

Natural Resources Wales permitting decisions

Variation of a Bespoke Permit

We have decided to issue the variation for Murco Petroleum Limited's Milford Haven Site.

The variation number is EPR/AP3830XQ/V009

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Structure of this document

- Key issues
- Annex 1 the decision checklist

Key issues of the decision

Introduction

The oil refining process units at Murco Petroleum Ltd's Milford Haven site have been shut down since May 2014. The operator has since confirmed that all refining plant will be permanently decommissioned, prior to removal off site. As such, this variation application details a timebound plan to confirm that actions are being undertaken, so that whilst the oil refining process units remain on site, the ability to refine is not physically possible. A Natural Resources Wales compliance officer visited the site on 9th December 2014 to verify that the operator's plan to physically abandon refining activity has been completed. Following this inspection visit, we are satisfied that the refining activity can no longer be operated. More specifically, all refining activities listed under S1.2A(1)(g) have ceased with no process materials within the units. All units are decommissioned and open to atmosphere, with process materials (catalyst) being returned to the suppliers or sent for disposal.

The Regulated Facility

In future, the site will continue to operate as a hydrocarbon storage and distribution facility. In view of this, the installation name of “Milford Haven Refinery” has been changed to “Murco Petroleum Limited”. The varied permit allows the continued import, storage and distribution of hydrocarbons into and from the facility, in addition to the continued operation of the steam and flare utilities.

The table below summarises the key plant changes on site as a result of this variation. The plant items in the table which are identified as “removed from permit” correlate to the listed activities which have been removed as described in the “Regulated Facility” section of the Annex 1 decision checklist below

Key plant changes at Murco Milford Haven	
Unit Number/Description	Status
0100 Crude Distillation Unit	Removed from permit
0200 and 1200 Ultraformers	Removed from permit
0200, 0300, 1200, 1700 and 1900 Hydrotreaters	Removed from permit
0400 Fluidised Catalytic Cracking Unit 1400 Vapour Recovery Unit	Removed from permit
0500 Alkylolation Unit	Removed from permit
2200 Amine Treating Units	Removed from permit
2000 Sulphur Recovery Units	Removed from permit
0800 Gasoline Merox Unit	Removed from permit
0900 LPG Merox Unit	Removed from permit
1100 Vacuum Distillation Unit	Removed from permit
1500 Dimersol Unit	Removed from permit
1700 Naphtha Isomerisation Unit	Removed from permit
2300 SweetFrac Unit	Removed from permit
2400 Selective Hydrogenation Process	Removed from permit
2500 Combined Heat and Power	Removed from permit
2600 Steam Generation and Distribution...	Retained in permit
2900 Isom & 3000 ISBL Cooling Water System	Removed from permit
5000 Tankage	Retained in permit
5200 Road Loading, 5300 Rail Loading, 5500 Mainline Pipeline, 7200 Jetty, 7300 Wayleave	Retained in permit
6000 Effluent Treatment/6100 Ballast Water Treatment	Retained in permit
6300 Flares	Retained in permit
3200 Cogen Units	Retained in permit

Schedule 7 - Interpretation Changes

The following terms have been deleted from the permit's interpretation section, because they are no longer relevant to remaining site operations:

- Bubble limit
- FCCU
- Feedstock
- Hourly Bubble Limit
- SRU
- SRU performance evaluation

Annex 1: decision checklist

This document should be read in conjunction with the application and supporting information and permit / notice.

Aspect considered	Justification / Detail	Criteria met
Yes		
The facility		
The regulated facility	<p>The following listed activities have been removed from Table S1.1 of the permit as a result of this variation:</p> <ul style="list-style-type: none"> • S1.2A(1)(g): Refining mineral oil (primary operations); • S1.2A(1)(g): Refining mineral oil (secondary operations – oil movements and blending); • S1.2A(1)(k): Odourising natural gas or liquefied petroleum gas where that activity is related to a Part A activity; and • S4.2A(1)(a)(v): Producing inorganic chemicals such as non-metals, metal oxides, metal carbonyls or other inorganic compounds such as calcium carbide, silicon, silicon carbide, titanium dioxide. <p>In addition, activity S1.2A(1)(h): “The loading, unloading or other handling of, the storage of, or the physical, chemical or thermal treatment of crude oil” has been amended by removing references to operation of the crude distillation unit. Therefore this activity now only applies to the jetty operations and crude storage.</p> <p>The following directly associated activities have been removed from Table S1.1 of the permit as a result of this variation:</p> <ul style="list-style-type: none"> • Auxiliary boilers; and • SRU caustic scrubber. <p>See Key Issues section above.</p>	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Biodiversity, Heritage, Landscape and Nature Conservation	We have not requested a habitats assessment as part of this variation. This is because the permanent closure of refining operations will lead to a significant reduction in oxides of nitrogen (as NO ₂) and other pollutants from the site. Therefore the changes associated with this variation	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	will result in a net environmental benefit. We have not formally consulted on the application on this basis.	
Environmental Risk Assessment and Operating Techniques		
Environmental Risk	We have not requested an environmental risk assessment as part of this variation. This is because the permanent closure of refining operations will lead to a significant reduction in oxides of nitrogen (as NO ₂) and other pollutants from the site. Therefore the changes associated with this variation will result in a net environmental benefit.	
The permit conditions		
Raw materials	The limits and controls on use of refinery fuel gas and refinery oil have been removed as part of this variation. As such, condition 2.3.2 and the associated table S3.1 have been deleted from the permit. Table S3.1 is also no longer relevant to the remaining combustion plant, because this plant now runs on natural gas only.	✓
Emission limits	<p>We have removed the emission points and emission limits associated with the refining plant from Table S4.1 of the permit.</p> <p>The following emission points (and their associated emission limits) have been removed:</p> <ul style="list-style-type: none"> • A1 (North Stack, secondary flue) • A2 (North Stack, primary flue) • A3 (North Stack, primary flue) • North Stack primary flue • A5 (South Stack) • A6 (South Stack) • A7 (South Stack) • South Stack • A8 (HDS Stack) • A8A (SRU) • A9 (CHP Stack) • A15 (Auxiliary Boiler) • A16 (Auxiliary Boiler) <p>The following tables containing other emission limits have been deleted from the permit as they are no longer relevant to the remaining site operations:</p> <ul style="list-style-type: none"> • Table S4.1(a) relating to a bubble limit for sulphur dioxide; and • Table S4.3(a) containing annual limits for the 	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>installation.</p> <p>Permit conditions 3.1.1, 3.1.3, 3.6.1 and 3.6.4 have been amended to remove the references to Tables S4.1(a) and S4.3(a).</p>	
Monitoring	<p>All monitoring requirements associated with the emission points listed in the Emission Limits section above have been removed from the permit and the relevant tables updated accordingly.</p> <p>Table S4.4 "Process Monitoring Requirements" has also been deleted from the permit as it is no longer relevant to the remaining site operations.</p>	✓
Reporting	<p>All reporting requirements associated with the emission points listed in the Emission Limits section above have been removed from the permit and tables S5.1 "Reporting of Monitoring Data" and S5.4 "Reporting Forms" have been updated accordingly.</p> <p>In addition, condition 3.6.5 has been removed from the permit because it relates to the collection of site reference data which needed to be submitted within 6 months of permit issue. This requirement has been completed and the condition is therefore no longer relevant.</p> <p>Furthermore, condition 4.3.9 has been removed from the permit because it relates to notification requirements for the SRU caustic scrubber. This is a directly associated activity which has been removed from the permit.</p> <p>Finally, Tables S5.2 "Annual Production / treatment" and S5.3 "Performance Parameters" have been removed from the permit because they are no longer relevant to the remaining site operations. Permit condition 4.2.1 has been amended to reflect this change.</p>	✓