Permit with introductory note

Pollution Prevention and Control Regulations 2000

Aleris Recycling (Swansea) Ltd
Waunarlwydd Works
Waunarlwydd
Swansea
SA5 4SF

Permit number:

EP3935UC

Contents

Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I.2000 No.1973) ("the PPC Regulations") to operate an installation carrying out one or more of the activities listed in Part 1 to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The Permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Brief description of the installation regulated by this permit

The main features of the installation are as follows. The main purpose of the activity at the Aleris part of the installation is to recover aluminium from dross and other scrap aluminium. The process involves the processing of non-ferrous metals from secondary raw materials by metallurgical means and is therefore described in Schedule 1, Part A(1), section 2.2, paragraph (a) of the PPC Regulations. The installation is located on an industrial estate on the Western edge of Swansea, referred to as Waunarlwydd Works.

The Aleris site is within 2km of the Burry Inlet that is categorised as a Site of Special Scientific Interest (SSSI). In addition the activities at the Aleris site are within 10km of the Gower Common and Gower Ashwoods SSSI's. Also within 10km are the designated European sites of Crymlyn bog, Limestone cliffs of South West Wales, Carmarthen dunes, Carmarthen bay and estuaries.

The Aleris operation is designed to recover aluminium metal from aluminium dross, a mixture of aluminium powder and various salts. The aluminium dross is melted in the presence of a salt flux and the molten aluminium drained away in to moulds. The remaining salt flux and other 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 main raw materials are aluminium dross, sodium and potassium chloride, and lime, carbon and/or sodium bicarbonate (used for abatement of acid gases). Process emissions include the release of exhaust gases via a baghouse filter unit.

Energy for the installation is obtained from the National Grid. The furnaces are powered by natural gas.

Aleris Recycling (Swansea) Ltd previously formed 'part of an installation' combined with the adjacent Aluminium smelter operated by Alcoa Flat Roll Products Ltd. This Alcoa facility ceased operations during 2007 and no longer provides materials to Aleris. Aleris Recycling (Swansea) Ltd now imports materials from facilities across Europe and therefore is no longer classed as 'part of an installation'. This is reflected in an amendment to the certificate page of this permit.

On transfer of the permit from IMCO Recycling (UK) Limited to Aleris Recycling (Swansea) Ltd this permit was consolidated to include all previous variations. The operator has already completed the majority of improvement items listed within the site improvement programme. These items remain within the permit as the documents submitted in accordance with the improvement programme continue to form part of the site's operating techniques.

Superseded Licenses/Consents/Authorisations relating to this installation		
Holder	Reference Number	Effective date
IMCO Recycling (UK) Limited	AX6168	17 Jun 1997
IMCO Recycling (UK) Limited	AZ6037	7 Dec 1997
IMCO Recycling (UK) Limited	BE1011	30 Nov 1998
IMCO Recycling (UK) Limited	BH8888	12 May 2000
IMCO Recycling (UK) Limited	BK9601	28 Jun 2001
IMCO Recycling (UK) Limited	BQ4467	28 May 2002

Talking to us

If you contact the Agency about this Permit please quote the Permit Number.

The Operator should use the Emergency Hotline telephone number (0800 80 70 60) or any other number notified to it to give a notification under condition 5.1.1.

Confidentiality

The Permit requires the Operator to provide information to the Agency. The Agency will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the Operator considers that any information provided is commercially confidential, it may apply to the Agency to have such information withheld from the register as provided in the PPC Regulations. To enable the Agency to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Variations to the permit

This Permit may be varied in the future. The Status Log within the Introductory Note to any such variation will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the permit

Before this Permit can be wholly or partially surrendered, an application to surrender the Permit has to be made. For the applicant to be successful, they would have to be able to demonstrate to the Agency, in accordance with Regulation 19 of the PPC Regulations, that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 18 of the PPC Regulations. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit. If the Permit authorises the carrying out of a specified waste management activity, then there is a further requirement that the transferee is considered to be a “fit and proper person” to carry out that activity.

Status Log

Detail	Date	Comment
Application BM1385	Received 14/12/01	
Response to request for information	1st Schedule 4 notice, Dated 08/12/02	Response received 20/02/02
	2nd Schedule 4 notice, Dated 25/04/02	Response received 18/07/02
	3rd Schedule 4 notice, Dated 10/10/02	Response received 31/10/02
	4th Schedule 4 notice, Dated 04/11/02	Response received 18/12/02 and 25/04/03
	5th Schedule 4 notice, Dated 03/06/03	Response received 23/06/03
Request by Agency to extend determination date from 27/08/02 to 27/11/02	Request dated 19/07/02	Request accepted 24/07/02
Request by Agency to extend determination date from 27/11/02 to 27/02/03	Request dated 28/10/02	Request accepted 30/10/02
Permit BM1385	Granted 05/09/03	- - -
Variation notice BX1411	Served 19/01/04	Reduction in emission limits and addition of Improvement condition 9.14.
Variation notice WP3339SP	Effective 18/01/05	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 break to furnace. Setting of limits for ammoniacal nitrogen to water and sulphur dioxide to air.
Variation Notice GP4232MN	Effective Date 29/6/07	Amendment of SO_2 limit 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.
Transfer EP3935UC	Received 01 March 2007 Effective Date 26 July 2007	Whole transfer from IMCO Recycling (UK) Ltd to Aleris Recycling (Swansea) Ltd. Consolidation of permit conditions.

End of introductory note.

ENVIRONMENT AGENCY

Permit

Permit number
EP3935UC

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973), hereby authorises
Aleris Recycling (Swansea) Ltd ("the Operator"),

whose Registered Office is

PO Box 38

Waunarlwydd Works

Waunarlwydd
Swansea
SA5 4YG

Company registration number **03221771**

to operate an installation at
Waunarlwydd Works
Waunarlwydd
Swansea
SA5 4SF

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

Signed

Barbara Tate

Barbara Tate

Authorised to sign on behalf of the Environment Agency

Date

27 July 2007

Conditions

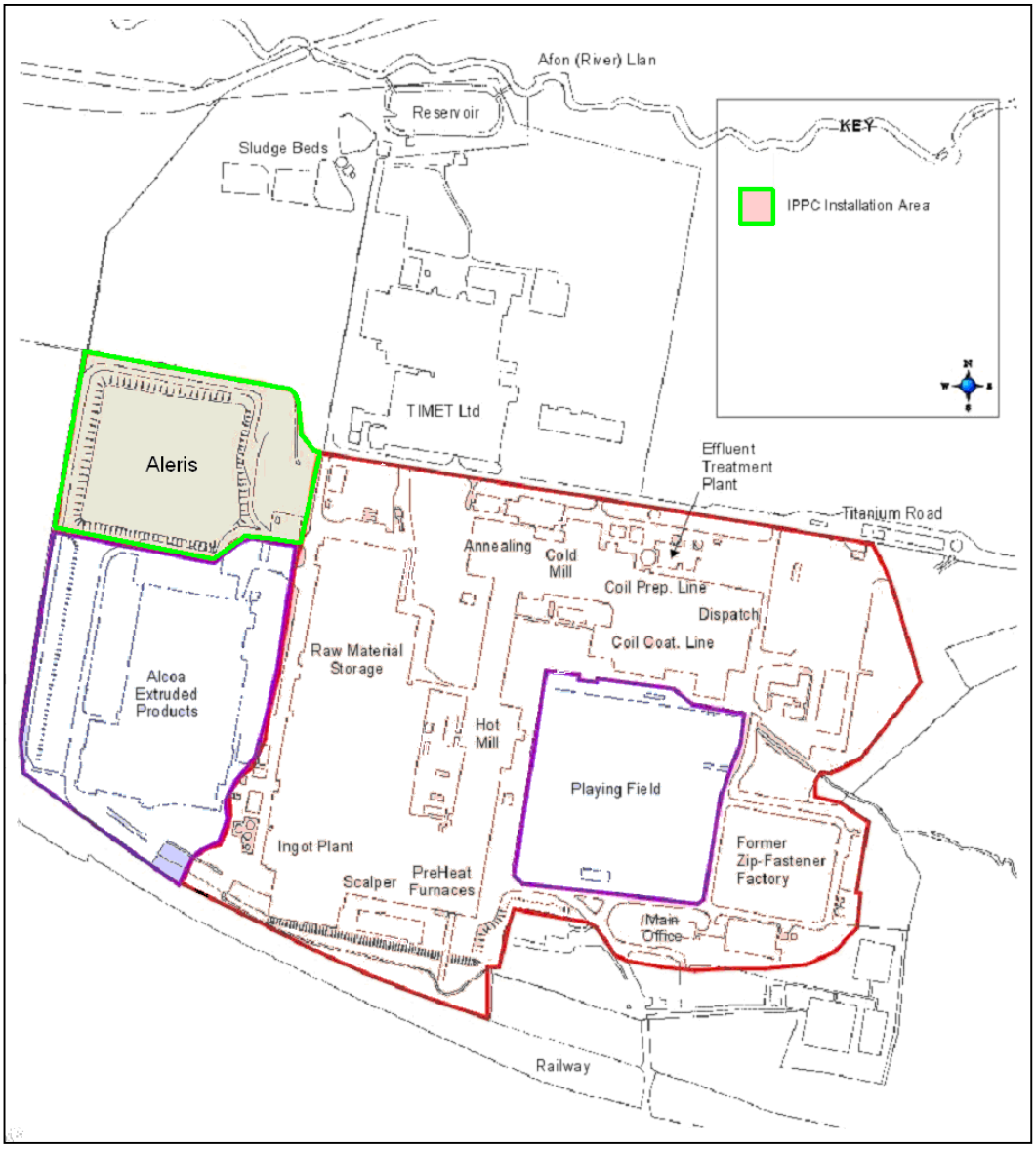
1 The permitted installation

1.1.1 The Operator is authorised to carry out the activities and/or the associated activities specified in Table 1.1.1.

Table 1.1.1

Activity under Schedule 1 of the Regulations/ Associated Activity	Description of specified activity	Schedule 1 Activity Ref. (if applicable)	Limits of specified activity
A manufacturing process involving the metallurgical recovery of non-ferrous from secondary raw materials.	Recovery of aluminium	2.2A(1)(a)	Melting of aluminium waste within 2 furnaces, removal of molten aluminium and transfer of remaining waste for recycling.
Storage and handling of raw materials	Storage, sorting, baling and pre-treatment of scrap aluminium	Directly associated activity	Receipt of raw materials to transfer to furnaces
Storage and handling of solid wastes	Storage and handling of dross, slag, and bag filter dust	Directly associated activity	From separation of wastes to despatch from installation
Filtration of solid wastes	Filtration of treated furnace fumes and removal of saltcake extraction fumes	Directly associated activity	Removal of solid waste from extraction system before emission to air

1.1.2 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in green on the plan below.



1.1.3 There are no pre-operation conditions.

2 Operational Matters

2.1 Management techniques and control

2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the documentation specified in Table 1.1, or as otherwise agreed in writing by the Agency.

Table 2.1.1 : Management and control

Description	Parts	Date Received
Application	The response to question B2.1 given in Section 2.1 of the Application.	14/12/01
Response to 1st Schedule 4 notice	Response to questions 2 to 5 inclusive.	20/02/02

2.1.2 All plant, equipment and technical means used in operating the Permitted Installation shall be maintained in good operating condition.

2.1.3 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.

2.1.4 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

2.1.5 All staff shall be fully conversant with those aspects of the Permit conditions, which are relevant to their duties and shall be provided with appropriate training and written operating instructions to enable them to carry out their duties.

2.2 Raw materials (including water)

2.2.1 The Operator shall, subject to the conditions of this Permit, use raw materials (including water) as described in the documentation specified in Table 2.2.1, or as otherwise agreed in writing by the Agency.

Table 2.2.1 : Raw materials (including water)

Description	Parts	Date Received
Application	The response to question B2.2 given in Section 2.2. of the application.	14/12/01
Response to 1st Schedule 4 notice	Response to questions 6 to 11 inclusive.	20/02/02
Response to 2nd Schedule 4 notice	Response to questions 26 to 28 inclusive.	18/07/02

2.2.2 The Operator shall store all incoming aluminium dross under cover to prevent ingress of rainwater.

2.3 Operating Techniques

2.3.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.3.1, or as otherwise agreed in writing by the Agency.

Table 2.3.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions B2.3 given in Section 2.3 of the application.	14/12/01
Response to 1st Schedule 4 notice	Response to questions 12 to 19 inclusive.	20/02/02
Response to 2nd Schedule 4 notice	Response to questions 22 and 23.	18/07/02
Response to 3rd Schedule 4 notice	Response to question 47.	31/10/02

2.4 Groundwater protection

2.4.1 The Permitted Installation shall, subject to the conditions of this Permit, be controlled as described in the documentation specified in Table 2.4.1, or as otherwise agreed in writing by the Agency.

Table 2.4.1: Groundwater protection

Description	Parts	Date Received
Application	The response to question 2.4 given in Section 2.4 of the application.	14/12/01
Response to 2nd Schedule 4 notice	Response to question 29.	18/07/02

2.4.2 The Operator shall minimise the amount of saltcake spilt on to the floor to prevent ingress of this material in to surface water and from there in to the groundwater drainage system.

2.5 Waste handling and storage

2.5.1 The Operator shall, subject to the conditions of this Permit, handle and store waste as described in the documentation specified in Table 2.5.1, or as otherwise agreed in writing by the Agency.

Table 2.5.1: Waste handling and storage

Description	Parts	Date Received
Application.	The response to question 2.5 given in Section 2.5 of the application.	14/12/01
Response to 2nd Schedule 4 notice.	Response to questions 30 to 42 inclusive.	18/07/02
Response to 3rd Schedule 4 notice.	Response to questions 48 to 51 inclusive.	31/10/02
Response to 4th Schedule 4 notice.	Response to questions 54.	18/12/02

2.5.2 Waste materials specified in Table 2.5.2 shall only be stored on the site in the location and manner specified in that Table.

Table 2.5.2 Waste Location	
Description of Waste	**Manner of Storage**
Salt slag	Covered storage
Main Baghouse filter dust	Sealed bags in skip/flat bed trailer/sealed containers
Mudroom Baghouse filter dust	Sealed bags in skip/flat bed trailer/sealed containers
Refractory waste	Designated skip
Interceptor residue	Tanker
Oily waste	Bunded tanks
Main Baghouse filters	Sealed bags
Mudroom Baghouse filters	Sealed bags
General non-hazardous waste	Designated skip for metals. General waste skip for cardboard, office paper. Designated waste skip for wood.
Canteen waste	General waste skip.

2.6 Waste recovery and disposal

2.6.1 The Operator shall, subject to the conditions of this Permit, recover and dispose of waste as described in the documentation specified in Table 2.6.1, or as otherwise agreed in writing by the Agency.

Table 2.6.1: Waste recovery and disposal		
Description	**Parts**	**Date Received**
Application	The response to question 2.6 given in Section 2.6 of the application – with the exception of baghouse filter dust (see condition 2.6.3 and 2.6.4)	14/12/01

2.6.2 The Operator shall store waste saltcake, including waste from the extraction baghouse filters linked to the mudroom under cover at all times.

2.6.3 The Operator shall not send baghouse filter dust from the Mudroom baghouse for disposal at landfill.

2.6.4 The Operator shall not send baghouse filter dust from the Main baghouse for disposal at landfill after 31 October 2003 if that dust releases highly flammable gases at a rate greater than 1ltr/kg/hr.

2.7 Energy Efficiency

2.7.1 The Operator shall, subject to the conditions of this Permit, use energy as described in the documentation specified in Table 2.7.1, or as otherwise agreed in writing by the Agency.

Table 2.7 1: Energy efficiency		
Description	**Parts**	**Date Received**
Application	The response to question 2.7 given in Section 2.7 of the application.	14/12/01

2.7.2 The Operator shall produce a report annually on the energy consumption of the installation. This report shall be sent to the Agency at the Reporting Address by end of February each year, and shall be incorporated in any programme brought about by requirement 9.10 in Table 9.1.1.

2.7.3 The Operator shall have an energy efficiency plan, which shall be updated each year.

2.8 Accident prevention and control

2.8.1 The Operator shall, subject to the conditions of this Permit, prevent and limit the consequences of accidents as described in the documentation specified in Table 2.8.1, or as otherwise agreed in writing by the Agency.

Table 2.8.1 : Accident prevention and control		
Description	**Parts**	**Date Received**
Application	The response to question 2.8 given in Section 2.8. of the application.	14/12/01

2.9 Noise and vibration

2.9.1 The Operator shall, subject to the conditions of this Permit, control noise and vibration as described in the documentation specified in Table 2.9.1, or as otherwise agreed in writing by the Agency.

Table 2.9.1 : Noise and vibration		
Description	**Parts**	**Date Received**
Application	The response to question 2.9 given in Section 2.9 of the application.	14/12/01

2.9.2 The Operator shall keep to a minimum the number of vehicle movements within the Aleris site and between that site and the neighbouring Alcoa Flat Roll products site between the hours of 23:00hrs and 06:00hrs.

2.10 Monitoring

2.10.1 The Operator shall, subject to the conditions of this Permit, carry out, evaluate and assess monitoring as described in the documentation specified in Table 2.10.1, or as otherwise agreed in writing by the Agency.

Table 2.10.1 : Monitoring		
Description	**Parts**	**Date Received**
Application	The response to question 2.10 given in Section 2.10 of the application.	14/12/01
Response to 2nd Schedule 4 notice	Response to questions 43 to 46 inclusive.	18/07/02

2.10.2 Where requested in writing by the Agency, the Operator shall provide at least 14 days advance notice of undertaking monitoring/spot sampling.

2.10.3 There shall be provided:

a safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2, unless otherwise specified in that Schedule; and

b safe means of access to other sampling/monitoring points when required by the Agency.

2.10.4 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.

2.10.5 Methods for extractive sampling and automated, continuous, measurement systems, including calibration, shall be carried out as specified by the appropriate CEN-standards. If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality, as agreed in writing with the Agency, shall apply. The reference measurements used shall be agreed in writing with the Agency. The results of any calibration assessment shall be submitted to the Agency, in writing, within one month of the completion of the monitoring.

2.11 Decommissioning

2.11.1 The Operator shall, subject to the conditions of this Permit, make provision for decommissioning the installation as described in the documentation specified in Table 2.11.1, or as otherwise agreed in writing by the Agency.

Table 2.11.1 : Decommissioning		
Description	**Parts**	**Date Received**
Application	The response to question 2.11 given in Section 2.11 of the Application.	14/12/01

2.12 Multi-operator installations

2.12.1 The Operator shall, subject to the conditions of this Permit, use the techniques and measures described in the documentation specified in Table 2.12.1, or as otherwise agreed in writing by the Agency.

Table 2.12.1: Multi-operator Installations		
Description	**Parts**	**Date Received**
Application	The response to questions 2.12 given in Section 2.12 of the application.	14/12/01

3 Records

3.1.1 A record (a "Specified Record") shall be made of:-

a any malfunction, breakdown or failure of plant, equipment or techniques (including down time and any short term and long term remedial measures) that may have, has had or might have had an effect on the environmental performance of the Permitted Installation. These records shall be kept in a log maintained for that purpose;

b all monitoring and sampling taken or carried out in accordance with the conditions of this permit and any assessment or evaluation made on the basis of such data.

3.1.2 There shall be made available for inspection by the Agency at any reasonable time:

a Specified Records;

b any other records made by the Operator in relation to the operation of the Permitted Installation ("Other Records").

3.1.3 A copy of any Specified or Other Records shall be supplied to the Agency on demand and without charge.

3.1.4 Specified Records and Other Records shall:-

a be legible;

b be made available as soon as reasonably practicable; and

c indicate any amendments which have been made and shall include the original record wherever possible.

3.1.5 Specified Records and Other Records shall be retained for a minimum period of 4 years from the date when the records were made at the Operator's site.

3.1.6 For all waste received or produced at the Permitted Installation, the Operator shall record (and shall retain such records for a minimum of 4 years)

a its origin;
b its composition, or as appropriate, description;
c the best estimate of the quantity produced;
d its disposal/recovery routes;
e the best estimate of the quantity sent for disposal/recovery.

3.1.7 A record shall be made at the Permitted Installation of any complaints concerning the Installation's effect or alleged effect on the environment. The record shall give the date of complaint, time of complaint, a summary of any investigation and the results of such investigation. Such records shall be made in a log kept for this purpose.

4 Reporting

4.1.1 All reports and notifications required by this Permit, or by Regulation 16 of the PPC Regulations, shall be sent to the Environment Agency at the address notified in writing to the Operator by the Agency.

4.1.2 The Operator shall report the parameters listed in Table S2 to Schedule 2 as follows:

a in respects of the emission points specified;

b for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;

c giving the information from such results and assessments as may be required by the forms specified in those Tables;

d and sending the report to the Agency within 28 days of the end of the reporting period.

4.1.3 The Operator shall, within 24 months of the issue of the Permit (BM1385), submit a report on potential environmental improvements to the Permitted Installation. For each of the subject areas identified in Section 2 of the appropriate technical guidance, the report shall assess the costs and benefits of alternative techniques that may provide environmental improvement. This shall include, but not be limited to, those techniques listed in guidance. The methodologies used should be based on those given in Agency guidance note IPPC H1 (Environmental Assessment and Appraisal of BAT) and should justify, against the Best Available Techniques criteria, where potential improvements are not planned to be implemented. As part of their management system the Operator shall submit an updated report every 36 months.

4.1.4 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.

4.1.5 Fugitive emissions shall be reviewed on an annual basis and a summary report on this review shall be sent to the Agency at the reporting address by 31 March detailing such releases and the measures taken to reduce them.

5 Notifications

5.1.1 The Operator shall notify the Agency **without delay** of:-

a the detection of an emission of any substance which exceeds any limit or criteria in this Permit specified in relation to the substance;

b the detection of any fugitive emission which has caused or may cause pollution unless the quantity emitted is so trivial that it would be incapable of causing pollution;

c the detection of any malfunction, breakdown or failure of plant or techniques which has caused or may have the potential to cause pollution; and

d any accident which has caused or may have the potential to cause pollution.

5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1 of this Permit by sending:-

a the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and

b the more detailed information listed in Part B of that Schedule as soon as practicable thereafter;
and such information shall be in accordance with that Schedule.

5.1.3 The Operator shall give written notification as soon as practicable, of any of the following:

a permanent cessation of the operation of any part of or all of the Permitted Installation;

b cessation of the operation of any part of or all of the Permitted Installation for a period, likely to exceed 1 year; and

c resumption of the operation of any part of or all of the Permitted Installation after a cessation notified under 5.1.3(b).

5.1.4 The Operator shall notify the following matters to the Agency, in writing, within 14 days of their occurrence:

a any change in the Operator's trading name, registered name or registered office address;

b a change to any particulars of the Operator's ultimate holding company (including details of an ultimate holding company where the Operator has become a subsidiary);

c any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up.

5.1.5 Where the Operator has entered into a Climate Change Levy Agreement with the Government, the Operator shall, within 14 days, notify the Agency, in writing and enclosing a copy of their Energy Optimisation plan, in the event that the Secretary of State has not re-certified that Agreement.

5.1.6 Where the Operator has entered into the Emissions Trading Scheme by taking on a voluntary target with a financial incentive, the Operator shall, within 14 days, notify the Agency, in writing, of either:

a a decision by the Operator to withdraw from the Scheme; or

b failure to comply with the Emissions Trading Scheme at the end of the 5 year period covered by the Scheme.

6 Emissions

6.1 Emissions into air

6.1.1 Emissions to air from the emission point(s) specified in Table 6.1.1 shall only arise from the source(s) specified in that Table.

Table 6.1.1: Emission points into air

Emission point reference/description	Source	Location of emission point
A3	General extraction serving mudroom area. Extraction via baghouse filter. 15.25 metre stack.	Point X on site plan
A4	Extraction system from top of furnaces via lime / activated carbon mixture or sodium bi-carbonate treatment and baghouse filter. 23 metre stack.	Point WA1 on site plan

6.1.2 The limits for emissions into air for the parameter(s) and emission point(s) set out in Table 6.1.3 shall not be exceeded.

6.1.3 The Operator shall carry out monitoring of the parameters listed in Table 6.1.3, from the emission points and at least at the frequencies specified in that Table.

Table 6.1.3: Emission to air		
Parameters	**A3**	**A4**
Particulate mg m^{-3}		
Rolling 3-hour average	5	5
Frequency of monitoring (C = continuous)	C + annual	C+ annual
Oxides of nitrogen (as NO_2) mg m^{-3}		
Average of extractive sample	-	60
Frequency of monitoring	-	Bi-annually
Minimum interval between extractive monitoring	-	5 months
Hydrogen chloride mg m^{-3}		
Average of extractive sample	-	10
Frequency of monitoring	-	Quarterly
Minimum interval between extractive monitoring	-	2 months
Volatile Organic Compounds (as carbon) mg m^{-3}		
Average of extractive sample	-	10
Frequency of monitoring	-	Quarterly
Minimum interval between extractive monitoring	-	2 months
Sulphur dioxide mg m^{-3}		
Average of extractive sample	-	35
Frequency of monitoring	-	Quarterly
Minimum interval between extractive monitoring	-	2 months
Fluorides (as HF) mg m^{-3}	-	2
Frequency of monitoring	-	Bi-annually
Minimum interval between monitoring	-	5 months
Dioxins (ITEQ) ng m^{-3}	-	0.1
Frequency of monitoring	-	Annually
Minimum interval between monitoring	-	11 months

Notes:

- For emission points A3 and A4 the limits in Table 6.1.3 are expressed at 273K and at a pressure of 101.3kPa.
- For particulate emissions also refer to Improvement Condition 9.9 and table 6.1.4 below.

6.1.4 Where an annual mass limit for a substance is stated in Table 6.1.4, the aggregate emission of such substance from the Permitted Installation into air from the emission point(s) specified in Table 6.1.1 shall not exceed that limit in any year.

Table 6.1.4 Annual mass limits	
Substance	**Limit – kg**
Particulate	4500

6.2 Emissions to land

6.2.1 There shall be no emission to land from the Permitted Installation.

6.2.2 The Operator shall notify the Agency, as soon as practicable, of any information concerning the state of the Site which affects or updates that provided to the Agency as part of the Site Report submitted with the application for this Permit.

6.3 Emissions to water [other than emissions to sewer]

6.3.1 Emissions to water from the emission point(s) specified in Table 6.3.1 shall only arise from the source(s) specified in that Table.

Table 6.3.1: Emission points into water

Emission Point Reference.	Source	Receiving Water
WA1	Site surface drains discharge point after interceptor.	Gors Fawr Brook (tributary of River Llan)

6.3.2 Limits for the emissions to water for the parameter(s) and emission point(s) set out in Table 6.3.3 shall not be exceeded.

6.3.3 The Operator shall carry out monitoring of the parameters listed in Table 6.3.3, at least at the frequencies specified in that Table.

Table 6.3.3. Emissions to water.

Parameter	Emission Point WA1	Monitoring Frequency
Total suspended solids (mg l^{-1}) Spot sample	50	Monthly
Total dissolved solids (mg l^{-1}) Spot sample	1200	Monthly
Oil & grease (mg l^{-1}) Spot sample	10	Monthly
Copper and its compounds as Cu (mg l^{-1}) Spot sample	0.25	6 Monthly
Lead and its compounds as Pb (mg l^{-1}) Spot sample	0.1	6 Monthly
Tin and its compounds as Sn (mg l^{-1}) Spot sample	0.1	6 Monthly
Zinc and its compounds as Zn (mg l^{-1}) Spot sample	0.5	6 Monthly
Aluminium and its compounds as Al (mg l^{-1}) Spot sample	1.5	Monthly
Mercury and its compounds as Hg (mg l^{-1}) Spot sample	0.075	6 Monthly
Arsenic and its compounds as As (mg l^{-1}) Spot sample	0.1	6 Monthly
Nickel and its compounds as Ni (mg l^{-1}) Spot sample	0.5	6 Monthly
Ammoniacal nitrogen as N (mg l^{-1})	1.5	Monthly
pH maximum	9	Monthly
pH minimum	6	Monthly

6.3.4 There shall be no emission into water from the Permitted Installation of any substance prescribed for water for which no limit is specified in Table 6.3.3 except in a concentration that is no greater than the background concentration.

6.4 Emissions to sewer

6.4.1 No emission shall be made into any sewer from the Permitted Installation.

6.5 Emissions of heat

6.5.1 No specific conditions in relation to heat are considered necessary.

6.6 Emissions of noise and vibration

6.6.1 The Operator shall implement any improvements identified via the Noise Minimisation Plan detailed in Improvement condition 9.6. in line with the timeline set out within that Improvement Condition.

7 Transfer to effluent treatment plant

7.1.1. No transfer shall be made from the Permitted Installation to Effluent treatment plant.

8 Off site conditions

8.1.1 There are no off-site conditions.

9 Improvement programme

9.1.1 The Operator shall complete the requirements specified in Table 9.1.1 by the date specified in that Table, and shall send written notification of the date of completion of each requirement to the Agency, at the Reporting Address, within 14 days of the completion of each such requirement.

Table 9.1.1: Improvement programme requirements

Ref.	Requirement	Date
9.1	The Operator shall submit a report to the Agency at the Reporting Address on the potential concentration and mass release of dioxins and furans into air, water and land from the Permitted Installation. The report shall contain a comparison of such releases with relevant technical guidance and a timetable for reducing emissions of dioxins and furans, if the techniques for reduction represent BAT.	30 November 2003
9.2	The Operator shall submit a report to the Agency at the Reporting Address, which identifies and quantifies all sources of fugitive emissions from the installation. The report shall describe the environmental impact of fugitive releases and their significance and shall contain a timetable for reducing by 28 February 2005 fugitive emissions if the techniques for reduction represent BAT.	31 October 2003 installation by 28 February 2005
9.3	The Operator shall submit a report to the Agency at the Reporting Address detailing planned improvements to be made to the storage of oily materials in order to avoid migration of oil in to surface water. The improvements detailed shall be installed on site within 3 months of issuing the report.	27 February 2004 installation by 31 May 2004
9.4	The Operator shall submit a report to the Agency at the Reporting Address reviewing the handling and storage of metallurgical wastes and the prevention or minimisation of emissions from the Permitted Installation. If the report identifies improvements that represent BAT, it shall contain a timetable for implementing by 31 May 2005 those improvements. Specific reference should be made to preventing contamination of surface water by wastes stored on site.	30 January 2004 installation by 31 May 2005

Table 9.1.1: Improvement programme requirements (Contd.)		
Ref.	**Requirement**	**Date**
9.5	The Operator shall submit a report to the Agency at the Reporting Address detailing actions taken to minimise the potential for contamination of run off water from the Permitted Installation. The review shall specifically focus upon contamination from List I and II Dangerous Substances particularly oil, heavy metals (Cr, Zn), fluoride, suspended solids and aluminium.	30 January 2004
9.6	The Operator shall review the recommendations of section 2.9 of the Non Ferrous Metals Technical Guidance Note (IPPC S 2.03) and the data supplied in section 2.9 of the Operator's IPPC application to derive and implement an installation wide Noise Minimisation Plan. A copy of the review shall be forwarded to the Agency at the Reporting Address. The review shall include a quantitative and qualitative assessment of all significant noise sources. The review shall also make specific reference to the control of noise by consideration of procedures to minimise door openings; minimal length of use for essential audible alarms; use of tannoy system only for emergency communications during the hours of 23:00 and 06:00; minimising lorry movements during the hours 23:00 to 06:00, routing of vehicles with reversing alarms to minimise requirement for alarm use; detailed assessment of the noise levels emitted from the vent fans of the Western façade of the furnace building and detailed assessment of the noise levels emitted from the stack fans.	30 November 2003
9.7	The Operator shall submit a report to the Agency at the Reporting Address detailing the amount of heat energy lost from the furnaces in to the general surroundings and through the extraction systems.	31 October 2003
9.8	The Operator shall submit a report to the Agency at the Reporting Address reviewing the emission of particulate and how such emissions can be reduced to below 5mg/m^3 as an hourly average in line with BAT. The report shall contain a timetable for implementing such improvements by 1 April 2004.	19 December 2003 implementation by 1 April 2004

Table 9.1.1: Improvement programme requirements (contd.)

Ref.	Requirement	Date
9.9	The Operator shall review the recommendations of sections 2.5 and 2.6 of the IPPC General Sector Guidance Note S0.01 and the data supplied in sections 2.5 and 2.6 of the Operator's IPPC application to derive and implement an installation wide Waste Optimisation Plan. A copy of the review shall be forwarded to the Agency at the Reporting Address.	31 March 2004
9.10	The Operator shall review the recommendations of section 2.7 of the IPPC General Sector Guidance Note S0.01 and the data supplied in section 2.7 of the Operator's IPPC application to derive and implement an installation wide Energy Optimisation Plan. A copy of the review shall be forwarded to the Agency at the Reporting Address.	31 March 2004
9.11	The Operator shall review the recommendations of section 2.11 of the IPPC Technical Guidance for Non-ferrous metals and the Production of Carbon and Graphite, Note S2.03 to derive a decommissioning plan for the site. A copy of the plan shall be forwarded to the Agency at the Reporting Address.	17 December 2004
9.12	The Operator shall submit a report to the Agency at the Reporting Address reviewing the emission of HCl and how such emissions can be reduced to 10mg/m^3 based on a spot sample in line with stated Benchmark limits for non-ferrous metal industry. The report shall contain a timetable for implementing such improvements by 1 April 2004.	19 December 2003 installation by 1 April 2004
9.13	The Operator, in conjunction with Alcoa Europe – Flat Rolled Products will carry out a noise survey of the permitted installation to establish the most significant noise emissions. A joint report shall be issued to the Agency detailing the results of such a survey and proposing an action plan of how and when the most significant noise sources will be upgraded by the relevant Operator to minimise the noise impact of the entire installation.	19 December 2003
9.14	The Operator shall review the possible improvements to reduce heat loss from the furnaces at the installation that were identified as part of the Operator response to Improvement Condition 9.7 of permit BM1385. Where such improvements represent BAT the Operator shall propose a timetable by which such improvements shall be completed.	31 March 2004
9.15	The Operator shall submit a report to the Agency at the Reporting Address reviewing the appropriateness of the current practices with regards to storage of raw materials within the permitted installation. The review shall take into consideration potential contamination of surface water run-off from the site due to inappropriately stored raw materials. Where improvements are identified the report shall include a plan for realising those improvements by 30th April 2005.	31st January 2005 improvements to be completed by 30th April 2005
9.16	The Operator shall submit a report to the Agency at the Reporting Address detailing an investigation into the reason(s) for the repeated unauthorised release of total dissolved solids and aluminium to controlled waters from the site. The report shall include a plan to eliminate the root causes by 31st March 2005.	31st January 2005 improvements to be completed by 31st March 2005

9.17	The Operator shall submit a report to the Agency at the Reporting Address detailing an investigation into the cause of recurring reports of white fumes emanating from the furnace building. The report shall include a plan to rectify the cause by 28th February 2005	31st January 2005 improvements to be completed by 28th February 2005
9.18	The Operator shall submit a report to the Agency at the Reporting Address detailing an assessment of the VOC emissions from stack A4 against the percentage of oily material and/or thermal break material added to the furnaces. The Operator shall ensure that during this assessment that the VOC emissions remain within the limits set out within this permit. The VOC emissions shall be measured by means of a continuous emission monitor. The Operator shall also analyse the dioxin emissions at the maximum addition of oily material and/or thermal break that maintains a VOC emission level of below 10mg/m^3.	31st March 2005 for completion of trial. Report to be submitted by 30th April 2005
9.19	The Operator shall submit a report to the Agency at the Reporting Address detailing an investigation into methods for controlling the release of total dissolved solids and aluminium to controlled waters from the site. The report shall include a plan for installing control measures identified as part of the investigation.	31st October 2007
9.20	The Operator shall submit a report to the Agency at the Reporting Address detailing an investigation of the sources of sulphur dioxide being released via A4 and a full assessment of the release of sulphur dioxide against BAT. The report will also include the control measures used to minimise sulphur dioxide release.	31st December 2007
9.21	The Operator shall submit a report to the Agency at the Reporting Address reviewing the concentration of Fluoride in the surface water discharge. The review will involve a minimum of 12 samples over 12 month period and a review against BAT Non Ferrous Sector Guidance.	31st September 2008

10 Interpretation

10.1.1 In this Permit, the following expressions shall have the following meanings:

"Authorised Officer"

means any person authorised by the Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, powers specified in Section 108(4) of that Act.

"Background concentration"

means the same as "background quantity" as defined in paragraph 11 to Part 2 to Schedule 1 of the PPC Regulations.

"Dioxins"

means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-p-furans.

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

	Equivalence factor
2,3,7,8 Tetrachlordibenzodioxin (TCDD)	1
1,2,3,7,8 Pentachlordibenzodioxin (PeCDD)	0.5
1,2,3,4,7,8 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,7,8,9 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,6,7,8 Hexachlordibenzodioxin (HxCDD)	0.1
1,2,3,4,6,7,8 Heptachlordibenzodioxin (HpCDD)	0.01
Octachlordibenzodioxin (OCDD)	0.001
2,3,7,8 Tetrachlorodibenzofuran (TCDF)	0.1
2,3,4,7,8 Pentachlorodibenzofuran (PeCDF)	0.5
1,2,3,7,8 Pentachlorodibenzofuran (PeCDF)	0.05
1,2,3,4,7,8 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,7,8,9 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,6,7,8 Hexachlordibenzofuran (HxCDF)	0.1
2,3,4,6,7,8 Hexachlordibenzofuran (HxCDF)	0.1
1,2,3,4,6,7,8 Heptachlordibenzofuran (HpCDF)	0.01
1,2,3,4,7,8,9 Heptachlordibenzofuran (HpCDF)	0.01
Octachlordibenzofuran (OCDF)	0.001

"Fugitive emission"

means an emission from any point other than those specified in the Tables in part 6 of this Permit.

"Monitoring"

includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

"Permitted Installation"

means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

"PPC Regulations"
means the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit.

"*Reporting Address*"
means the address from time to time notified to the Operator, for that purpose by the Environment Agency in writing.

"Staff"
includes employees, directors or other officers of Aleris Recycling (Swansea) Ltd, and any other person under Aleris Recycling (Swansea) Ltd's direct or indirect control, including contractors.

"Substances prescribed for water"
means those substances mentioned in paragraph 13 of Part 2 of Schedule 1 to the PPC Regulations.

"Year"
means calendar year ending 31 December.

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

10.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means;

a in relation to gases 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 gases 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.

11 Written agreement to changes

11.1.1 When the qualification “or as otherwise agreed in writing” is used in a condition of this Permit, the Operator shall seek such agreement in the following manner:

a the Operator shall give the Agency written notice of the details of the proposed change, indicating the relevant part(s) of this Permit; and

b such notice shall include an assessment of the possible effects of the proposed change (including waste production) on risks to the environment from the Permitted Installation.

11.1.2 Any change proposed according to condition 11.1.1 and agreed in writing by the Agency, shall not be implemented until the Operator has given the Agency prior written notice of the implementation date for the change. As from that date, the Operator shall operate the Permitted Installation in accordance with that change, and any relevant documentation referred to in this Permit shall be deemed to be amended.

Schedule 1

Confirmation of condition 5.1.1 notifications, in accordance with condition 5.1.2

This Schedule outlines the information that the Operator must provide to the Agency to satisfy condition 5.1.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements must 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 PPC Regulations.

Returns should contain:

Part A

- ☐ Name of Operator.
- ☐ Permit Number
- ☐ Location of Installation.
- ☐ Date information provided.
- ☐ Time, date and location of the emission.
- ☐ Identity and details of the substance[s] emitted to include:-
  - ☐ Best estimate of the quantity or the rate of emission, and the time during which the emission took place.
  - ☐ Environmental medium into which the emission took place.
  - ☐ Measures taken, or intended to be taken, to stop the emission.

Part B

- ☐ Date and time of emission
- ☐ Any more accurate information on the matters notified 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 or harm which has been or may be caused by the emission.
- ☐ The dates of any Part A notifications within in the previous 24 months.
- ☐ Name ☐ Post
- ☐ Signature ☐ Date
- ☐ Statement that signatory is authorised to sign on behalf of Aleris Recycling (Swansea) Limited.

Schedule 2

Reporting of monitoring data

Parameters for which reports shall be made, in accordance with condition 4.1.2 of this Permit, are listed below.

Table S2 : Sample points

Parameter	Emission point	Reporting period	Period begins
Particulate (mg/m^3)	A3, A4.	Quarterly (Continuous monitoring – report 3-hourly avg.)	01/07/03
Particulate (mg/m^3)	A3, A4	Annually (kg released)	01/07/03
Oxides of nitrogen as NO_2 (mg/ m^3)	A4	Bi-annually	01/07/03
Hydrogen chloride (mg/m^3)	A4	Quarterly	01/07/03
Volatile Organic Compounds as C (mg/m^3)	A4	Quarterly	01/07/03
Dioxins (ITEQ) ng/m^3	A4	Annually	01/01/03
Fluorides (as HF) mg/m^3	A4	Bi-annually	01/07/03
Sulphur dioxide	A4	Quarterly	01/07/03
Total suspended solids (mg/l)	WA1	Monthly	01/08/03
Total dissolved solids (mg/l)	WA1	Monthly	01/08/03
Oil and grease (mg/l)	WA1	Monthly	01/08/03
Copper and its compounds as Cu (mg/l)	WA1	6 Monthly	01/08/03
Lead and its compounds as Pb (mg/l)	WA1	6 Monthly	01/08/03
Tin and its compounds as Sn (mg/l)	WA1	6 Monthly	01/08/03
Zinc and its compounds as Zn (mg/l)	WA1	6 Monthly	01/08/03
Aluminium and its compounds as Al mg/l)	WA1	Monthly	01/08/03
Mercury and its compounds as Hg (mg/l)	WA1	6 Monthly	01/08/03
Arsenic and its compounds as As (mg/l)	WA1	6 Monthly	01/08/03
Nickel and its compounds as Ni (mg/l)	WA1	6 Monthly	01/08/03
Ammoniacal nitrogen as N (mg/l)	WA1	Monthly	01/08/03
pH maximum	WA1	Monthly	01/08/03
pH minimum	WA1	Monthly	01/08/03

Table S2 : Sample points (continued)			
Parameter	**Emission point**	**Reporting period**	**Period begins**
Salt slag	Furnaces	Annual	01/01/03
Main baghouse filter dust	Main baghouse	Annual	01/01/03
Mudroom baghouse filter dust	Mudrom baghouse	Annual	01/01/03
Refractory waste	Furnaces	Annual	01/01/03
Interceptor residue	Surface water interceptor	Annual	01/01/03
Oily waste	Various	Annual	01/01/03
Main baghouse filters	Main baghouse	Annual	01/01/03
Mudroom baghouse filters	Mudroom baghouse	Annual	01/01/03
General non-hazardous waste	Various	Annual	01/01/03
Canteen waste	Canteen areas	Annual	01/01/03
Vehicle wash waters	Various	Annual	01/01/03

Schedule 3

Forms to be used

Unless otherwise agreed in writing between Agency and the Operator, the following Agency forms are to be used for reports submitted to Agency.

Table S3:Reporting Forms		
Media/parameter	**Form Number**	**Date of Form**
Air	A1	27/07/07
Energy	E1	27/07/07
Waste Return	R1	27/07/07
Water	W1	27/07/07

END OF PERMIT

FORM A1: EMISSIONS TO AIR

RELEASE SUMMARY FOR QUARTER …… 20…….

Emission Point	**A3**	**A4**						
Substances	**Particulate**	**Particulate**	**Oxides of Nitrogen (as NO_2)**	**HCl**	**VOC's (as Carbon)**	**Dioxins (ITEQ)**	**Fluoride As HF**	**SO_2**
Summary								
Permit limit (value, units)	5 mg/m^3 Rolling 3-hour average	5mg/m^3 Rolling 3-hour average	60mg/m^3	10mg/m^3	10mg/m^3	0.1ng/m^3	2 mg/m^3	35 mg/m^3
Concentration (value, uncertainty, units)	Maximum: Mean: Minimum:	Maximum: Mean: Minimum:						
Mass emission (value, uncertainty, units)								
Mass emission (year to date)								
Test Details								
Sampling method (e.g. CEN, ISO, national standard)								
Accreditation of sampling method (e.g. UKAS Ref. No.)								
Analytical method (state technique e.g. gravimetric)								
Accreditation of analytical method (e.g. UKAS Ref No.)								
State if sampling compliant with method								
State if analysis compliant with method								
Date of sampling (dd/mm/yy)								
Time sampling started								
Time sampling finished								
Date of analysis (dd/mm/yy)								
Limit of detection of overall method (value, units)*								
Span gas concentration (if applicable) (value, units)								
Process conditions								
Process status**								
Fuel (if applicable)								
Feedstock (e.g. normal or state alternative)								
% Load/throughput/maximum continuous rating								

FORM A1: EMISSIONS TO AIR

RELEASE SUMMARY FOR QUARTER …… 20…….

Emission Point	**A3**	**A4**						
Substances	**Particulate**	**Particulate**	**Oxides of Nitrogen (as NO_2)**	**HCl**	**VOC's (as Carbon)**	**Dioxins (ITEQ)**	**Fluoride As HF**	**SO_2**
(MCR) at time of test (delete as appropriate)***								
Continuous or batch process								
If batch state: normal batch time								
Frequency of batch (e.g. per 24 hours)								
State part of batch sampled								
% of batch sampled								
Supporting information								
Emission point grid reference								
Minimum interval between sampling (weeks)								
Date of previous sampling (dd/mm/yy)								
% requirement load/throughput MCR								
CEMS reading (value, uncertainty, units) (Y/N)			N/A	N/A	N/A	N/A	N/A	N/A
Ref. Conditions used (273K & 101.3kPa) wet/dry, oxygen								

*Ideally LOD should be 10% of the permit limit

** Process conditions: N = normal, A = abnormal (e.g. failure of abatement control), T= Transitional (e.g. start-up), O = Other (e.g. different fuel)

*** Load – raw material being used (e.g. waste incineration), throughput – amount of product produced (e.g. cement kiln), maximum continuous rating (e.g. combustion process)

Note: If some information supplied is considered to be commercially confidential, a statement of which information this applies to and the reasons why must be specified.

Signed on behalf of Aleris Recycling (Swansea) Limited

Name: _____

Signature: _____

Dated: _____

FORM R1: WASTE RETURNS

ANNUAL RETURN TO 31 DECEMBER 20…….

Operator: Aleris Recycling (Swansea) Limited

Permit Number: EP3935UC

Location: Waunarlwydd Works, Waunarlwydd, Swansea. SA5 4SF

Substance	Quantity ('000kg)	Waste Type (E.G. Hazardous)	Fate
Salt Slag			
Main baghouse filter dust			
Mudroom baghouse filter dust			
Refractory Waste			
Interceptor Residue			
Oily Waste			
Main baghouse filters			
Mudroom baghouse filters			
General Non-hazardous Waste			
Canteen waste			
Vehicle wash waters			

Note: If some information supplied is considered to be commercially confidential, a statement of which information this applies to and the reasons why must be specified.

Signed on behalf of Aleris Recycling (Swansea) Limited

Name: _____

Signature: _____

Dated: _____

Date of form: 27/07/07

FORM E1: ENERGY USE

ANNUAL SUMMARY TO 31 DECEMBER 20……

Operator: Aleris Recycling (Swansea) Limited

Permit Number: EP3935UC

Location: Waunarlwydd Works, Waunarlwydd, Swansea. SA5 4SF

Energy Source	Annual Energy Consumption(1)		CO_2 released tonnes
	Primary energy on-site MWh	Primary energy imported (2) MWh	
Electricity			
Gas			

(1) Reported energy use shall cover 95% of all energy used by the Installation. An operational record of the energy use calculation shall be maintained.

(2) Units of imported electricity should be multiplied by a factor of 2.6 to account for the energy lost in generation and transmission.

Note: If some information supplied is considered to be commercially confidential, a statement of which information this applies to and the reasons why must be specified.

Signed on behalf of Aleris Recycling (Swansea) Limited

Name: _____

Signature: _____

Dated: _____

Date of form: 27/07/07

FORM W1: WATER RELEASE RETURN

RELEASE SUMMARY FOR ……(Month) 20…….

Operator: Aleris Recycling (Swansea) Limited

Permit Number: EP3935UC

Location: Waunarlwydd Works, Waunarlwydd, Swansea. SA5 4SF

Parameter	Limit	Concentration (mg l-1)
Total suspended solids mg/l	50	
Total dissolved solids mg/l	1200	
Oil and grease mg/l	10	
Copper and its compounds (as Cu) mg/l	0.25	
Lead and its compounds (as Pb) mg/l	0.1	
Tin and its compounds (as Sn) mg/l	0.1	
Zinc and its compounds (as Zn) mg/l	0.5	
Aluminium and its compounds (as Al) mg/l	1.5	
Mercury and its compounds (as Hg) mg/l	0.075	
Arsenic and its compounds (as As) mg/l	0.1	
Nickel and its compounds (as Ni) mg/l	0.5	
Ammoniacal nitrogen as N (mg/l)	1.5	
pH max	9	
pH min	6	

Note: If some information supplied is considered to be commercially confidential, a statement of which information this applies to and the reasons why must be specified.

Signed on behalf of Aleris Recycling (Swansea) Limited

Name: _____

Signature: _____

Dated: _____

Date of form: 27/07/07