

Compliance Assessment Report

Report ID:
CAR_NRW0031468

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

Site	Barry Thermosets Plant EA/EPR/PP3238LX/V002	Permit Ref	PP3238LX			
Operator/Permit holder	Hexion UK Limited					
Regime	Installations					
Date of assessment	05/04/2017	Time in	N/A	Out	N/A	
Assessment type	Report/Data Review					
Parts of the permit assessed	Monitoring and annual submissions, actions review and CO exceedance					
Lead officer's name	Kemp, Andi					
Accompanied by						
Recipient's name/position	Ian Beatty/ EHS Manager	Date issued	06/04/2017			

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). 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	CCS Category	Condition(s) breached
E1 - Emissions - Air	C4	3.1.2

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	1	Total compliance score (see section 5 for scoring scheme)	0.1
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If the Number of breaches recorded is greater than zero, please see Section 3 for 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 (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Purpose of Compliance Assessment

This compliance assessment form (CAR1) covers the following items:

- Routine monitoring submissions W1, E1, A1 & A2:
 - W1 & E1: Jan – Mar 2016; Apr – June 2016; Jul – Sep 2016; Oct – Dec 2016
 - Annual A1 & A2 2016
- Annual reporting:
 - Water usage and by per tonne product
 - Energy usage and by per tonne product
 - Total production
 - Annual performance reporting (condition 4.2.1)
- Previous actions update:
 - Actions 6 & 7 May 2016
 - Actions 1 – 5 Jan 2017
 - Action from resin spill investigation Mar 2017
- Boiler CO exceedance Nov 2016

Routine Submissions

Quarterly W1 – The correct frequency and quantity of sampling has been conducted and reported. Jan – Mar 2016 - compliant – test methods missing, but in place for remaining quarters. Apr – Jun 2016 – compliant – all test methods as per permit or to more up to date equivalents (ref. M18), except formaldehyde.

Action 1 Hexion 6th April 2017: Operator to investigate a more up to date standard for formaldehyde in effluent, as BS 2942 is from 1957 and has been formally withdrawn. Confirm in writing to the regulator what method your lab will work towards. **Due: 31st May 2017.**

Recommendation 1 Hexion 6th April 2017: Operator (as per recent OMA) to periodically check analytical standards with M18 guidance to ensure recognised extant methods being used.

Jul – Sep 2016 – compliant. Oct – Dec 2017 – compliant.

The regulator notices that at times the COD, phenol and methanol limits have been approached.

Quarterly E1 – The correct frequency and quantity of sampling has been conducted and reported. There are no limits for E1, however, this is the effluent coming off the treatment plant and entering the clean lagoon, where there would be some dilution, before being discharged via W1. Ideally, E1 process parameters would be monitored at the point raw effluent enters the dirty lagoon, before treatment, in order to gauge efficiency of treatment process, with W1 results. The data provided shows that frequently the parameters monitored (formaldehyde, methanol, phenol, COD and suspended solids) are higher than the permit ELVs for release at W1 and that this means that beyond E1, only dilution can bring these levels down to W1 ELVs. Work is planned to evaluate the efficiency of the ETP and this data will form part of that.

A1 & A2 – The boilers are reported separately and the annual sampling has been carried out. The results were compliant. On the reporting form NO_x measurement was stated as performed under BS 14791, which actually is the SO_x standard – BS 14792 is the NO_x standard.

An exceedance of CO was reported – see further on in CAR1.

A2 reactor scrubber results were all compliant.

Annual Performance Reporting – The various performance indicators reported are similar to previous years, apart from water, explained below – there is no obvious positive or negative trend to comment on. The company is continually developing new ways to improve products for customers, while reducing energy and water use and the type of substances used in the process. Some years ago the then EA carried out a national audit campaign on resource efficiency – NRW may explore redoing this work sometime in the future.

The operator, in accordance with condition 4.2.1, has submitted a brief report on the installation performance. Noticeable items are:

- Reduced mass of phenol released in effluent
- Steam line fitted to ETP to aid bacteria population during the colder months; steam production helps to keep boilers running at optimum rate
- More water used to dilute clean lagoon since Zeon effluent has stopped – ETP and BAT assessment of performance is a future regulatory topic
- Table 1 shows a useful comparison of some key indicators of performance over the last three years, notably:
 - Production up
 - Electricity – stable
 - Gas use up
 - Water use up considerably
 - Effluent released down
 - Phenol and formaldehyde mass released, both down

This report is useful and NRW notes that the site is refining its operational baseline and any targets set from this, as they adjust to the closure of Zeon.

Previous Actions Update

From May 2016

Action 6 Borax trial – yet to pass.

Action 7 Sealine integrity testing – operator to confirm in writing what the 2014 testing revealed about the state of the diffuser head and if in fact the C.P extends to the diffuser head. Upon receipt of this and NRW assessment a decision will be made on the frequency of the sealine testing. **Due: 31st May 2017.**

From January 2017

Action 1 – SCR report – received, action closed.

Action 2 – fugitive emissions review – due end of September 2017.

Action 3 – U39 inspections to be on PPM program – complete. Operator submitted a screen shot showing U39 included on maintenance schedule along with the other below ground concrete sump. Action closed.

Action 4 – The operator has not confirmed if a spill kit is proximate to the diesel area – please confirm ASAP. The kit and its contents must be capable of being accessed and equipment deployed without delay.

Action 5 – Glycol tank secondary containment – due by 31st Dec 2017.

From Resin Spill Mar 2017

One action was raised to look at procedures and training records – due 30th April 2017.

Boiler Exceedance of CO

In November 2016 the operator by phone and email of a Schedule 6 notification, reported an exceedance of CO. The result was >602 mg/m³ against a limit of 140 mg/m³. The issue was noted by a monitoring contractor on 8th Nov and Hexion called in a specialist contractor to investigate on the 9th. The issue was a loose potentiometer, which failed to operate a gas servo-motor valve, leading to poor combustion and hence CO exceedance.

It is believed that the CO exceedance could have been happening for some definite time, since the last maintenance inspection or monitoring. This period of time is not thought to be of considerable duration and the effect of this level of CO, is not thought to have caused any environmental harm or indeed affected local human health or fire risk.

Non Compliance: A CCS4 minor non-compliance has been issued for the breach of limit.

The operator acted quickly and is now aware this type of event is possible.

END

EPR Compliance Assessment Report

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Operator/Permit holder	Hexion UK Limited	Date	05/04/2017

Section 3 – Enforcement Response

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.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			
E1	C4	Operator knows of potential issue and acted quickly	30/04/2017

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 verbally or 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 that 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 the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The 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 (eg. 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
- Assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Regulations request

The 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

The 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 fifteen 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 officer's line managers using the informal appeals procedure. 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 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.