



Environment  
Agency

## Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

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Padeswood Cement Works

Castle Cement Ltd  
Padeswood Works  
Padeswood  
Mold  
Flintshire  
CH7 4HB

Variation notice number  
EA/EPR/BL1096IB/V005

Permit number  
BL1096

surface water management plan for land fill  
+ SNCR to reduce NOx

# **Padeswood Cement Works**

## **Permit Number BL1096**

### **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 a regulated facility..

This variation has been issued in response to an application by Castle Cement to modify the Surface Water Management Plan for the new landfill following the construction of Cell 1 and formalise the revised location of the south western surface pond adjacent to Cell 1. In addition the use of SNCR (selective non-catalytic reduction) to reduce NO<sub>x</sub> (nitrogen oxide) emissions has also been included in the variation. SNCR involves the high temperature reduction of NO<sub>x</sub> to N<sub>2</sub> (nitrogen) by reaction with NH<sub>3</sub> (ammonia).

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 BL 1096	Received 29/08/01 Duly Made 31/08/01	
First Schedule 4 Information Notice	Notice dated 17/12/01	Consolidated application incorporating response received 05/06/02
2 <sup>nd</sup> Sch 4 Notice	Notice dated 11/04/03	Response dated 06/06/03
3 <sup>rd</sup> Sch 4 Notice	Notice dated 17/07/03	Response dated 11/08/03
Additional information from Applicant. Revised Site plan and confirmation that landfill is not part of the Installation	Received 24/10/03	
Additional Information from Applicant	Received 10/05/04	
Permit BL 1096	Determined 17/12/04	
Application for landfill variation	Received 15/04/05	
First Schedule 7 Information Notice	Notice dated 21/07/05	Response dated 23/09/05 Response dated 09/01/06
Second Schedule 7 Information Notice	Notice dated 02/06/06	Response dated 03/08/06 Response dated 14/08/06 Response dated 15/09/06
Variation Notice YP3438	Determined 08/11/07	Consolidated permit
Application for MBM variation	Duly made 30/03/07	
Schedule 7 Information Notice	Notice dated 27/06/07	Response dated 19/07/07 (received 20/07/07)
Additional Information from Applicant	Received 20/12/07	
Request from Applicant to amend fuel specifications to the Standard Waste Derived Fuel Specifications for the Cement Sector	Received 21/12/07	
Additional Information from Applicant	Received 20/02/08	
Variation Notice KP3338UC	Determined 03/04/08	
Application for SRF variation	Duly made 03/07/07	
Schedule 7 Information Notice	Notice dated 31/07/07	Response dated 24/08/07 (received 28/08/07)
Additional Information from Applicant	Received 10/03/08	
Variation Notice AP3134UN	Determined 17/04/08	
Application for landfill variation	Duly made 27/05/08	
Additional Information from Applicant	Received 21/08/08	
Variation Notice EA/EPR/BL1096IB/V005	Determined 09/10/08	

End of Introductory Note

**Notice of variation**

**Environmental Permitting  
(England and Wales) Regulations 2007**

Permit number

**BL1096**

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.

**Castle Cement Ltd** ("the operator"),

whose registered office is

**Hanson House**

**14 Castle Hill**

**Maidenhead**

**SI6 4JJ**

company registration number **2182762**

holds a permit to operate a regulated facility at

**Padeswood Works]**

**Padeswood**

**Mold**

**Flintshire**

**CH7 4HB**

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

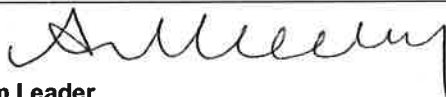
The notice shall take effect from 09 October 2008

Name

Date

**Ann Weedy**

**PPC Compliance Team Leader**



9/10/08

Authorised on behalf of the Agency

## Schedule 1 – conditions to be deleted

1. None

## Schedule 2 – conditions to be amended

2. Schedule 1 Table S1.1 Activities shall be amended to:

Table S1.1 Activities		
Activity listed in Schedule 1 of the PPC Regulations	Description of specified activity	Limits of specified activity
Section 3.1, Part A(1)(a), The production of cement clinker or the production and grinding of cement clinker.	All raw materials storage, handling and preparation.	Receive raw materials from suppliers, including checking for suitability for use in line with the Integrated Management System ("IMS"). Preparation and storage of raw materials or process feedstocks, including crushing, blending, other processing and feeding materials to kiln 4.
	All fuel handling, storage and preparation.	Coal, petcoke, gas oil, kerosene, Profuel®, Cemfuel®, Tyres, MBM and SRF including receipt on site through storage, handling, crushing, blending, other processing and feeding materials to the kiln system. This includes the use of gas oil or kerosene as a start-up fuel.
	Cement kiln No 4 and associated cooler.	Operation of cement kiln systems including feed of all materials and fuels into the kiln system through to discharge of clinker from the cooler and discharges to air from the stacks.
	All cement clinker storage and associated milling.	Clinker handling, storage and milling, including feed of clinker from clinker coolers or import facility, receipt of grinding aids and reducing agents, all storage, transport, milling and blending activities through to discharge from cement milling area to export facilities.
	All cement storage, blending, packing and loading.	Cement handling, storage, packing and dispatch, including all transport, bulk storage through to bulk discharge to road transport or bagging, storage and loading to road transport.
Section 5.2 Part A(1) (a) , The disposal of waste in a landfill.	Landfill for hazardous waste (landfill classification under the Landfill Regulations 2002)	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in schedule 3, table S3.3, as an integral part of landfilling.
<b>Directly Associated Activity</b>		
Water discharges to controlled waters.	Discharges of site drainage	From surface water management system to point of entry to controlled waters.
All waste storage and handling	Waste storage and handling	From the on site generation of waste through to dispatch for recovery or disposal
Leachate management	Recirculation of leachate within the landfill and disposal of leachate via kiln 4	Leachate arising from the Permitted landfill

### 3. Schedule 1 Table S1.2 Operating techniques shall be amended to:

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
The Consolidated Response to the Sch-4 Notice issued 17 December 2001	Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	05/06/2002
The response to the Sch 4 Notice issued 11 April 2003	The response given to questions 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 23, 25, 26, 27, 28, 29 & 39	06/06/2003
The additional information May 2004	Sections 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18	10/05/2004
Variation Application YP3438	The response to questions, 2.1, 2.2, 2.3, 2.4 and 2.5 in part B of the Variation Application Form	15/04/05
The response to the Sch 7 Notice issued 21 July 2005	The response to questions A19, A20, A23, A29, A65, A66, A70, A79 and A81	23/09/05
The response to the Sch 7 Notice issued 2 June 2006	The response to questions B4, B8, B21 and B23	03/08/06 and 14/08/06
Variation Application KP3338UC	C2.1 to C2.9, C2.10 (except 2.10.17 to 2.10.20, 2.10.23 and Table 2.10.2), C2.11	30/03/07
The response to the Sch 7 Notice issued 27 June 2007	The response to questions 1, 2 and 4	20/07/07
The additional information Feb 2008	Alternative fuel maximum tonnage per hour amendments	20/02/08
Variation Application AP3134UN	C2.1 to C2.9, C2.10 (except 2.10.18 to 2.10.21, 2.10.24 and Table 2.10.2), C2.11	03/07/07
The response to the Sch 7 Notice issued 31 July 2007	The response to questions 1, 4, 5, 6, 7	28/08/07
The additional information March 2008	SRF maximum tonnage per hour amendment	10/03/08
Variation Application EA/EPR/BL1096IB/V005	Section A – section 3.0 & Appendix 2 (revised surface water management plan)	27/05/08
The additional information August 2008	Use of SNCR (selective non-catalytic reduction)	21/08/08

4. Schedule 1 Table S1.4 Pre-operational measures for future development shall be amended to :

**Table S1.4 Pre-operational measures for future development**

Reference	Operation	Pre-operational Measures
S1.4.1	Hazardous waste landfill	The Operator shall submit to the Environment Agency, for its approval in writing, a revised Landfill Gas Management and Monitoring Plan, which shall include a review of the perimeter gas monitoring data. The review shall propose assessment and compliance limits, based upon 6 sets of data collected at monthly intervals. Gas monitoring shall be undertaken in accordance with the Environment Agency's document, "Guidance on the Management of Landfill Gas" (LFTGN03) dated September 2004. Following determination by the Environment Agency the operator shall implement the plan with any amendments as approved by the Environment Agency immediately. (Complete)
S1.4.2	Use of MBM as an alternative fuel	The Operator shall ensure that the MBM HAZOP study is validated by a competent 3 <sup>rd</sup> party (i.e. independent of the Heidelberg organisation and to be agreed with the Environment Agency)
S1.4.3	Use of SRF as an alternative fuel on the calciner	The Operator shall ensure that all feed-system HAZOP recommendations have been implemented.
S1.4.4	Use of SRF & Profuel® as alternative fuels on the main kiln burner	The Operator shall provide details of the transport system to the main burner and monitoring programmes for agreement by the Environment Agency.
S1.4.5	Hazardous waste landfill – Cell1	The Operator shall complete the Cell1 CQA Plan described in the Variation Application (May 2008) and submit the CQA plan for approval by the Environment Agency.
S1.4.6	Hazardous Waste landfill – surface water management	The Operator shall provide details of the pumps to be used for the landfill surface water management system and the action to be taken in the event of pump breakdown or malfunction (to ensure that the surface water pond does not surcharge) for approval by the Environment Agency.
S1.4.7	Disposal of leachate via kiln 4	The Operator shall provide details of the disposal method for agreement by the Environment Agency.

5. Schedule 4 Table S4.5 Surface water monitoring requirements shall be amended to :

<b>Table S4.5 Surface water monitoring requirements</b>				
<b>Location or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method (Note1)</b>	<b>Other specifications</b>
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	BOD	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	COD	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Chloride	Quarterly	Monitoring to be carried out in accordance with Environment Agency Document "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface water" (LFTGN02), unless otherwise agreed in writing with the Agency	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Suspended solids	Quarterly	As per Variation Application, Volume 3, Appendix 3 and the Schedule 7 response of 23 September 2005, answer to question A23	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	pH	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Electrical conductivity	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Potassium	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Cadmium	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Mercury	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Copper	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Lead	Quarterly	As per Variation Application, Volume 3, Appendix 3	
SW1, SW2, SW3 and SW4 as indicated on plan ESID 11r1	Selenium	Quarterly	As per Variation Application, Volume 3, Appendix 3	

Note1: where relevant refers to application documentation for YP3438



### **Schedule 3 – conditions to be added**

6. None

