

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

Celsa Manufacturing UK Limited

Cardiff Rod and Bar Mill
Castle Works
East Moors Road
Cardiff
CF24 5NN

Variation notice number
EPR/BV0759IC/V002

Permit number
EPR/BV0759IC

Cardiff Rod and Bar Mill

Permit number EPR/BV0759IC

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.

Cardiff Rod and Bar Mill principally manufactures reinforcing steel bar in the form of bar, coil or rod for use in the reinforcement of concrete. The hot rolling of steel billet conducted at the facility falls under the requirements of Schedule 1, Section 2.1 A(1)(c): 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.

The capacity of the hot rolling mill is 150 tonnes per hour, associated activities comprise operation of a re-heating furnace, water cooling systems, water treatment, raw material handling and storage, and product handling and storage. Heat is supplied from a 54MWth furnace, firing on gas with a back-up fuel of light fuel oil. Combustion gases are released via two fifty one metre stacks. Water is used to remove scale from and cool the billets using high pressure water jets. There is an onsite effluent treatment plant which discharges via one emission point into the Bute East Dock via a multi stage interceptor.

Changes to the current permit, issued 28/11/2003, are necessary to enable replacement of the existing product cooling water box systems in the rod mill, bar mill, spooler and Tempcore water treatment system. In addition, the one cooling tower is to be replaced by three smaller cooling units providing more efficient cooling on-site. These changes are likely to cause minimal environmental impact to emissions to air, water or land however there are changes to the site's noise profile, which were assessed to be minimal based upon manufacturer's data. Although cooling demand is greater than previously, the new system should lead to a net reduction in water and energy use.

Limits to air have been reviewed resulting in the removal of some monitoring requirements and emission limit values.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions, Schedule 3 lists any conditions that have been added and Schedule 4 shows any changes to the plan.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status Log of the permit

Detail	Date	Response Date
Application BV0759IC	Duly made 11/06/03	
Response to request for information	02/10/03	24/10/03
Permit determined BV0759IC	28/11/03	
Permit Issued BV0759IC	28/11/03	
Application EPR/BV0759IC/V002	21/09/09	
Response to request for information	16/12/09	
Variation EPR/BV0759IC/V002 issued	21/12/09	
Variation EPR/BV0759IC/V002 takes effect	31/12/09	

End of Introductory Note

Notice of variation

Environmental Permitting
(England and Wales) Regulations 2007

Permit number

EPR/BV0759IC

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.

CELSA Manufacturing (UK) Ltd ("the operator"),

whose registered office is

Building 58

Castle Works

East Moors Rd

Cardiff CF24 5NN

Company registration number 04577881

holds a permit to operate a regulated facility at

Castle Works

East Moors Rd

Cardiff

CF24 5NN

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

The notice is issued on 21/12/2009 and shall take effect from 31/12/2009.

Name	Date
<i>M A Bischer</i>	21/12/2009

M.Bischer, Team Leader, National Permitting Service

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None.

Schedule 2 – conditions to be amended

The following conditions are amended as follows:

Table 1.4.1: Improvement programme		
Reference	Requirement	Date
1	Undertake a study into the predicted atmospheric impact of the process on the proposed new residential development at the SE edge of Bute East Dock [Known as 'Queensgate North'], this study to refer to the previously undertaken modelling work, having regard to any effects that the proposed buildings will have upon local air dispersion.	Within 3 months following commencement of construction of the housing development.
2(a)	Characterise releases from release points A3 to A18 inclusive.	1 st July 2004
2(b)	Following 2(a) above, consider whether releases from discharge points A3 to A18 constitute BAT, and report the findings of the BAT assessment to the Agency.	1 st October 2004
3(a)	Characterise the effluent being discharged into Bute East Dock in regard to the following parameters, based on a suitable number of monthly samples taken in accordance with Table 2.10 of Condition 2.10.2 of the Permit, in order that a statistically valid result may be obtained. Suspended Solids (as mg/l) Total Chromium (as mg/l) Oil and Grease (as mg/l) Dissolved Iron (as mg/l) Dissolved Nickel (as mg/l) Zinc (as mg/l) pH (as pH Units)	1 st December 2004
3(b)	Using the results obtained from 3(a) above; compare the environmental impact and costs of the current method of discharge against the cost and environmental benefits of diverting this discharge to sewer. If diverting flows to a new sewer connection represent BAT, propose a scheme of works (including appropriate timescale) to undertake this improvement. Report the results of i) and ii) to the Agency in advance of undertaking any such works and by the deadline specified.	1 st February 2005
4(a)	Undertake further groundwater monitoring at existing borehole locations [BH1, BH3, BH4, BH5 and BH6 or equivalent as agreed in writing with the Agency] on a 3 monthly basis for the following parameters :- Arsenic(As), Nickel(Ni), Zinc(Zn), Iron(Fe), Manganese(Mn), Ammonia(NH ₃), Chloride (Cl ⁻), all expressed as ug/l; Total Petroleum Hydrocarbons (TPH), Poly Aromatic Hydrocarbons (PAH) and Volatile Organic Compounds, all expressed as ug/l; Conductivity, expressed as usv/cm; pH, expressed as Units.	Commencing from the date of issue of the Permit for <u>four</u> quarterly monitoring sets.
4(b)	Report the findings of the survey to the Agency on the completion of sampling, this report to include an analysis of any trends or patterns in the groundwater quality across the site.	Within 3 months of the completion of the above monitoring exercise.
5(a)	Review the outstanding actions identified in the response to Question 2.8 of the application [Accident Prevention and Control], and present the Agency with a plan detailing the Operators intentions in regard to completing these actions, this plan to include a timetable of prioritised works.	1 st March 2004
5(b)	Undertake the work identified in 5(a) above in order to complete these outstanding actions.	As detailed in the timetable contained within the response to 5(a) above.

6	Submit a written report to the Environment Agency for approval. The report must assess the containment for storage of cooling water treatment chemicals having regard to Section 3 of the Environment Agency Guidance Note 'Getting the Basics Right' Fugitive Emissions to Surface Water Sewer and Groundwater. The report must contain dates for the implementation of individual measures. The notification requirements of condition 1.4.1 will be deemed to have been complied with on submission of the plan.	01/03/2010
7	Submit a noise assessment to the Environment Agency for approval. The assessment must include frequency analysis of the new cooling systems to BS7445:1991 also having regard to BS4142:1997 and the Environment Agency's Horizontal Guidance for Noise IPPC H3 (Part 2) Noise Assessment and Control. The report must contain options for mitigation of noise where necessary with dates for the implementation of individual measures. The notification requirements of condition 1.4.1 will be deemed to have been complied with on submission of the report.	01/06/2010
8	Submit a noise management plan to the Environment Agency for approval. The plan must detail the measures to be used to control emissions of noise having regard to Appendix 4 of the Environment Agency's Horizontal Guidance for Noise IPPC H3 (Part 2) Noise Assessment and Control. The plan must contain dates for the implementation of individual measures. The notification requirements of condition 1.4.1 will be deemed to have been complied with on submission of the plan.	01/12/2010
9	The Operator shall submit a commissioning report to the Environment Agency for approval. The report shall include details of any changes in energy and water use, and any other resources impacted by the installation of the new cooling systems. The notification requirements of condition 1.4.1 will be deemed to have been complied with on submission of the report.	01/03/2011

Table 2.2.1 : Emission points to air

Emission point reference or description	Source	Location of emission point
A1	54 MWth reheat furnace stack	The location of the emission points is shown on plan GM297, supplied in response to the Schedule 4 Notice Requesting Further Information. (As supplied to the Agency by the Applicant on the 24 th October 2003, and subsequently appended to the Application.) Each emission point on Plan GM297 is identified on the plan as shown in this table.
A2	Heat exchange boiler stack	
A3	Chemical Cleaning Bath LEV	
A4	Bead Shot Blaster1 LEV	
A5	Bead Shot Blaster2 LEV	
A6	Filter Cleaning LEV	
A7	Metallurgy LEV	
A8	Portable Extractor No.7 LEV	
A9	Portable Extractor No.13 LEV	
A10	Roll Turning LEV	
A11	6" and 8" Wendt Grinding M/C LEV	
A12	Fuel oil storage tank vent	
A13	Mobile plant fuel storage tank vent	
A14	North holding tank vent	
A15	Waste Oil tank	
A16	Wanson Boiler 1	
A17	Wanson Boiler 2	

Table 2.2.2 : Emission limits to air and monitoring

Emission point reference	Parameter	Limit (including Reference Period) ¹	Monitoring frequency	Monitoring method
A1 (Reheat furnace exhaust stack) and A2 (Waste heat boiler exhaust stack.)	Oxides of Nitrogen (NOx, expressed as mg/m ³)	400 mg/m ³ , measured over a four-hour reference period.	Quarterly	BSEN 14792:2005, Determination of the mass concentration of nitrogen oxides - Performance characteristics of automated measuring systems.

Note 1: See Section 6 for reference conditions

Table 2.10.1 : Monitoring requirements

Emission point reference	Substance or parameter	Monitoring frequency	Monitoring method
A1	Oxides of Nitrogen (NOx, expressed as mg/m ³)	Quarterly	BSEN 14792:2005 Determination of the mass concentration of nitrogen oxides - Performance characteristics of automated measuring systems
W1	Total Hydrocarbon Oil	Monthly	The determination of Hydrocarbon Oils in waters by solvent Extraction, Infra Red Absorption and Gravimetry 1983 ISBN 0 11 751728 3.
	pH	Monthly	To be agreed in writing with the Agency.
	Suspended Solids	Monthly	Suspended, Settleable, and Total Dissolved Solids in Waters and Effluents 1980 ISBN no. 0 11 751957 X
	Free Chlorine	Monthly	To be agreed in writing with the Agency.
	Dissolved Iron	Monthly	Inductively Coupled Plasma Optical Emission Spectroscopy [ICPOES] – to Environment Agency Compendium Method 140 or equivalent.
	Total Chromium	Monthly	Inductively Coupled Plasma Mass Spectrometry [ICPMS] – to Environment Agency Compendium Method 120 or equivalent.
	Dissolved Nickel	Monthly	Inductively Coupled Plasma Mass Spectrometry – to Environment Agency Compendium Method 120 or equivalent.
	Zinc	Monthly	Inductively Coupled Plasma Mass Spectrometry – to Environment Agency Compendium Method 120 or equivalent.

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Oxides of nitrogen mg m ⁻³	A1	Every 3 months	01/01/2010
Total Hydrocarbon Oil mg/l	W1	Monthly	01/01/2010
pH	W1	Monthly	01/01/2010
Suspended Solids, mg/l	W1	Monthly	01/01/2010
Free Chlorine, mg/l	W1	Monthly	01/01/2010
Dissolved Iron, mg/l	W1	Monthly	01/01/2010
Total Chromium, mg/l	W1	Monthly	01/01/2010
Dissolved Nickel, mg/l	W1	Monthly	01/01/2010
Zinc, mg/l	W1	Monthly	01/01/2010
Water usage	N/A	Every 12 months	01/01/2010
Energy usage	N/A	Every 12 months	01/01/2010
Waste disposal and/or recovery.	N/A	Every 12 months	01/01/2010

Table S3: Reporting Forms		
Media / parameter	Form Number	Date of Form
Air	A1, A2	01/01/2010
Water (excluding sewer)	W1	01/01/2010
Energy and Water Usage	EW1	01/01/2010
Waste Return	R1	01/01/2010
Performance indicators	PI1	01/01/2010

Table S4.2: Performance parameters		
Parameter	Frequency of assessment	Performance indicator
Water Usage	Monthly	Total water supplied per tonne of rolled steel [litres]
Usage of oils	Monthly	Total oil usage per tonne of rolled steel [litres]
NOx production	Quarterly	NOx release per tonne of steel rolled [kg]

Schedule 3 – conditions to be added

The following conditions are to be added as follows

- 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 or Technical Measures	
Parameter or measure	Requirement or description of measure, and frequency if relevant
Sulphur content of fuel oil	Maximum of 0.1% sulphur content.