

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

Site	Valero Refinery Pembrokeshire		Permit Ref	QP3033LW		
Operator/ Permit holder	Valero Energy Limited					
Date	13 August 2015		Time in	09.30	Out	11.30
What parts of the permit were assessed	See below					
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	21/09/15		

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	A	
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	A	
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. Some gases and oils are burnt on site to produce power to operate the refinery.

Purpose of visit/assessment

To discuss the regulation 60 notices for the refinery and to review IED implementation issues for this site.

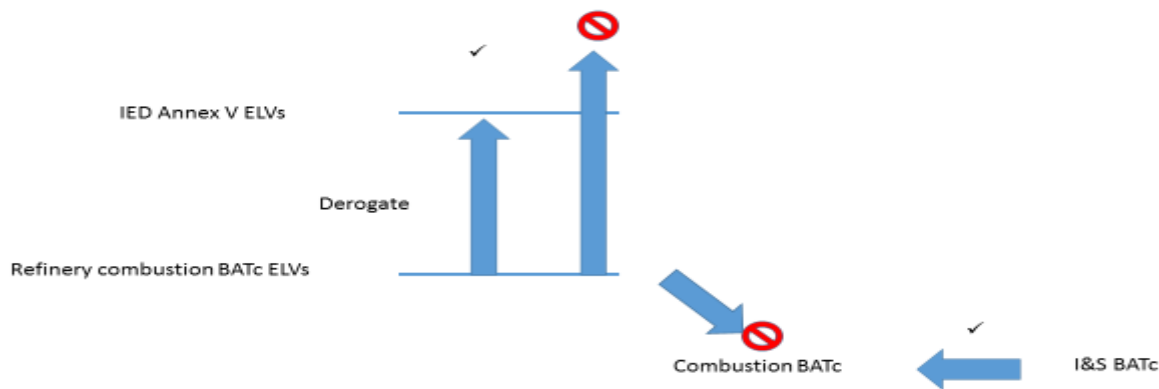
Person(s) present (Office based)

VEL Neil White NRW Mark Broom

There are two main current issues for this site – implementing the large combustion plant part of the Industrial emissions directive (IED) and then the implementation of the Bat conclusions for this sector. IED has to be implemented by 1/1/2016 whereas the Refinery BAT conclusions (BATc) has until October 2018 before the BATc limits have to be met.

There was agreement between the regulators on how to apply limits for IED to the Refinery combustion plant however there has been a difference of views between the three regulators. It appears that the EA is looking to use a sulphur dioxide limit of 1000 mg/m³ for using refinery fuel gas (RFG) and the Scottish Regulator may be using 35 mg/m³ as their corresponding limit based on the limits contained in Annex V of the IED. NRW is currently seeking legal advice on its approach – to either adopt the EA approach or the Scottish one or to apply a 1000 mg/m³ limit if the gases from the process can be shown to be from residues and where not to impose a 35 mg/m³ limit value. Vacuum distillation unit (VDU) off gas could fall into the residue classification. Based on this interpretation, Valero refinery stack 52 (A7/A8/A9 and A10) would attract a 1000 mg/m³ limit value whereas stacks 48 (A1 & A2) and 49 (A3 & A4) would get a 35 mg/m³ limit value for sulphur dioxide.

There is an interactions between Annex V and the BAT conclusions for refineries. Annex V requires operators to show compliance with a daily mean elv, a monthly mean elv and finally an annual elv based on the 95th percentile of the hourly means but the refineries BAT conclusions for combustion plant only has a monthly mean elv. For refinery combustion plant the elvs are based on the refineries BAT conclusion not the combustion plant BAT conclusions elvs which is unlike the iron and steel sector. Their combustion plant have to comply with the combustion plant elvs because the iron and steel BAT conclusions does not contain any elvs for combustion plant so their combustion plant have to comply with the combustion plant BAT conclusions and their associated elvs. The Annex V limits in IED cannot be exceeded but the BAT conclusions can be derogated up to but not beyond any Annex V limits. Valero believe that they can comply with Annex V based on either the EA or the potential NRW approach but they will not be complaint on Stack 52 (A7/A8/A9 & A10) if the SEPA approach is taken. So the current plan will be based on the following approach –



The situation with refinery combustion plant is further complicated by the ability to have a site NO_x bubble for combustion plant and FCCUs and a sulphur dioxide bubble of containing the combustion plant, FCCU and SRU plant releases. These two bubbles are as monthly elvs. So for this site the following approach is planned with regard to the combustion plant because the site has to continue to demonstrate compliance with Annex V elvs –

Relationship between Annex V & Refinery BATc elvs

Annex V	Refinery combustion BATc	Refinery bubble BATc
• Daily ELV	✓✓✓	
• Monthly ELV	✓✓	• Monthly ELV ✓
• Annual ELV	✓✓✓	• Monthly ELV ✓
<ul style="list-style-type: none"> • Demonstrate compliance with Annex V ELVs and either refinery combustion BATc or the bubble BATc elvs 		
	<ul style="list-style-type: none"> ✓ = Annex V Elvs ✓ = Refinery BATc combustion plant ELVs applied ✓ = Refinery bubble applied 	

If correct this approach means that up to when the BAT conclusions are applied the black ticks show the information that will be needed to demonstrate compliance. If the refinery BAT conclusions are chosen, the orange ticks will be needed to show compliance with Annex V and IED and if the bubble approach is chosen the blue tick information will be needed to show compliance with both Annex V and IED.

Valero do not think they need to have a sulphur dioxide bubble as they will be compliant with all three BAT conclusions (combustion, FCCU and SRU) but they will be seeking to have a NO_x bubble for their combustion plant and their FCCU which uses an antimony additive.

The QAL 2 testing for the CEMs is due to be complete by October ready for the start of the Annex V elvs in January 2016.

The Environment Agency issued two regulation 60 notices to their refineries during August. One notice covered the combustion plant and is aimed at getting enough information to complete the variation to implement the Annex V limits which has to be issued by 31/12/2015. The second notice is aimed largely at the refinery BAT conclusion but also includes requests about the water framework directive and energy efficiency issues. The WFD information requires the use of the tool H1. NRW will issue its corresponding notices once the annex V interpretation has been resolved.

Valero remain concerned about the potential effect EID implementation may have on their site and business and they will be

writing to the Welsh Government Ministers about their concerns. They also understand that their trade body, UKPIA, will also be writing to NRW and also the Welsh Government about related issues.

Other issues

Valero continue to have interest in the provision of energy by a third party supplier. The Company is planning to design, build and operate a biomass facility close to the current boilers with the biomass being imported to site mainly across the Valero jetties and stored within the refinery before being moved to the biomass boilers.

Conclusions

Based on the current interpretations under IED and the BAT conclusions Valero will be able to meet the Annex V and the BATAELs with no derogations. They may also only need one bubble limit. Valero will be raising their concerns over IED and its implementation and interpretation with the Welsh Government.

[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
Operator/ Permit	Valero Energy Limited	Date	21/09/15

Section 3- Enforcement Response **Only one of the boxes below should be ticked**

<p>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.</p>	
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**.