

This form will report compliance with your permit as determined by an NRW officer

Site	Ford Engine Plant Bridgend			Permit Ref	BL2548IF		
Operator/ Permit holder	Ford Motor Company Ltd						
Date	4 March 2015			Time in	11:50	Out	13:15
What parts of the permit were assessed	See Below						
Assessment	Choose an item.	EPR Activity:	Installation	X	Waste Op		Water Discharge
Recipient's name/position	Brett James – Environmental Control Engineer						
Officer's name	Karen Dunn			Date issued		13 March 2015	

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our [Compliance Classification Scheme](#) (CCS). CCS scores can be consolidated or suspended, where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your [local office](#).

Permit Conditions and Compliance Summary

Condition(s) breached

a) Permitted activities	1. Specified by permit	A	
b) Infrastructure	1. Engineering for prevention & control of pollution	N	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	N	
	5. Plant and equipment	N	
c) General management	1. Staff competency/ training	N	
	2. Management system & operating procedures	N	
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	N	
d) Incident management	1. Site security	N	
	2. Accident, emergency & incident planning	N	
e) Emissions	1. Air	A	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	N	
	2. Noise	N	
	3. Dust/fibres/particulates	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	N	
	2. Records of activity, site diary, journal & events	N	
	3. Maintenance records	N	
	4. Reporting & notification	N	
h) Resource efficiency	1. Efficient use of raw materials	N	
	2. Energy	N	

KEY: C1, C2, C3, C4 = CCS breach category (* suspended scores are marked with an asterisk),
A = Assessed or assessed in part (no evidence of non-compliance), N = Not assessed, NA = Not Applicable

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Total No Breaches is greater than zero, then please see Section 3 for details of our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- | | |
|--|---|
| ➤ the part(s) of the permit that were assessed (e.g. maintenance, training, combustion plant, etc) | ➤ information on the compliance score accrued inc. details of suspended or consolidated scores. |
| ➤ where the type of assessment was 'Data Review' details of the report/results triggering the assessment | ➤ details of advice given |
| ➤ any non-compliances identified | ➤ any other areas of concern |
| ➤ any non-compliances with directly applicable legislation | ➤ all actions requested |
| ➤ details of any multiple non-compliances | ➤ any examples of good practice. |
| | ➤ a reference to photos taken |

Ford representatives present :

Brett James – Environmental Control Engineer
Tony Osborne (via Telecom) – Environmental Compliance
Brian Vicker - Plant Engineer

The main purpose of this visit was to discuss :

- A formal notification to NRW following the installation of a low NOX burner and de-rating of one of the 12.7MW boilers (to include the boiler data sheets, calculations, supplementary information provided on e-mails e.g. Martin Howard response 24/2/2015 regarding the software etc);
- Verification of the status of the boilers to the regulator in future inspections through software or a physical change i.e. orifice plate;
- Industrial Emissions Directive (IED) Chapter III (Annex 5) & Chapter II (Annex 1)
- Large Combustion Plant (LCP) Reporting for 2014;
- Current NOx Emissions;
- Permit Review – Response to EPR Regulation 60(1) Notice following low NOx burner installation;
- Medium Combustion Plant Directive (MCPD)

Large Combustion Plant Directive (LCPD) Status

The boiler house at the Ford Motor Company Ltd (Ford) in Waterston Bridgend consists of five boilers with a net thermal input of 54.8MW. Boilers one to four have an aggregated thermal input of 50.8MW which exhaust to a single windshield. Three of the boilers were installed when the plant was built in 1979 and a fourth was added with the same thermal input of 12.7MW in 1989. In addition a fifth ancillary boiler (3.8MW) with its own stack was also installed in 1989.

On 19 November 2004 Ford was issued with an environmental permit (BL2548IF) for the operations at the boiler house which supplies high pressure hot water to the rest of the engine manufacturing plant.

On 16 December 2005 DEFRA announced that it had accepted the "stack" definition under the revised LCPD. A stack is defined as a windshield, through which one or more combustion plants vent exhaust gases via one or more flues. The respective size of the combustion plant for the revised LCPD is the sum of the individual rated thermal inputs of all the combustion plants which vent to the stack. This aggregation meant that more combustion plants came under the revised LCPD including the boiler house at Ford Bridgend.

A letter confirming the LCPD status of the boiler house was sent to Ford in January 2007 and advice to contact DEFRA concerning the National Emission Reduction Plan (NERP). The LCPD status was also reaffirmed in September 2008 in a Compliance Assessment Report (CAR) form (reference 2059) also advising that a permit variation was required in respect of the LCPD reporting requirement. The operator subsequently wrote to DEFRA in 2008 regarding the NERP

and were informed the relevant application timeframe had passed. Following this Ford made a decision to install low NOx burners in the boilers.

Action: Operator to submit LCPD reporting information for 2014 to the point of the agreed change concerning one of the 12.7MW boilers.

Background Low NOx Burner Installation

The decision to install low NOx burners in the boilers was well received by the regulator and seen as a positive environmental improvement. The reduction of greenhouse gas emissions is and continues to be one of our key environmental objectives. In 2009 the regulator was advised that Bridgend Engine plant had secured the funding required to make the change. However following this decision updates were provided by Ford whereby the economic downturn had impacted on the proposed work. Also, the first burner installation involved a complete change to the controls which had since become obsolete at an additional cost.

In 2010 the operator verbally proposed to de-rate one of the boilers with the installation of a low NOx burner in one of the 12.7MW boilers falling out of the LCPD. KD requested for the proposal to be made in writing for internal discussion. In May 2010 Ford provided written options/proposals to de-rate boiler number 2. However, it was noted at that time that option 2 would take a while due to the lead times involved with acquiring the burner and controls. In August 2010 following the assessment of the proposals option 2 was agreed, being a permanent change with the installation of a low NOx burner and de-rating of one of the 12.7MW thermal boilers. In agreeing the change the regulator advised that it could be made under section 1.5 of the permit 'Minor Operational Change', and the permanent change should include verification by an independent engineer and that the Ford would also need to consider any implications of the then forthcoming Industrial Emissions Directive.

The Industrial Emissions Directive (IED)

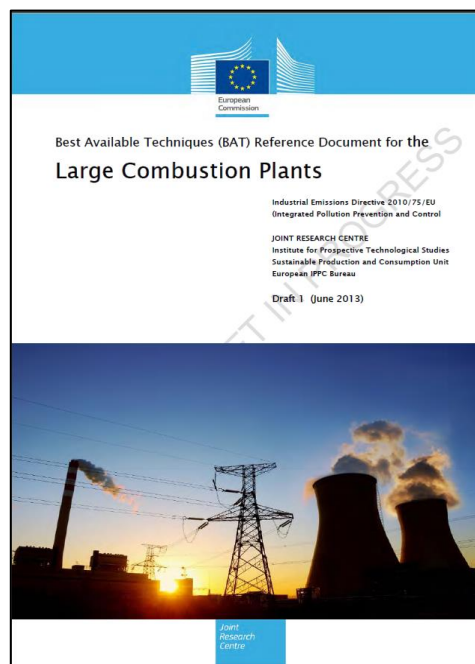
The Industrial Emissions Directive (November 2010) is European Legislation that is being applied to the UK. It brings seven Directives into one replacing the Large Combustion Plant Directive (LCPD), Integrated Pollution Prevention and Control Directive (IPPCD), Waste Incineration Directive (WID) Solvent Emissions Directive (SED) and 3 directives on Titanium Oxide <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:334:0017:0119:en:PDF>

The IED retains the IPPC principles in that it specifies a range of industrial process and activities that require regulation as 'installations' to protect the Environment and human health. IED requires operators of installations to meet the requirements of the Best Available Techniques Conclusions (BATc) within four years of the publication of the Best Reference Document (BREF). The Bref for each sector can be found using the following link

<http://eippcb.jrc.ec.europa.eu/reference/>

Please note that the Large Combustion Plants (LCP) Bref is currently in draft and that there is no separate combustion equivalent. It is expected that the LCP Bref will be published soon.

Following the publication the regulator will better understand what combustion plant will fall under the Medium Combustion Plant Directive (MCPD). The emission limit values (ELV's) have been proposed and can be found in Annex II via the following link:



The IED also requires the Competent Authority (CA) to review the environmental permits to ensure they reflect the BATc published within the Bref.

Environmental Permitting Regulations (EPR) Regulation 60(1) Notice Requesting Information

The mechanism by which we review a permit on publication of a revised Bref is by issue of an EPR Regulation 60(1) Notice requesting information.

Under the notice the operator is required to inform NRW how they perform against each BAT conclusion and where they currently do not meet the standard explain how they propose to do so, within 4 years of the anniversary of the publication of the Bref.

The EA and NRW agreed that the same mechanism by issue of an EPR Regulation 60(1) Notice would be used to ascertain how operators of LCP plan to meet the requirements of IED Chapter III Annex V emission limits by 1 January 2016. This information would then be used to review the permits of LCP's. It was also agreed that these Notices would be issued to operators of LCP in November 2014 with a deadline 31 March 2015.

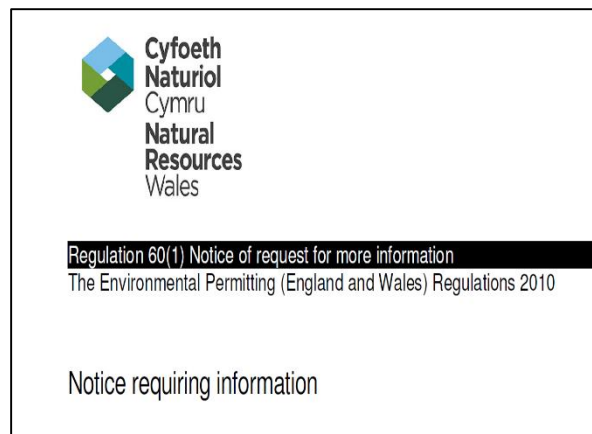
Close to the notice deadline NRW also proposed to write to operator's concerning the fees and charges for the permit variation required under the review process. During this visit KD advised that she had spoken with permitting and the NRW combustion sector lead about refraining from sending this letter. NRW considers that the EPR Regulation 60(1) notice will fall on the assessment of the formal de-rating notification and confirmation of the change (see below).

Minor Operational Change Submission

In September 2014 a minor operation change request was made to NRW for the installation of a low NOx burner in boiler number 4 (update in CAR 5495 March 2014). It was proposed that the change would take place in October / November 2014 and would see the deration of just over 1MW thermal input to the boiler. Also due to the timing of the change and the ongoing LCPD status of the boilers at the engine plant an EPR Regulation 60(1) Notice was issued to Ford on 18 November 2014.

Following the minor change submission subsequent advice was provided to Ford on e-mail concerning the demonstration of the change to the regulator and the evidence required. The operator provided supporting evidence on e-mail and a discussion was had during this visit on the information provided and future verification of the change. In brief Ford will need to consider whether this could be done through their third party and demonstration of the software set point or through a physical change e.g. installation of an orifice plate. So long as the operator is able to verify the thermal rating to the regulator whether this is through a third party or a physical barrier is a decision for the operator. Following this discussion NRW requested a consolidation of the supporting information in a formal notification. A further discussion was then had on the future status of the boiler-house following the de-rating. The regulator understands that there was a proposed rolling programme to install low NOX burners in the boilers on an annual basis following the first change.

The following table has been compiled to help visualise the status of the boilers at Ford and any future change in respect of the relevant legislation:



Boiler	2006 to November 2014 (Revised LCPD (>50MW/th) and EPR Part A(1))	Current Status LCPD / IED (>50MW/th - IED Chapter II and EPR Part A(1))	With 3 Low NOx burners and same de-rating (>50MW/th - IED Chapter II & EPR Part A(1))	With 4 Low NOX burners same de-rating Low NOx (<50MW/th NOT Chapter II IED or EPR Part A(1))
	Was	Now		
A1/1	12.7	12.7	12.7	11.18
A1/2	12.7	12.7	11.18	11.18
A1/3	12.7	12.7	11.18	11.18
A1/4	12.7	11.18	11.18	11.18
Total Aggregated to Stack A1 MW/th	50.8	49.28	46.24	44.72
A2 (5 th Auxiliary)	3.8	3.8	3.8	3.8
Total thermal Capacity of installation MW/th (input)	54.6	53.08	50.04	48.52

Action: Operator to provide a formal letter notifying the regulator of when the installation of the low NOX burner took place etc. The notification should include a consolidation of the supporting evidence with respect to the permanent de-rating of one of the 12.7MW boilers e.g. boiler data sheets, calculations, information provided on e-mail (Martin Howard e-mail 24/2/15) etc. (Before 31 March 2015).

Action: NRW to review the notification and take action to remove the installation from the LCP register.

Current Emissions and ELV with the permit.

Based on the minor operation change it is proposed that the permit would be reviewed at a later date on publication of the LCP Bref and when more is known about the implications of the MCPD. The ELV's in the current permit were set at BAT and are currently still considered environmentally protective. However it should be noted that on review of the emissions data for 2014 that the NOx results for A1/1 and particularly A1/2 are very close to the ELV (250mg/m³) with the A1/2 result from Sept 2014 to Feb 2015 being 236.39mg/m³ (the proposed ELV for NOx in the MCPD for existing plant is 200mg/m³). It is important that Ford considers the implications of this in their operations of the boiler house and any proposed future investment programme.

{End}

	EPR Compliance Assessment Report	Report ID: 5712
This form will report non-compliance with your permit as determined by an NRW officer		
Site	Ford Engine Plant Waterston Bridgend	Permit BL2548IF
Operator/ Permit	Ford Motor Company Ltd	Date 13 March 2015

Section 3- Enforcement Response		Only one of the boxes below should be ticked	
You must take immediate action to rectify any non-compliance and prevent repetition. Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.			
Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.		☐	
In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.		☐	
We will now consider what enforcement action is appropriate and notify you, referencing this form.		☐	

Section 4- Action(s)			
Where a non - compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.			
Criteria Ref.	CCS Category	Action Required/Advised	Due Date
See Section 1 above			
		Action: Operator to provide a formal letter notifying the regulator of when the installation of the low NOX burner too place etc. The notification should include a consolidation of the supporting evidence with respect to the permanent de-rating of one of the 12.7MW boilers e.g. boiler data sheets, calculations, information provided on e-mail (Martin Howard e-mail 24/2/15) etc.	Before 31 March 2015
		Action: NRW to review the notification and take action to remove the installation from the LCP register	On confirmation and assessment of the formal notification in above action.

Section 5 - Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- advise on corrective actions verbally or in writing
- require you to take specific actions in writing
- issue a notice
- require you to review your procedures or management system
- change some of the conditions of your permit
- decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you.

● We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.

● Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- ensure you comply with other legislative provisions which may apply.

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance which could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General Information

Data protection notice

The information on this form will be processed by Natural Resources Wales (NRW) to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). NRW may also use and/or disclose it in connection with:

- offering/providing you with its literature/services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information Regulations request.

NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within twenty working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with the officer's line managers. If you wish to raise your dispute further through our official **Complaints** and Commendations procedure, phone our general enquiry number **0300 065 3000** (Mon to Fri **08.00–18.00**) and ask for the **Customer Contact team** or send an email to enquiries@naturalresourceswales.gov.uk If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on **(0845) 601 0987**.