Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Haltermann Carless UK Limited

Harwich Manufacturing Centre
Refinery Road
Parkeston
Harwich
Essex
CO12 4SS

Variation application number

EPR/NP3139LM/V004

Permit number

EPR/NP3139LM

Harwich Manufacturing Centre
Permit number EPR/NP3139LM

Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

Article 21(3) of the Industrial Emissions Directive (IED) requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions. We have reviewed the permit for this installation against the revised BAT Conclusions for the refining of mineral oil and gas industry sector published on 28th October 2014.

The main features of the permit are as follows.

Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
Section 1.2 Part A(1)(e)(i) The loading, unloading, handling or storage of, or the physical, chemical or thermal treatment of crude oil	The loading, unloading, handling and storage and treatment of condensate including: Methanol removal by washing with water. Distillation of gas condensate into naphtha and kerosene. Further processing, including blending.	From receipt of raw materials to despatch of products and waste, release of emissions to air and surface water.

The installation is located at Parkeston, Harwich, adjacent to the Tidal River Stour. The site is bounded to the North by the main London to Harwich rail line, and to the north east of the site is Harwich International Port.

Harwich Manufacturing Centre is a small specialist condensate handling and processing facility, processing liquid hydrocarbon feedstocks by distillation and other techniques to produce a range of products including fuels and solvents.

The principal raw material is gas condensate, delivered by ship and rail. Continuous distillation is used to split the condensate into naphtha and kerosene for delivery or further processing. Products are dispatched by road, rail and ship.

There are 175 above ground bunded tanks for storage of raw materials and products of varying capacity (18-13000 m^3), connected via pipework and interconnecting pump bays.

Combustion plant, comprising 3 boilers (1.1, 5.5 and 5.6 MWth) providing steam and 3 thermal fluid heaters (4.5, 4.5 and 6.8 MWth) are operated on the installation. The combustion units are fired on liquid and gaseous fuels.

The main emissions to air are Volatile Organic Compounds (VOCs) from the storage, handling and treatment of hydrocarbons, and combustion gases from the burning of fuels in the associated boilers and thermal fluid heaters. Waste water, comprising process waters, jetty pipeline wash waters, boiler blowdown, water treatment plant effluent, and surface water are discharged to the Tidal River Stour via an interceptor. The concentrated effluent arising from a methanol removal plant is collected prior to being tankered off site.

This variation makes the below changes following the review under Article 21(3) of the Industrial Emissions Directive (IED), consideration of the Water Framework Directive and the consolidation of the Environmental Permitting Regulations that came into force on the 4 January 2017:

- The listed activity has been changed from S1.2 A1(g) to 1.2 Part A(1)(e)(i) as this is the most apt description for the site.
- Improvement conditions were set requiring the Operator to propose a monitoring plan for emissions to water and then carry out an impact assessment based on the results;
- An improvement condition was set requiring the Operator to review the measures and procedures in place to prevent and reduce/mitigate venting of gas from the process;
- An improvement condition was set requiring the Operator to review the segregation of waste water streams;
- The BAT Associated Emission Levels (AELs) for emissions to surface water and associated monitoring and reporting have been included in table S3.1; and
- Process monitoring has been specified for VOCs in table S3.3.

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

Status log of the permit		
Description	**Date**	**Comments**
Application NP3139LM	Duly made 05/09/06	
Additional information received	16/01/07	
Permit determined	16/05/07	
Agency variation determined EPR/NP3139LM/V002	07/11/13	Agency variation to implement the changes introduced by IED
Notified of change of company change	17/11/15	Name changed to Haltermann Carless UK Limited
Variation issued EPR/NP3139LM/V003	26/11/15	Varied permit issued to Haltermann Carless UK Limited
Regulation 60 Notice sent to the Operator	09/11/2015	Issue of a Notice under Regulation 60(1) of the EPR. Environment Agency initiated review and variation to vary the permit under IED to implement Chapter II following the publication of the revised Best Available Techniques (BAT) Reference Document for the Refining of Mineral Oil and Gas.
Regulation 60 Notice response	29/01/16	Response received from the Operator.
Response to additional information requested 11/10/16	13/11/16	Information relating to BAT Conclusions 4, 6, 10, 11, 17, 34, 37 and 52.
Regulation 60 Notice sent to the Operator	23/01/17	Issue of an additional Notice under Regulation 60(1) of the EPR.
Regulation 60 Notice response	26/01/17	Information relating to BAT Conclusions 10 and 36.
Further information received	08/06/17	Derogation Plan
Further information received	28/07/17	Supporting documentation for derogation application.
Further information received	29/11/17	Revised Derogation Plan
Further information received	04/05/18	BAT Improvement Plan Version 2.3
Regulation 60 Notice sent to the Operator	19/07/18	Issue of an additional Notice under Regulation 60(1) of the EPR.

Status log of the permit		
Description	**Date**	**Comments**
Regulation 60 Notice response	31/08/18	BAT Improvement Plan Version 2.4
Variation determined EPR/NP3139LM/V004 (Billing ref: DP3737RK)	24/10/18	Varied and consolidated permit issued in modern condition format. Variation effective from 28/10/2018.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates

Permit number

EPR/NP3139LM

Issued to

Haltermann Carless UK Limited ("the operator")

whose registered office is

Grove House
Guildford Road
Leatherhead
Surrey
KT22 9DF

company registration number 00429315

to operate a regulated facility at

Harwich Manufacturing Centre
Refinery Road
Parkeston
Harwich
Essex
CO12 4SS

to the extent set out in the schedules.

The notice shall take effect from 28/10/2018.

Name	Date
Martin Jenkins, Principal Permitting Team Leader	**24/10/2018**

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/NP3139LM

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/NP3139LM/V004 authorising,

Haltermann Carless UK Limited ("the operator"),

whose registered office is

Grove House
Guildford Road
Leatherhead
Surrey
KT22 9DF

company registration number 00429315

to operate an installation at

Harwich Manufacturing Centre
Refinery Road
Parkeston
Harwich
Essex
CO12 4SS

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

Name	Date
Martin Jenkins, Principal Permitting Team Leader	**24/10/2018**

Authorised on behalf of the Environment Agency

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.

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 red on the site plan at schedule 7 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 Environment Agency.

2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency 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 the Environment Agency.

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

2.3.4 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.

2.3.5 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 the Environment Agency.

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

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 and S3.2.

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

3.1.3 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.

3.2 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 the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency 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 the Environment Agency.

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 the Environment Agency, 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 the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency 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 the Environment Agency.

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 the Environment Agency, 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 the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency 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 the Environment Agency.

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1 and S3.2;

(b) process monitoring specified in table S3.3.

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 the Environment Agency.

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 and S3.2 unless otherwise agreed in writing by the Environment 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 Environment 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) 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 the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) 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 the Environment 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 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 the Environment Agency, 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 In the event:

(a) 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 the Environment Agency,

(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) of a breach of any permit condition the operator must immediately—

(i) inform the Environment Agency, and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) 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 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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 the Environment 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 Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency 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) the Environment Agency 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 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

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 "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	**Description of specified activity**	**Limits of specified activity**
Section 1.2 Part A(1)(e)(i) The loading, unloading, handling or storage of, or the physical, chemical or thermal treatment of crude oil	The loading, unloading, handling and storage and treatment of condensate including: Methanol removal by washing with water. Distillation of gas condensate into naphtha and kerosene. Further processing, including blending and further distillation.	From receipt of raw materials to despatch of products and waste, release of emissions to air and surface water.
Directly Associated Activity		
Combustion plant	Three boilers (5.5, 5.6 and 1.1 MWth) and 3 thermal fluid heaters (4.5, 4.5 and 6.8 MWth).	From receipt of fuels to generation of steam and heat, release of emissions to air and water.
Water treatment	Reverse osmosis and water softening plant.	From receipt of raw materials to discharge of effluent to the site drainage system.
Cooling systems	Two recirculating water cooling towers.	From receipt of steam to release of heat and water vapour.
Methanol recovery	Distillation of condensate wash water to recover methanol.	From receipt of wash waters to despatch of recovered methanol and storage of effluent prior to tankering off site.
Site drainage system	Process waters, jetty pipeline wash waters, boiler blowdown, reverse osmosis and water softening plant effluent, surface water.	Handling, storage and treatment of site drainage until discharge to the Tidal River Stour.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application NP3139LM/A001	The response to section B2.1 and B2.2 in the Application.	05/09/06
Additional information NP3139LM/A001	Responses to questions 1 and 8-13, providing further information on how releases are minimised.	16/01/07
Responses to regulation 60(1) Notice – request for information dated 09/11/15 EPR/NP3139LM/V004	Compliance and operating techniques identified in response to the BAT Conclusions for the refining of mineral oil and gas industry sector published on 28th October 2014 excluding the response to BAT Conclusion 10.	29/01/16
Additional information received in response to regulation 60(1) Notice – request for information dated 09/11/15 EPR/NP3139LM/V004	Clarification relating to BAT Conclusions 4, 6, 10, 11, 17, 34, 37 and 52 (email dated 13/10/16).	13/10/16

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Responses to regulation 60(1) Notice – request for information dated 23/01/17 EPR/NP3139LM/V004	Clarification relating to BAT Conclusion 36. Letter dated 26/01/17	26/01/17
Responses to regulation 60(1) Notice – request for information dated 19/07/18 EPR/NP3139LM/V004	BAT Improvement Plan v2.4	31/08/18

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	A written procedure shall be submitted to the Agency for approval. The procedure shall detail the method for determination of a monthly average sulphur dioxide concentration (across all combustion plant), including details of the verification of the suitability of the method.	Closed
IC2	A written procedure shall be submitted to the Agency for approval. The procedure shall detail the recovery and disposal routes for recovered leaded spirit from areas handling leaded fuel.	Closed
IC3	A written procedure shall be submitted to the agency detailing the measures to be used so that monitoring equipment, personnel and organisations employed for the emissions monitoring programme shall have either MCERTS certification or accreditation in accordance with condition 3.6.3. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure. The procedure shall be implemented by the operator from the date of approval in writing by the Agency	Closed
IC4	A written report shall be submitted to the Agency for approval. The report shall contain the findings of a review of site security. The review shall include, but not be limited to, consideration of how unauthorised access from Ray Lane can be prevented. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Closed
IC5	A written plan shall be submitted to the Agency for approval. The plan shall provide contain the measures required to ensure that all oil storage tanks are fitted with level gauges, high level alarms and pump cut-outs to aid in avoiding spillage. 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 report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	30/04/2019

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC6	A written report shall be submitted to the Agency for approval. The report shall provide the findings of a review of surfacing. In particular, the report shall consider and identify the improvements necessary to reduce the risk of pollution during rail loading and unloading activities, and ensure that all operational areas are equipped with appropriate surfacing and containment. Due regard shall be given to the requirements of Section 2.2.2 and 2.2.5 of IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	30/04/2019
IC7	A written report shall be submitted to the Agency for approval. The report shall provide the findings of a review of current bunding. In particular, the report shall provide evidence to demonstrate that the existing stone over clay bunds (bunds 1-10) are fit for purpose, and identify any improvements necessary. Due regard shall be given to the requirements of Section 2.2.2 and 2.2.5 of IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	30/06/2019
IC8	A written report shall be submitted to the Agency for approval. The report shall provide the results of a Direct Toxicity Assessment for releases to controlled waters from emission point W1 with the purpose of evaluating the potential for impact and/or harm to the aquatic environment. Due regard shall be given to the requirements of the Agency Guidance Note 'The Use of Direct Toxicity Assessments in PPC Impact Assessments'. Proposed improvements to prevent any acute toxic effects in the receiving water, with timescales for implementation shall be provided in the report. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Superseded by IC20 and IC22
IC9	A written plan shall be submitted to the Agency for approval. The plan shall contain the results of a review of the current fugitive release inventory, and include the improvements identified. Due regard shall be given to the requirements of Section 2.2.4 the IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Superseded by IC18 and IC21
IC10	A written report shall be submitted to the Agency for approval. The report shall contain the findings of a review of the storage strategy to ensure the need and numbers for tankage are minimised. Due regard shall be given to the requirements of section 2.1.3.1 of IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Closed

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC11	A written report shall be submitted to the Agency for approval. The report shall provide the findings of a review of the sources of contamination and appropriate techniques to control emissions to water, and identify any improvements necessary to achieve the emission benchmarks detailed in the IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Superseded by IC20 and IC22
IC12	A written report shall be submitted to the Agency for approval. The report shall contain the findings of a review of the refinery fuel strategy. The review shall include, but not be limited to consideration of how liquid fuel use can be minimised. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Closed
IC13	A written report shall be submitted to the Agency for approval. The report shall contain the findings of a review of techniques to reduce oxides of nitrogen releases from the combustion plant. Due regard shall be given to the requirements of Section 2.2.1.2 of the IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector. The review shall include, but not be limited to, consideration of the installation of low NOx burners. The report shall include a timetable to implement any improvements identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements identified shall be implemented by the Operator from the date of approval in writing by the Agency.	30/06/2019
IC14	A written site closure plan shall be submitted to the Agency for approval. The plan shall contain the measures, which will be taken on cessation of any part or all of the activities, to avoid any pollution risk and return the site to a satisfactory state, in accordance with the requirements of section 2.11 of IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector.	Closed
IC15	A written energy efficiency plan shall be submitted to the Agency for approval. The plan shall consider all techniques relevant to the installation in accordance with the requirements of section 2.7 of IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector and guidance note and H2 Energy efficiency for IPPC, and include dates for the implementation of individual improvement measures identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Closed

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC16	A written report shall be submitted to the Agency for approval. The report shall contain the findings of a water efficiency audit in accordance with the requirements of section 2.4.3 of IPPC Sector Guidance Note for the Gasification, Liquefaction and Refining Sector, including dates for the implementation of individual improvement measures identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing be the Agency.	Closed
IC17	A written report shall be submitted to the Agency for approval. The report shall contain the findings of a waste minimisation audit in accordance with the requirements of section 2.4.2 of IPPC Sector Guidance Note for Gasification, Liquefaction and Refining Sector, including dates for the implementation of individual improvement measures identified. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Closed
IC18	The Operator shall submit a diffuse VOC monitoring plan to the Environment Agency for written approval. This shall include but not be limited to: • The nature of the material handled; • The sources of emissions; • Justification of the monitoring techniques selected • How the monitoring data will be recorded and reviewed The plan shall take into account the appropriate techniques for VOC monitoring specified in BAT conclusion 6 for the Refining of Mineral Oil and Gas. The Operator shall implement the approved plan and produce and submit an annual report on the results of the monitoring undertaken under the plan.	01/11/2019
IC19	The operator shall submit a written monitoring plan to the Environment Agency for approval that includes: (a) proposals to undertake representative monitoring of hazardous pollutants (as set out in the Environment Agency's Surface Water Pollution Risk Assessment guidance) in the discharge to surface water from point W1 including the parameters to be monitored, frequencies of monitoring and methods to be used. The operator shall carry out the monitoring in accordance with the Environment Agency's written approval.	01/07/2019
IC20	The operator shall submit a written report to the Environment Agency for approval that includes: the results of an assessment of the impact of the emissions to surface water from the site in accordance with the Environment Agency's Surface Water Pollution Risk Assessment Guidance available on our website. The report shall: (a) be based on the parameters monitored in IC19 above; and (b) include proposals for appropriate measures to mitigate the impact of any emissions where the assessment determines they are liable to cause pollution, including timescales for implementation of individual measures.	01/11/2020

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC21	The Operator shall review the measures and procedures in place to prevent and reduce/mitigate venting of gas from the process. The review must consider in detail all available options, both combustion and non-combustion based (including but not necessarily limited to flaring, vapour recovery, scrubbing and adsorption), for the reduction/abatement/mitigation of waste gas so as to minimise its environmental impacts as far as available techniques allow. A written report summarising the findings shall be submitted to the Agency for approval, along with a timetable for implementing improvements. The Operator shall implement the improvements to the approved timetable.	01/05/2020
IC22	The Operator shall carry out an assessment of the options available for segregation of waste water streams and the viability of their implementation; to reduce the volume of process water produced, as detailed in BAT conclusion 11 for the Refining of Mineral Oil and Gas. A written report summarising the findings shall be submitted to the Agency for approval, along with a timetable for implementing viable improvements identified. The Operator shall implement the improvements to the approved timetable.	30/04/2019

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
Raw materials which may discharge to water	Impurity levels of cadmium and mercury shall be the minimum available in the commercial product.
Gaseous fuels	Natural gas from the National Grid and vapour from distillation process vents.
Liquid fuels	Residue from distillation columns and liquid from distillation process vents

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 [Point A1 on site plan in schedule 7]	Total Volatile Organic Compounds	No. 1 unit, batch distillation – vacuum pump vent	500 g/hr	Hourly average	Annual discontinuous	BS EN 13526
	Benzene		-	Hourly average	Annual discontinuous	As agreed in writing with the Agency
	Toluene		-	Hourly average	Annual discontinuous	As agreed in writing with the Agency
A3 [Point A3 on site plan in schedule 7]	Total Volatile Organic Compounds	No. 3 unit, continuous distillation – vacuum pump vent, via caustic scrubber	500 g/hr	Hourly average	Annual discontinuous	BS EN 13526
	Benzene		-	Hourly average	Annual discontinuous	As agreed in writing with the Agency
	Toluene		-	Hourly average	Annual discontinuous	As agreed in writing with the Agency
A4 [Point A4 on site plan in schedule 7]	Total Volatile Organic Compounds	No. 4 unit, batch distillation – vacuum pump vent	500 g/hr	Hourly average	Annual discontinuous	BS EN 13526
	Benzene		-	Hourly average	Annual discontinuous	As agreed in writing with the Agency
	Toluene		-	Hourly average	Annual discontinuous	As agreed in writing with the Agency
A5	Emission point no longer in use.					
A7 [Point A7 on site plan in schedule 7]	Total Volatile Organic Compounds	No. 7 unit and perco sweetening beds, via caustic scrubber	500 g/hr	Hourly average	Annual discontinuous	BS EN 13526
	Benzene		-	Hourly average	Annual discontinuous	As agreed in writing with the Agency
	Toluene		-	Hourly average	Annual discontinuous	As agreed in writing with the Agency
A11 (Point A11 on site plan in schedule 7]	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	No. 1 Boiler fired on gaseous fuel	100 mg/m^3	Hourly average	Annual discontinuous	ISO 10849
		No. 1 Boiler fired on liquid fuel	450 mg/m^3			
	Sulphur dioxide	No. 1 Boiler fired on gaseous fuel	5 mg/m^3	Hourly average	Annual discontinuous	BS ISO 11632: 1998
		No. 1 Boiler fired on liquid fuel	35 mg/m^3			
	Particulates	No. 1 Boiler fired on liquid fuel	50 mg/m^3	Hourly average	Annual discontinuous	BS EN 13284-1

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A12 (Point A12 on site plan in schedule 7]	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	No. 2 Boiler fired on gaseous fuel	100 mg/m^3	Hourly average	Annual discontinuous	ISO 10849
		No. 2 Boiler fired on liquid fuel	450 mg/m^3			
	Sulphur dioxide	No. 2 Boiler fired on gaseous fuel	5 mg/m^3	Hourly average	Annual discontinuous	BS ISO 11632: 1998
		No. 2 Boiler fired on liquid fuel	35 mg/m^3			
	Particulates	No. 1 Boiler fired on liquid fuel	50 mg/m^3	Hourly average	Annual discontinuous	BS EN 13284-1
A14 [Point A14 on site plan in schedule 7]	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Beverly A thermal fluid heater fired on gaseous fuel	100 mg/m^3	Hourly average	Annual discontinuous	ISO 10849
		Beverly A thermal fluid heater fired on liquid fuel	450 mg/m^3			
	Sulphur dioxide	Beverly A thermal fluid heater fired on gaseous fuel	5 mg/m^3	Hourly average	Annual discontinuous	BS ISO 11632: 1998
		Beverly A thermal fluid heater fired on liquid fuel	35 mg/m^3			
	Particulates	Beverly A thermal fluid heater fired on liquid fuel	50 mg/m^3	Hourly average	Annual discontinuous	BS EN 13284-1
A15 [Point A15 on site plan in schedule 7]	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Beverly B thermal fluid heater fired on gaseous fuel	100 mg/m^3	Hourly average	Annual discontinuous	ISO 10849
		Beverly B thermal fluid heater fired on liquid fuel	450 mg/m^3			

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
	Sulphur dioxide	Beverly B thermal fluid heater fired on gaseous fuel	5 mg/m^3	Hourly average	Annual discontinuous	BS ISO 11632: 1998
		Beverly B thermal fluid heater fired on liquid fuel	35 mg/m^3			
	Particulates	Beverly B thermal fluid heater fired on liquid fuel	50 mg/m^3	Hourly average	Annual discontinuous	BS EN 13284-1
A16 [Point A16 on site plan in schedule 7]	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Beverly C thermal fluid heater fired on gaseous fuel	100 mg/m^3	Hourly average	Annual discontinuous	ISO 10849
		Beverly C thermal fluid heater fired on liquid fuel	450 mg/m^3			
	Sulphur dioxide	Beverly C thermal fluid heater fired on gaseous fuel	5 mg/m^3	Hourly average	Annual discontinuous	BS ISO 11632: 1998
		Beverly C thermal fluid heater fired on liquid fuel	35 mg/m^3			
	Particulates	Beverly C thermal fluid heater fired on liquid fuel	50 mg/m^3	Hourly average	Annual discontinuous	BS EN 13284-1
A11 - A16 [Points A11 - A16, on site plan in schedule 7]	Sulphur dioxide	No. 1, 2 and 3 Boilers, Beverly A, B and C thermal fluid heaters	1700 mg/m^3	Monthly average (averaged over all plant)	Monthly	As agreed in writing with the Agency
Tank vents	No parameters set	Storage tank vents	-	-	-	Permanent sampling access not required

Table S3.2 Point source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
W1 on site plan in schedule 7 emission to Tidal River Stour	Flow	Process waters, jetty pipeline wash waters, boiler blowdown, reverse osmosis and water softening plant effluent, and surface water	1700 m^3/day	Daily	Continuous	MCERTS self-monitoring of effluent flow scheme
	Oil and grease		None visible	-	Daily	As agreed in writing with the Agency
	Total suspended solids		100 mg/l Maximum value	24 hour flow proportional sample	Weekly	BS EN 872:2005 or as agreed in writing with the Environment Agency
	Biochemical Oxygen Demand		1200 mg/l Maximum value	24 hour flow proportional sample	Weekly	As agreed in writing with the Agency
	Chemical Oxygen Demand		2000 mg/l Maximum value	24 hour flow proportional sample	Weekly	BS ISO 15705:2002 or as agreed in writing with the Environment Agency
	Total hydrocarbons		50 mg/l Maximum value	24 hour flow proportional sample	Weekly	As agreed in writing with the Agency
	pH		6 – 9	24 hour flow proportional sample	Weekly	As agreed in writing with the Agency
	Cadmium		0.01 mg/l Maximum value	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Mercury		0.002 mg/l Maximum value	24 hour flow proportional sample	Monthly	BS EN 12486
	Chromium		0.045 mg/l Maximum value	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Nickel		0.2 mg/l Maximum value	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Zinc		0.5 mg/l Maximum value	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Copper		0.5 mg/l Maximum value	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Lead		0.05 mg/l Maximum value	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Hydrocarbon oil index		2.5 mg/l Annual average	24 hour flow proportional sample	Weekly	BS EN 9377 – 2 Note 1
	Total suspended solids		25 mg/l Annual average	24 hour flow proportional sample	Weekly	BS EN 872:2005 or as agreed in writing with the Environment Agency

Table S3.2 Point source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
	Chemical Oxygen Demand		125 mg/l Annual average	24 hour flow proportional sample	Weekly	BS ISO 15705:2002 or as agreed in writing with the Environment Agency
	Total nitrogen expressed as N		25 mg/l Annual average	24 hour flow proportional sample	Weekly	BS EN 12260 or as agreed in writing with the Environment Agency
	Lead		0.03 mg/l Annual average	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Cadmium		0.008 mg/l Annual average	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Nickel		0.1 mg/l Annual average	24 hour flow proportional sample	Monthly	BS EN ISO 11885
	Mercury		0.001 mg/l Annual average	24 hour flow proportional sample	Monthly	BS EN 12486
	Phenol index		No limit set Annual average	24 hour flow proportional sample	6 monthly	BS EN ISO 14402
	Benzene, toluene, ethyl benzene, xylene (BTEX)		Benzene 0.05 mg/l Annual average	24 hour flow proportional sample	6 monthly	ISO 11423-1
Note 1: Test method METH 410, IP426 shall be run in parallel with test method (BS EN ISO 9377-2) for up to 12 months adaptation period, whilst quality assurance of the new test method is undertaken. During this time compliance with the limit shall be assessed against the result from test method METH 410, IP426. At the end of the quality assurance period the operator shall confirm in writing that compliance with the hydrocarbon oil index BAT AEL is now assessed using monitoring standard BS EN ISO 9377-2.						

Table S3.3 Process monitoring requirements							
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
No. 3 unit caustic scrubber	Sodium hydroxide	Daily	Not applicable	-	-	Permanent sampling access not required	-
No. 5 unit, SOLEX plant NMP scrubber	NMP flow	Continuous	Not applicable	-	-	-	-
No. 7 unit caustic scrubber	Sodium hydroxide	Daily	Not applicable	-	-	-	-

Table S3.3 Process monitoring requirements							
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Fugitive emissions of VOCs from operational plant at the installation	VOCs	-	Not applicable	-	-	LDAR programme (with regard to the Institute of Petroleum [Energy Institute] protocol) for testing potential sources of fugitive emissions of VOCs	The operator shall complete repairs and/or carry out other actions to prevent, or where that is not possible, minimise continued emissions from those sources

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air – Parameters as required by condition 3.5.1.	A1, A3, A4, A7, A11, A12, A14, A15, A16	Annual	1 January
Emissions to water – Parameters as required by condition 3.5.1	W1 – annual average limits	Annual	1 January
Emissions to water – Parameters as required by condition 3.5.1	W1 – flow, oil and grease, pH and maximum value limits	Every 6 months	1 January, 1 July

Table S4.2 Annual production/treatment	
Parameter	**Units**
Products	Tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Fugitive VOC Releases	Annually	kg
Water usage	Annually	m^3
Energy usage	Annually	MWh
Sulphur content of liquid fuel	6 monthly	%
Sulphur content of gaseous fuel	6 monthly	%

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	03/12/2013
Water	Form water 1 or other form as agreed in writing by the Environment Agency	28/10/2018
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	03/12/2013
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	01/03/2017
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	03/12/2013

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	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit 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	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
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**

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – 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 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment 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.

“BAT” means Best available techniques, as defined in Article 3 of the Industrial Emissions Directive.

“BAT AEL” means the achievable emission level associated with application of the best available techniques.

“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.

“Hazardous property” has the meaning in Annex lll of the Waste Framework Directive.

“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.

“Nm^3” means normal cubic meter (volume at 101.325 kPa, 273 K)

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

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

“Other than normal operating conditions” means process conditions that would not occur during the normal operation of a process unit.

“SI” means site inspector.

“Standby fuel” means alternative liquid fuels that are used in emergency situations when the gas fuel which is normally used, is not available.

“The BREF” means the BAT Reference Document for the Refining of Mineral Oil and Gas published by the European commission 2014/738/EU.

“VOC” means Volatile organic compounds as defined in Article 3(45) of Directive 2010/75/EU - ‘volatile organic compound’ means any organic compounds as well as the fraction of creosote, having at 293,15 K a vapour pressure of 0,01 kPa or more, or having a corresponding volatility under the particular conditions of use.

“WFD” means the Water Framework Directive (200/60/EC).

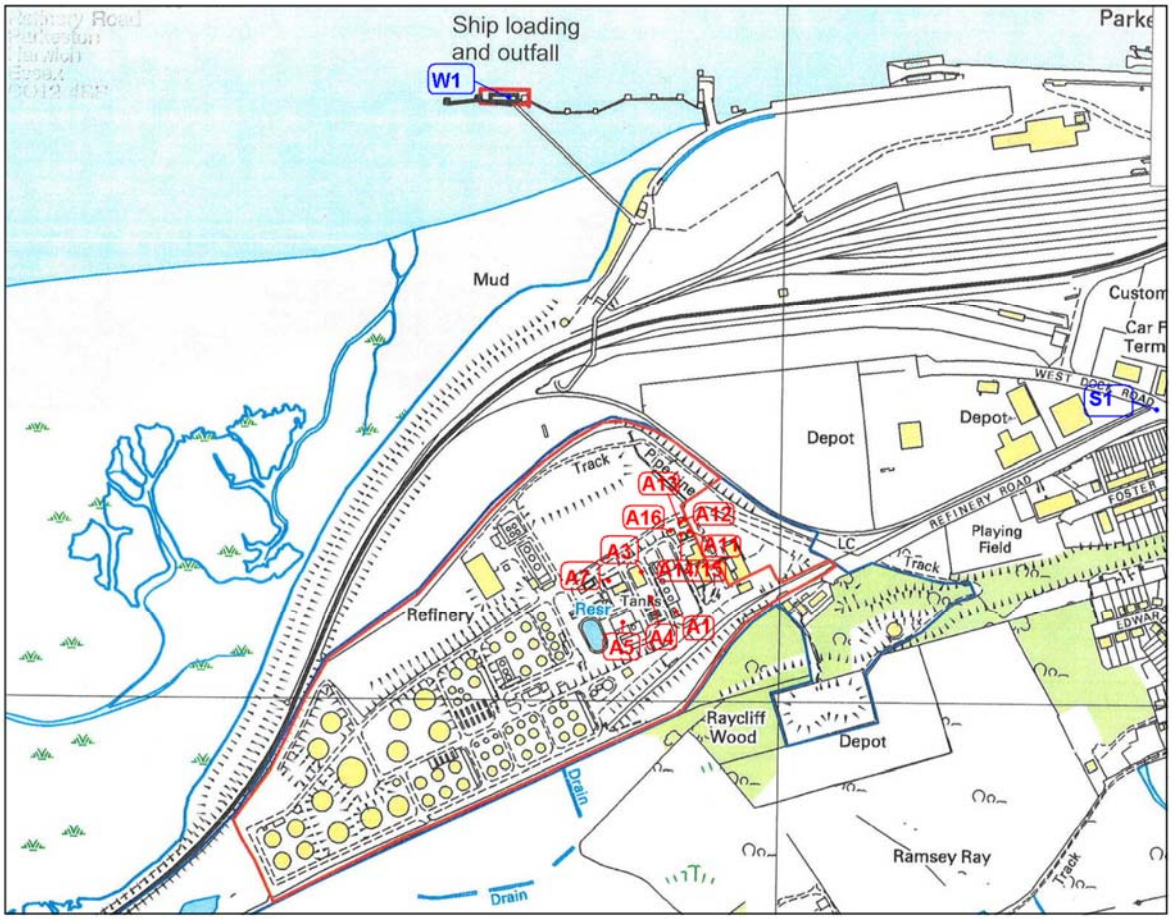
“year” means calendar year ending 31 December.

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:

- 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
- 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