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Date: 8 August 2025

Your Ref: PAN-026226

Mr William Wallace
Permitting Service
Natural Resources Wales
Crown Buildings
Cathays Park
Cardiff
CF10 3NQ

Dear Mr Wallace,

Environmental Permit Variation Application (PAN-026226) Schedule 5 Notice Requiring Further Information.

In response to your notice of request for more information dated 25/06/2025, Valero wants to highlight that the proposed connection of Tanks 9, 11 and 12 (the "**Tanks**") to the Cross Haven Refinery Crude Pipeline does not represent a significant change to the current permitted operation under Valero Pembrokeshire Oil Terminal (VPOT) Environmental Permit (EP) EPR/BK1341IN. This currently allows VPOT to import and store crude oil in the Tanks and export highly flammable liquid hydrocarbon via the Mainline Pipeline. Valero is simply adding a connection to a second pipeline, which does not present a material change in the current risk profile of the Tanks.

Natural Resources Wales (NRW), in their capacity as COMAH Competent Authority (CA), is already going through the process of formally assessing the VPOT COMAH Safety Report [1] including details of the design, operation and maintenance systems at VPOT, and the primary, secondary and tertiary arrangements across the Establishment. I would therefore suggest that the NRW Permitting Service consult their COMAH inspector who is already in the process of assessing the information relating to the Tanks requested in the Schedule 5 Notice.

CIRIA C736 Risk Assessment, Gap Analysis, Rectification Timetable and Management Plans

CIRIA C736 (2014) is captured by the ongoing COMAH compliance processes for the day to day operation of VPOT. Valero has assessed the Crude Project and the changes necessary to the Tanks within a Process Hazard Analysis (PHA) framework. This has included loss of containment from tanks and infrastructure in line with industry good practice, design codes, standards and guidance. Valero's demonstration of an ALARP design will be a key output of the project management process for large capital projects. This includes hazard identification and risk assessment, and identifying suitable protective measures for managing and mitigating the risk.

Nonetheless, in line with the criteria and expectations of the CIRIA C736 guidance document the site is assessed as having an overall site risk rating of "High" equivalent to a "Class 3"

containment facility, requiring a high level of integrity. Valero assesses that the preferred CIRIA C736 'source pathway receptor' approach, and compliance with CIRIA C736 and BAT in particular, are covered by our COMAH compliance. Such risks to environmental receptors including groundwater, the Haven waterway and non-designated land are assessed in the updated interim COMAH ERA, carried out in accordance with the CDOIF Guidelines, which assesses the risk of a Major Accident to the Environment (MATTE) to environmental receptors.

VPOT considers the ongoing COMAH assessment process to be the correct route for demonstrating the measures in place for managing Major Accidents To The Environment (MATTE) which will also be compliant with BATs and CIRIA C736, so far as is reasonably practicable.

Therefore, in addition to discussing matters with your COMAH inspector, Valero would be very happy to take you through our PHA framework which is too cumbersome a document to enclose with this letter. Our invitation to visit our premises is extended to this purpose if you wish.

BAT Compliance

As Valero does not conduct separate CIRIA C736 risk assessments, it is not possible to demonstrate BAT compliance through such a document. Compliance is ensured by the processes as described above. BAT 11 (iv) and BAT 51 (i) to (iv), as listed below, are covered by the design of assets, management systems and policies implemented across the site and these are described in detail in the COMAH Safety Report.

BAT 11

- BAT 11 (iv): Prevention of spillages and leaks.

  Practices employed by Valero include the utilisation of special procedures and/or temporary equipment to maintain performances when necessary to manage special circumstances such as spills, loss of containment, etc. Valero concludes that BAT 11 (iv) is met.

BAT 51

- BAT 51 (i): Maintenance programme including corrosion monitoring, prevention and control.

  Valero concludes BAT 51 (i) is met because existing Risk Reduction measures for LOC from tanks include:

  - Internal corrosion is mitigated by the internal surface treatment of floor plate with a 3-coat epoxy resin liner.
  - Thorough Tank and pipeline inspections scheduled according to Valero's risk-based inspection process provide suitable assurance of tank and pipe structural integrity. Tank Inspection includes floor scanning.
  - Tank reconciliation which includes both level and volume measurement, manual recording of all levels on a 2 hourly dip basis, manual gauging by independent third party for all exports/receipts and continuous monitoring of levels by tank gauging system at all times.
  - Thorough tank reconciliation includes level measurement, manually by 2 hourly dip testing regime, and continuously by tank level measurement and monitoring.
  - BPCS tank level deviation monitoring.
  - Regular water drawing and microbial induced corrosion (MIC) indicator testing.
  - Tank maintenance and repair to industry standards (API & EEMUA).

- BAT 51(ii): Double bottomed tanks.

  None of the tanks at VPOT, have double bottoms fitted. Valero agrees with the Environmental Guidelines for Petroleum Distribution Installations [2]; installation of double fitting can be counterproductive because of the safety concerns raised in "repairing the bottom when a leak is detected as it is very difficult to gas-free and clean the space between the two bottoms". In addition, non-destructive integrity inspection techniques for double bottoms is not available.

- BAT 51 (iii): Impervious membrane liners.

  Valero does and will comply with BAT 51 (iii) which requires installing an under-tank liner for existing tanks after an overhaul. Tanks 9 and 12 comply because they have already had a liner installed after overhaul. Tank 11, which does not have a liner installed, will be inspected in 2026 under the crude pipeline project. This includes a thorough non-destructive testing regime with a floor scan to verify its integrity. If the results of the inspection determine that a new tank floor is required then Valero will install an under-tank liner at this time and meet the BAT 51 (iii) requirement. Valero would be happy to discuss making this a condition of the requested permit variation.

- BAT 51 (iv): Sufficient tank farm bund containment.

  BAT 51 (iv) is met because tanks are located in adequately sized earth bunds that are inspected.

  The combined volume of tertiary containment is 135,400 m^3 (c. 30,000 m^3 lined storage) and additional emergency storage is also afforded by empty in service tanks.

I appreciate that this letter is the beginning of a process for determining any conditions to be added to Valero's permit variation. Valero has another permit variation application [reference PAN-026658 EPR/YP3930EX/V009] lodged with NRW in relation to the Pembroke Refinery end of the crude oil project and I expect you are looking at these in tandem. Following your review of this letter, I hope you can accept our invitation to examine the PHA framework in more detail and we can work together in answering any follow up questions you have. I look forward to working with you in the future.

Yours sincerely,

Huw Morgan

Digitally signed by Huw Morgan
Date: 2025.08.08 15:05:57 +01'00'

David McLoughlin

Director Pipelines & Terminals

Valero Operations Support Limited

cc: Mike Launder – NRW Lead Specialist – Industry and Waste Regulation

The Company Secretary.

References

[1] VPOT, "COMAH Safety Report," 2022.

[2] Institute, Energy, "Environmental Guidelines for Petroleum Distribution Installations," 2007.