

# Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Tranmere Oil Terminal
Shell UK Oil Products Limited
New Chester Road
Tranmere
Birkenhead
Wirral
CH42 1LQ

Permit number NP3437LX

# Tranmere Oil Terminal, Permit Number NP3437LX

### Introductory note

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

The main features of the installation are as follows.

The Tranmere Oil Terminal covers an area of 13.5 hectares and is located on the west bank of the River Mersey at Tranmere, Birkenhead (Grid Ref: SJ332872).

The installation is used for the receipt and export of crude oil, gas oil, fuel oil and long residue from ships berthed at one of two jetties. Materials are then stored on site awaiting transfer to Stanlow Manufacturing Complex and Eastham refineries by pipeline. Approximately 11.5 million tonnes per annum of hydrocarbon are received by ship.

Crude oil is imported via the two jetties (North and South) into storage tanks. The crude oil is stored and on request transferred to the respective refinery using a cross-country pipeline. During pipeline transfer crude oils may be blended with other crude oils. Crude oils may also be exported from the installation by ship. The facility also receives white oils into on-site storage for subsequent export by ship. Gas oil may be exported from the installation.

The installation contains one directly associated activity which is the hot water heaters.

There is one emission point to air. Emissions to air are from two gas oil fired hot water heaters (each of MCR fuel input energy rating, 6 MW(th)). These are used to provide heat to the tanks and pipes used for the storage and transfer of the oils. There are two emission points to water. Emissions to water are of surface water from the installation and blowdown from the hot water heating system. Emissions to water are abated by gravity settling bays and single parallel plate pack separator. All emissions to air and water have been identified as not significant. There are no emissions to sewer.

The installation has an environmental management system which has been externally certified to ISO 14001.

There are a number of sites with statutory nature conservation designations within 10km of the installation which are as follows: The Dee Estuary Ramsar; Dee Estuary (SAC) (proposed); Dee Estuary SPA (or proposed SPA); Mersey Estuary Ramsar; Mersey Estuary SPA (or proposed SPA); Ribble & Alt Estuaries SPA (or proposed SPA); Ribble & Alt Estuaries Ramsar and Sefton Coast SAC (candidate). There is one SSSI within 2 km of the installation which is as follows; New Ferry SSSI.

The Agency concludes that activities at the Tranmere Oil Terminal Installation have no adverse effect on any Natura 2000 sites and nor considered to have an adverse effect on any other important ecological sites.

Status Log of the permit		
Detail	Date	Response Date
Application NP3437LX	Duly made 21/0	8/06
Additional Information Received		02/02/07
Permit determined	30/06/07	

Superseded or Partial	ly Superseded Licences/A	uthorisations/Consen	ts relating to this installation
Holder	Reference Number Date of Issue		Fully or Partially Superseded
Shell UK Limited	AF8254		Fully superseded

End of Introductory Note

### Permit

Pollution Prevention and Control (England and Wales) Regulations 2000

### **Permit**

Permit number

### **NP3437LX**

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973) hereby authorises

Shell UK Oil Products Limited ("the operator"),

Whose registered office is:

Shell UK Oil Products Limited **Shell Centre** London SE1 7NA

Company registration number: 3625633

To operate an installation at:

Tranmere Oil Terminal **New Chester Road Tranmere** Birkenhead Wirral **CH42 1LQ** 

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

Signed	Date
Cignou	

Julian Ingram

Strategic Permitting Team Leader, Warrington

Authorised to sign on behalf of the Agency

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### **Conditions**

### 1 Management

### 1.1 General management

- 1.1.1 The activities shall be managed and operated:
  - in accordance with a management system, which identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents and non-conformances and those drawn to the attention of the operator as a result of complaints; and
  - (b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.
- 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 Accident management plan

- 1.2.1 The operator shall:
  - (a) maintain and implement an accident management plan;
  - (b) review and record at least every 4 years or as soon as practicable after an accident, (whichever is the earlier) whether changes to the plan should be made;
  - (c) make any appropriate changes to the plan identified by a review.

### 1.3 Energy efficiency

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities:
  - (b) review and record at least every 4 years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures by a review.

### 1.4 Efficient use of raw materials

- 1.4.1 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 4 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 appropriate further measures identified by a review.

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

### 1.5.1. The operator shall:

- (a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;
- (b) review and record at least every 4 years whether changes to those measures should be made; and
- (c) take any further appropriate measures identified by a review.

### 1.6 Site security

1.6.1. Site security measures shall prevent unauthorised access to the site, as far as practicable.

### 2. Operations

### 2.1 Permitted activities

2.1.1 The operator is 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 by the thick black continuous line on the site plan at schedule 2 to this permit.

### 2.3 Operating techniques

- 2.3.1 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 the Agency.
- 2.3.2 No raw materials or fuels listed in schedule 3 table S3.1 shall be used unless they comply with the specifications set out in that table.
- 2.3.3 No condition applies.
- 2.3.4 No condition applies.

### 2.4 Off-site conditions

There are no off-site conditions under this section.

### 2.5 Improvement programme

- 2.5.1 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 the Agency.
- 2.5.2 Except in the case of an improvement which consists only of a submission to the Agency, the operator shall notify the Agency within 14 days of completion of each improvement.

### 2.6 Pre-operational conditions

There are no pre-operational conditions in this permit.

### 2.7 Closure and decommissioning

- 2.7.1 The operator shall maintain and operate the activities so as to prevent or where that is not practicable, to minimise, any pollution risk on closure and decommissioning.
- 2.7.2 The operator shall maintain a site closure plan which demonstrates how the activities can be decommissioned to avoid any pollution risk and return the site to a satisfactory state.
- 2.7.3 The operator shall carry out and record a review of the site closure plan at least every 4 vears.
- 2.7.4 The site closure plan (or relevant part thereof) shall be implemented on final cessation or decommissioning of the activities or part thereof.

### 2.8 Site protection and monitoring programme

- 2.8.1 The operator shall, within 2 months of the issue of this permit, submit a site protection and monitoring programme.
- 2.8.2 The operator shall implement and maintain the site protection and monitoring programme and shall carry out and record a review of it at least every 4 years.

### 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 4 tables S4.1 and S4.2.
- 3.1.2 The limits given in schedule 4 shall not be exceeded.
- 3.1.3 No condition applies.
- 3.1.4 No condition applies.

### 3.2 Transfers off-site

3.2.1 Records of all the wastes sent off site from the activities, for either disposal or recovery, shall be maintained.

### 3.3 Fugitive emissions of substances

- 3.3.1 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.3.2 Litter or mud arising from the activities shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures [, including those specified in schedule 1 tables S1.6 and S1.7,] have been used to prevent or where that is not practicable to minimise, the litter and mud.
- 3.3.3 Litter or mud arising from the activities shall be cleared from affected areas outside the site as soon as practicable
- 3.3.4 All liquids, 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.

### 3.4 Odour

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the odour.
- 3.4.2 No condition applies.

### 3.5 Noise and vibration

3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the noise and vibration.

### 3.6 Monitoring

- 3.6.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake monitoring for the parameters, at the locations and at not less than the frequencies specified in the following tables in schedule 4 to this permit:
  - (a) point source emissions specified in tables \$4.1 and \$4.2.
- 3.6.2 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.
- 3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Agency.
- 3.6.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 4 tables S4.1 and S4.2 unless otherwise specified in that schedule.

3.6.5 Within 6 months of the issue of this permit (unless otherwise agreed in writing by the Agency) the site reference data identified in the site protection and monitoring programme shall be collected and submitted to the Agency.

### 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 the Agency, 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) the site protection and monitoring programme.
- 4.1.2 Any records required to be made by this permit shall be supplied to the Agency within 14 days where the records have been requested in writing by the Agency.
- 4.1.3 All records required to be held by this permit shall be held on the installation or at Stanlow Manufacturing Complex, as agreed by the Agency, and shall be available for inspection by the Agency at any reasonable time.

### 4.2 Reporting

- 4.2.1 A report or reports on the performance of the activities over the previous year shall be submitted to the Agency by 31 January (or other date agreed in writing by the Agency) each year. The report(s) shall include as a minimum:
  - a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the assessment of the impact of the emissions submitted with the application;
  - (b) where the operator's management system encompasses annual improvement targets, a summary report of the previous year's progress against such targets;
  - (c) the annual production /treatment data set out in schedule 5 table \$5,2;
  - (d) the performance parameters set out in schedule 5 table S5.3 using the forms specified in table S5.4 of that schedule; and
  - (e) details of any contamination or decontamination of the site which has occurred.
- 4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Agency, 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 5 tableS5.1:

- (b) for the reporting periods specified in schedule 5 table S5.1 and using the forms specified in schedule 5 table S5.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.3 The operator shall, unless notice under this condition has been served within the preceding 4 years, submit to the Agency, within 6 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.
- 4.2.4 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency
- 4.2.5 No condition applies
- 4.2.6 The results of reviews and any changes made to the site protection and monitoring programme shall be reported to the Agency, within 1 month of the review or change.

### 4.3 Notifications

- 4.3.1 The Agency shall be notified without delay following the detection of:
  - (a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;
  - (b) the breach of a limit specified in the permit;
  - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 6 to this permit within the time period specified in that schedule.
- 4.3.3 Prior written notification shall be given to the Agency of the following events and in the specified timescales:
  - (a) as soon as practicable prior to the permanent cessation of any of the activities;
  - (b) cessation of operation of part or all of the activities for a period likely to exceed 1
    year; and
  - (c) resumption of the operation of part or all of the activities after a cessation notified under (b) above.
- 4.3.4 The Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.
- 4.3.5 Where the Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.6 No condition applies.
- 4.3.7 No condition applies.
- 4.3.8 No condition applies.
- 4.3.9 The Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

- (a) any change in the operator's trading name, registered name or registered office address;
  - (b) any change to particulars of the operator's ultimate holding company (including details of an ultimate holding company where an operator has become a subsidiary); and
  - (c) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

### 4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 7 shall have the meaning given in that schedule.

# Schedule 1 - Operations

Table S1.1 activities		
Activity listed in Schedule 1 of the PPC Regulations	Description of specified activity	Limits of specified activity
Section 1.2 A(1)(h)(i)	Crude oil processing and handling.	Loading and unloading of crude oil, gas oil and fuel oil from ships from one of two jetties or transfer to Stanlow Manufacturing Complex.
Directly Associated Activity		
Hot water heaters	Operation of gas oil fired boilers	To provide heat to the tanks and pipes used for the storage and transfer of the oils.

Table S1.2 Operati	ng techniques	1 N 3 1 2 1
Description	Parts	Date Received
Application	The response to section 2.1 and 2.2 in the Application.	21/08/06

Reference	Improvement programme requirements	D
	Requirement	Date
IP1	The Operator shall review the provision of MCERTS certification for the	30/6/08
	monitoring equipment, personnel and organisations employed for the emissions	
	monitoring programme in condition 3.6.1 and propose a timetable for achieving	
	this standard for any elements for which MCERTS certification exists.	
IP2	A written plan shall be submitted to the Agency for approval detailing the results of a survey of hard-standing, kerbing and secondary containment for raw material, intermediate, product and waste storage areas and the measures to comply with the requirements of section 2.2.2 of Sector Guidance Note S 1.02. Where appropriate the plan shall contain dates for the implementation of individual measures. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.	30/06/08
	The plan shall be implemented by the operator from the date of approval by the Agency.	
IP3	The Operator shall review BAT for operation of the floating roof tanks. The Operator shall provide a report to the Agency summarising the findings.	30/06/08
	Where appropriate the plan shall contain dates for the implementation of individual measures. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.	
	The plan shall be implemented by the operator from the date of approval by the Agency.	

# Schedule 2 - Site plan

Page

# Schedule 3 - Waste types, raw materials and fuels

Raw materials and fuel description	Specification
Gas oil for fuelling hot water heaters	Sulphur content limited to a maximum of:
	0.2 % until 31 December 2007 and
	0.1% from 1 January 2008.

# Schedule 4 – Emissions and monitoring

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitori ng frequency	Monitoring standard or method
A1 [Point A1 on site plan in Schedule 2]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Tranmere common boiler stack	No limit set	-	-	•
A1 [Point A1 on site plan in Schedule 2]	Carbon Dioxide	Tranmere common boiler stack	No limit set	-	-	-
A1 [Point A1 on site plan in Schedule 2]	Sulphur Dioxide	Tranmere common boiler stack	No limit set	-	-	•
A1 [Point A1 on site plan in Schedule 2]	Carbon Monoxide	Tranmere common boiler stack	No limit set	-	•	-

Emission point ref. & location	Source emission Parameter	Source	Limit (incl. unit)		Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 2	Total flow	Surface water from the north area of the installation, & blowdown from the hot water heating system	No limit set			2
W1 on site plan in schedule 2	Temperature	Surface water from the north- area of the installation, & blowdown from the hot water heating system	30°C	Spot sample	Weekly	
W1 on site plan in schedule 2	pН	Surface water from the north area of the installation, & blowdown from the hot water heating system	6 - 9	Spot sample	Weekly	ISO: 10523: 1996
W1 on site plan in schedule 2	BOD	Surface water from the north- area of the installation, & blowdown from the hot water heating system	30mg/l	Spot sample	Weekly	BS EN 1899-1 (1998)
W1 on site plan in schedule 2	Suspended solids	Surface water from the north area of the installation, & blowdown from the hot water heating system	40mg/l	For 95% of all measured values of periodic samples taken over one month	Weekly	BS EN 872: 2005
W1 on site plan in schedule 2	Hydrocarbon Oil	Surface water from the north area of the installation, & blowdown from the hot water heating system	10mg/l	Spot sample	Weekly	SCA blue book 77 ISBN 0117517283
W2 on site plan n schedule 2	Hydrocarbon Oif	Surface water from the north area of the installation, & blowdown from the hot water heating-system	10mg/l	Spot-sample	Weekly	SCA blue book 77 ISBN 0117517283

## Schedule 5 - Reporting

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

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to water	W1, <del>-W2-</del>	Every 6 months	DD/MM/YY
Parameters as required by cond	ition	•	
3.6.1			

Table S5.2: Annual production/treatment	
Parameter	Units
Crude oil processing and handling	tonnes

Table S5.3 Performance parame	ters	
Parameter	Frequency of assessment	Units
Fugitive VOC emissions to air	Annually	kg
Water usage	Annually	tonnes
Energy usage	Annually	MWh

Media/parameter	Reporting format	Date of form
Water	Form water 1 or other form as agreed in writing by the Agency	DD/MM/YY
Energy usage	Form performance 1 or other form as agreed in writing by the Agency	DD/MM/YY
Other performance indicators	Form performance 1 or other form as agreed in writing by the Agency	DD/MM/YY

### **Schedule 6 - 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 PPC Regulations.

### Part A

Permit Number	NP3437LX
Name of operator	Shell UK Oil Products Limited
Location of Installation	Tranmere Oil Terminal
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution		
To be notified within 24 hours of detection		
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) Notification requirements for the breach of a limit  To be notified within 24 hours of detection unless otherwise specified below	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to	
be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period
1	
* * * * * * * * * * * * * * * * * * * *	

(c) Notification requirements for the detection of any significant adverse environmental effect  To be notified within 24 hours of detection	
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	
installation in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

<sup>\*</sup> authorised to sign on behalf of Shell UK Oil Products Limited

### **Schedule 7 - Interpretation**

"accident" means an accident that may result in pollution.

"annually" means once every year.

"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 4 to the PPC Regulations.

"authorised officer" means any person authorised by the Agency 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.

"emissions to land", includes emissions to groundwater.

"fugitive emission" means an emission to air, water or land from the activities which is 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.

"land protection guidance", means Agency guidance "H7 - Guidance on the protection of land under the PPC Regime: application site report and site protection monitoring programme".

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"notify/notified without delay" means that a telephone call can be used, whereas all other reports and notifications must be supplied in writing, either electronically or on paper.

"PPC Regulations" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"site protection and monitoring programme" means a document which meets the requirements for site protection and monitoring programmes described in the Land Protection Guidance.

"year" means calendar year ending 31 December.

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 combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) 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

END OF PERMIT