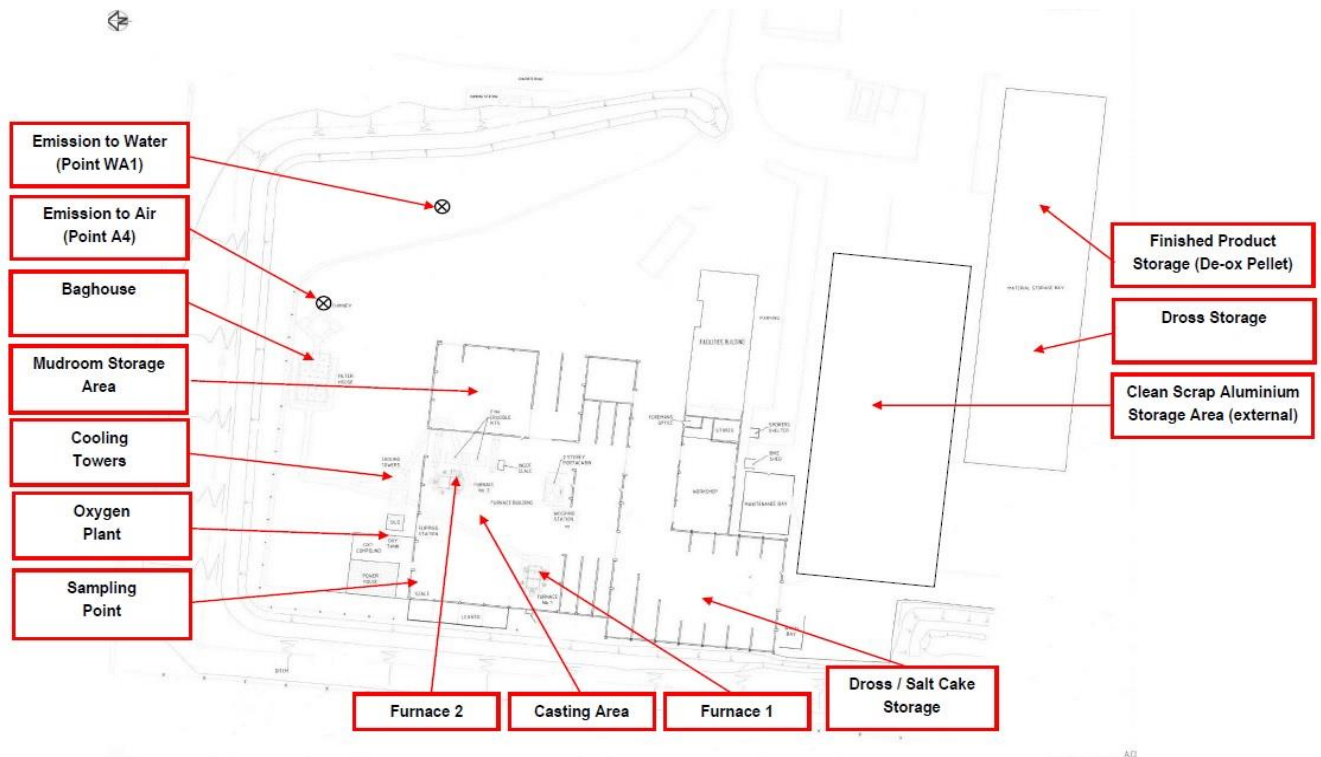
Schedule 7 - Site plan

Installation boundary plan



© Crown Copyright and database right 2017. Ordnance Survey licence number 10001974.

Site layout plan



1. Do not scale off this drawing
2. All dimensions to be confirmed on site
3. This drawing is copyright of Sol Environment Ltd
4. This drawing is to be read in conjunction with relevant consultant drawings and specifications

Rev: 0
Date: DEC 15
Desc: Original

Client: REAL ALLOY (UK) LTD
Project: WESTBURY INDUSTRIAL ESTATE
Drawing Title: SITE PLAN

Job No: SOL1512RA01
Date: DEC 15
Drawn By: SOPHIE PERRIN

Drawing No: RA01
Revision: 0
Scale: NTS

Sol Environment Ltd
2nd Floor,
10 The Lees, Malvern,
Worcestershire WR14 9HT
t: +44(0)1684 572727
e: enquiries@sol-environment.co.uk
www.sol-environment.co.uk

END OF PERMIT

Permit Number EPR/EP3935UC