

Reference Number: PPC/A/1013495/VN05

SCOTTISH ENVIRONMENT PROTECTION AGENCY
POLLUTION PREVENTION AND CONTROL ACT 1999
POLLUTION PREVENTION AND CONTROL (SCOTLAND) REGULATIONS 2012
(“THE REGULATIONS”)
NOTICE OF VARIATION TO PERMIT

Permit No: PPC/A/1013495 (As Varied)

To: Shell U.K. Limited

Address: Shell Centre
York Road
London
SE1 7NA

The Scottish Environment Protection Agency (“SEPA”), in exercise of its powers under Regulation 46 of the Regulations, hereby gives you notice that it has decided, to vary permit PPC/A/1013495 (As Varied) granted under the Regulations. The variations are specified in the Schedule to this notice and take effect on 23 August 2019.

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Authorised to sign on behalf of the
Scottish Environment Protection Agency

Date: 23 August 2019

Right of Appeal

Under Regulation 58 of the Regulations you are entitled to appeal to the Scottish Ministers against the conditions attached to this Notice, except where SEPA has served this Notice to implement a direction to SEPA of the Scottish Ministers. The bringing of an appeal will not have the effect of suspending the operation of the conditions attached to this Notice. The procedures and timescales for the making of an appeal are set out in Schedule 8 of the Regulations.

SCOTTISH ENVIRONMENT PROTECTION AGENCY

POLLUTION PREVENTION AND CONTROL ACT 1999

**POLLUTION PREVENTION AND CONTROL (SCOTLAND) REGULATIONS 2012
("THE REGULATIONS")**

SCHEDULE TO NOTICE OF VARIATION UNDER REGULATION 46(8)

Operator: Shell U.K. Limited
Permit Number: PPC/A/1013495 (As Varied)
Date of Permit: 29 October 2007
Variation No: VN05

Permit number PPC/A/1013494 (As Varied) has been varied as follows

1. Conditions 4.3.10 and 4.3.11 are deleted and new Conditions 4.3.10, 4.3.11, 4.3.12, 4.3.13, 4.3.14 and 4.3.15 added as follows:

- 4.3.10 By the 31 January 2020 and every three months thereafter the Operator shall prepare, and submit to SEPA, a review of ground flaring from the installation including:
 - (i) the availability of ground flares A7005 and B7005 during that quarter;
 - (ii) the ground flare flaring rates and duration utilised during that quarter; and
 - (iii) any improvements identified to increase availability and flaring rates of the ground flares.
- 4.3.11 From 31 December 2021 the Operator shall continuously monitor and record:
 - (i) the gas flow from the NGL and FEP to the ground flares A7005 and B7005;
 - (ii) the gas flow to the NGL elevated flares (emission points A04 and A05); and
 - (iii) the composition of flare gas and the steam flow rates to the NGL elevated flares (emission points A04 and A05).
- 4.3.12 From 31 December 2021 the NGL No. 1 HP Elevated flare tip (emission point A04) shall:
 - (i) operate using a low sound flare burner (tip) designed with internal steam tubes or an equivalent design which will deliver the same performance for sound reduction;
 - (ii) have acoustic insulation installed on the steam injectors and valves; and
 - (iii) have a smokeless capacity of 10% as a minimum.
- 4.3.13 By 31 January 2020 the Operator must submit, in writing, to SEPA details of the modifications to be made to the elevated flare system to meet the requirements of Condition 4.3.12, which shall include:
 - (i) A technical specification of the elevated flare tip;
 - (ii) Demonstration that the elevated flare system design will meet the requirements of Condition 4.3.12;
 - (iii) Automatic recording of the ratio of steam to flare gas in the elevated flares via the Distributed Control System (DCS) in the

- control room and shall have alarms set in the DCS to alert the Operator of any deviation or faults in the ratio of steam to flare gas; and
- (iv) The predicted flare tip sound and the reduction from the current design.
- 4.3.14 By 31 January 2020, the Operator must submit, in writing to SEPA a project plan for a totally enclosed ground flare system for the Fife Natural Gas Liquids (FNGL) Plant, to meet the requirements of Condition 4.3.15. The plan shall cover all stages of design, procurement, installation and commissioning to the point of routine operation and identify key milestones and the critical path for completion.
- 4.3.15 The totally enclosed ground flare system design basis shall have, as a minimum:
- (i) A minimum operational capacity of 54 tph for the gas compositions at the permitted installation;
 - (ii) Continuous monitoring and recording of gas flows to the ground flare system;
 - (iii) Continuous monitoring and recording of the composition of flare gas to the ground flare system;
 - (iv) A maximum ground flare noise of 85 decibels at 1 metre from the wind/noise barrier of the ground flare;
 - (v) A smokeless capacity of 100%;
 - (vi) Availability of 99%; and
 - (vii) A minimum combustion efficiency of 99%.

2. The following rows are inserted into Table 2.1:

Table 2.1 - Reporting and Notification Requirements

Summary of Information to be Reported or Notified	Condition	Date/Within period/ Frequency to be Reported	Date First Report Due
Review of ground flaring from the installation	4.3.12	Every 3 months	31 January 2020
Details of the modifications to be made to the elevated flare system to meet the requirements of Condition 4.3.12	4.3.13	31 January 2020	Not applicable
Ground Flare Project Plan	4.3.15	31 January 2020	Not applicable