

# Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

---

**Llanwern Steelworks**

**Corus Strip Products**

**Corus UK Ltd**

Llanwern Works

Newport

NP19 4QZ

---

Variation notice number

**EA/EPR/BS3905IP/V002**

Permit number

**BS3905IP**

# **Llanwern Steelworks**

## **Permit Number BS3905IP**

### **Introductory note**

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

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations S.I.2007 No. 3538 (the Regulations), gives notice of the variation of an environmental permit to operate regulated facilities.

The Llanwern Steel Works installation comprises hot rolling, cold rolling, pickling and galvanising activities. This variation notice incorporates a number of changes and additions to the existing permit. These are as follows;

- Correction of the existing installation boundary in the permit to reflect the correct boundary delineation
- Pickle Line Scalebreaker – Incorporation of a new dust extraction plant on the pickle line process which replaces an older unit. The variation adds this to the permit and includes a new emission point with an emission limit value for particulate.
- Zodiac Zinc Recovery process – Incorporation of a small scale heat treatment process to recover zinc from zinc dross in the galvanising process (The Zodiac plant).
- Pickle Line Effluent Treatment Plant – Incorporation of an effluent treatment plant which has been installed and commissioned in order to treat rinse water arisings from the pickle line process as previously agreed in writing between the Operator and Regulator.
- Hot Mill Sludge Filter Press Plant - Following a successful trial at the works, the inclusion of a permanent filter press unit to treat the arisings of Hot Mill Sludge.
- Monitoring and Reporting Requirements for the Large Combustion Plant Directive (LCPD) – Following changes to the definition of what constitutes a Large Combustion Plant (LCP), the package boiler plant that serves the works is now considered an LCP and thus the emissions limits and associated monitoring and reporting requirements under the LCPD is incorporated into the permit by way of this variation.
- Minor amendments to monitoring and reporting requirements for air and water
- Addition of a number of new improvement conditions

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions and Schedule 3 lists any conditions that have been added.

**Status Log of the permit**

<b>Detail</b>	<b>Date</b>	<b>Response Date</b>
Application BS3905	Received 31/07/02 & 10/01/03	
Response to request for information	Request dated 9/08/02 Request dated 18/10/02	Response dated 5/09/02 Response dated 10/01/03 & 17/06/03
Request to extend determination	Requested 1/12/03	Response dated 08/12/03
Request to extend determination	Requested 27/01/04	Response dated 29/01/04
Request to extend determination	Requested 2/03/04	Response dated 4/03/04
Permit BS3905	Determined 18/03/04	
Application EA/EPR/BS3905IP/V002	Duly made 20/11/08	Response dated 17/02/09
Additional Information Received	17/11/08, 28/01/09, 6/3/09, 17/03/09, 06/8/09	28/01/09, 1/02/09, 17/03/09, 21/10/09
Variation EA/EPR/BS3905IP/V002	26/10//09	

**Other Part A installation permits relating to this installation**

<b>Operator</b>	<b>Permit Number</b>	<b>Date of Issue</b>
Corus UK Ltd – South Side Queensway Landfill	GP3331SV	14/08/2007

End of Introductory Note

Notice of variation

Environmental Permitting  
(England and Wales) Regulations 2007

Permit number

**BS3905IP**

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2007 (SI 2000 No 3538) varies the permit as set out below.

**Corus UK Ltd** ("the Operator"),

whose Registered Office is

**30 Millbank, London SW1P 4WY**

Company registration number


**2280000**

holds a permit to operate a regulated facility at

**Corus Strip Products, Llanwern Works, Newport, NP19 4QZ**

and that permit is varied to the extent set out in Schedules 1 to 3 of this notice.

The notice shall take effect from 26/10/09

Name	Date
<b>Tony Leakey</b> 	26 <sup>th</sup> October 2009

Authorised on behalf of the Agency

## **Schedule 1 – conditions to be deleted**

None

## **Schedule 2 – conditions to be amended**

The following conditions are amended as follows

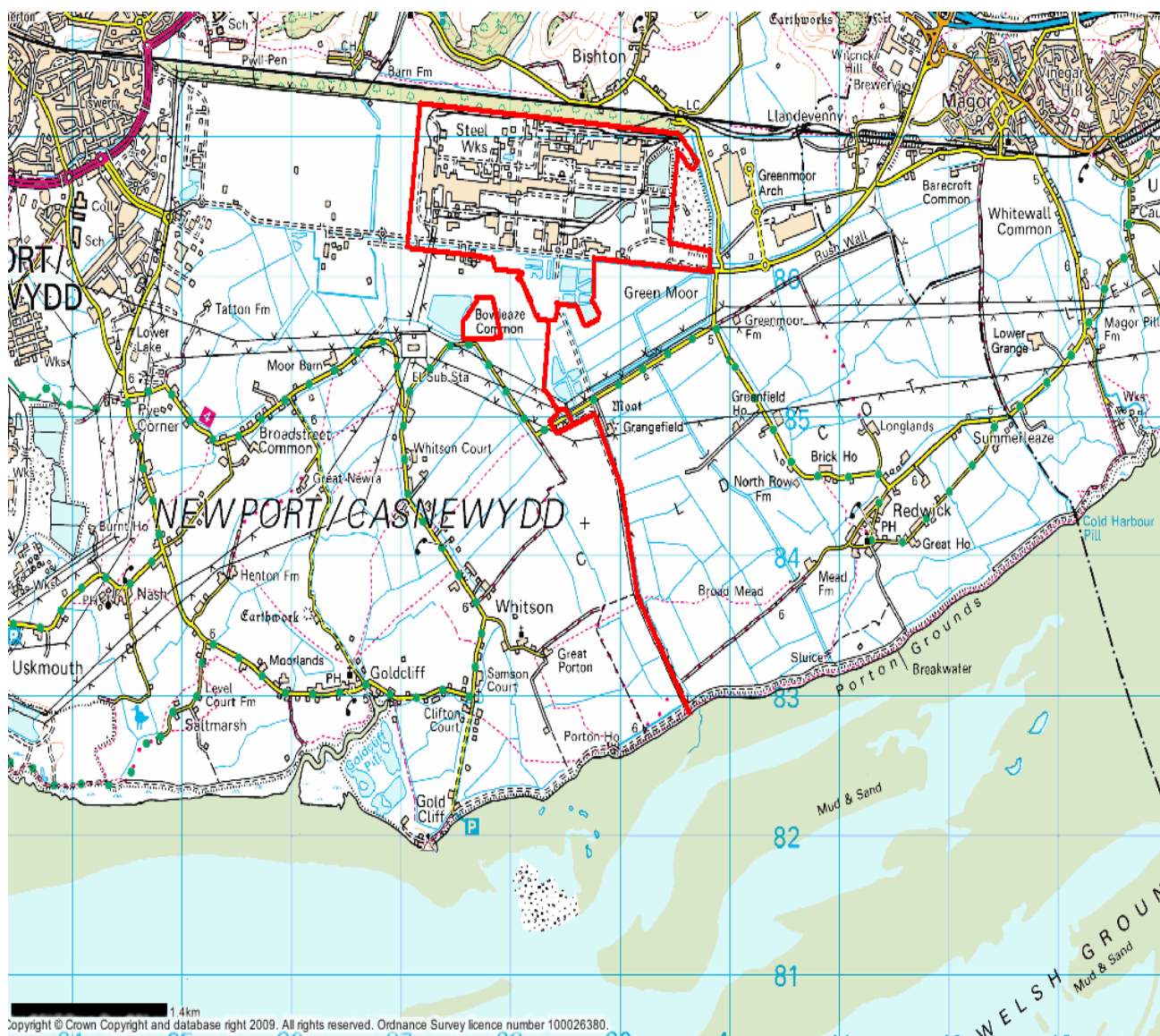
**1.1.1** The Operator is authorised to carry out the activities and/or the associated activities specified in Table 1.1.1.

<b>Table 1.1.1</b>		
<b>Activity under Schedule 1 of the Regulations/ Associated Activity</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
Processing ferrous metals and their alloys by using hot-rolling mills with a production capacity of more than 20 tonnes of crude steel per hour. [Schedule 1 Activity – Chapter 2, Section 2.1, Part A(1)(c)]	Hot Strip Mill	(1)
Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more. [Schedule 1 Activity – Chapter 1, Section 1.1, Part A(1)(a)]	140 MWth Slab Reheat Furnace No 1 140 MWth Slab Reheat Furnace No 2 140 MWth Slab Reheat Furnace No 3 140MWth Slab Reheat Furnace No 4 140 MWth Slab Reheat Furnace No 5	(1)
Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more. [Schedule 1 Activity – Chapter 1, Section 1.1, Part A(1)(a)]	19.5 MWth Natural gas-fired boiler No 1 19.5 MWth Natural gas-fired boiler No 2 19.5 MWth Natural gas-fired boiler No 3	(1)
Surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30 m <sup>3</sup> and where the activity is carried out at the same installation as one or more activities falling within – Part A(2) of Section 2.1 [Schedule 1 Activity – Chapter 2, Section 2.3, Part A(2)]	Pickle lines 1 & 2	(1)
Applying protective fused metal coatings with an input of more than 2 tonnes of crude steel per hour. [Schedule 1 Activity – Chapter 2, Section 2.1, Part A(2)(c)]	ZODIAC Hot Dip Galvanising Line, including precleaner, radiant furnace and direct fired furnace (combined rating 20.1MW), chromate treatments, Meibach Welder and Zinc recovery unit (Zinkoff).	(1)
Directly associated activity	Slab unloading, storage and transfer to the furnaces.	(1)
Directly associated activity	Packing and despatch areas	(1)
Directly associated activity	Cold Reduction Mill	(1)
Directly associated activity	Water treatment plant	(1)
Directly associated activity	Pickle line effluent treatment plant	(1)
Directly associated activity	Hot Mill Sludge filter press plant	(1)

### **Note**

(1) The limits of specified and associated activities collectively comprise all activities carried out in the installation between the receipt of raw materials to the supply of finished products

1.1.3 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the Llanwern Works areas shown within bold red lines on the plan below



## 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 B2.1 given in Section B2.1 of the application	31/7/02
Response to Schedule 4 Part1 Notice	Response to question B2.1	13/01/03
Variation Application	Application overview document, letter dated 6/8/09	20/11/08, 6/8/09

## 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 B2.3 given in Section B2.3 of the application	31/7/02
Response to Schedule 4 Part 1 Notice	Response to question B2.3	13/01/03
Variation Application	Application overview document, letter dated 6/8/09	20/11/08, 6/8/09

## 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 B2.6 given in section B2.6 of the application	31/7/02
Variation Application	Application overview document	20/11/08

## 2.10 Monitoring

2.10.6 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

2.10.7 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Agency.

## 2.10.8 Monitoring for the purposes of the Large Combustion Plant Directive

2.10.8.1 All LCP monitoring required by this permit shall be carried out in accordance with the provisions of Annex VIII of the Large Combustion Plant Directive.

2.10.8.2 If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality shall be used, as agreed in writing with the Agency.

2.10.8.3 Where required by a condition of this permit to check the measurement equipment the operator shall submit a report to the Agency in writing, within 28 days of the completion of the check.

## 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	Slab reheat furnace No 1	A1 on site plan
A2	Slab reheat furnace No 2	A2 on site plan
A3	Slab reheat furnace No 3	A3 on site plan
A4	Slab reheat furnace No 4	A4 on site plan
A5	Slab reheat furnace No 5	A5 on site plan
A6	Pickle line stack No 1	A6 on site plan
A7	Pickle line stack No 2	A7 on site plan
A8	Pickle line roof extraction	A8 on site plan
A9	Cold Mill oil mist vent	A9 on site plan
A10	Zodiac precleaner stack	A10 on site plan
A11	Zodiac heat treatment stack	A11 on site plan
A12	Zodiac chromate stack	A12 on site plan
A13	Meibach welder	A13 on site plan
A14	Boiler No 1	A14 on site plan
A15	Boiler No 2	A15 on site plan
A16	Boiler No 3	A16 on site plan
A17	Pickleline scalemaster extraction unit	Marked on plan included with variation application

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						
Emission point	Source	Parameters				
		Monitoring frequency <sup>1</sup>				
		NOx (as NO <sub>2</sub> ) mg/m <sup>3</sup>	CO (mg/m <sup>3</sup> )	Hydrogen chloride mg/m <sup>3</sup>	Particulates (PM)mg/m <sup>3</sup>	Oil mist mg/m <sup>3</sup>
A1	Slab reheat furnace No 1	400	-	-	-	-
A2	Slab reheat furnace No 2	400	-	-	-	-
A3	Slab reheat furnace No 3	400	-	-	-	-
A4	Slab reheat furnace No 4	400	-	-	-	-
A5	Slab reheat furnace No 5	400	-	-	-	-
A6	Pickle line stack No 1	-	-	5	-	-
A7	Pickle line stack No 2	-	-	5	-	-
A8	Pickle line roof extraction <sup>(2)</sup>	-	-	5 <sup>3)</sup>	-	-
A9	Cold Mill oil mist vent <sup>(2)</sup>	-	-	-	-	15
A10	Zodiac precleaner stack <sup>(2)</sup>	-	-	-	5	-
A11	Zodiac heat treatment stack	140	-	-	-	-
A12	Zodiac chromate stack <sup>(2)</sup>	-	-	-	5	-
A13	Meibach welder <sup>(2)</sup>	-	-	-	5	-
A14	Package boiler No 1 <sup>(3)</sup>	140 on natural gas 200 on gas oil	-	-	50 on gas oil	-
A15	Package boiler No 2 <sup>(3)</sup>			-		-
A16	Package boiler No 3 <sup>(3)</sup>			-		-
A17	Pickleline scalemaster unit <sup>(2)</sup>				5	

Notes :

- 1.All release points to be monitored at least quarterly with at least 4 weeks between tests unless indicated otherwise.
- 2.Annual monitoring.
3. 6 monthly monitoring

### 6.3.3. Emissions into water

Table 6.3.3: Emission limits into water		
Parameter	Emission Point W1	Monitoring Frequency
Flow rate	28 000 m <sup>3</sup> /day (dry weather)	
pH min	6	Continuous
pH max	12	
Surface oil	None specified	
Total hydrocarbon oil <sup>(3)</sup>	5 mg/l	Composite weekly
Suspended solids <sup>(1)</sup> <sup>(2)</sup> <sup>(3)</sup> <sup>(4)</sup>	50 mg/l	
Dissolved iron <sup>(1)</sup> <sup>(3)</sup>	10 mg/l	
Total chromium <sup>(1)</sup> <sup>(3)</sup>	0.2 mg/l	
Dissolved nickel <sup>(1)</sup> <sup>(3)</sup>	0.2 mg/l	
Zinc <sup>(1)</sup> <sup>(3)</sup>	2 mg/l	
Copper <sup>(1)</sup> <sup>(3)</sup>	0.1mg/l	
Lead <sup>(1)</sup> <sup>(3)</sup>	0.8 mg/l	
Arsenic <sup>(1)</sup> <sup>(3)</sup>	0.01mg/l	
Cadium <sup>(1)</sup> <sup>(3)</sup>	0.05mg/l	
Mercury <sup>(1)</sup> <sup>(3)</sup>	0.05mg/l	
Ammoniacal nitrogen	None specified	Monthly
Monohydric phenol		
Cyanide		
Benzene		

Notes:

- 1.Any representative spot sample.
- 2.The solids shall be separated and dried at 105°C.
- 3.Limit shall be complied with if 95% of all weekly representative spot samples during a rolling half year period do not exceed the limit value given in Table 6.3.3. and the peak spot sample value does not exceed 1.5 times the limit value.
4. Process contribution (excluding off-site sources) following monitoring procedure as approved by the Agency. Linked to Improvement Item 9.15.

## 10 Interpretation

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

*“Authorised Officer”*

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

*“Background concentration”*

means the same as “background quantity” as defined in paragraph 11 to Part 2 to Schedule1 of the PPC Regulations.

*“Environmental Permitting Regulations (EPR)”*

means the Environmental Permitting (England and Wales) Regulations S.I.2007 No. 3538 and words and expressions defined in the EPR Regulations shall have the same meanings when used in this Permit

*“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)

*“large combustion plant”* or *“LCP”* is a boiler or group of boilers discharging waste gases through a common windshied or stack, where the total thermal input is 50 MWth or more, based on gross calorific value.

*“Large Combustion Plant Directive”* means Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants.

*“Monitoring”*

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

*“Permitted Installation”*

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

*“PPC Regulations”*

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

*“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.

*“year”*

means year ending 31 December.

*“quarter”*

means a period of 3 successive calendar months commencing on 1 January.

## **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
Particulate mg/m <sup>3</sup>	A10, A12 A13, A17	Every 12 months	
Particulate mg/m <sup>3</sup>	A14, A15, A16	Every 6 months	
Oxides of nitrogen (as NO <sub>2</sub> ) mg/m <sup>3</sup>	A1, A2, A3, A4, A5, A11,	Every 3 months	
Oxides of nitrogen (as NO <sub>2</sub> ) mg/m <sup>3</sup>	A14, A15, A16	Every 6 months	
Carbon monoxide mg/m <sup>3</sup>	A1, A2, A3, A4, A5, A11,	Every 3 months	
Carbon monoxide mg/m <sup>3</sup>	A14, A15, A16	Every 6 months	
Hydrogen chloride mg/m <sup>3</sup>	A6, A7	Every 3 months	
	A8	Every 12 months	
Oil mist mg/m <sup>3</sup>	A9	Every 12 months	
Metals <sup>(1)</sup> mg/m <sup>3</sup>	W1	Every 3 months	
pH	W1	Every 3 months	
Suspended solids mg/l	W1	Every 3 months	
Total hydrocarbon oil mg/l	W1	Every 3 months	
Maximum flow m <sup>3</sup> /day	W1	Every 3 months	
Ammoniacal nitrogen	W1	Every 3 months	
Monohydric phenol	W1	Every 3 months	
Cyanide	W1	Every 3 months	
Benzene	W1	Every 3 months	
Gas oil sulphur content, %w/w		Every 3 months	
Energy		Every 12 months	
Waste		Every 12 months	
Total annual oxides of nitrogen (T)	A14, A15, A16	Annually	
Total annual oxides of sulphur (T) (expressed as SO <sub>2</sub> )	A14, A15, A16	Annually	
Total annual dust emission (T) (expressed as total suspended particulates)	A14, A15, A16	Annually	
<b>Notes</b> 1. Metals means elements and compounds expressed as the metal and includes As, Cd, Cr, Cu, Hg, Ni, Pb, Zn, Fe, Pb			

# 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 S.3 : Reporting Forms		
Media parameter	Form Number	Date of Form
Air	A1/2/3/4	1/9/09
Water	W1	1/9/09
Energy	EW1	1/9/09
Waste Return	R1	1/9/09
Performance Indicators	PI1	1/9/09
Annual LCPD requirements	LCPD1	1/9/09

Operators written reports to be submitted by 31 January each year

1. EMS Key Performance Indicators required by condition 4.1.4 and 4.1.7.
2. Fugitive emissions report required by condition 4.1.5.

## Schedule 3 - Conditions to be added

### 9. Improvement programme

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 <sup>(1)</sup>
9.14	The Operator shall evaluate compliance with the requirement for self monitoring of effluent flow for PPC installations (MCERTs standard) and if necessary provide options and a timetable for implementation. The Operator shall submit a report to the Agency for approval.	1 <sup>st</sup> January 2011
9.15	The Operator shall evaluate the monitoring data and effectiveness of the methods used to demonstrate compliance with the emission limit value for suspended solids at W1 (Table 6.3.3, Note 4) and to provide a written summary to the Agency for approval.	1 <sup>st</sup> September 2010
9.16	The Operator shall undertake a review of the existing process effluent, surface water and foul effluent drainage system and techniques for effluent handling, treatment and disposal against Best Available Techniques (BAT) and produce a written report, including the identification of any deficiencies and potential areas for improvement with a proposed timetable for completion for approval by the Agency.	1 <sup>st</sup> November 2010

Note

1. Or as otherwise agreed in writing by the Environment Agency

**End of variation**