



**ENVIRONMENT  
AGENCY**

## **Permit with introductory note**

**Pollution Prevention and Control (England & Wales) Regulations 2000**

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**Point of Ayr Gas Terminal**

**BHP Billiton Petroleum Ltd  
Talacre  
Holywell  
Flintshire  
CH8 9RD**

**Permit number**

**ZP3331LM**

# Point of Ayr Gas Terminal Permit Number ZP3331LM

## Introductory note

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

The main features of the installation are as follows.

The installation, operated and owned by BHP Billiton Petroleum Ltd, is located at national grid reference SJ1224083900. The installation is on a 37 Ha site and is approximately 5km east of Prestatyn in north Wales. It is bounded to the east by the sea wall and the Dee Estuary, and to the southeast and south by the former Point of Ayr Colliery. To the north and west of the site is grazing land associated with Llawndy Farm. Beyond Llawndy farm is the village of Talacre and a caravan park.

The Dee Estuary (Site of Special Scientific Interest, Special Protection Area, Special Area of Conservation and Ramsar) are located 258m to the east of the installation. The Gronant Dunes and Talacre Warren (Site of Special Interest) is located 898 metres to the north of the installation.

The purpose of the installation is to process gas from the off-shore Douglas Platform to meet sales requirements, with the primary processes being gas sweetening (sulphur removal) and dewpoint control (condensable liquid removal). The Terminal consists of A and B trains, each with Gas Sweetening and Dewpoint Control Units. Each train is capable of achieving 50% of the total plant throughput (353,000 m<sup>3</sup>/h). Common gas import and export facilities serve both trains.

Gas sweetening is carried out by contacting the gas with an amine solvent. The amine is regenerated for re-use. The acid gases from the amine regeneration process are combusted in the Sulphur Recovery Unit (SRU) and converted in the presence of a catalyst to produce elemental liquid sulphur (exported for sale by road tanker). The Tail Gas Unit (TGU) provides further removal/conversion of sulphurous compounds. The first stage of TGU involves catalytically converting residual sulphur dioxide in the tail gas to hydrogen sulphide. The second stage involves removal of the hydrogen sulphide by contact with an amine solvent solution, followed by recycle back to the SRU. Residual gases are combusted in the installation's thermal oxidiser.

Dewpoint control is achieved by cooling the gas using a closed-loop propane refrigeration system.

The site also has various utilities systems including nitrogen for purging/blanketing, cooling water, compressed air, hot oil heating system, propane refrigeration system and a flare. The flare is primarily provided for short-term use during maintenance, e.g. when de-pressuring plant sections, or to vent the plant in an incident/ emergency.

The layout of the installation can be summarised as:

- Flare in the North;
- Process trains in the South;
- Gas inlet facilities and cooling tower in the East;
- Open ground for future expansion in the centre;
- Administration/control buildings in the West; and

- Firewater retention pond in the North West.

The installation emits products of combustion to the air with the most significant emission being nitrous oxides (NOx). The major sources of NOx at the installation are the thermal oxidiser, gas turbine and flares (when in operation).

Process effluent in the form of boiler and cooling tower blowdown and surface water run-off are discharged to the Talacre New Drain which flows into the Dee Estuary. Considerable amounts of hydrocarbon condensate are returned to the Douglas Platform for processing or re-injection.

The operator has an externally accredited ISO14001:2004 Environmental Management System in place at the installation.

Status Log of the permit		
Detail	Date	Response Date
Application ZP3331LM	Duly made 30/06/06	
Permit issued	20/03/07	

Superseded or Partially Superseded Licences/Authorisations/Consents relating to this installation			
Holder	Reference Number	Date of Issue	Fully or Partially Superseded
BHP Billiton Petroleum Ltd	A58422 (IPC Authorisation)	03/10/95	Fully superseded

End of Introductory Note

## Permit

Pollution Prevention and Control  
(England and Wales) Regulations 2000

## Permit

Permit number

**ZP3331LM**

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

**BHP Billiton Petroleum Ltd** ("the operator"),

whose registered office is

**Neathouse Place**

**London**

**SW1V 1BH**

company registration number **1064509**

to operate an installation at

**Talacre**

**Holywell**

**Flintshire**

**CH8 9RD**

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

Signed

Date

	20 <sup>th</sup> March 2007
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J M Ingram

Authorised to sign on behalf of the Agency

# Conditions

## 1 Management

### 1.1 General management

1.1.1 The activities shall be managed and operated:

- (a) 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 identified 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 in green 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.

## **2.4 Off-site conditions**

2.4.1 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**

- 2.6.1 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 years.
- 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, S4.2 and S4.3.
- 3.1.2 The limits given in schedule 4 shall not be exceeded.

## **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 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.

### **3.5 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 the monitoring specified in the following tables in schedule 4 to this permit:
- (a) point source emissions specified in tables S4.1, S4.2 and S4.3;
  - (b) process monitoring specified in table S4.4.
- 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, S4.2 and S4.3 unless otherwise specified in that schedule.

## **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 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 28<sup>th</sup> February (or other date agreed in writing by the 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 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 S5.2;
  - (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 table S5.1;
  - (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 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
S1.2 A1 (a)	Refining gas	From receipt of raw materials to the dispatch of products and wastes
S5.3 A1 (c)(ii)	Physico-chemical treatment of waste waters	The use of a tilted plate separator package for removing oil from water. Includes oil transfer to tanker.
<b>Directly Associated Activity</b>		
Steam, heat and electrical power supply.	8 MW gas-fired/gas oil standby turbine plus 4MW gas with gas-oil standby boiler plus 2x2.1MW gas-fired 'hot oil boilers'	Combustion of sales quality gas or gas oil, Includes oil receipt and storage.
Emission abatement equipment	Thermal oxidiser and low and high pressure flares	Abatement using a thermal oxidiser at or above 850°C and a flare system
Utilities	Operation of cooling towers, hot oil system, demineralised water plant, compressed air plant and refrigeration system	From receipt of raw materials to the dispatch of wastes.

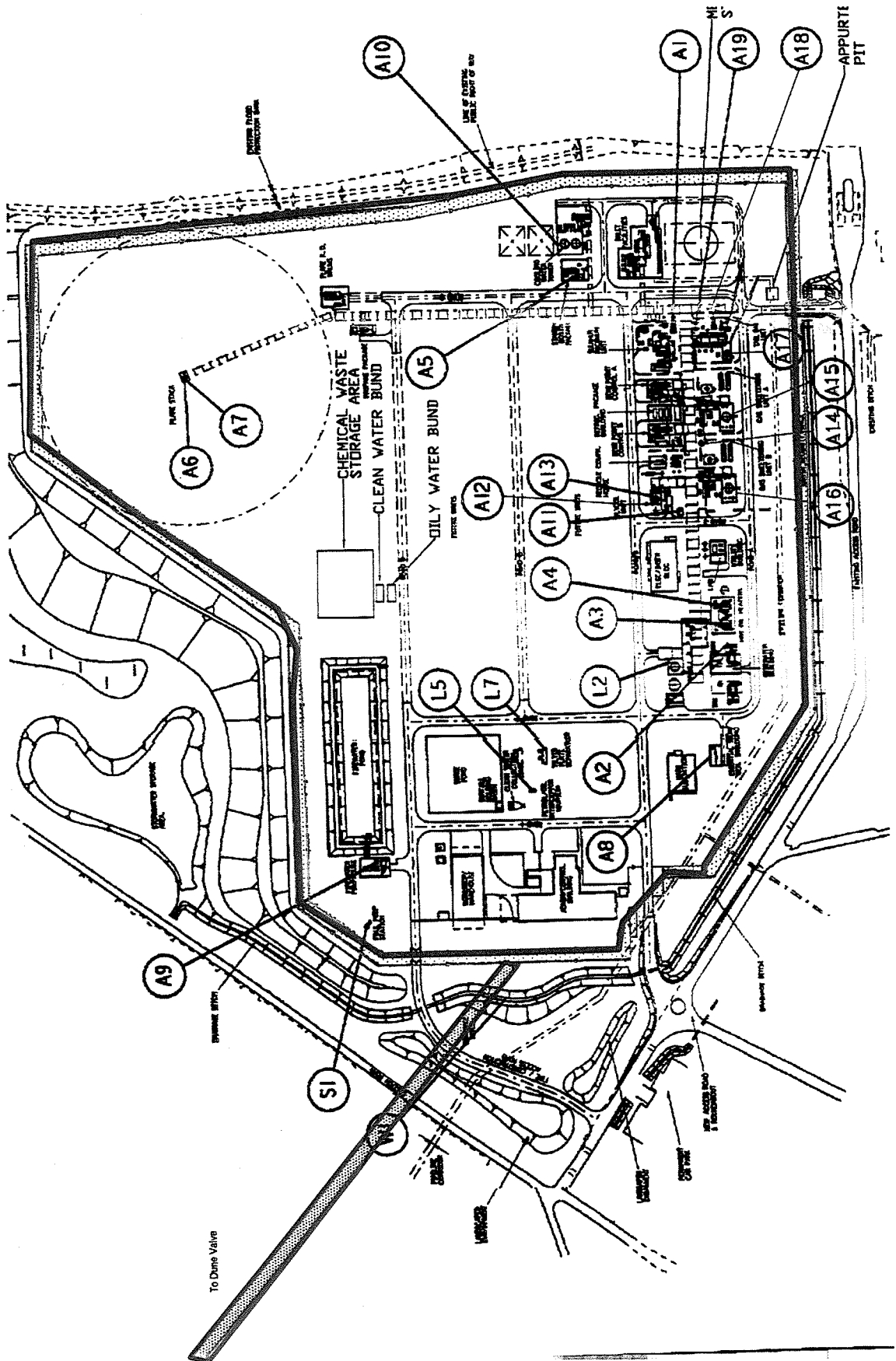
**Table S1.2 Operating techniques**

Description	Parts	Date Received
Application	The response to questions B2.1 and B2.2 in the Application.	30/06/06

**Table S1.3 Improvement programme requirements**

Reference	Requirement	Date
IC1	<p>The operator shall submit a written report to the Agency for approval summarising an assessment of the capacity of bunds relative to the largest storage tanks contained within.</p> <p>Where the assessment shows that the bunds have a capacity below 110% of that of the largest tank stored within the operator shall include in the report timelines for upgrading the bunds to meet this capacity requirement.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.</p> <p>Any improvements identified in the report shall be implemented by the operator from the date of approval by the Agency.</p>	20/06/07
IC2	<p>The Operator shall carry out modelling of emissions of oxides of nitrogen from discharge points A1, A2, A3, A4 and A5. The air modelling shall make use of an appropriate air modelling package. The report shall compare modelled emissions against the relevant short and long term air quality objectives.</p> <p>Based on the results of the modelling, the Operator shall carry out a BAT assessment to determine if emissions should be reduced and identify techniques to reduce the emission if required.</p> <p>The Operator shall submit a written report to include a summary of the modelling, the BAT assessment and any techniques identified.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.</p>	20/12/07
IC3	<p>An odour management plan shall be submitted to the Agency, detailing the measures to be used to control emissions of odour and shall be in accordance with Appendix 7 (template for an odour management plan) of Horizontal Guidance Note H4 (Horizontal Guidance for Odour (Part 1)). The plan shall include but not be limited to procedures to identify when maintenance activities are likely to generate odour and measures to be taken to prevent annoyance from such odour.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>Measures identified in the plan shall be implemented by the operator from the date of approval in writing by the Agency.</p>	20/03/08
IC4	<p>The operator shall install hardstanding under the pipework leading from the hot oil expansion tank. The hardstanding shall be impervious to the material contained within the pipework and shall be curbed so as to prevent any spill from draining to land.</p> <p>The operator shall install bunding around the amine tanks. The bunding shall conform with the requirements specified in the sector guidance note S1.02.</p>	20/03/08
IC5	<p>A noise management plan shall be submitted to the Agency, detailing the measures to be used to control emissions of noise and shall be in accordance with Appendix 4 (noise management plan) of Horizontal Guidance Note H3 (Horizontal Noise Guidance) Part 2). The plan shall include but not be limited to procedures to identify when maintenance activities are likely to generate noise and measures to be taken to prevent annoyance from such noise. The plan shall also identify measures to prevent noisy activities such as unplanned venting of gases and the use of the flares</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>Measures identified in the plan shall be implemented by the operator from the date of approval in writing by the Agency</p>	20/03/08
IC6	<p>The operator shall develop a Site Closure Plan. The Site Closure Plan shall meet the indicative BAT requirements highlighted in section 2.11 of the Sector Guidance Note S1.02.</p>	20/09/08

## Schedule 2 - Site plan





## Schedule 3 - Waste types, raw materials and fuels

Table S3.1 Raw materials and fuels

Raw materials and fuel description	Specification
-	

## Schedule 4 – Emissions and monitoring

Table S4.1 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 2]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Thermal oxidiser	120 mg/m <sup>3</sup>	Hourly average	6-monthly	ISO 10849: 1996
A1[Point A1 on site plan in Schedule 2]	Sulphur dioxide	Thermal oxidiser	190 mg/m <sup>3</sup>	Hourly average	Continuous	ISO 6069-4.4
A2 [Point A2 on site plan in Schedule 2]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Turbine Generator	100 mg/m <sup>3</sup>	Hourly average	6-monthly	ISO 10849: 1996
A3 [Point A3 on site plan in Schedule 2]	No parameters set	Hot oil heater A	No limit set	–	–	Permanent sampling access not required
A4 [Point A4 on site plan in Schedule 2]	No parameters set	Hot oil heater B	No limit set	–	–	Permanent sampling access not required
A5 [Point A5 on site plan in Schedule 2]	No parameters set	Steam boiler – standby	No limit set	–	–	Permanent sampling access not required
A6 [Point A6 on site plan in Schedule 2]	No parameters set	High pressure flare	No limit set	–	–	Permanent sampling access not required
A7 [Point A7 on site plan in Schedule 2]	No parameters set	Low pressure flare	No limit set	–	–	Permanent sampling access not required
A8 [Point A8 on site plan in Schedule 2]	No parameters set	Diesel generator (backup)	No limit set	–	–	Permanent sampling access not required
A9 [Point A9 on site plan in Schedule 2]	No parameters set	Firewater pump	No limit set	–	–	Permanent sampling access not required
A10 [Point A10 on site plan in Schedule 2]	No parameters set	Cooling Tower	No limit set	–	–	Permanent sampling access not required



**Table S4.1 Point source emissions to air – emission limits and monitoring requirements**

<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A11 [Point A11 on site plan in Schedule 2]	No parameters set	Sales gas analyser	No limit set	–	–	Permanent sampling access not required
A12 [Point A12 on site plan in Schedule 2]	No parameters set	Glycol sump via carbon filter	No limit set	–	–	Permanent sampling access not required
A13 [Point A1 on site plan in Schedule 2]	No parameters set	Glycol storage tank via carbon filter	No limit set	–	–	Permanent sampling access not required
A14 [Point A14 on site plan in Schedule 2]	No parameters set	Amine sump via carbon filter	No limit set	–	–	Permanent sampling access not required
A15 [Point A15 on site plan in Schedule 2]	No parameters set	Amine surge tank A via carbon filter	No limit set	–	–	Permanent sampling access not required
A16 [Point A16 on site plan in Schedule 2]	No parameters set	Amine surge tank B via carbon filter	No limit set	–	–	Permanent sampling access not required
A17 [Point A17 on site plan in Schedule 2]	No parameters set	Solvent surge tank via carbon filter	No limit set	–	–	Permanent sampling access not required
A18 [Point A18 on site plan in Schedule 2]	No parameters set	Solvent sump via carbon filter	No limit set	–	–	Permanent sampling access not required
A19 [Point A19 on site plan in Schedule 2]	No parameters set	Spent caustic sump via carbon filter	No limit set	–	–	Permanent sampling access not required
Pressure relief valves	No parameters set	Piping and vessels	No limit set	–	–	Permanent sampling access not required
Vents from tanks	No parameters set	Storage tanks	No limit set	–	–	Permanent sampling access not required

**Table S4.2 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 2 emission to Talacre New Drain	Biochemical oxygen demand	Boiler and cooling tower blowdown, site surface water and boiler water pre-treatment plant effluent.	15 mg/ml	For 95% of all measured values of periodic samples taken over one month	Prior to each discharge	BS EN 1899-1 (1998) Or BS EN 1899-2 (1998)
W1 on site plan in schedule 2 emission to Talacre New Drain	pH	Boiler and cooling tower blowdown, site surface water and boiler water pre-treatment plant effluent.	6-9	Instantaneous	Prior to each discharge	BS6068-2.50

**Table S4.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements**

Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
-	-	-	-	-	-	-

**Table S4.4 Process monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Thermal Oxidiser A1[Point A1 on site plan in Schedule 2]	Temperature	Continuous	Not applicable	Temperature to be maintained above 850°C

## Schedule 5 - Reporting

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

**Table S5.1 Reporting of monitoring data**

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.6.1.	A1, A2	Every 12 months	01/02/07
Emissions to water Parameters as required by condition 3.6.1	W1	Every 12 months	01/02/07

**Table S5.2: Annual production/treatment**

Parameter	Units
Exported gas product	tonnes

**Table S5.3 Performance parameters**

Parameter	Frequency of assessment	Units
Water usage/tonne of product	Annually	tonnes
Electricity usage per tonne of product	Annually	MWh/tonne of product
Natural gas use per tonne of product	Annually	tonnes/tonne of product

**Table S5.4 Reporting forms**

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Agency	26/02/07
Water	Form water 1 or other form as agreed in writing by the Agency	26/02/07
Water usage	Form water usage1 or other form as agreed in writing by the Agency	26/02/07
Energy usage	Form energy 1 or other form as agreed in writing by the Agency	26/02/07
Other performance indicators	Form performance 1 or other form as agreed in writing by the Agency	26/02/07

## 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	<b>ZP3331LP</b>
Name of operator	<b>BHP Billiton Petroleum Ltd</b>
Location of Installation	<b>Talacre Holywell Flintshire CH8 9RD</b>
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	
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	

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 installation in the preceding 24 months.	

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

\* authorised to sign on behalf of BHP Billiton Petroleum Ltd.

## 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
- (c) in relation to gas turbines or compression ignition engines; an oxygen content of 15%, dry, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, for liquid and gaseous fuels.

END OF PERMIT