



Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Yuasa Battery (UK)
Yuasa Battery (UK) Limited
Unit 22 Rassau Industrial Estate
Ebbw Vale
Gwent NP23 5SD

Permit number

BV5386IX

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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 (England and Wales) Regulations 2000 (S.I.2000 No.1973), as amended, ("the PPC Regulations") to operate an installation carrying out activities covered by the description in Section 2.2 A(1)(b), Section 2.2 A(2)(a), Section 2.2 B(a), Section 4.2 A(1)(a)(v), Section 4.2 A(1)(d) and Section 2.3 A(1)(a) in Part 1 to Schedule 1 of the PPC Regulations, to the extent authorised by the Permit:

Section 4.2 A(1)(a)(v) – Producing inorganic chemicals such as metal oxides.

Section 4.2 A(1)(d) – Unless falling within another Section of this Schedule, any manufacturing activity, other than the application of a glaze or vitreous enamel, involving the use of lead or a compound of lead, or the recovery of any compound of lead where the activity may result in the release into the air of lead or compound of lead, or the release into water of any substance listed in paragraph 13 of Part 2 of this schedule.

Section 2.2 A(1)(b) – Melting of non-ferrous metals, including recovered products where (i) the plant has a melting capacity of more than 4 tonnes per day for lead ; and (ii) any furnace bath or holding vessel used in the plant for the melting has a design holding capacity of 5 tonnes or more.

Section 2.2 A(2)(a) – melting of non-ferrous metals, including recovered products where – (i) the plant has a melting capacity of more than 4 tonnes per day for lead: and (ii) no furnace, bath or holding vessel used in the plant for the melting has a design capacity of 5 tonnes or more.

Section 2.2 B(a) – Melting of non-ferrous metals, including recovered products in plant with a melting capacity of 4 tonnes or less per day for lead.

Section 2.3 A(1)(a) – Surface treatment of metals using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30 m³.

Aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the condition implied by Regulation 12(10) of the PPC Regulations, i.e. 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.

In some sections of the Permit conditions require the Operator to use Best Available Techniques (BAT), in each of the aspects of the management of the installation, to prevent and where that is not practicable to reduce emissions. The conditions do not explain what is BAT. In determining BAT, the Operator should pay particular attention to relevant sections of the IPPC Sector guidance, appropriate Horizontal guidance and other relevant guidance.

A non-technical description of the installation is given in the Application, but the main features of the installation are as follows.

Yuasa manufactures valve regulated, sealed, lead acid batteries. The main raw materials being lead and sulphuric acid. The site also manufactures lead oxide by the Shimadzu process, an essential ingredient in the production of the batteries. The site operates to a certified ISO 14001 Environment Management System and also has a Climate Change Agreement.

Several batch processes take place to produce the batteries and includes the melting of lead ingots to form the battery plates and pellets, the production of lead oxide from lead pellets in rotary mills, production of lead paste for the manufacture of the battery plates, surface treatment of the lead plates to produce positive and negatively charged plates, injection moulding of battery cases and final charging of the batteries.

There are a total of 61 releases to air. Of these, 26 are from the main lead releasing processes. There are two releases to sewer from the two on-site effluent treatment plants and one release of uncontaminated surface water to Cwm Nant Mellyn. Ambient monitoring for lead is also required from within the boundary of the Installation.

Note that the Permit requires the submission of certain information to the Agency (see Sections 4 and 5). In addition, the Agency has the power to seek further information at any time under regulation 28 to the PPC Regulations provided that it acts reasonably.

Other PPC Permits relating to this installation

Permit holder	Permit Number	Date of Issue
None		

Superseded Licences/Authorisations/Consents relating to this installation

Holder	Reference Number	Date of Issue
Yuasa Battery (UK) Ltd Ebbw Vale site	AO1616 (IPC authorisation)	01/12/94

Other activities may take place on the site of this installation which are not regulated under this Permit or any other PPC Permit referred to in the Table above.

Other existing Licences/Authorisations/Registrations relating to this site

Holder	Reference Number	Date of issue
Yuasa Battery (UK) Ltd	20/56/64/29 variation No 1 (abstraction licence)	01/04/01

Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with the requirements of the PPC Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

Variations to the Permit

This Permit may be varied in the future (by the Agency serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introductory Note to any such Variation Notice 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 by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Agency 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, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. 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 comply with the conditions of the transferred Permit. If, however, the Permit authorises the carrying out of a specified waste management activity, the transfer will only be allowed if the proposed holder is also considered to be "a fit and proper person" as required by the PPC Regulations.

Talking to us

Please quote the Permit Number if you contact the Agency about this Permit.

To give a Notification under Condition 5.1.1, the Operator should use the Incident Hotline telephone number (0800 80 70 60) or any other number notified in writing to the Operator by the Agency for that purpose.

Status Log

Detail	Date	Response Date
Application BV5386IX	Received 24/12/04	
Response to request for information	Request dated 11/02/05 and 23/03/05	Response dated 15/02/05, 16/02/05, 25/02/05, 28/02/05, 02/03/05, 23/03/05 and 24/03/05
Permit determined	09/05/05	

End of Introductory Note.

Permit

Pollution Prevention and Control
Regulations 2000



**ENVIRONMENT
AGENCY**

Permit

Permit number

BV5386IX

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations (SI 2000 No 1973), hereby authorises **Yuasa Battery (UK) Limited** ("the Operator"),

Of/ whose Registered Office (or principal place of business) is

Unit 22

Rassau Industrial Estate

Ebbw Vale

Gwent NP23 5SD

Company registration number 1561536

to operate an Installation at

Yuasa Battery (UK)

Unit 22

Rassau Industrial Estate

Ebbw Vale

Gwent NP23 5SD

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

Signed

Date

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S Puce

Authorised to sign on behalf of the Agency

Conditions

1 General

1.1 Permitted Activities

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

Table 1.1.1		
Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
Section 2.2 A(1)(b) : Melting of non-ferrous metals, ----- holding capacity of 5 tonnes or more. ^[1]	Melting and casting of primary lead.	From receipt of raw materials to production and storage of lead pellets, disposal of waste and emission of exhaust gases.
Section 2.2 A(2)(a) : Melting of non-ferrous metals, ----- holding capacity of 5 tonnes or more. ^[1]	Melting and casting of secondary lead.	From receipt of raw materials to production of lead grids, disposal of waste and emission of exhaust gases.
Section 2.2 B(a): Melting of non-ferrous metals, ----- melting capacity of 4 tonnes or less per day for lead. ^[1]	Melting and casting of secondary lead.	From receipt of raw materials to production of strip cast lead, disposal of waste and emission of exhaust gases.
Section 4.2 A(1)(a)(v): Producing inorganic chemicals such as lead oxide. ^[1]	Production of lead oxide from lead pellets.	From receipt of lead pellets to production and storage of lead oxide, waste and emission of exhaust gases.
Section 4.2 A(1)(d): Unless falling within another section of this Schedule, any manufacturing activity, ----- listed in paragraph 13 of Part 2 of this Schedule. ^[1]	Manufacture of lead paste and cutting of lead sheet to form expanded grids.	From receipt of lead oxide to production of lead paste and manufacture of grids, disposal of waste, effluent and emission of exhaust gases.
Section 2.3 A(1)(a): Surface treatment of metals ----- aggregated volume of the treatment vats is more than 30 m ³ . ^[1]	Preparation of positive and negative plates for batteries.	From receipt of lead oxide grids to manufacture of positive and negative charged plates, disposal of waste, effluent and emission of exhaust gases.
Directly associated activity	Preparation of moulded cases, assembly, case sealing and battery charging.	From receipt of charged plates to despatch of batteries, disposal of waste and emission of exhaust gases.
Directly associated activity	Effluent treatment	From receipt of raw materials and effluent to discharge of treated effluent to sewer.
Directly associated activity	Treatment of abstracted water	From receipt of raw materials and borehole water to dispatch within the installation.
Directly associated activity	Surface water collection and discharge	From collection of surface water to discharge to Cwm Nant Mellyn
Directly associated activity	Combustion processes that are < 20 MWth input.	From receipt of raw materials to production and disposal of waste, effluent and emission of exhaust gases.

Note [1] refer to PPC Regulations 2000, Schedule 1, Part 1.

1.2 Site

- 1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in green on the Site Plan at Schedule 5 to this Permit.

1.3 Overarching Management Condition

- 1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a management system, organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

1.4 Improvement Programme

- 1.4.1 The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table, and shall send written notification of the date of completion of each requirement to the Agency within 14 days of the completion of each such requirement.

Table 1.4.1: Improvement programme		
Reference	Requirement	Date
IP1	The Operator shall submit a report in writing to the Agency detailing the sections updated in the Environment Management System.	30/06/05
IP2	The Operator shall supply an up to date plan showing the location of the release points A27 to A64.	30/06/05
IP3	The Operator shall report in writing to the Agency the measures taken to ensure the chemical stores are secure.	31/07/05
IP4	The Operator shall submit a plan showing the layout of the acid system within the Installation as described in section 5 item 5 of the Application. The Operator shall also assess, having regard to guidance given in IPPC S4.03 section 2.2.5, and agree with the Agency a timetable for the improvements required in the secondary containment of acid / alkali storage tank areas.	30/09/05
IP5	The Operator shall submit a report to the Agency demonstrating whether the pH meters used for continuous monitoring of pH on S1 and S2, meet the requirements given in the MCERTs document 'Continuous water monitoring equipment part 2: Performance Standards for on-line analysers, Turbidity and pH meters; ammonia, COD, TOC, dissolved O2, total phosphorous, nitrate and total oxidised nitrogen analysis version 1, February 2003'. The report shall include an assessment of the analyser's performance with the criteria given in the standard, and where these are not met, proposals and timescales required to achieve the standard. The Agency shall agree any proposals and associated timescales.	30/09/05
IP6	The Operator shall submit a report to the Agency demonstrating whether the flow meters used for continuous monitoring of flow on S1 and S2 meets the requirements given in the MCERTs document 'Continuous water monitoring equipment part 3: Performance Standards for water flow meters version 1, February 2003'. The report shall include an assessment of the flow meters performance with the criteria given in the standard, and where these are not met, proposals and time scales required to achieve the standard. The Agency shall agree any proposals and associated time-scales.	30/09/05
IP7	The Operator shall undertake a CCTV survey of the site drains as described in Section 5 item 4 of the Application. A report shall be submitted to the Agency that will include the findings of the survey and any identified improvements and associated timescales. Any improvements and timescales shall be agreed with the Agency.	30/09/05
IP8	The Operator shall submit a report to the Agency outlining the monitoring strategy and reporting format for ambient monitoring of lead. This shall be agreed with the Agency. In designing the monitoring strategy, the Operator shall have regard for the monitoring guidance notes M8 'Environmental Monitoring Strategy – Ambient Air' (published 2000) and M9 'Monitoring Methods for Ambient Air' (Published 2000). The monitoring strategy shall be based on a minimum of two monitoring locations one being upwind of the prevailing wind direction. Any monitoring locations placed downwind of the prevailing wind direction shall have regard for the findings of the ADMS model as submitted with this permit Application.	30/09/05
IP9	The Operator shall submit a report in writing to the Agency, detailing the measures to be taken at the acid / alkali storage tanks to ensure that the tanks are identified, the fill / draw off pipes are secure and how overfilling of tanks is prevented. Included in the report shall be the timescales required to implement these measures that shall be agreed with the Agency.	30/11/05
IP10	The Operator shall assess, having regard for the guidance given in IPPC S4.03 section 2.2.5, and provide the Agency in writing with a timetable for the improvements required at the waste oil storage area, as identified as Zone 4 in the Application Site Report. The timetable shall be agreed with the Agency.	30/11/05
IP11	The Operator shall submit a report in writing to the Agency, detailing the measures taken to ensure spillage of dielectric oil from the transformers identified in Zone 5 of the Application Site Report is prevented.	30/11/05
IP12	The Operator shall undertake an assessment such as Agency guidance H1 'An Environmental Assessment' on the emission of lead from S1 and S2. A report shall be submitted to the Agency that shall detail the findings as well as the significance of any impact to the environment. Where significance is shown, a timetable of improvements shall be included that shall be agreed with the	30/11/05

	Agency.	
IP13	The Operator shall submit a water efficiency report as identified in the Application improvement programme item 3 of section 5 detailing the findings of the water consumption analysis that started in Aug 2004.	31/12/05
IP14	The Operator shall submit an energy efficiency report as identified in the Application improvement programme, item 6 of section 5, detailing the findings of the utility monitoring that started in Aug 2004.	31/12/05
IP15	The Operator shall assess the efficiency of the abatement at A3, A4, A5, A7, A13, A14, A20, A23 and A26 to minimise the release of lead to air. A report of the findings shall be submitted to the Agency that shall include a timetable for any necessary improvement in order to meet with emission limit values, which shall be agreed with the Agency.	28/02/06
IP16	The Operator shall investigate ways in which to obtain representative monitoring data of lead emissions using the PCME DT990 continuous particulate monitors. The Operator shall submit a report of the investigation that shall detail the locations for all the PCME DT990 monitors (having regard to the requirements given in M1 'Sampling requirements for monitoring stack emissions to air from Industrial Installations' v2 July 2002), the proposed method of calibration and the reporting format of any data from the monitors that is required to be submitted to the Agency. The report shall be agreed with the Agency.	28/02/06
IP17	The Operator shall provide a timetable for upgrading all sampling location points and ports at the listed release points to air to meet the requirements of monitoring guidance note M1 'Sampling requirements for monitoring stack emissions to air from Industrial Installations' v2 July 2002. Where the standard required in M1 cannot be met, the proposed sampling location shall be agreed in writing with the Agency.	28/02/06
IP18	The Operator shall submit a report in writing to the Agency on the releases of lead to air at A6. The report shall include a comparison of the monitored releases using the method BS EN 14285:2002, when red lead and grey lead are used in the preparation of lead oxide paste.	31/05/06
IP19	The Operator shall extend the Emergency Response Plan as outlined in the section 5 item 7 of the Application and submit an updated Accident Plan that shall be agreed with the Agency.	31/05/06
IP20	The Operator shall submit a Site Closure Plan with regard to section 11 of the Agency Guidance Note IPPC S4.03 that shall be agreed with the Agency.	31/05/06
IP21	The Operator shall monitor the releases of lead from A27 to A37 and oil mist from A28 to A37 using methods and sampling protocols as agreed with the Agency. A report of the results shall be submitted to the Agency.	31/05/06
IP22	<p>The Operator shall</p> <ol style="list-style-type: none"> Provide a $\frac{1}{3}$ octave frequency spectra for identified key items of plant and equipment at a given distance from the source. (To identify tonal components.) Measure the <u>ambient noise levels</u> [expressed as dB(A), LA₉₀] at suitable noise-sensitive receptors (in prior agreement with the Agency) with the plant <u>operating</u>. Using the measurements obtained from i. and ii. above, compare these to the <u>background noise levels</u> provided in support of the PPC Application. Measurements and comparison are to be made in accordance with the relevant parts of BS 4142 :1997 'Method for rating industrial noise affecting mixed residential and industrial areas'. The definitions of terms used above, together with details of the information to be reported can also be found in BS4142:1997. Report the results of the above comparison as a difference between rating level and background level, as outlined in BS4142:1997. Using this comparison, identify whether or not the operation of the installation represents BAT as regards noise impact on the adjacent noise sensitive receptors. <p>If the operation of the installation does not represent BAT in regard to noise, provide the Agency with suitable proposals to ensure that noise from the installation is attenuated at the identified sensitive receptors in order to meet BAT.</p>	31/05/06
IP23	The Operator shall assess the releases of lead from the listed release points to air and the fugitive sources, with a view to meeting the Air Quality Objective (AQO) for annual mean of lead 31/12/08. A report shall be submitted to the Agency that shall detail the findings as well as any timetable of	30/11/06

improvement needed in order to achieve the AQO annual mean for lead. Any timetable shall be agreed in writing with the Agency.

- 1.4.2 Where the Operator fails to comply with any requirement by the date specified in Table 1.4.1 the Operator shall send written notification of such failure to the Agency within 14 days of such date.

1.5 Minor Operational Changes

- 1.5.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.1.1 of this Permit by sending to the Agency: written notice of the details of the proposed change including an assessment of its possible effects (including waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 1.5.2 Any such change shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation in accordance with that change, and relevant provisions in the Application shall be deemed to be amended.
- 1.5.3 When the qualification "unless otherwise agreed in writing" is used elsewhere in this Permit, the Operator shall seek such agreement by sending to the Agency written notice of the details of the proposed method(s) or techniques.
- 1.5.4 Any such method(s) or techniques shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation using that method or technique, and relevant provisions in the Application (and the Site Protection and Monitoring Programme, as the case may be) shall be deemed to be amended.

1.6 Pre-Operational Conditions

- 1.6.1 There are no pre-operational conditions.

1.7 Off-site Conditions

- 1.7.1 There are no off-site conditions.

2 Operating conditions

2.1 In-Process Controls

- 2.1.1 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 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques		
Description	Parts	Date Received
Application	The response to questions 2.1 and 2.2 given in the following sections of the application Section 2.1 Section 2.2 excluding tables 2.2.1, 2.2.1a & b, 2.2.2, 2.2.3 2.2.4 and Appendix Section 2.3 excluding Appendices 2, 3 , 4 and 5 Section 2.4 Section 2.5 excluding Table 2.5.1 Section 2.6 Section 2.7 excluding Table 2.7.3 and Appendices 1, 2, 3 and 4 Section 2.8 excluding Appendices 1 and 2 Section 2.9 excluding Appendix 1 Section 2.10 excluding Appendix 1 Section 2.11	24/12/04
Further information	Regarding above sections and the installation boundary.	Received on 15/02/05, 16/02/05, 25/02/05

- 2.1.2 The Permitted Installation shall, subject to the other conditions of this Permit, be operated using the techniques and in the manner described in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit (as amended from time to time under condition 4.1.7), or as otherwise agreed in writing by the Agency.

2.2 Emissions

2.2.1 Emissions to Air, (including heat, but excluding Odour, Noise or Vibration) from Specified Points

- 2.2.1.1 This Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.
- 2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the sources specified in that Table.

Table 2.2.1 : Emission points to air

Emission reference description	point or Source	Location of emission point
A1	Oxide Mill No 4	Plan FPE-063 issue 1 received on 15/02/05
A2	Oxide Mill No 5	Plan FPE-063 issue 1 received on 15/02/05
A3	Casting Off-Cut Hopper	Plan FPE-063 issue 1 received on 15/02/05
A4	Casting Ladles 1- 16	Plan FPE-063 issue 1 received on 15/02/05
A5	Strip Bar Casting	Plan FPE-063 issue 1 received on 15/02/05
A6	Pasting machine mixers 2 & 3	Plan FPE-063 issue 1 received on 15/02/05
A7	Expanded gird line	Plan FPE-063 issue 1 received on 15/02/05
A8	Formation 1	Plan FPE-063 issue 1 received on 15/02/05
A9	Pellet Caster	Plan FPE-063 issue 1 received on 15/02/05
A10	Cutting machines 7 – 12, extraction	Plan FPE-063 issue 1 received on 15/02/05
A11	Assembly lines 6 & 7	Plan FPE-063 issue 1 received on 15/02/05
A12	Assembly lines 4 & 5	Plan FPE-063 issue 1 received on 15/02/05
A13	Assembly lines 1, 2 & 3, vacuum	Plan FPE-063 issue 1 received on 15/02/05
A14	Assembly lines 6, 7 & 8, vacuum	Plan FPE-063 issue 1 received on 15/02/05
A15	Assembly lines 4 & 5, vacuum	Plan FPE-063 issue 1 received on 15/02/05
A16	Assembly lines NNP & EN, vacuum Stack 1	Plan FPE-063 issue 1 received on 15/02/05
A17	Assembly lines NNP & EN, vacuum Stack 2	Plan FPE-063 issue 1 received on 15/02/05
A18	Cutting machines 7-12	Plan FPE-063 issue 1 received on 15/02/05
A19	Dross bins 1 – 8	Plan FPE-063 issue 1 received on 15/02/05
A20	Oxide Mill No 6	Plan FPE-063 issue 1 received on 15/02/05
A21	New NNP extraction	Plan FPE-063 issue 1 received on 15/02/05
A22	New NNP Vacuum	Plan FPE-063 issue 1 received on 15/02/05
A23	Oxide Mill No 7	Plan FPE-063 issue 1 received on 15/02/05
A24	Assembly line 9 Extraction	Plan FPE-063 issue 1 received on 15/02/05
A25	Assembly line 9, vacuum	Plan FPE-063 issue 1 received on 15/02/05
A26	Casting Pots 1 – 8	Plan FPE-063 issue 1 received on 15/02/05
A27	Small parts Furnaces 1-3	See IP2
A28	Cast on strap line 1	See IP2
A29	Cast on strap line 2	See IP2
A30	Cast on strap line 3	See IP2
A31	Cast on strap line 4	See IP2
A32	Cast on strap line 5	See IP2
A33	Cast on strap line 6	See IP2
A34	Cast on strap line 7	See IP2
A35	Line 12 cast on strap	See IP2
A36	Line 11A cast on strap	See IP2
A37	Line 11 cast on strap	See IP2
A38	Pellet caster – gas burner stack 1	See IP2
A39	Pellet caster – gas burner stack 2	See IP2
A40	Mill extraction 4	See IP2
A41	Mill extraction 5	See IP2
A42	Mill extraction 6	See IP2
A43	Mill extraction 7	See IP2

A44	Flash drying oven No2	See IP2
A45	Flash drying oven No3	See IP2
A46	Gas drying ovens 1 a	See IP2
A47	Gas drying ovens 1b	See IP2
A48	Gas drying ovens 2a	See IP2
A49	Gas drying ovens 2b	See IP2
A50	Gas drying ovens 3a	See IP2
A51	Gas drying ovens 3b	See IP2
A52	Gas drying ovens 9a	See IP2
A53	Gas drying ovens 9b	See IP2
A54	Gas drying ovens 10a	See IP2
A55	Gas drying ovens 10b	See IP2
A56	Combat heaters No.1	See IP2
A57	Combat heater No.2	See IP2
A58	Combat heater No.3	See IP2
A59	0.85MW Boiler stack at West boiler house	See IP2
A60	0.85MW boiler stack at North boiler house	See IP2
A61	1.75MW boiler stack at North Boiler house.	See IP2
A62	Steam curing ovens land 3 & 4	See IP2
A63	Combat heater No.4	See IP2
A64	Combat heater No.5	See IP2

2.2.1.3 The limits for emissions to air for the parameter and emission points set out in Table 2.2.2 shall not be exceeded.

Table 2.2.2 : Emission limits to air and monitoring

Emission point reference	Parameter	Limit (including Reference Period) ¹	Monitoring frequency	Monitoring method
A1 - A5, A10 - A12, A15 - A17, A19 - A21 & A23 - A26	Lead	0.5 mg/m ³	Quarterly spot sample	BSEN 14385:2002
A6, A18	Lead	1.0 mg/m ³	Quarterly spot sample	BSEN 14385:2002
A7, A9, A13, A14, A22	Lead	2.0 mg/m ³	Quarterly spot sample	BSEN 14385:2002

Note 1: See Section 6.1.3.2 for reference conditions

2.2.1.4 No condition applies.

2.2.2 Emissions to water (other than groundwater), including heat, from specified points

- 2.2.2.1 This Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.

Emissions to water (other than Sewer)

- 2.2.2.2 Conditions 2.2.2.3 - 2.2.2.6 shall not apply to emissions to sewer.
- 2.2.2.3 Emissions to water from the emission point specified in Table 2.2.4 shall only arise from the sources specified in that Table. There are no specific controls imposed on emissions to water in Part 2.2.2 of this Permit.

Table 2.2.4: Emission point to water

Emission Point Reference or description	Source	Receiving Water
W1 on Appendix A4 'Site Drainage Plan' received 03/03/05	Uncontaminated surface water drainage	Cwm Nant Mellyn

- 2.2.2.4 No condition applies.
- 2.2.2.5 No condition applies.
- 2.2.2.6 No condition applies.

Emissions to sewer

- 2.2.2.7 Emissions to sewer from the specified emission points in Table 2.2.7 shall only arise from the sources specified in that Table.

Table 2.2.7 Emission points to sewer

Emission point reference or description	Source	Sewer
S1 (as S2 on Appendix A4 'Site Drainage Plan' received 03/03/05)	Effluent treatment plant at Factory 1 and 2	Dwr Cymru
S2 (as S3 on Appendix A4 'Site Drainage Plan' received 03/03/05)	Effluent treatment plant at Factory 4	Dwr Cymru

- 2.2.2.8 The limits for the emissions to sewer for the parameters and emission points set out in Table 2.2.8 shall not be exceeded.

Table 2.2.8 : Emission limits and monitoring frequency to sewer

Emission point reference	Substance	Limit (including Reference Period)	Monitoring frequency	Monitoring method
S1 and S2	pH	Min 6 max 11	daily	No standard method is available ^[1]
S1	Lead and its compounds	10 mg/l	Weekly sample	spot BS ISO 17294-2:2003, BS 6068-2.89:2003
S2	Lead and its compounds	5 mg/l	Weekly sample	spot BS ISO 17294-2:2003, BS 6068-2.89:2003
S1 and S2	Cadmium and its compounds	0.01 mg/l	Annual	See Note [2]
S1 and S2	Mercury and its compounds	0.005 mg/l	Annual	See Note [2]

[1] The Operator shall provide a procedure / work instruction that shall be agreed with the Agency for the operation of the continuous pH meter having regard to the calibration requirements given in BS6068-2.50:1995, ISO 10523:1984

[2] Compliance based on Mass Balance Calculation. See condition 6.1.1, Interpretation

2.2.2.9 No condition applies.

2.2.2.10 Total emissions in any year of a substance listed in Table 2.2.9 shall not exceed the relevant limit in that Table.

Table 2.2.9 Annual emission limit

Substance	Annual limit – g
Cadmium and its compounds	0.3 ^[1]
Mercury and its compounds	0.9 ^[1]

[1] Compliance based on Mass Balance Calculation. See condition 6.1.1, Interpretation.

2.2.3 Emissions to groundwater

2.2.3.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).

2.2.3.2 No emission from within the Permitted Installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).

2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No.2746)), the Operator shall use BAT to prevent or where that is not practicable to reduce emissions to groundwater from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, .

2.2.4 Fugitive emissions of substances to air

2.2.4.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation in particular from:

- storage areas
- buildings
- pipes, valves and other transfer systems
- open surfaces

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5 Fugitive emissions of substances to water and sewer

2.2.5.1 Subject to condition 2.2.5.2 below, the Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than Groundwater) and sewer from the Permitted Installation in particular from:

- all structures under or over ground
- surfacing
- bunding
- storage areas

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5.2 There shall be no release to water that would cause a breach of an EQS established by the UK Government to implement the Dangerous Substances Directive 76/464/EEC.

2.2.6 Odour

2.2.6.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:

- limiting the use of odorous materials
- restricting odorous activities
- controlling the storage conditions of odorous materials
- controlling processing parameters to minimise the generation of odour
- optimising the performance of abatement systems
- timely monitoring, inspection and maintenance
- employing, where appropriate, an approved odour management plan

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.6.2 No condition applies.

2.2.6.3 No condition applies.

2.2.7 Emissions to Land

- 2.2.7.1 This Part 2.2.7 of this Permit shall not apply to emissions to groundwater.
- 2.2.7.2 No emission from the Permitted installation shall be made to land.
- 2.2.7.3 No condition applies.

2.2.8 Equivalent Parameters or Technical Measures

- 2.2.8.1 The Operator shall comply with the requirements specified in Table 2.2.11, which supplement or replace emission limit values in accordance with Regulation 12(8) of the PPC Regulations.

Table 2.2.11 Equivalent parameters and technical measures

Parameter or measure	Requirement or description of measure, and frequency if relevant
A27 - A37	The temperature of the furnaces to be maintained at < 500 C. If temperature is >500 C for more than 1 hour, the Operator to notify the Agency under condition 5.1.1
A1, A2, A13, A14, A20 and A23 abatement	Maintain pressure drop across the abatement between 2 and 6 inch water gauge. If the pressure falls either side of this range, the Operator to inform the Agency under condition 5.1.1
A38, A39, A44 – A61, A63 and A64	Annual boiler efficiency testing to be carried out at each combustion source of each release point. Results of the efficiency testing to be reported to the Agency by 31 st December of each year.

2.3 Management

- 2.3.1 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.

Training

- 2.3.2 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.
- 2.3.3 All staff shall be fully conversant with those aspects of the Permit conditions which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to carry out their duties.
- 2.3.4 The Operator shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

Maintenance

- 2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.
- 2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:

2.3.6.1 a written or electronic maintenance programme; and

2.3.6.2 records of its maintenance.

Incidents and Complaints

2.3.7 The Operator shall maintain and implement written procedures for:

2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits; and

2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and

2.3.7.3 ensuring that detailed records are made of all such actions and investigations.

2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

2.3.9 No condition applies.

2.4 Efficient use of raw materials

2.4.1 The Operator shall -

2.4.1.1 maintain the raw materials table or description submitted in Section 2.4 of the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;

2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Agency at least every 4 years thereafter; and

2.4.1.3 ensure that incoming water use is directly measured and recorded.

2.5 Waste Storage and Handling

2.5.1 The Operator shall design, maintain and operate all facilities for the storage and handling of waste on the Permitted installation such that there are no releases to water or land during normal operation and that emissions to air and the risk of accidental release to water or land are minimised.

2.5.2 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of litter from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.6 Waste recovery or disposal

- 2.6.1 Waste produced at the Permitted Installation shall be:
- 2.6.1.1 recovered to no lesser extent than described in the Application; and
- 2.6.1.2 where not recovered, disposed of while avoiding or reducing any impacts on the environment provided always that this is not done in any way that would have a greater effect on the environment than that described in the Application.
- 2.6.2 The Operator shall maintain the waste recovery or disposal table or description submitted in Section 2.6 of the Application and in particular review the available options for waste recovery and disposal for the purposes of complying with condition 2.6.1 above.
- 2.6.3 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.
- 2.6.4 No condition applies.

2.7 Energy Efficiency

- 2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information required by condition 4.1.2.
- 2.7.2 The Operator shall maintain and update annually an energy management system which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.
- 2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Agency's Energy Efficiency Horizontal Guidance Note as from time to time amended. Energy efficiency shall be secured in particular by:
- ensuring that the appropriate operating and maintenance systems are in place;
 - ensuring that all plant is adequately insulated to minimise energy loss or gain;
 - ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
 - employing appropriate basic controls, such as simple sensors and timers, to avoid unnecessary discharge of heated water or air;
- where building services constitute more than 5% of the total energy consumption of the installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in particular to the Building services part of the Agency's Energy Efficiency Horizontal Guidance Note H2; and

maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are applicable to the activities and their associated environmental benefit and prioritises them, having regard to the appraisal method in the Agency's Energy Efficiency Horizontal Guidance Note H2.

2.8 Accident prevention and control

- 2.8.1 The Operator shall maintain and implement when necessary the accident management plan submitted or described in Section 2.8 of the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.

2.9 Noise and Vibration

- 2.9.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of noise and vibration from the Permitted Installation, in particular by:
- equipment maintenance, eg. of fans, pumps, motors, conveyors and mobile plant;
 - use and maintenance of appropriate attenuation, eg. silencers, barriers, enclosures;
 - timing and location of noisy activities and vehicle movements;
 - periodic checking of noise emissions, either qualitatively or quantitatively; and
 - maintenance of building fabric,
- provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.
- 2.9.2 No condition applies.
- 2.9.3 No condition applies.

2.10 On-site Monitoring

- 2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2 and 2.2.8, unless otherwise agreed in writing, and that the results of such monitoring are assessed. The programme shall ensure that monitoring is carried out under an appropriate range of operating conditions.
- 2.10.2 The Operator shall carry out environmental or other specified substance monitoring to the frequencies and methods described in Table 2.10.1.

Table 2.10.1 : Other monitoring requirements

Emission point reference or source or description of point of measurement	Substance or parameter	Monitoring frequency	Monitoring method	Other specifications
S1 and S2	Flow	Daily average	BS3680 series	
S1 and S2	Copper and its compounds	Quarterly Spot sample	BS ISO 17294-2:2003, BS 6068-2.89:2003 ^[1]	
S1 and S2	Zinc and its compounds	Quarterly Spot sample	BS ISO 17294-2:2003, BS 6068-2.89:2003 ^[1]	
S1 and S2	Chromium and its compounds	Quarterly Spot sample	BS ISO 17294-2:2003, BS 6068-2.89:2003 ^[1]	
S1 and S2	Nickel and its compounds	Quarterly Spot sample	BS ISO 17294-2:2003, BS 6068-2.89:2003 ^[1]	
S1 and S2	Chemical Oxygen Demand	Quarterly Spot sample	BS ISO 15705:2002, BS 6068-2.80:2002 ^[1]	
S1 and S2	Sulphate	Quarterly spot sample	SCA Blue Book 136 ^[1]	
S1 and S2	Total suspended solids	Quarterly Spot sample	BS EN 872:1996 BS 6068-2.54:1996 ^[1]	
Ambient monitoring points (for locations see IP8)	Lead	Monthly	See IP8	To commence on completion of IP8
A8	Sulphuric acid mist ^[2]	Quarterly spot sample	USEPA method 8	
Continuous monitoring of lead on various release points to air (for locations see IP16)	Lead	Continuous (daily average)	See IP16	To commence on completion of IP16

[1] or other EN, ISO, BS or Blue Book method as agreed with the Agency

[2] see condition 6.1.3.2 for reference conditions

2.10.3 No condition applies.

2.10.4 No condition applies.

2.10.5 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the Agency.

2.10.6 The Operator shall maintain records of all monitoring taken or carried out (this includes records of the taking and analysis of samples instrument measurements (periodic and continual), calibrations, examinations, tests and surveys) and any assessment or evaluation made on the basis of such data.

2.10.7 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1 of this Permit and the environmental or other monitoring specified in condition 2.10.2 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing.

2.10.8 There shall be provided:

- 2.10.8.1 safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, unless otherwise specified in that Schedule; and
- 2.10.8.2 safe means of access to other sampling/monitoring points when required by the Agency.
- 2.10.9 The Operator shall carry out the on-going monitoring identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, unless otherwise agreed in writing by the Agency.
- 2.10.10 The Operator shall, within 6 months of the issue of this Permit, in accordance with and using the format given in the Land Protection Guidance:
 - 2.10.10.1 collect the site reference data identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, and
 - 2.10.10.2 report that site reference data to the Agency,
 - unless otherwise agreed in writing by the Agency.

2.11 Closure and Decommissioning

- 2.11.1 The Operator shall maintain and operate the Permitted Installation so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:-
 - 2.11.1.1 attention to the design of new plant or equipment;
 - 2.11.1.2 the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out; and
 - 2.11.1.3 the maintenance of a site closure plan to demonstrate that the installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.
- 2.11.2 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.
- 2.11.3 The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.
- 2.11.4 The Operator shall give at least 30 days written notice to the Agency before implementing the site closure plan.

2.12 Multiple Operator installations

- 2.12.1 This is not a multi-Operator installation.

2.13 Transfer to effluent treatment plant

- 2.13.1 No transfers to the effluent treatment plant are controlled under this part of this Permit.
- 2.13.2 No condition applies.

3 Records

- 3.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:-
- 3.1.1 be made available for inspection by the Agency at any reasonable time;
 - 3.1.2 be supplied to the Agency on demand and without charge;
 - 3.1.3 be legible;
 - 3.1.4 be made as soon as reasonably practicable;
 - 3.1.5 indicate any amendments which have been made and shall include the original record wherever possible;
 - 3.1.6 be retained at the Permitted Installation, or other location agreed by the Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing; and
 - 3.1.7 where they concern the condition of the site of the Installation or are related to the implementation of the Site Protection and Monitoring Programme, be kept at the Permitted Installation, or other location agreed by the Agency in writing, until all parts of the Permit have been surrendered.

4 Reporting

- 4.1.1 All reports and written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Agency using the contact details notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:-
 - 4.1.2.1 in respect of the parameters and emission points specified in Table S2 to Schedule 2;
 - 4.1.2.2 for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;
 - 4.1.2.3 giving the information from such results and assessments as may be required by the forms specified in those Tables; and
 - 4.1.2.4 to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1 and S4.2 of Schedule 4, assessed at any frequency specified therein, and using the form specified in Table S3 to Schedule 3.
- 4.1.4 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.
- 4.1.5 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.
- 4.1.6 The Operator shall, within 6 months of receipt of written notice from the Agency, submit to the Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution, in particular through the application of the best available techniques, at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement.
- 4.1.7 The Operator shall, within two months of the date of this permit, submit a detailed Site Protection and Monitoring Programme, in accordance with and using the appropriate template format given in the Land Protection Guidance. The Operator shall implement and maintain the Site Protection and Monitoring Programme (SPMP) submitted under this condition, and shall carry out regular reviews of it at a minimum frequency of every 2 years. The results of such reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change.
- 4.1.8 No condition applies.

5 Notifications

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

- 5.1.1.1 the detection of an emission of any substance which exceeds any limit or criterion in this Permit specified in relation to the substance;
- 5.1.1.2 the detection of any fugitive emission which has caused, is causing or may cause significant pollution;
- 5.1.1.3 the detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution; and
- 5.1.1.4 any accident which has caused, is causing or has the potential to cause significant pollution.

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

- 5.1.2.1 the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
 - 5.1.2.2 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 prior to any of the following:-

- 5.1.3.1 permanent cessation of the operation of part or all of the Permitted Installation;
- 5.1.3.2 cessation of operation of part or all of the Permitted Installation for a period likely to exceed 1 year; and
- 5.1.3.3 resumption of the operation of part or all of the Permitted Installation after a cessation notified under condition 5.1.3.2.

5.1.4 The Operator shall notify the Agency, as soon as reasonably practicable, of any information concerning the state of the Site which adds to that provided to the Agency as part of the Application or to that in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit.

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

5.1.5.1 where the Operator is a registered company:-

- any change in the Operator's trading name, registered name or registered office address;
- any change to particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary)
- any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up;

5.1.5.2 where the Operator is a corporate body other than a registered company:

- any change in the Operator's name or address;
- any steps taken with a view to the dissolution of the Operator.

5.1.5.3 In any other case: -

- the death of any of the named Operators (where the Operator consists of more than one named individual);

Notifications

any change in the Operator's name(s) or address(es);

any steps taken with a view to the Operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership;

5.1.6 Where the Operator has entered into a Climate Change Agreement with the Government, the Operator shall notify the Agency within one month of:-

5.1.6.1 a decision by the Secretary of State not to re-certify that Agreement.

5.1.6.2 a decision by either the Operator or the Secretary of State to terminate that agreement.

5.1.6.3 any subsequent decision by the Secretary of State to re-certify such an Agreement.

5.1.7 Where the Operator has entered into a Direct Participant Agreement in the Emissions Trading Scheme which covers emissions relating to the energy consumption of the activities, the Operator shall notify the Agency within one month of:-

5.1.7.1 a decision by the Operator to withdraw from or the Secretary of State to terminate that agreement.

5.1.7.2 a failure to comply with an annual target under that Agreement at the end of the trading compliance period.

5.1.8 The Operator shall notify the Agency in writing, of any known or planned introduction or material emission from the permitted installation to sewer, that may increase the concentration of any "dangerous substance", as defined in List I and List II of the Dangerous Substances Directive, 76/464/EEC, and its daughter directives.

6 Interpretation

6.1.1 In this Permit, the following expressions shall have the following meanings:-

"Application" means the application for this Permit, together with any response to a notice served under Schedule 4 to the PPC Regulations and any operational change agreed under the conditions of this Permit.

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

water supplied to the site; or

where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; or

where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation on to the site.

"BAT" means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: "available techniques" means "those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator"; "best" means "in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole" and "techniques" "includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned". In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.

"Compliance Based on Mass Balance Calculation" means that for the purposes of demonstrating compliance or non-compliance with a specified limit the release shall be calculated. Annual mass releases for Mercury and Cadmium shall be calculated from the maximum potential concentration of the metal present as contamination multiplied by the volume of the chemicals used on site during the Year. An allowance may be deducted for any proportion of the chemicals used that can be demonstrated not to have reached the emission point. The concentration of Mercury and Cadmium shall be calculated from the annual mass release and the volume of effluent discharged during the Year.

"Fugitive emission" means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit under conditions 2.2.1.3, 2.2.2.4, 2.2.2.5, 2.2.2.8 or 2.2.2.9 of this Permit.

"Groundwater" means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Land Protection Guidance" means the version of the Agency guidance note "H7 - Guidance on the Protection of Land under the PPC Regime: Application Site Report and Site Protection and Monitoring Programme", including its appended templates for data reporting, which is current at the time of issue of the Permit.

" $L_{Aeq,T}$ " means the equivalent continuous A-weighted sound pressure level in dB determined over time period, T.

" $L_{A90,T}$ " means the A-weighted sound pressure level in dB exceeded for 90% of the time period, T.

Interpretation

"L_{AFmax}" means the maximum A weighted sound level measurement in dB measured with a fast time weighting.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"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 (England and Wales) Regulations SI 2000 No.1973 (as amended) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit.

"Sewer" means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

"Staff" includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"Year" means calendar year ending 31 December.

"µg" means microgrammes

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

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

6.1.3.1 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

6.1.3.2 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

6.1.4 Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such conflict.

Schedule 1 - Notification of abnormal emissions

This page outlines the information that the Operator must provide to satisfy conditions 5.1.1 and 5.1.2 of this Permit.

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

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

Part A

Permit Number	
Name of Operator	
Location of Installation	
Location of the emission	
Time and date of the emission	

Substance(s) emitted	Media	Best estimate of the quantity or the rate of emission	Time during which the emission took place

Measures taken, or intended to be taken, to stop the emission	
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Part B

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Yuasa Battery (UK) Ltd

Schedule 2 - Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 4.1.2 and 4.1.3 of this Permit, are listed below.

Table S2: Reporting of monitoring data			
Parameter	Emission point	Reporting period	Period begins
Lead mg/m ³	A1 to A7 and A9 to A26	Quarterly	01/04/05
pH	S1 and S2	Quarterly	01/04/05
Lead mg/l	S1 and S2	Quarterly	01/04/05
Cadmium and its compounds mg/l	S1 and S2	Annual	01/04/05
Mercury and its compounds mg/l	S1 and S2	Annual	01/01/05
Cadmium and its compounds g	S1 and S2	Annual	01/01/05
Mercury and its compounds g	S1 and S2	Annual	01/01/05
Copper and its compounds	S1 and S2	Six monthly	01/04/05
Zinc and its compounds	S1 and S2	Six monthly	01/04/05
Nickel and its compounds	S1 and S2	Six monthly	01/04/05
Chromium and its compound	S1 and S2	Six monthly	01/04/05
Chemical Oxygen Demand mg/l	S1 and S2	Six monthly	01/04/05
Total suspended solids mg/l	S1 and S2	Six monthly	01/04/05
Sulphate mg/l	S1 and S2	Six monthly	01/04/05
Flow m ³ /day	S1 and S2	Annual	01/04/05
Lead µg/m ³	Ambient monitors (see IP8)	Annual	01/04/05
Sulphuric acid mist mg/m ³	A8	Quarterly	01/04/05
Lead mg/m ³ (from continuous particulate monitors)	See IP16	Quarterly	01/04/05
Boiler efficiency	A38, A39, A44 –A61, A63 and A64	Annual	01/01/05
Water usage	Installation	Annual	01/01/05
Energy usage	Installation	Annual	01/01/05
Waste disposal and/or recovery.	Installation	Annual	01/01/05

Schedule 3 - Forms to be used

Table S3: Reporting Forms		
Media / parameter	Form Number	Date of Form
Air	A1	01/05/05
Sewer	S1	01/05/05
Mass release	MR1	01/05/05
Ambient	See IP8	01/05/05
Energy	E1	01/05/05
Waste Return	R1	01/05/05
Water usage	WU1	01/05/05
Performance indicators	PI1	01/05/05

Schedule 4 - Reporting of performance data

Data required to be recorded and reported by Condition 4.1.3. The data should be assessed at the frequency given and reported annually to the Agency.

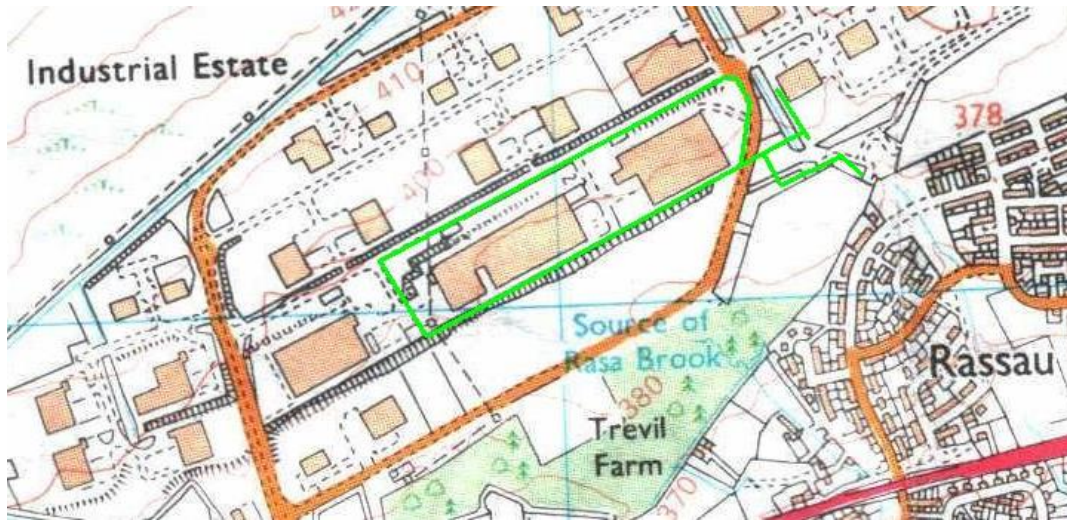
Table S4.1: Annual Production/Treatment

Production of batteries per year	x (tonnes)

Table S4.2: Performance parameters

Parameter		Frequency assessment	of	Performance indicator
COD		Annual		COD kg/t
Mass of lead released at A1 – A7 and A9 – A26		Annual		kg/t
Mass of lead released to sewer		Annual		kg/t

Schedule 5 - Site Plan



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