ENVIRONMENT AGENCY

Permit with introductory note

Pollution Prevention and Control Regulations 2000

Short Bros (Plant) Ltd
trading as
Brambles Industrial Services
Tin Anode Plant
Trostre Works
Llanelli
SA14 9SD

Permit number

BT6365

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.

Manufacture of tin anodes

The main purpose of the Shorts managed activities at the Tin Anode installation at Trostre is to manufacture tin anodes. The activity produces tin anodes, which are exported to the neighbouring Corus Packaging Plus tinplate production plant, known as Trostre Works. The principal prescribed activity is:

melting tin (a non-ferrous metal), where any furnace, bath or holding vessel used in the plant for melting has a design holding capacity of 5 tonnes or more.

The activities at the installation include the handling of virgin tin and used tin anodes, heating the tin in a gas-fired furnace to produce molten tin, which in-turn allows the casting of tin to produce anodes. The molten tin is poured into specialised moulds encompassed upon a conveyor system. Air cooling quickly solidifies the tin and within minutes new anodes are produced, which are loaded directly onto a scissors-lift platform. The finished product is then stored in a secure unit until Corus require them for their production lines.

When tin is melted in this manner impurities in the tin rise to the uppermost level of molten tin. From time to time a ladle is used to skim off the impurities, which are loaded into sealed metal containers (typically a 205 litre drum). Some tin is inevitably scooped out with the impurities so arrangements are made for the skimmed waste product to be collected and sent elsewhere for recycling to recover the tin content.

There will be no release to land, sewer or controlled waters from this operation.

There are releases to air from the process. The two melting furnaces are gas-fired. Combustion flue gases (key substance released in mass terms will be oxides of nitrogen and carbon dioxide) from the furnaces are released to air through two stacks (release point A1 for furnace 1 and release point A2 for furnace 2) situated at the rear of the building.

Typically for this type of melting activity, there is also the potential for fugitive releases to air. However, at this installation, the melting furnaces are enclosed and air from above the molten metal in the furnaces and from above and around the casting point is extracted and passed to the Regenerative Thermal Oxidiser abatement plant.

Recycling used tin anodes

One important aspect to the Short Bros. (Plant) Limited process is the processing of used tin anodes, to recover the tin and to recast it into reusable anodes. The anodes are used by Corus Packaging Plus on their production lines when they are electroplating steel to manufacture tinplate. The anodes are suspended into a bath of metal cleansing liquid containing acids, which dissolves the tin until the anodes are disfigured and unable to support the current flow throughout the bath of liquid. At this stage the anodes are removed and can be recycled.

Regenerative thermal oxidiser

When used anodes are recycled through the furnace there is no release to ground or water however there is a release to air, in the form of fume containing phenol. To prevent the release of phenol Short Bros. (Plant) Limited has installed an abatement plant to capture the releases from the furnace and to process the fumes and destroy the phenol. This is achieved by passing the fume through a Regenerative Thermal Oxidiser, wherein the temperature is raised until all phenol is burned off. Further releases (key substance released in mass terms will be carbon monoxide, oxides of nitrogen and carbon dioxide) to air arise from this abatement process and are released through a third stack (Release point A3).

Details of the PPC application can be found at the PPC public registers that are located at the Environment Agency offices and at the Carmarthenshire County Council offices.

Other PPC Permits relating to this installation		
Permit holder	Permit Number	Date of Issue
None	None	Not applicable

Superseded Licenses/Consents/Authorisations relating to this part of the installation		
Holder	Reference Number	Date of Issue
None.	None	Not applicable

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 BT6365	Received 1/11/2002	Duly made.
Request for information (1st Schedule 4 Notice)	Notice issued 23/12/2002	Further site report information required.
Request from applicant to extend response period for 1st Schedule Notice	Request received 17/1/2003 Response 17/1/2003	Request letter dated 16/1/2003. Agency agreed extension to 31/3/2003.
Request for information (2nd Schedule 4 Notice)	Notice issued 14/3/2003	Further information on the process, its emissions, noise issues and emissions monitoring requested.
Response to 1st Schedule 4 Notice	Received 1/4/2003	Response to Notice incomplete.
Response to 2nd Schedule 4 Notice	Received 3/4/2003	Response to Notice incomplete.
Request for information (3rd Schedule 4 Notice)	Notice issued 16/3/2003	Further information on noise issues and site report requested.
Response to 3rd Schedule 4 Notice	Received 17/4/2003	Satisfactory responses now received to all Notices, except for some minor issues on site report.
1st request by the Agency to extend the determination date to 11 July 2003.	Request made 13/5/2003 Response received 22/5/2003	Extension to determination period agreed.
Letter from Agency to applicant clarifying deficiencies in site report.	Letter issued 23/5/2003 Response received 17/6/2003	Satisfactory.
2nd request by the Agency to extend the determination date to 18 July 2003.	Request made 4/7/2003 Response received 8/7/2003	Extension to determination period agreed.
Permit BT6365	16 July 2003	Permit granted and issued

End of introductory Note.

ENVIRONMENT AGENCY

Permit

Permit number
BT6365

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
Short Bros (Plant) Limited,
trading as Brambles Industrial Services, ("the Operator"),

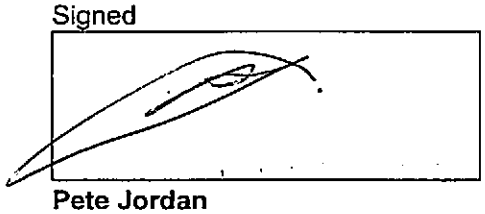
Of/ whose Registered Office is
Cassini House
57 St. James's Street
London
SA1A 1LD

Company registration number **465057**

to operate part of an Installation at
Short Bros. (Plant) Limited
Tin Anode Plant
Trostre Works
Llanelli
Carmarthenshire
SA14 9SD

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

Signed



Pete Jordan

Authorised to sign on behalf of the Environment Agency

Date

16 July 2003

Conditions

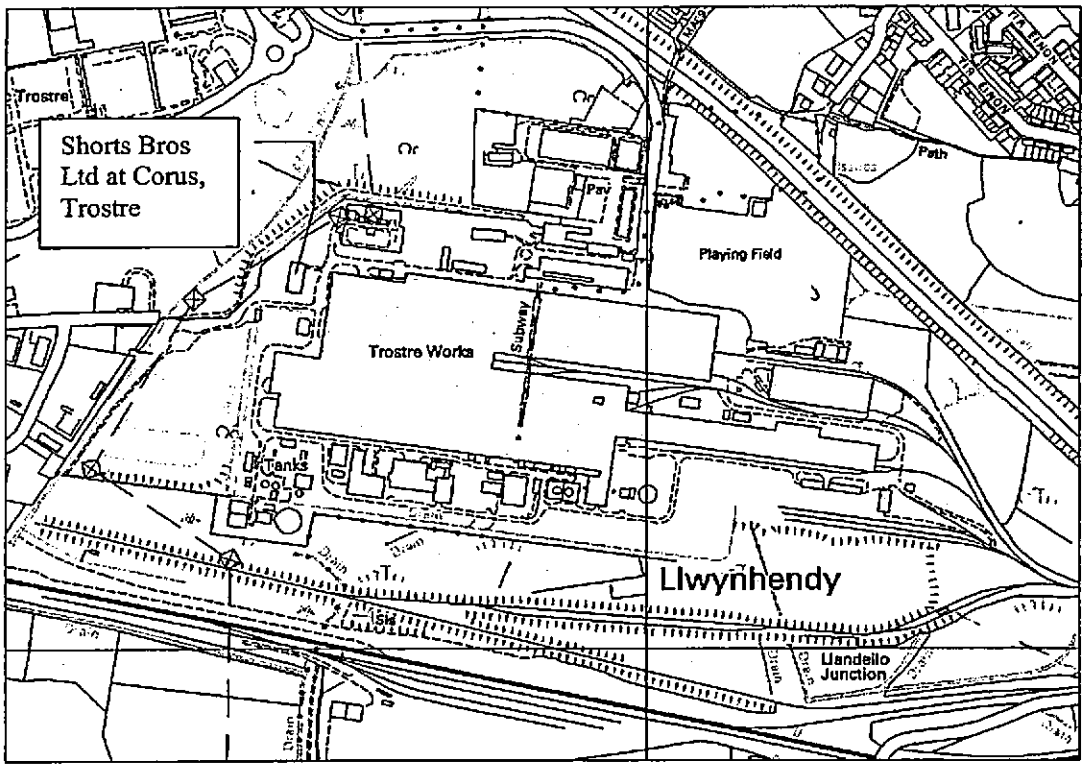
1 The permitted installation

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 Reference (if applicable)	Limits of specified activity
Raw materials handling. (Associated Activity)	Receipt, storage and preparation of raw materials.	Not applicable	Operations and storage prior to melting process.
Melting tin	Stationary Technical Unit	Section 2.2 A(1) (b) (ii)	Melting tin.
Products, and waste products handling. (Associated Activity)	Product and by-product processing and waste handling.	Not applicable	Operations (including casting) and storage following tin melting process.

1.1.2 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the single area labelled "Shorts" on the plan below:



"Reproduced from the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office © Crown Copyright 2000. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings."

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 2.1.1, 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 2.1 given in Section B2.1 of the application document.	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	The responses given to questions 2, 3, 4, 5 and 7 of the 2nd Schedule 4 Notice, given in the Schedule 4 Notice response document.	3/4/2003

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 2.2 given in Section B2.2 of the application document	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	Response to Question 2 of the 2nd Schedule 4 Notice, given in the Schedule 4 Notice response document.	3/4/2003

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 question 2.3 given in Section B2.3 of the application document.	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	The responses given to questions 2, 3, 4 and 7 of the 2nd Schedule 4 Notice, given in the Schedule 4 Notice response document.	3/4/2003

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 B2.4 of the application document.	1/11/2002

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 B2.5 of the application document	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	The responses given to questions 3 and 4 of the 2nd Schedule 4 Notice, given in the Schedule 4 Notice response document.	3/4/2003

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 stored on site			
Description of Waste	Location of Storage on Site	Manner of Storage	Storage Conditions
Tin dross	L1	Sealed drums. Locked cage.	Ambient, inside building
General waste	L2	Baskets and bins as required.	Ambient, inside building

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 B2.6 of the application document.	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	The responses given to questions 3 and 4 of the 2nd Schedule 4 Notice, given in the Schedule 4 Notice response document.	3/4/2003

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 B2.7 in the application document.	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	The responses given to questions 3 and 4 of the 2nd Schedule 4 Notice, given in the Schedule 4 Notice response document.	3/4/2003

2.7.2 By the 31 January each year the Operator shall produce a report on the energy consumption of the installation. This report shall be sent to the Agency and shall be incorporated in any Environmental Management System programme brought about by the requirement reference 9.4 in Table 9.1.1.

2.7.3 The Operator shall have an energy management plan including costs, which shall be reviewed and updated annually.

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 B2.8 of the application document.	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	The responses given to questions 3 of the 2nd Schedule 4 Notice, given in the Schedule 4 Notice response document.	3/4/2003

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 B2.9 of the application document.	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	The responses given to question 6 of the 2nd Schedule 4 Notice, given in the relevant Schedule 4 Notice response documents.	3/4/2003
Additional Information in response to the 3rd Schedule 4 Notice	The responses given to question 8 of the 3rd Schedule 4 Notice, given in the relevant Schedule 4 Notice response documents.	17/4/2003

2.9.2 The Operator shall ensure adequate maintenance of any parts of plant or equipment whose deterioration may give rise to increases in noise including maintenance of any bearings, air handling plant, building fabric as well as specific noise attenuation measures associated with plant, equipment or machinery.

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 B2.10 of the application document.	1/11/2002
Additional Information in response to the 2nd Schedule 4 Notice	The responses given to questions 3, 4, 5, and 7 of the 2nd Schedule 4 Notice, given in the Schedule 4 Notice response document.	3/4/2003

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.

2.11 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 B 2.11 of the application document.	1/11/2002

2.11.2 The Operator shall notify the Agency, in writing, 6 months before the termination of operations at the installation.

2.11.3 The Operator shall complete a review of the decommissioning plan within 3 months of the decision to terminate operations at the installation. A copy of the review shall be sent to the Agency within 1 month of the completion of the review.

2.12 Multi-operator installations

2.12.1 This is not a multi-Operator installation.

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 and any assessment or evaluation made on the basis of such data; and

c any other Specified Records for the installation as stipulated from time to time by the Agency.

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

a Specified Records; and

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 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.

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

a its composition, or as appropriate, description;

b the best estimate of the quantity produced;

c its disposal routes; and

d the best estimate of the quantity sent for 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; and

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

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 in accordance with Schedule 1 to this Permit, by sending the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification. The Operator shall send the more detailed information listed in Part B of that Schedule as soon as practicable thereafter.

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:

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

ii 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);

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

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
A1	Gas-fired furnace flue from Furnace (melting pot) 1	Rear of building Height 9.5 metres (minimum 3 metres above edge of roof)
A2	Gas-fired furnace flue from Furnace (melting pot) 2	Rear of building Height 9.5 metres (minimum 3 metres above edge of roof)
A3	Regenerative thermal oxidiser flue	Rear of building Height 10.36 metres

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

6.1.3 The Operator shall carry out monitoring of the parameters listed in Table 6.1.2, from the emission points and at least at the frequencies specified in that Table.

Table 6.1.2: Emission limits into air

Parameters	Emission Points		
	A1	A2	A3
Oxides of nitrogen mg m^{-3} * (expressed as NO_2)	100	100	100
Volatile organic compounds mg m^{-3} * (expressed as Carbon)	no limit (monitoring not required)	no limit (monitoring not required)	10
Frequency of monitoring ***	Annually **	Annually **	Annually **

* *Monitoring for a minimum 4 hour sample period.*

** *Twice in the year 2003 (i.e. the first 6-months of operation), thereafter once annually*

*** *Where monitoring is required, the frequency of monitoring is the same for both parameters.*

6.2 Emissions to land

6.2.1 There shall be no disposal to land within the Permitted Installation.

6.3 Emissions to water [other than emissions to sewer]

6.3.1 No emission from the Permitted Installation shall be made into water.

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 have been included in this permit.

6.6 Emissions of noise and vibration

6.6.1 With the exception of improvement condition reference 9.2 in Condition 9.1.1, no specific conditions in relation to noise and vibration have been included in this permit.

7 Transfer to effluent treatment plant

7.1.1 No transfer from the Permitted Installation shall be made to an 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

Reference	Requirement	Date
9.1	The Operator shall install sampling/monitoring points in the flues leading to release points A1, A2 and A3, and inform the Agency in writing that the work is complete. The sampling/monitoring points shall be positioned and installed in compliance with Environment Agency guidance and international/UK standards. Access to the sampling points shall be in compliance with Condition 2.10.3.	19 September 2003
9.2	The Operator shall carry out a noise monitoring survey when the permitted process is in operation and within the first 3 months of the commencement of operations. The survey shall be carried out at the same time(s) of day, at the same locations and under the same general conditions as survey carried out and submitted in response to Question 6 of the 2nd Schedule 4 Notice issued on 14 March 2003. The same methodology and types of monitoring instruments shall also be used. The Operator shall submit a report to the Environment Agency on the noise monitoring survey, detailing the methods used, confirming the standards to which the work was done and giving the results obtained. The report shall include the Operators conclusions.	31 October 2003
9.3	The Operator shall carry out monitoring for tin in the emissions to air from release point A3 and submit a report of the results to the Environment Agency. The monitoring method selected and used shall be in accordance with Agency guidance and international/UK standards. The method shall be capable of measuring both particulate and vapour-phase tin.	28 November 2003
9.4	The Operator shall send a report to the Environment Agency on establishing an externally audited Environmental Management System having regard to section 2.1 of the relevant IPPC Sectoral or other Technical Guidance. The report shall include proposals to implement such a programme and the timescales over which the necessary work will be completed.	30 December 2003
9.5	The Operator shall review results for oxides of nitrogen emissions from release point A1, A2 and A3, and for volatile organic compounds from release point A3. The review shall include a BAT assessment regarding the possibility of installing and using continuous emission monitors (CEMs) for these substances on relevant release point flues. The Operator shall submit a report of the review and their conclusions as to whether installing CEMs represents BAT. If the use of CEMs is considered BAT, the Operator shall provide a timetable for their installation with the report.	31 January 2005

10 Interpretation

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

"Annual release"
means the total release during any calendar year commencing 1 January;

"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 Schedule1 of the PPC Regulations.

"Best Available Techniques (BAT)"
means the same as "best available techniques" as defined in paragraph 3 to Part I (on page 5) of the PPC Regulations.

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

"LAeq"
means the A-weighted equivalent continuous equal energy level (dBA).

"mg/Nm^3"
means milligrammes per normal cubic metre.

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

"NO_x"
means oxides of nitrogen (being any mixture of nitric oxide (NO) and nitrogen dioxide (NO_2), reported as NO_2).

"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.

"Relevant wastes/release"
means all wastes, other than releases into the air, controlled waters, any on-site effluent treatment system or any public sewer, arising from the permitted installation;

"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 the Operator, and any other person under the Operator'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.

"VOCs"

means any volatile organic compound in the exhaust gas emissions.

"year"

means 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

- ☐ 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 Short Bros (Plant) Limited

Schedule 2

Reporting of monitoring data

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

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Oxides of nitrogen (as NO_2) ($mg\ m^{-3}$)	A1, A2 and A3	Every 12 months * (Annually)	01/07/2003
Volatile organic compounds (as Carbon) ($mg\ m^{-3}$)	A3	Every 12 months * (Annually)	01/07/2003

Note: * Monitoring required twice in the year 2003 (i.e. the first 6-months of operation), Thereafter once annually (refer to Condition 6.1.3 and Table 6.1.2).

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 / Oxides of nitrogen	S3/Air 1	16 July 2003
Air / Oxides of nitrogen	S3/Air 3	16 July 2003
Air / Volatile Organic Carbons	S3/Air 2	16 July 2003
Air / Volatile Organic Carbons	S3/Air 3	16 July 2003

END OF PERMIT

RELEASES TO AIR **Form S3/Air 1**

REPORTING OF MONITORING DATA

EXTRACTIVE SAMPLING RESULTS FOR THE 12 MONTH PERIOD TO 31 December 200...

Operator: Short Bros. (Plant) Limited

Location: Tin Anode Plant, Trostre Works, Llanelli SA14 9SD

Permit Number: BT6365

Release Points A1, A2 and A3

Table S3/AIR 1: Periodic Extractive Sampling

Parameter: Oxides of nitrogen (as NO_2)

Release Point	Parameter concentration (mg/Nm^3)	Uncertainty Error (+/- %)	Parameter Limit (mg/Nm^3)	Sample Date
A1			100	
A2			100	
A3			100	

Test Details	
Sampling method	
Analytical method	

[Note: Two sets of samples must be reported for the period to 31 December 2003, thereafter sampling and reporting shall be once per year.]

Suggested format for:

- monitoring of NOx (NO and NO_2, reported as NO_2).

Signed on behalf of the Operator .....

Dated .....

RELEASES TO AIR **Form S3/Air 2**

REPORTING OF MONITORING DATA

EXTRACTIVE SAMPLING RESULTS FOR THE PERIOD TO ..... 200...

Operator: Short Bros. (Plant) Limited

Location: Tin Anode Plant, Trostre Works, Llanelli SA14 9SD

Permit Number: BT6365

Release Point A3

Table S3/AIR 2: Periodic Extractive Sampling

Parameter: Volatile Organic Compounds (VOCs)

Release Point	Parameter concentration (mg/Nm^3)	Uncertainty Error (+/- %)	Parameter Limit (mg/Nm^3)	Sample Date
A3			10	

Test Details	
Sampling method	
Analytical method	

Suggested format for:

- monitoring of Volatile Organic Compounds (VOCs).

Signed on behalf of the Operator .....

Dated .....

RELEASES TO AIR

Form S3/Air 3

REPORTING OF MONITORING DATA

ANNUAL RELEASES FOR THE YEAR TO 31 DECEMBER 200...

Operator: Short Bros. (Plant) Limited

Location: Tin Anode Plant, Trostre Works, Llanelli SA14 9SD

Permit Number: BT6365

Table S3/AIR 3: Annual Mass Releases to Air

Substance	Annual mass release (kg)		
	Release Point A1	Release Point A2	Release Point A3
Oxides of nitrogen (expressed as NO_2)			
Volatile organic compounds (expressed as total organic carbon)			

Notes:

- If any of the information supplied is considered to be confidential, a statement of which information this applies to and the reasons why must be specified.

Signed on behalf of the Operator: .....

Dated: .....

From: Gary L Evans
To: jeff.madden@brambles-is.com
Date: 24/10/2005 14:07:15
Subject: Brambles visit Thursday 09:30am

Jeff,

Please find below a short agenda for the visit on Thursday.

- Audit Condition 2.3 Operational Control
- Audit Condition 2.7 Energy Efficiency
- Minor Operational Changes
- AOB

Thanks,
Regards,

Gary L Evans
PIR/RSR Regulatory Officer
Maes Newydd
Llandarcy
Neath Port Talbot
SA10 6JQ

Ext 726 5548
Email gary.l.evans@environment-agency.gov.uk

AUTHORISATION TRACKING LOG

AUTHORISATION NO.	BT6365IQ/BV9250IW	RETURNS - 2005	
OPERATOR	Shorts Bros Trostre Works	Case Inspector	GRANT WOOD
DATE AUTHORISED	16.07.03/24.09.03	Sheet Number	1 of 1

REPORT ACTION	REF. CODE	Annual 04	Jan 05	Feb 05	Mar 05	Apr 05	May 05	Jun 05	Jul 05	Aug 05	Sep 05	Oct 05	Nov 05	Dec 05	Annual 05
Releases to Air	S3/Air1	1/2/05													
Releases to Air	S3/Air2	1/2/05													
Releases to Air	S3/Air3	1/2/05													
ISR return															
Condition 2.7.2 – report on energy consumption	31 Jan each year		1/2												
Improvement Condition 9.5	31/01/05		1/2												

RELEASES TO AIR

RELEASE SUMMARY FOR QUARTER ENDING ..... 200..

OPERATOR: **Short Bros (Plant) Ltd**

LOCATION: **Port Talbot Works, Port Talbot, SA13 3NG**

AUTHORISATION/VARIATION NUMBER: **BL7191/BL7191**

Release Points: **AS3**

WEEK	OPERATIONAL PARAMETERS			
	TOTAL HOURS LANCING INSIDE BURNING BOOTH	WEIGHT OF DUST COLLECTED FROM BOOTH BINS (KG)	NO OF STUCK POTS LANCED, POT I.D NUMBER IN BRACKETS	TOTAL HOURS LANCING ON STUCK POTS
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
Total for Quarter	Total hours	Total weight of fume collected	Total number of pots lanced	Total number of hours pot lancing

SIGNED ON BEHALF OF THE OPERATOR BY .....

DATE.....

Form A1 (01/010/2005)

RELEASES TO AIR Continuous Monitoring results

RELEASE SUMMARY FOR THE QUARTER ENDING..... 200..

Operator: **Short Bros (Plant) Ltd**

Location: **Port Talbot Works, Port Talbot, SA13 3NG**

Authorisation/Variation Number: **BL7191/BL7191**

Release Point: **AS2** Continuous Monitoring results

Release point	AS2 Scarfing machine stack
Substance	Particulates
Emission averaging time	Hourly
Maximum emission limit	10 mg/m^3 (as an hourly mean)
Maximum value obtained over the reporting period	
Date of the maximum value (dd/mm/yy)	
Time of the maximum value	
Mean hourly value obtained over the reporting period	
Standard deviation of values over the reporting period	
Percentage data capture of values over the reporting period	

Signed on behalf of the Operator by .....

Date.....

RELEASES TO AIR

RELEASE SUMMARY FOR QUARTER ENDING .... 200..

OPERATOR: **Short Bros (Plant) Ltd**

LOCATION: **Port Talbot Works, Port Talbot, SA13 3NG**

AUTHORISATION/VARIATION NUMBER: **BL7191/BL7191**

RELEASE POINTS: **AS4**

Change in relation quantity recovered in metal from MR Plant.

	PARAMETER			
WEEK	PRODUCTION HOURS WORKED ON THE METAL RECOVERY PLANT	METAL RECOVERY FROM BOS SLAG	METAL RECOVERY FROM DESULPHURISATION SLAG	WATER BOWSER
	Total Hours	%	%	Total hours
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
Total for Quarter	Total hours	Average percentage	Average percentage	Total hours

SIGNED ON BEHALF OF THE OPERATOR BY .....

DATE.....

Form A3 (01/05/2003)

RELEASES TO AIR

RELEASE SUMMARY FOR QUARTER ENDING .....200..

Operator: **Short Bros (Plant) Ltd**

Location: **Port Talbot Works, Port Talbot, SA13 3NG**

Authorisation/Variation Number: **BL7191/WP3337SD** Release Points: **AS4 at MR**

Week	Desulphurisation Slag pot tipping assessments (density of emission)							Bos slag	Stuck pots
	1	2	3	4	5	Total Number of Desulph slag pots tipped	Number of desulph pots tipped with a standing time of < 30 mins	Total number Bos slag pots tipped	Number of stuck skulls needing attention
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
Total for Quarter									

NB Tipping assessments numbers based on Ringleman chart. The higher the score on tipping the higher the perceived releases to air from the tipping operation.

Stuck pots will need either chipping out with pecking machine or lancing. Pots requiring lancing reported on form A1.

Signed on behalf of the Operator by .....

Date.....

Form A4 (01/09/2005)

RELEASES TO AIR

RELEASE SUMMARY FOR YEAR ENDING ..... 200..

Operator: **Short Bros (Plant) Ltd**

Location: **Port Talbot Works, Port Talbot, SA13 3NG**

Authorisation/Variation Number: **BL7191/BL7191**

Release Points : **AS1, AS2 & AS3 -**

Manual monitoring results

Release Point	AS1 Steam vent at WOB	AS2 Scarfing machine stack	AS3 Burning booth stack
Substance	Particulate matter	Particulate matter	Particulate matter
Permit limit	50 mg/m^3 (as an hourly mean)	10 mg/m^3 (as an hourly mean)	20 mg/m^3 (as an hourly mean)
Measured concentration			
Sampling method used			
Analytical method used			
Date of sampling (dd/mm/yy)			
Time sampling started			
Time sampling finished			
Date of analysis			
Limit of detection			
Process status at the time of sampling			
Stack Continuous monitor result over same the sampling period (Hourly mean)	N/A		

Signed on behalf of the Operator by .....

Date.....

Form A5

(01/05/2003)

RELEASES TO AIR

RELEASE SUMMARY FOR QUARTER ENDING .... 200..

Operator: **Short Bros (Plant) Ltd**

Location: **Port Talbot Works, Port Talbot, SA13 3NG**

Authorisation/Variation Number: **BL7191/WP3337SD**

Release Points: **AS3**

Desulph and Kish operational parameters

Week	Parameter					
	Desulph pots		Desulph slag pot standing times			
	Number of desulph pots in site Fleet	Total number of desulph slag pots available for desulph slag tipping	Maximum (hours)	Mean (hours)	Minimum (hours)	Standard deviation
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
Totals for Quarter	Average	Average	Maximum over period	Mean average over period	Minimum over period	N/A

Signed on behalf of the Operator by .....

Date.....

OPERATIONAL PARAMETERS

RELEASE SUMMARY FOR QUARTER ENDING …… ……. 200..

Operator: **Short Bros (Plant) Ltd**

Location: **Port Talbot Works, Port Talbot, SA13 3NG**

Authorisation/Variation Number: **BL7191/BL7191**

Operational Parameters – BOS solids recovery

Week	Parameter	
	Water usage in the BOS slurry filtration plant	Weight of BOS solids recovered from the BOS slurry
	m^3	Tonnes
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
Total for Quarter		

Signed on behalf of the Operator by ……

Date……

RELEASES TO AIR Continuous Monitoring results

RELEASE SUMMARY FOR THE QUARTER ENDING..... 200..

Operator: **Short Bros (Plant) Ltd**

Location: **Port Talbot Works, Port Talbot, SA13 3NG**

Authorisation/Variation Number: **BL7191/BX9374**

Release Point: **AS3** Continuous Monitoring results

Release point	AS3 burning booth stack
Substance	Particulates
Emission averaging time	Hourly
Maximum emission limit	20 mg/m^3 (as an hourly mean)
Maximum value obtained over the reporting period	
Date of the maximum value (dd/mm/yy)	
Time of the maximum value	
Mean hourly value obtained over the reporting period	
Standard deviation of values over the reporting period	
Percentage data capture of values over the reporting period	

Signed on behalf of the Operator by .....

Date.....