

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

Site	Valero Refinery Pembrokeshire		Permit Ref	QP3033LW (as amended)		
Operator/ Permit holder	Valero Energy Limited					
Date	10 February 2015		Time in	09.30	Out	15.30
What parts of the permit were assessed	NERP verification					
Assessment	EPR - inspection	EPR Activity:	Installation	X	Waste Op	Water Discharge
Recipient's name/position	Neil White, Environmental Engineer, Valero Energy Limited					
Officers names	DMP Broom		Date issued	12/5/2015		

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	A	
	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	A	
	3. Dust/fibres/particulates	A	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	A	
	2. Records of activity, site diary, journal & events	A	
	3. Maintenance records	N	
	4. Reporting & notification	A	
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	-	Total compliance score (see section 5 for scoring scheme)	-
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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)
- 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 suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

Site description

Valero produce a variety of petroleum products from crude oil. The products range from liquid gases such as propane and butane through gasolines to gas oils and kerosenes through to heavier products such as fuel oils. To produce these products they use a number of unit processes such as distillation, fractionation, isomerisation, cracking and alkylation to produce products that meet the required specification. The site also removes sulphur from the raw materials by conversion to hydrogen sulphide and its subsequent conversion to solid sulphur. The aqueous effluent processed within the refinery is treated with oil separation and biological treatment to reduce the impact of the refinery on the receiving Haven waterway. Most of the gases produced on site and some of the residual oils are burnt on site to produce power to operate the refinery.

Purpose of visit/assessment

To verify the To review the 2014 NERP data and systems in use at Valero Pembroke and to verify the submissions, if appropriate.

The UK operates a National emissions reduction plan (NERP) for certain combustion plant. This plan covers the releases of sulphur dioxide, oxides of nitrogen and particulate releases from qualifying plant.

Each year the Environmental Regulator is required to verify the NERP submissions prior to trading (NERP Verification).

Person(s) present (Office based)

VEL Neil White
Clare James
Dan McDermott

NRW Mark Broom

There are five large combustion plant (LCP) at Valero Pembroke that are within the NERP scheme. The range of fuels that are burnt on these boilers and process heaters are either a combination of refinery fuel oil (RFO) and refinery fuel gas (RFG) or just RFG. All Continuous Emissions Monitors (CEMS) in operation on these boiler plants are MCERT approved. Currently Valero are not allowed to enter their combustion plant into the Industrial Emissions Directive (IED) Transitional National Plan (TNP) that will replace the NERP from 1/1/2016 and they will have to comply with IED emission limit values from 1/1/2016.

LCP	NERP Reference	RFO	RFG	Size	CEMS Parts	CEMS SO ₂	CEMS NO _x
A1 & A2	48	✓	✓	295	✓	✓	✓
A3 & A4	49	✓	✓	262	✓	✓	✓
A6	50	✗	✓	82	✗	✗	✗
A7, A8, A9 & A10	51	✓	✓	287	✓	✓	✓
A11 & A12	52	✗	✓	<100 (*)	✗	✗	✗

* Currently under assessment by NRW.

CEMS for SO₂, NO_x, Particulates and carbon monoxide (CO from 1/1/2016) are required on combustion plant > 100MWth input.

Fuel usages

RFO was only burnt on NERP plants 48, 49 and 51 during 2014 during April, June, July and August with 100% RFG being burnt on the other months on these NERP plants and on the other two NERP plants (50 & 52). Currently RFO usages are reconciled daily and recorded monthly.

CEMS and Invalidation logs

The current permit contains a requirement (condition 3.7.2) to maintain a log of invalid days on the CEMs monitoring equipment. All three CEM stacks and sets of monitoring equipment comply with this requirement of being less than 10 invalid days. However at the start of 2015, the CEMS on release point A9 part of the NERP plant 51 has had more than 10 invalid days and Valero will be reporting this issue together with a plan within the 28 day reporting period to comply with this permit condition.

Annual surveillance test (AST) and QAL monitoring

At least every year Valero are required to carry out parallel monitoring with reference methods (condition 3.7.3). The reference methods need to refer to the CEN standards (condition 3.7.5). For ASTs on the CEMS the data needs to be handled according to ISO 14181. In the AST report for A1 release point (reference A1, 21-23/1/14 by ESG), the stack samplers were MCERTED (condition 3.6.3) and the company are accredited to BS EN 14181. Based on the report Valero are complaint against all four permit conditions. The following link contains explicit reference to the 14181 accreditation –

<http://www.ukas.org/testing/schedules/actual/1015Testing%20Multiple.pdf>

Valero use a system designed by 'Envirosoft' to automatically exclude start up and shut down operations based on pre-defined criteria on their combustion plant. It helps to exclude start up and shut down conditions for compliance purposes. When data is excluded the reason is recorded. This system can also autocorrect the flow, concentration for temperature and oxygen content.

To calculate the mass release rates, the daily data (concentration and flow) are used to get a daily mass release figure which are then summed to get the monthly data. The data is reviewed before formal submission to the Regulator.

For the non-CEM releases the A6, A11 and A12 releases are calculated from factors based on the release results for A7 for all three parameters.

Conclusion.

Natural Resources Wales (NRW) to verify the existing plant NERP/LCP Forms for the relevant Combustion processes based on the information presented.

Actions

- 1 NRW to verify the 2014 NERP returns

[END OF SECTION 2]

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

Site	Valero Refinery Pembrokeshire	Permit	QP3033LW (as amended)
Operator/ Permit	Valero Energy Limited	Date	12/5/2015

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.	n/a
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.	n/a
We will now consider what enforcement action is appropriate and notify you, referencing this form.	n/a

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			
-	-	-	-

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**.