

## **Permit with introductory note**

The Environmental Permitting (England & Wales) Regulations 2016

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**Valero Pembrokeshire Oil Terminal  
Ltd.**

**Valero Pembrokeshire Oil Terminal  
Main Road  
Waterston  
Milford Haven  
Pembrokeshire  
SA73 1DR**

Permit number  
**EPR/BK1341IN**

# Valero Pembrookeshire Oil Terminal

## Permit number EPR/BK1341IN

### Introductory note

**This introductory note does not form a part of the permit**

The main features of the permit are as follows.

Valero Pembrookeshire Oil Terminal Ltd operate a fuel and oil storage facility in Waterston Pembrookeshire storing fuels and oils for third parties, importing and export materials by ship. The environmental permit allows for the storage of a variety of fuels and oils which includes crude oil, Naphtha (LCN) kerosene, Gas Oil (LGO), Isomerate, Alkylate, Gasoline Blend, Fuel oil, Automotive gas oil (AGO) etc. The site is a Top Tier COMAH site regulated by the Competent Authority (HSE and NRW). The site is part of the former Gulf oil refinery which closed in 1998 and was sold to Petroplus Tank Storage Milford Haven Ltd who converted it into the storage facility. Petroplus also started the LNG terminal on the site in 2000. Petroplus sold the tank storage facility to SEM in 2006 and kept some of the remaining land and refinery (since demolished). The site was then sold to Valero Pembrookeshire Oil Terminal Ltd in April 2018.

The Cross-Haven pipeline, connects this site with the Pembroke Refinery operated by Valero Energy Limited under the permit EPR/YP3930EX. Crude stored at the Pembrookeshire Oil Terminal is sent to Pembroke Refinery (via the pipeline) for processing. Slop oil and dewatering effluent generated at the Pembrookeshire Oil Terminal can also be sent via the pipeline or road tanker to Pembroke Refinery for further treatment.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application BK1341	Received 19/12/00	Information missing – submitted 28 December 2000
Application duly made	28/12/00	-
Schedule 4 Notice issued	Dated 14/03/01	-
Response to Schedule 4 Notice received	27/04/01 04/05/01	Some information incorrect Corrected information received
Permit BK1341	Determined 17/07/01	
Application for Variation BL8252	Received 13/08/01	Standard variation – To change the approach to soil remediation from bio-cell to windrows.

### Status log of the permit

Description	Date	Comments
Variation BL8252	Determined 20/09/01 Effective 24/09/01	
Application for Variation BM2659	4/10/01	Standard variation – To permit treatment of contaminated groundwater.
Variation BM2659	Determined 21/12/01 Effective 1/01/02	
Application for Variation BS6424	Received 11/04/2002	Non chargeable variation – To amend and delete conditions (i.e. 2.1.6d, 2.1.7 and delete 2.1.8) relating to the maximum storage quantity of Produced water
Variation BS6424	Effective 2/07/2002	
Application for Variation BU0214	Received 23/12/02	Chargeable variation – Remediation of groundwater and soils by air sparging, vapour extraction and insitu-bioremediation. Treatment of contaminated groundwater.
Schedule 4 Notice issued	Dated 13/01/2003	
Response to Schedule 4 Notice received	11/02/2003	
Variation BU0214	Effective 25/04/2003	
Application for variation MP3136SH	Received 05/05/2005	Simple standard variation – removal of capability to process produced water within waste water treatment plant. Modification of water monitoring in line with this.
Variation MP3136SH	Effective 04/08/2005	Removal of the capability to process produced water within waste water treatment plant and modifies water monitoring in line with this.
Transfer Request – SemLogistics – XP3134TC 4Gas – GP3034TW	17/05/2010	Changes to the site following the purchase from Petroplus of the tank storage business by SemLogistics and the change in ownership of the remainder of the site to 4Gas

**Status log of the permit**

<b>Description</b>	<b>Date</b>	<b>Comments</b>
Variation EPR/BK1341IN/V007 Regulation 60 Notice sent to the Operator	November 2016	NRW led variation incorporating the Regulation 60 changes following the publication of the revised Best Available Techniques Reference Document for the Refining of Mineral Oil and Gas.
Regulation 60 Notice Response	29/06/2016	Response received from the Operator.
Variation determined EPR/BK1341IN/V007	26/10/2021	Varied and consolidated permit issued in modern condition format to Valero Pembrokeshire Oil Terminal Limited.
Variation application PAN- 026226 (EPR/BK1341IN/V008)	Duly Made 15/04/2025	Variation to reflect changes to the site as a result of the use of the Cross-Haven pipeline and to add effluent treatment as a directly associated activity
PAN-026226 Additional Information Response to Schedule 5 Notification	08/08/2025	More information on the containment risk assessment and BAT compliance for Tanks 9, 11 and 12
Variation determined EPR/BK1341IN/V008	03/12/2025	Variation issued

**Other Part A installation permits relating to this installation**

<b>Operator</b>	<b>Permit number</b>	<b>Date of issue</b>
Dragon LNG Limited	EPR/AP3136UA	20/06/2003 (original Permit)
Valero Energy Limited	EPR/YP3930EX	20/12/2007 (original Permit)

End of introductory note

# Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number  
**EPR/BK1341IN**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BK1341IN/V008 authorising

**Valero Pembrokeshire Oil Terminal Ltd.** (“the operator”),

whose registered office is  
**27<sup>th</sup> Floor**  
**1 Canada Square,**  
**London**  
**EC14 5AA**

company registration number **03601913**

to operate an installation at  
**Valero Pembrokeshire Oil Terminal**  
**Main Road**  
**Waterston**  
**Milford Haven**  
**Pembrokeshire**  
**SA73 1DR**

to the extent authorised by and subject to the conditions of this permit.

Signed	Date
<b>Jennifer McGuire</b>	<b>03/12/2025</b>

Authorised on behalf of Natural Resources Wales

# Conditions

## 1 Management

### 1.1 General management

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.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

### 1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) Take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

### 1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **1.5 Multiple operator installations**

1.5.1 Where the operator notifies Natural Resources Wales under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

# **2 Operations**

## **2.1 Permitted activities**

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

## **2.2 The site**

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit. The area shown edged in blue on the site plan represents the extent of the installation covered by that of the other operator of the installation

## **2.3 Operating techniques**

2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by Natural Resources Wales.

- (b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.3 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

- (a) the nature of the process producing the waste;
- (b) the composition of the waste;

- (c) the handling requirements of the waste;
- (d) the hazardous property associated with the waste, if applicable; and
- (e) the waste code of the waste.

2.3.4 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

## **2.4 Improvement programme**

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.

2.4.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales within 14 days of completion of each improvement.

## **2.5 Pre-operational conditions**

2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

# **3 Emissions and monitoring**

## **3.1 Emissions to water, air or land**

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Where a substance is specified in schedule 3 table S3.2 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

3.1.4 Total annual emissions from the emission point(s) set out in tables schedule 3, S3.2 of a substance listed in schedule 3 table S3.5 shall not exceed the relevant limit in table S3.5.

3.1.5 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.1.6 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2 unless otherwise specified in that schedule

## **3.2 Emissions of substances not controlled by emission limits**

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

## **3.3 Odour**

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
- (a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

## **3.4 Noise and vibration**

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:

- (a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

## **3.5 Monitoring**

- 3.5.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1, S3.3
  - (b) surface water in table S3.2
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by Natural Resources Wales.

# **4 Information**

## **4.1 Records**

- 4.1.1 All records required to be made by this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by Natural Resources Wales, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.

- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by Natural Resources Wales.

## 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) each year. The report(s) shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production / treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to Natural Resources Wales, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

## 4.3 Notifications

- 4.3.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
- (i) inform Natural Resources Wales,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) in the event of a breach of any permit condition the operator must immediately—
- (i) inform Natural Resources Wales, and

- (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

  - (a) any change in the operator's trading name, registered name or registered office address; and
  - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

  - (a) any change in the operator's name or address; and
  - (b) any steps taken with a view to the dissolution of the operator.

In any other case:

  - (a) the death of any of the named operators (where the operator consists of more than one named individual);
  - (b) any change in the operator's name(s) or address(es); and
  - (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) Natural Resources Wales shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 Natural Resources Wales shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, Natural Resources Wales shall be notified within one month of:

- (a) a decision by the Secretary of State not to re-certify the agreement;
- (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
- (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## **4.4 Interpretation**

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made “without delay”, in which case it may be provided by telephone.

# Schedule 1 - Operations

**Table S1.1 activities**

Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	S1.2 Part A1 (e)	The loading, unloading or other handling of, the storage of, or the physical, chemical or thermal treatment of crude oil	Receipt and storage and the dispatch of crude including: (i) Jetty operations (ii) Crude storage
<b>Directly Associated Activity</b>			
AR2	Connection to mainline pipeline limited pumping station located north of VPOT.	Connection to the Mainline Pipeline	
AR3	Connection to Cross-Haven Pipeline	Connection to Cross-Haven pipeline to Pembroke refinery (EPR/YP3930EX)	Crude stored in tanks 9, 11 and 12
AR4	Effluent treatment	API oil separation system	Treatment of effluent generated on site

**Table S1.2 Operating techniques**

Description	Parts	Date Received
Application	The response to questions 2.3 given in section B2.3 of the application (excluding section 2.3.1 subsection B2, Section 2.3.2 subsection B2, Section 2.3.2 subsection B2 section 2.3.4 subsection B2 and section 2.3.5 subsection B2).	09/12/2000
Response to Schedule 4 Part 1 Notice	Response to questions 21, 22, 23, 24, 25, 26, 28, 29 and 53	04/05/2001
Application for Variation BL8252	The response to question 1.2 and 2.3 given in sections C1.2 and C2.3, respectively, and Appendix 1 of the Soil Remediation Variation application	13/08/2001
Application for Variation BM2659	The responses to question 2.3 given in section C2.3 of the variation application	04/10/2001
Application for Variation BU0214	The responses to question 2.3 given in section C2.3 of the variation application	23/12/2002
Response to Schedule 4 Part 1 Notice (Variation BU0214)	Response to questions 6, 7, 8, 9 and 10	11/02/2003
Regulation 60 Response	Report on the Review of Gas Refineries BAT Conclusions – Valero Pembrokeshire Oil Terminal Limited	29/06/2016
Variation Application EPR/BK13411N/V008 (PAN-026226)	<ul style="list-style-type: none"> <li>Application to vary permit EPR/BK13411N Valero Pembrokeshire Oil Terminal Supporting Information Document</li> <li>Not Duly Made response letter (dated 15/04/2025)</li> </ul>	28/06/2024 and 15/04/2005

**Table S1.2 Operating techniques**

Description	Parts	Date Received
EPR/BK1341IN/V008 (PAN-026226)	<ul style="list-style-type: none"> <li>PAN-026226 Response to Schedule 5 Notice</li> </ul>	08/08/2025

**Table S1.3 Improvement programme requirements**

Reference	Requirement	Date
IC9.20	The operator is required to review water emission monitoring methodology outlined in the Crude Oil Refinery BREF (BAT 10)	6 months from Variation V007 Issued
IC9.21	The operator is required to undertake a BAT review for the use of a risk based leak detection and repair (LDAR) programme to identify leaking components and minimising the VOC emissions to air. The review should consider techniques outlined in the Crude Oil Refinery BREF (BAT 6 and BAT 18).	10 months from Variation V007 Issued
IC9.22	The operator is required to undertake a BAT review for utilisation of a vapour recovery system on fixed roof storage tanks. (BAT49)	8 months from Variation V007 Issued
IC9.23	The operator is required to undertake a BAT review for the requirement of a vapour recovery process as outlined in the Crude Oil Refinery BREF (BAT 52) based on the last three years annual throughput.	8 months from Variation V007 Issued
IC9.24	The operator to provide an overview of the management system and operation of the connection to the Mainline Pipeline Limited.	4 months from Variation V007 Issued

**Table S1.4 Pre-operational measures for future development**

Reference	Operation	Pre-operational measures
PO1	Export of crude to Pembroke Refinery via the Cross-Haven Pipeline.	Prior to operation of sending of crude oil to Pembroke Refinery via the Cross-Haven pipeline, the operator must submit to Natural Resources Wales for approval the finalised version of the amendments to the accident management plan

## Schedule 2 - Waste types, raw materials and fuels

**Table S2.1 Raw materials and fuels**

Raw materials and fuel description	Specification
-	-

## Schedule 3 – Emissions and monitoring

**Table S3.1 Point source emissions to air – emission limits and monitoring requirements**

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Tanks	Fugitive releases from storage operation	No parameters set	No Limit Set	-	-	-
A5 [Point A5 on site plan in schedule 7]	East Catch Basin	No parameters set	No Limit Set	-	-	-

**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
C on site plan in schedule 7 emission to Milford Haven Waterway	Effluent Treatment Plant	Maximum daily flow	10,000 m <sup>3</sup> /day	--	Continuous	
	Effluent Treatment Plant	Suspended solids	70 mg/l	--	Twice a week	
	Effluent Treatment Plant	Total BOD 5 (ATU)	50 mg/l	--	Twice a week	
	Effluent Treatment Plant	Ammoniacal Nitrogen	5 mg/l	--	Weekly	
	Effluent Treatment Plant	Maximum Temperature	30 °C	--	Daily	
	Effluent Treatment Plant	pH maximum	9.0	--	Daily	

**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
	Effluent Treatment Plant	pH minimum	6.0	--	Daily	
	Effluent Treatment Plant	Total Oil	30 mg/l	--	Weekly	
	Effluent Treatment Plant	Chemical Oxygen Demand (COD)	50 mg/l	--	Weekly	
	Effluent Treatment Plant	Sulphide (as S)	1 mg/l	--	Weekly	
	Effluent Treatment Plant	Total phenols	7.5 mg/l	--	Weekly	
	Effluent Treatment Plant	Total cyanide	0.25 mg/l	--	Weekly	
	Effluent Treatment Plant	Cadmium	14 µg/l	--	Weekly	
	Effluent Treatment Plant	Cadmium	0.46 kg/month	--	Calculated based on monthly average	
	Effluent Treatment Plant	Mercury	2 µg/l	--	Weekly	
	Effluent Treatment Plant	Mercury	0.06 kg/month	--	Calculated based on monthly average	
	Effluent Treatment Plant	Lead	120 µg/l	--	2 per month	
	Effluent Treatment Plant	Copper	30 µg/l	--	2 per month	
	Effluent Treatment Plant	Iron	1200 µg/l	--	2 per month	
	Effluent Treatment Plant	Nickel	30 µg/l	--	2 per month	

**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
	Effluent Treatment Plant	Zinc	150 µg/l	--	2 per month	
	Effluent Treatment Plant	Chromium	10 µg/l	--	2 per month	
D on site plan in schedule 7 emission to Milford Haven Waterway --	Effluent Treatment Plant	Maximum daily flow	3,500 m <sup>3</sup> /day	--	Daily	
	Effluent Treatment Plant	Suspended solids	35 mg/l	--	Twice a week	
	Effluent Treatment Plant	Total BOD 5 (ATU)	50 mg/l	--	Weekly	
	Effluent Treatment Plant	Ammoniacal Nitrogen	0.4 mg/l	--	Weekly	
	Effluent Treatment Plant	Maximum Temperature	27 °C	--	Twice a week	
	Effluent Treatment Plant	pH maximum	--	--	--	
	Effluent Treatment Plant	pH minimum	--	--	--	
	Effluent Treatment Plant	Total Oil	--	--	--	
	Effluent Treatment Plant	Chemical Oxygen Demand (COD)	--	--	--	

**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
	Effluent Treatment Plant	Sulphide (as S)	--	--	--	
	Effluent Treatment Plant	Total phenols	--	--	--	
	Effluent Treatment Plant	Total cyanide	--	--	--	
	Effluent Treatment Plant	Cadmium	14 µg/l	--	Weekly	
	Effluent Treatment Plant	Cadmium	0.46 kg/month	--	Calculated based on monthly average	
	Effluent Treatment Plant	Mercury	--	--	Weekly	
	Effluent Treatment Plant	Mercury	0.06 kg/month	--	Calculated based on monthly average	
	Effluent Treatment Plant	Lead	50 µg/l	--	Weekly	
	Effluent Treatment Plant	Copper	40 µg/l	--	Weekly	
	Effluent Treatment Plant	Iron	1400 µg/l	--	Weekly	
	Effluent Treatment Plant	Nickel	10 µg/l	--	Weekly	
	Effluent Treatment Plant	Zinc	40 µg/l	--	Weekly	

**Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements**

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
	Effluent Treatment Plant	Chromium	--	--	--	

**Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements**

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
E2	Water from the West Catch Basin	-	-	-	-	-
E3	Water from the outlet of the API separator	-	-	-	-	-
AP3136UA – E3	Dragon LNG Process effluent	-	-	-	-	-

**Table S3.4 Process monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
-	-	-	-	-

**Table S3.5 Annual limits**

Substance	Medium	Limit (including unit)
Cadmium	Water	5.5 kg in a year
Mercury	Water	0.7 kg in a year

## Schedule 4 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Emissions to air Parameters as required by condition 3.5.1.	A1, A5	Every 12 months	1 January
Emissions to water Parameters as required by condition 3.5.1	Point C and Point D	Every 12 months	1 January

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
-	-

<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Water usage/tonne product	Annually	tonnes
Energy usage/tonne of product	Annually	MWh

<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Air	Form air 1 or other form as agreed in writing by Natural Resources Wales	26/10/2018
Water	Form water 1 or other form as agreed in writing by Natural Resources Wales	26/10/2018
Water usage	Form water usage 1 or other form as agreed in writing by Natural Resources Wales	26/10/2018
Energy usage	Form energy 1 or other form as agreed in writing by Natural Resources Wales	26/10/2018
Other performance indicators	Form performance 1 or other form as agreed in writing by Natural Resources Wales	26/10/2018

# Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

## Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

<b>(a) Notification requirements for any activity that gives rise to an incident or accident which significantly affects or may significantly affect the environment</b>	
<b>To be notified within 24 hours of detection</b>	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

<b>(b) Notification requirements for the breach of a permit condition</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>


<b>(c) In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment:</b>	
<b>To be notified within 24 hours of detection</b>	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

**Part B - to be submitted as soon as practicable**

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

<b>Name*</b>	
<b>Post</b>	
<b>Signature</b>	
<b>Date</b>	

\* authorised to sign on behalf of the operator

# Schedule 6 - Interpretation

“*accident*” means an accident that may result in pollution.

“*application*” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“*authorised officer*” means any person authorised by Natural Resources Wales under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“*background concentration*” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“*calendar monthly mean*” means the value across a calendar month of all validated hourly means.

“*dynamic emission limit value*” (DELV) means an emission limit that varies in accordance with Article 40 of the Industrial Emissions Directive.

“*ELV*” means Emission Level Value

“*emissions to land*” includes emissions to groundwater.

“*EP Regulations*” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“*emissions of substances not controlled by emission limits*” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit

“*groundwater*” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“*Industrial Emissions Directive*” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“*MCERTS*” means the Environment Agency’s Monitoring Certification Scheme.

“*mcr*” means maximum continuous rating

“*Natural gas*” means naturally occurring methane with no more than 20% by volume of inert or other constituents.

“*operational hours*” are whole hours commencing from the first unit ending start up and ending when the last unit commences shut down.

“*quarter*” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“*recovery*” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste

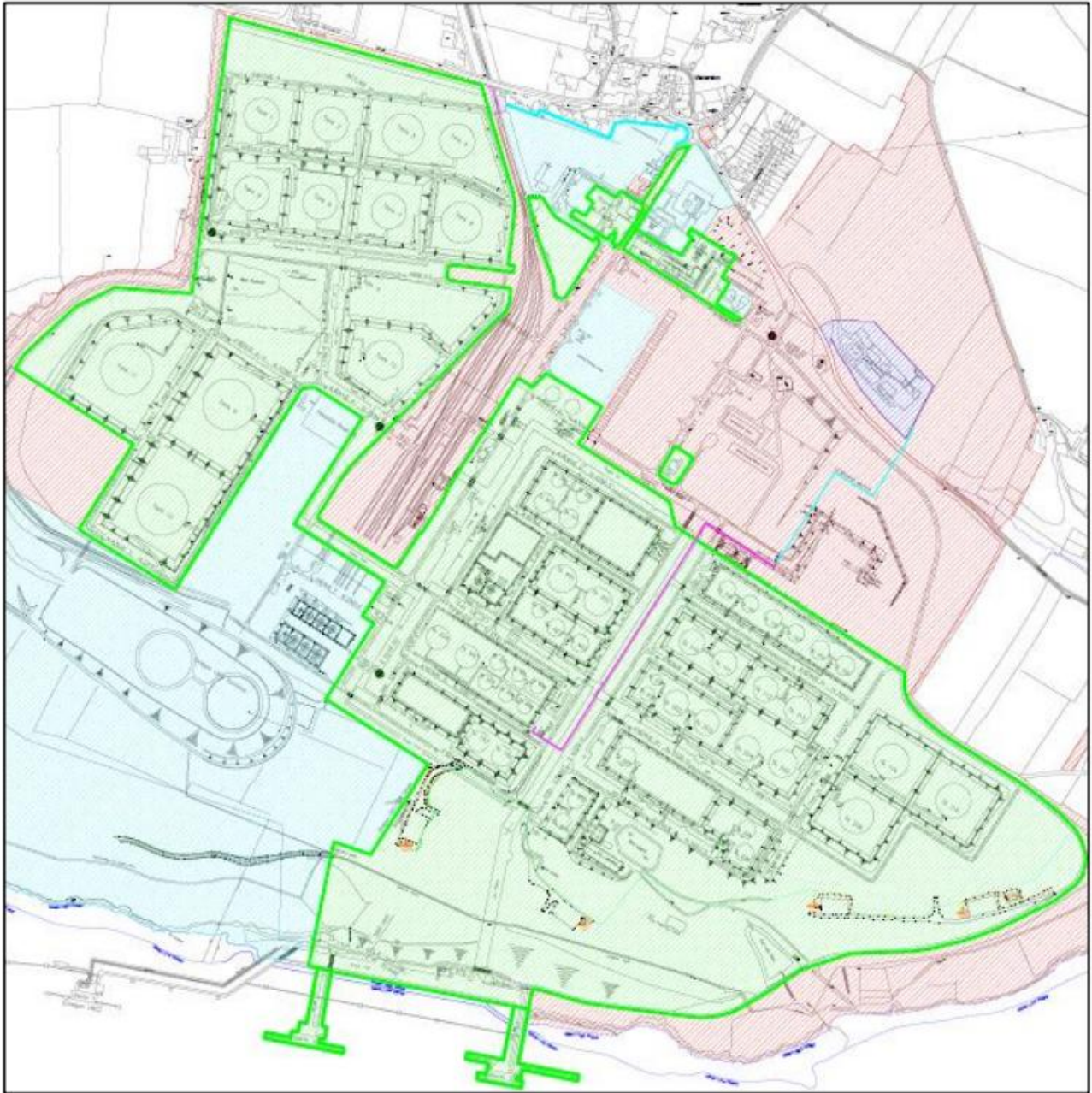
“*Waste code*” means the six digit code referable to a type of waste in accordance with the list of wastes established by Commission Decision 2000/532/EC as amended from time to time (the ‘List of Wastes Decision’) and in relation to hazardous waste, includes the asterisk.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- (a) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

## Schedule 7 - Site plan



END OF PERMIT.