

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

Site	Cardiff Energy Recovery Facility	Permit Ref	LP3030XA		
Operator/Permit holder	Viridor Waste Management Ltd				
Regime	Installations				
Date of assessment	08/05/2018	Time in	N/A	Out	N/A
Assessment type	Report/Data Review				
Parts of the permit assessed	Improvement Condition 1- 5				
Lead officer's name	Griffiths, David				
Accompanied by					
Recipient's name/position	Mr Gwyn Jones/ HSE Manager	Date issued	09/05/2018		

## 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
A1 - Specified by permit	A	
B1 - Infrastructure - Engineering for prevention and control of emissions	A	
C2 - General Management - Management system and operating procedures	A	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	A	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	A	

**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.

<b>Number of breaches recorded</b>	<b>0</b>	<b>Total compliance score</b> (see section 5 for scoring scheme)	<b>0</b>
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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

We recently identified an administrative error from a variation on your permit in 2017 (dated 02/03/2017) whereby, Improvement conditions (1-4) had been taken from the permit in error. In considering placing these back during the most recent variation, our review highlighted that not all of the Improvement condition information had been reviewed and closed off sufficiently. We have now reviewed this fully, and the following matter require some final information/clarification. As this information should form part of the ongoing operational documents for the plant we appreciate your cooperation in finalising this matter.

NRW has detailed below each of the Improvement conditions and our formal assessment:

**Table S1.3 Improvement programme requirements**

Reference	Requirement	Date
IC1	The operator shall submit a written summary report to the Agency to confirm by the results of calibration and verification testing that the performance of Continuous Emission Monitors for parameters as specified in Table S4.1 and Table S4.1(a) complies with the requirements of BS EN 14181, specifically the requirements of QAL1, QAL2 and QAL3.	Initial calibration report to be submitted to the Agency within 3 months of completion of commissioning. Full summary evidence compliance report to be submitted within 18 months of commissioning.
IC2	The operator shall carry out checks to verify the residence time, minimum temperature and oxygen content of the exhaust gases in the furnace whilst operating under the anticipated most unfavourable operating conditions. The results shall be submitted in writing to the Agency.	Within 3 months of completion of commissioning.
IC3	The operator shall submit a post-commissioning report to the Agency which shall include: <ul style="list-style-type: none"> <li>- a review of performance of the facility against the conditions of this permit.</li> <li>- details of optimisation of emission abatement systems including reagent dosing rates.</li> <li>- details of procedures developed during commissioning for achieving and demonstrating satisfactory process control.</li> </ul>	Within 4 months of completion of commissioning

IC4	The operator shall submit a written proposal to the Agency to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air from emission points A1 and A2, identifying the fractions within the PM10, PM2.5 and PM1.0 ranges. The proposal shall include a proposed timetable to carry out such tests and produce a report on the results. On receipt of written approval by the Agency to the proposal and timetable, the operator shall carry out the tests and submit to the Agency a report on the results.	Within 6 months of completion of commissioning.
IC5	The Operator shall carry out an assessment of the impact of emissions to air of Chromium (VI) having regard to the 2009 report of the Expert Panel on Air Quality Standards – Guidelines for Metal and Metalloids in Ambient Air for the Protection of Human Health. The assessment shall predict the impact of Arsenic and Chromium (VI) against the guidelines through the use of emissions monitoring data during the first year of operation and air dispersion modelling. A report on the assessment shall be made to the Environment Agency.	Within 15 months of completion of commissioning

**IC1** was initially received on the 30<sup>th</sup> April 2015 by Fiona Bussell (Viridor) and recently was re-submitted to NRW by Mr Gwyn Jones (Viridor) on the 31<sup>st</sup> August 2017. NRW have assessed this submission and have the following queries: -

NRW assessed all four of the QAL2 emissions monitoring reports, linearity & variability reports and linked homogeneity report, covering Emissions Points Stream 1 (Duty Analyser & Standby Unit) and Stream 2 (Duty Analyser & Standby Unit).

All the reports conform to Appendix 2 from EA Technical Guidance Note M20, in terms of content and format. It was noted there no deviations from EN 14181 or the standard reference method (SRM) during the QAL2 campaigns on all the emissions points. Where it has not been possible to gain a quantitative calibration function due to low clusters of results, it has been noted that the CEM should be used for qualitative purposes. In the cases where the CEMs and SRMS have been in very close agreement with each other, it has been noted that the calibration factor applied will be 1 (i.e.  $y=x$ ). This all conforms with the requirements of EN14181 and TGN M20.

Our only query mainly relates to the “Pro-forma for Site Provisions for Monitoring” section (Page 8 of the QAL2 Reports) on all the reports. Two of these requirements are not met in terms of:

- A safe & clean working environment (due to construction activities around the site and CEM units)
- Facilities to introduce reference materials (i.e. calibration gases) for the instrumental CEM monitoring systems due to gas lines having been cut.

Regarding the first issue, as particulates is one of the QAL2 determinands, what provisions does the test contractor (Exova Catalyst) put in place during the parallel testing (with the standard reference method) to ensure there is no contamination of their particulate samples (e.g. filters). On the second issue, is there any update on the gas lines that were cut – I presume they have been repaired by now (this QAL2 campaign took place during November-December 2014)? So for subsequent monitoring campaigns (QAL2 or AST) there should be adequate facilities to introduce reference materials as per EN 14181 requirements.

One more issue NRW have found is that the test contractor (Exova Catalyst) has stated an outdated Standard Reference Method for flow measurement (Page 10 of the reports). They have stated EN 13284-1 (which is also the particulates monitoring standard and used to be accredited for monitoring velocity and temperature profiles of a stack during a traverse prior to 2013). The standard that should be stated and worked to now is **EN 16911-1** – this standard

came out in 2013 (so a year before this QAL2 campaign

**IC2** was submitted to NRW by Fiona Bussell on the 10<sup>th</sup> January 2017 NRW have assessed this submission and have the following queries:

- No flow measurement independently of DCS flow – no (2 Secs residence time) verification
- No oxygen measurement
- Independent temperature measurement method not specified, thermocouple?
- 110% load case not tested – justification?

**IC3** was submitted to NRW on the 4<sup>th</sup> September 2017 by Mr Gwyn Jones of Viridor – NRW have assessed this submission and have the following queries:

NRW require this document to have a non-technical summary to accompany it. The submission just had the raw data from the consultant and we require a more detailed explanation specifically on the findings and addressing the headings detailed in the improvement condition. This requirement is also detailed in a Compliance Assessment Report (CAR) dated 30<sup>th</sup> January 2018 (Report ID: CAR\_NRW0032804). This report was emailed to Mr Gwyn Jones and Mr Tim Stamper of Viridor. We have not received a response. NRW also require the following information.

- Outcome of NOx ?? guarantee tests, e, g lime comparison, energy generation, noise level?
- Details of procedures developed for satisfactory process control not provided

**IC4** was submitted to NRW on the 20<sup>th</sup> July 2015 by Fiona Bussell of Viridor – NRW have assessed this submission and have the following queries:

- Accreditation for PM2.5/10 – needs a more detailed review
- Timetable for monitoring survey not provided
- Has the monitoring been completed?

**IC5** was submitted to NRW on the 29<sup>th</sup> April 2016 by Mr Gwyn Jones of Viridor – NRW have assessed this submission and are satisfied with your response. This improvement condition is complete.

NRW require you to respond in writing to the assessments and queries highlighted above by 18<sup>th</sup> June 2018

## EPR Compliance Assessment Report

**Report ID:  
CAR\_NRW0033314**

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Site	Cardiff Energy Recovery Facility	Permit Ref	LP3030XA
Operator/Permit holder	Viridor Waste Management Ltd	Date	08/05/2018

### 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			

## 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](mailto: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.