



ENVIRONMENT  
AGENCY

## **Variation Notice with introductory note**

Pollution Prevention and Control (England & Wales) Regulations 2000

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International Rectifier Swansea

International Rectifier Electronic  
Motion Systems Limited  
Penllergaer Business Park  
Swansea  
SA4 9HL

Variation Notice Number  
EP3938MH

Permit number  
TP3035SG

# International Rectifier Swansea Permit Number TP3035SG

## Introductory note

### ***This introductory note does not form a part of the permit***

The following notice is issued under regulation 17 of The Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No. 1973 (as amended) (the Regulations) to vary the conditions of a permit issued under the Regulations to operate an installation. The notice comprises schedule 1 containing conditions to be deleted, schedule 2 conditions to be amended and schedule 3 conditions to be added.

International Rectifier Electronic Motion Systems Ltd manufacture power electronic motion systems for automotive and industrial applications. The major process is the use of lead solder screen paste to mechanically and electrically bond copper or ceramic substrates to electronic devices which are manufactured elsewhere. The bonding is achieved by the oven melting of lead solder and subsequent cooling and cleaning. The plant extracts air from the process areas through manifolds to a single unabated stack. There are two further air emissions points, which relate to the 1450 kW natural gas fired boilers. Aqueous process effluent is treated using an on site effluent treat plant to adjust the pH and remove solids before discharge into the public sewer for subsequent secondary treatment at a Dŵr Cymru Welsh Water treatment plant. Uncontaminated surface water is discharged into a tributary of the Afan Llan.

The operator has applied for a standard variation that identifies a number of process changes including a change in the conformal coat process, the use of a palladium alloy in the manufacturing process and the installation of a new compressed plant (replacing the nitrogen generation plant compressed dry air unit). The operator also requested

- the modification of effluent consent discharge limits;
- the addition of a pH dosing system for the final effluent to sewer;
- the removal of emission limit of sulphur dioxide from the air monitoring requirements.

The Environment Agency has also chosen to modify the site improvement programme. Improvement item IP6 has been removed due to a drafting error in the original permit. Item IP7 has also been deleted requiring the operator to produce only one report to confirm compliance with the Solvent Emissions Directive.

Status Log of the permit		
Detail	Date	Response Date
Application TP3035SG	Received 29/12/04	- - -
Response to request for information	Requests dated 20/01/05 and 07/02/05	Response dated 22/02/05 and 23/02/05
Permit TP3035SG determined	11/08/05	- - -
Application EP3938MH received	Received 01/11/06	Duly made 01/11/06
Variation notice EP3938MH issued	16/01/07	- - -

**Other existing Licences/Authorisations/Registrations relating to this site**

Holder	Reference Number	Date of issue
Trade Effluent Consent	D100/06	13/11/2006

End of Introductory Note

**Variation Notice**

Pollution Prevention and Control  
(England and Wales) Regulations 2000



**ENVIRONMENT  
AGENCY**

## Variation Notice

Permit number

**TP3035SG**

Variation number

**EP3938MH**

The Environment Agency (the Agency) in exercise of its powers under Regulation 17 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973) hereby varies the permit held by you

**International Rectifier Electronic Motion Systems Limited** ("the operator"),

whose registered office is

**Fox Court**

**14 Gray's Inn Road**

**London**

**WC1X 8HN**

Company registration number **03648720**

to operate an installation at

**International Rectifier Swansea**

**Penllergaer Business Park**

**Penllergaer**

**Swansea**

**SA4 9HL**

to the extent set out in schedules 1 to 3 of this variation notice .

The notice shall take effect from 16 January 2007

Signed

Date

Handwritten signature of Barbara Tate in black ink.	16 January 2007
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Barbara Tate

Authorised to sign on behalf of the Agency

## SCHEDULE 1 – CONDITIONS TO BE DELETED

1. The following improvement items shall be deleted:

Table 1.4.1: Improvement programme		
Reference	Requirement	Date
IP6	A report prioritising the recommendations of the energy audit provided in the application shall be submitted to the Environment Agency in writing for agreement. This report shall include a timetable of actions to implement these recommendations.	01/07/06
IP7	Provide the Agency with a report detailing the proposals for the operator meet the requirements of the Pollution Prevention and Control (Solvent Emissions Directive) (England and Wales) Direction 2002.	31/10/06

## SCHEDULE 2 – CONDITIONS TO BE AMENDED

1. The following table shall be amended as follows:

Table 2.1.1: Operating techniques		
Description	Parts	Date Received
Application	The response to question 2.1 (given on pages 4 to 8 of the Application) and 2.10 (given on pages 71 to 114 of the Application)	29/12/04
Variation Application	The response to questions 1.2, 2.1 to 2.12 (inclusive), 3.1 and 4.1 to 4.3 (inclusive) in Part C of the Application Form.	01/11/06

2. The following condition shall be amended as follows:

- 2.2.1.3 The limits for emissions to air for the parameters 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) <sup>1</sup>	Monitoring frequency	Monitoring method
A1	Particulate and vapour phase lead	2 mg/m <sup>3</sup>	Annual	BS EN 14385:2004

3. Schedule 2 - Reporting of Monitoring Data shall be amended as follows:

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
Vapour phase and particulate lead mg/m <sup>3</sup>	A1	Every 12 months	01/01/05
Dichloromethane kg/year	A1	Every 12 months	01/01/05
pH	S1	Every 3 months	01/07/05
Copper and its compounds	S1	Every 3 months	01/01/05
Zinc and its compounds	S1	Every 3 months	01/01/05
Chromium and its compounds	S1	Every 3 months	01/01/05
Nickel and its compounds	S1	Every 3 months	01/01/05
Lead and its compounds	S1	Every 3 months	01/01/05
Chemical Oxygen Demand	S1	Every 3 months	01/01/05
Sulphate	S1	Every 3 months	01/01/05
Total suspended solids	S1	Every 3 months	01/01/05
Fugitive emissions of solvent as a % of solvent input <sup>[note 1]</sup>	Installation	Every 12 months	01/01/05
Energy usage	Installation	Every 12 months	01/01/05
Waste disposal and/or recovery.	Installation	Every 12 months	01/01/05
Water usage	Installation	Every 12 months	01/01/05

Note 1 – See Schedule 4 of Pollution Prevention and control (Solvent Emissions Directive) (England and Wales) Direction 2002

4. Schedule 3 - Forms to be used shall be amended as follows:

**Table S3: Reporting Forms**

Media / parameter	Form Number	Date of Form
Mass release to air	MR1	01/05/05
Energy	E1	01/05/05
Waste Return	R1	01/05/05
Water usage	WU1	01/05/05
Air	A1	16/01/07
Sewer	S1	01/05/05

### SCHEDULE 3 – CONDITIONS TO BE ADDED

1. None