

## Compliance Assessment Report CAR\_NRW0037539

**Permit being assessed:** YP3930EX.

For: Pembroke Refinery, held by Valero Energy Ltd

At: Valero Energy Ltd , Pembroke Refinery, Pembroke, Pembrokeshire, SA71 5SJ.

**Type of assessment carried out:** Report/Data Review, Reason: Other.

On 31/12/2020.

Parts of permit assessed: see below

**NRW Lead Officer:** Gary Evans.

**Report sent to:** Neil White, Manager Environmental Engineer on 11/02/2021.

### 1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
A1 - Specified by permit	C2 Significant	1.1.1

Result types are explained in more detail in the 'Important Information' section below.

Total number of non-compliances recorded	Total non-compliance score
1	31

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

### 2. What action is required?

Criteria	Action needed	Complete by
A1	Improve operations	Already completed

Action criteria codes are listed in the 'Important information' section below.

### 3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

**You are non-compliant with your permit.**

**At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.**

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

## 4. Details of our assessment

### Introduction

This Compliance Assessment Report (CAR) is a written record of an incident that occurred at the Pembroke Refinery On 29 December 2018. Natural Resources Wales (NRW) were formally notified (Part A notification as required by permit conditions) of a release of Naphtha from an 8 inch flange located at the Cross Haven area within the refinery. The leak was originally detected at approximately 3:30am on 28 December 2018 and lasted for approximately 2 hours.

An initial CAR Form (**CAR\_NRW0034581**) was submitted to the operator outlining that the release had potential consequences to the environment (both direct and indirect). The unauthorised release of Naphtha was classified as having a potentially high environmental impact (category 2 – (C2)). The CAR form also outlined that further investigation would identify the root cause and an enforcement decision on the environmental breach of permit.

Please note that during the drafting of this report there was a global pandemic (COVID-19) which resulted in restrictions and stringent measures in place around the world. This CAR form aims to conclude the compliance assessment of the potential environmental impact from this leak as well as the root cause to prevent a reoccurrence.

### Incident in Brief:

Initial investigations suggest that the Heavy Cat Naptha (HCN) tankage at the northern edge of the refinery, was supplying HCN into the blending system, through pumps at the old Cross-Haven pump and pipeline area. At 03.50 hours a leak was detected (gasoline odour) and an operator noted a discharge from a filter housing at the Cross-Haven pump rack. Action was taken, the pump was stopped and the line isolated after initial attempts to shut the local valve failed. Supply tank valves were then used to isolate the leak because the local isolation valve was 'passing'. The site alarm was activated, and a foam blanket was applied. The all clear was sounded at 05.47 hours later that morning. The following day a hydrocarbon odour was observed at Pwllcrochan bridge and NRW and Pembrokeshire County Council were informed of a sheen on St Martins Stream. Within the following 24 hours Valero cleaned up the area from the cross-haven pumps to Pwllcrochan bridge. In total NRW was advised that around 37m<sup>3</sup> of hydrocarbon was recovered.

The map below shows the pathway of the lost product.



The incident was jointly investigated by the Competent Authority (HSE and NRW) and was concluded on the 12<sup>th</sup> of June 2019 (*Investigation: Loss of Containment from Filter Pot at HCN Meter Station 5 – Cross Haven Area*).

The HSE Mechanical Specialist report also details aspects of the root cause of the incident and are detailed below:

- *The O-ring was the incorrect size as there was no spares listing / specification / bill of materials that was available to the craftsmen to access to identify what the correct part was for this application.*
- *The O-ring was not held as a stock item in stores – though this is less important as there was a duty / standby arrangement with 2 filter pots. This would have allowed time to order in the correct part as and when needed. Even with time to do this, it is possible that craftsmen may opt for the easier route of reaching for the O-ring kit and attempting to make one, rather than deal with the hassle of trying to order one from the OEM or seal specialist supplier.*
- *The filter pot had been inspected some 4 years previously, and the inspector had recommended a remedial action to replace the holding down mechanism “T-bar”, but this work had not been programmed, and the remedial work was not carried out. This is a clear failure of the integrity management system. There was no back-up system to periodically identify recommended actions that have not been carried out.*

Classification of the permit breach according to the NRW Compliance Classification Scheme (CCS) and EPR compliance.

Section 1 (1.1.1) of the environmental permit states

*1.1.1 The operator shall manage and operate the activities:*

*(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the*

*operator as a result of complaints; and  
(b) using sufficient competent persons and resources.*

NRW considers that permit condition 1.1 was breached in respect of management which results in a C2 as this had the potential for a significant incident. The non-compliance has been scored as the loss of containment was a failure in the integrity management system.

#### Conclusion

It is concluded that as a result of this incident the operator has received an NRW warning which is recorded on this CAR form. The resultant enforcement action of this warning reflects on the findings of the CA investigation such as the actual environmental impact, and importantly other factors such as no-intent, operator response / co-operation, and the corrective actions taken to prevent a reoccurrence (root cause investigation).

#### References

- CA - Investigation: Loss of Containment from Filter Pot at HCN Meter Station 5 – Cross Haven Area 12 June 2019.
- CA Mechanical Engineering Report : Loss of Containment from Filter Pot at HCN Meter Station 5 – Cross Haven Area 10 June 2019. (Ref 45865)
- CA Letter to Valero (12 June 2019) CONTROL OF MAJOR ACCIDENT HAZARDS REGULATIONS 2015 – COMPETENT AUTHORITY INVESTIGATION – NAPHTHA RELEASE ON 28/12/18

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

## Important information

### Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

### Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

### How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

### **What are suspended scores?**

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

**Full list of Industry and Waste action criteria (used in section 1 and 2):**

#### **A: Permitted activities**

- A1 Specified by permit

#### **B: Infrastructure**

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

#### **C: General management**

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

#### **D: Incident management**

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

#### **E: Emissions**

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

#### **F: Amenity**

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

#### **G: Monitoring and records, maintenance and reporting**

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

#### **H: Resources efficiency**

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

### **Enforcement response**

Any permit condition non-compliance is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

### **Data protection notice**

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or 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
- assessing customer service satisfaction and improving our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

### **Disclosure of information – this report will be available to view on-line**

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within 20 working days to let you know if we agree to your request.

### **What do I do if I disagree with the report or have a complaint?**

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 – 18:00), or email [enquiries@naturalresourceswales.gov.uk](mailto:enquiries@naturalresourceswales.gov.uk) for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at [ask@ombudsman.wales](mailto:ask@ombudsman.wales)

### **Welsh Language Standards**

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.