

Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

National Grid Gas PLC

Huntingdon Compressor Station

Bigrams Lane

Stonely

St Neots

Cambridgeshire

PE19 5NX

Variation application number

EPR/DP3139LA/V004

Permit number

EPR/DP3139LA

Huntingdon Compressor Station

Permit number EPR/DP3139LA

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

The variation authorises the following changes to the permit:

- Changes to the drainage design philosophy – The following changes have been made to the initial drainage design: removal of culverts 2 and 3, removal of one of the oil interceptors (one oil interceptor will remain), inclusion of a 440m³ attenuation tank, inclusion of oil detection equipment upstream of the attenuation tank, inclusion of an isolation valve and removal of associated pipework and manhole covers.
- Changes to the bunding philosophy – The bunding arrangements for the two 6m³ lubrication oil storage tank associated with the two gas compressor systems and the two 2m³ condensate storage tanks associated with the two gas separators have changed. 110% secondary containment will still be provided for both tanks with some tertiary containment. The general drainage arrangements have also changed with a 125mm kerbed area installed to prevent run off onto grassed areas, with other changes as described above.
- Alteration to the volume (increase) and location of diesel oil storage tank – The tank capacity has increased from 14,000 litres to 25,272 litres. The new larger tank will have 110% secondary containment.
- Addition of an on-site vehicle fuelling point on the diesel oil storage tank – Inclusion of a fill point for off-road vehicles used on site. The same mitigation and protection measures associated with the tanker unloading bay (used for filling diesel oil storage tank) will be in place.
- Relocation of the proposed engineering workshop – Relocation of this building from the north of the installation to the west of the installation.
- A change to the stated stack height from 20.6m to 21.3m – The exhaust from the two compressors will be increased to 21.3m. This increases dispersion and is an environmental improvement.
- Update to the Technical Description to reflect the design for permanent access provision (stack emissions testing) – A permanent monitoring platform will be installed which will be in accordance with the Environment Agency's TGN 1 guidance on emissions monitoring.
- Minor change in compressor shaft seal selection on the new units – An alternative gas shaft seal will be used.
- Addition of one further emission point to allow better control over emergency station venting, reducing natural gas (methane) emissions – There will now be two emergency shut down vents installed instead of one. The emission point A63 has been removed and replaced with A71 and A72 in table S4.1 of the permit. This provides greater control of the plant allowing for separate sections of the plant to be vented as necessary instead of the whole system, which was the only option with one vent installed. As a result, in the event venting is necessary the methane emissions will be reduced.

The schedules specify the changes made to the original permit.

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

Status log of the permit		
Description	Date	Comments
Application DP3139LA	Duly made 29/03/2006	
Additional information received	10/08/2006	
Additional information received	25/09/2006	
Additional information received	09/11/2006	
Additional information received	21/11/2006	
Permit determined DP3139LA	22/12/2006	
Variation EPR/DP3139LA/V002 (PAS/ Billing ref: AP3930TY)	29/03/2010	Variation issued
Application EPR/DP3139LA/V004	Duly made 07/06/2016	Compressor and ancillary plant upgrade. Extension to installation boundary.
Response to schedule 5 notice	13/03/2017	Emission point plan
Response to schedule 5 notice	22/03/2017	Supporting information for noise modelling, including: manufacturer sound power data for the mitigated sources, a site plan showing noise sources and further information on the location of sensitive receptors.
Response to schedule 5 notice	04/08/2017	Further supporting information for noise modelling, including a technical performance guarantee.
Variation determined EPR/DP3139LA/V003	28/09/2017	Varied permit issued.
Application EPR/DP3139LA/V004 (variation)	Duly made 10/11/2021	Variation to amend drainage details, bunding arrangements, volume of diesel stored, include a vehicle refuelling point, change location of engineering workshop, increase stack height, provide permanent access for monitoring, change to compressor shaft seal and inclusion of one further emission point.
Response to Schedule 5 Notice	28/02/2022	Additional information provided in relation to: drainage arrangements, containment arrangements for 6m ³ lubrication oil tank and 4m ³ condensate tank, mitigation arrangements for circulation pipework and plant to cool the lubrication oil, measures in place for underground pipework, clarity on inclusion of an additional venting point and an updated site condition report.
Additional information	22/04/2022	Further clarification on Schedule 5 Notice response, additional information provided in relation to: containment arrangements and underground pipework.

Status log of the permit		
Description	Date	Comments
Variation determined EPR/DP3139LA (PAS/ Billing ref: UP3507LC)	04/05/2022	Varied permit issued.

End of introductory note

Notice of variation

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

Permit number

EPR/DP3139LA

Issued to

National Grid Gas PLC (“the operator”)

whose registered office is

**1-3 Strand
London
WC2N 5EH**

company registration number 02006000

to operate a regulated facility at

**Huntingdon Compressor Station
Bigrams Lane
Stonely
St Neots
Cambridgeshire
PE19 5NX**

to the extent set out in the schedules.

The notice shall take effect from 04/05/2022

Name	Date
Maxine Evans	04/05/2022

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator

Condition 2.3.1 refers to table S1.2 which is amended as follows:

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to section 2.1 and 2.2 in the Application.	29/03/2006
Application	The response to section B2.10 and Appendix 7 in the application	29/03/2006
Application EPR/DP3139LA/V003	Application forms Part C2 and C3 and referenced supporting information	07/06/2016
Application EPR/DP3139LA/V004	Application forms Part C2 and C3 and referenced supporting information.	Duly Made 10/11/2021
Response to Schedule 5 Notice dated 13/12/2021	Additional information provided in relation to: drainage arrangements, containment arrangements for 6m ³ lubrication oil tank and 4m ³ condensate tank, mitigation arrangements for circulation pipework and plant to cool the lubrication oil, measures in place for underground pipework, clarity on inclusion of an additional venting point and an updated site condition report.	28/02/2022
Additional information	Further clarification on Schedule 5 Notice response, additional information provided in relation to: containment arrangements and underground pipework.	22/04/2022

Condition 2.5.1 refers to table S1.3 which is amended as follows:

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC7	<p>In order to validate the assessment provided within the application, the Operator shall prepare and submit a comprehensive noise assessment report undertaken by an experienced and suitably qualified person in accordance with BS4142:2014 (Methods for rating and assessing industrial and commercial sound). The assessment shall identify and assess the impact of noise emissions upon surrounding sensitive receptors arising from the operation of items of new plant associated with variation EPR/DP3139LA/V003.</p> <p>In the event that the report shows that noise could have a significant adverse impact at the sensitive receptors, the operator shall submit a noise management plan which shall include proposals for the further attenuation and/or management of noise and timescales, to be agreed with the Environment Agency, for the implementation of the proposed measures. Any proposals shall be implemented within the agreed timescales.</p>	30/04/2023

Condition 2.6.1 refers to table S1.4 which is amended as follows:

Table S1.4 Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
1	New/ modified waste storage areas	<p>The operator shall submit detailed design information on the new or modified waste storage areas to the Environment Agency for approval. This shall be submitted at least three calendar months (or any other date as agreed with the Environment Agency) before construction commences.</p> <p>The information shall include (but not be limited to) the following:</p> <ul style="list-style-type: none"> • detailed specification of the waste storage areas • a description of any associated pollution prevention measures, including confirmation of the design standards and capacity of any secondary containment • an updated site layout plan showing waste storage location[s]
2	New/ modified Raw materials storage areas	<p>The operator shall submit detailed design information on the new or modified raw material storage to the Environment Agency for approval. This shall be submitted at least three calendar months (or any other date as agreed with the Environment Agency) before construction commences.</p> <p>The information shall include (but not be limited to) the following:</p> <ul style="list-style-type: none"> • detailed specification of the raw material storage • a description of any associated pollution prevention measures, including confirmation of the design standards and capacity of any secondary containment • an updated site layout plan showing raw material storage location[s]
3	Extractive Exhaust Emissions Testing	<p>At least one calendar month (or any other date as agreed with the Environment Agency) prior to the first scheduled round of periodic extractive exhaust emissions testing (post operational acceptance) the operator shall update the emissions monitoring procedures to include site specific requirements. The updated emissions monitoring procedures shall be submitted to the Environment Agency for approval.</p> <p>No operations shall commence unless the Environment Agency has given prior written permission under this condition.</p>
4	Site drainage for each phase of development granted by variation EPR/DP3139LA/V003	<p>For each phase of development granted by variation EPR/DP3139LA/V003, the Operator shall submit a written site drainage report to the Environment Agency for approval. Each report shall include (but not be limited to) the following:</p> <ul style="list-style-type: none"> • a detailed site drainage plan for the part of the site covered by the report, reflecting the proposed drainage system and showing the location of all discharge points in that section • the design specification of any containment infrastructure to be installed as part of that section of the drainage system, including all sub-surface structures and equipment

Table S1.4 Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
		<ul style="list-style-type: none"> an inspection and maintenance programme for that section of the site drainage system or, if applicable, the drainage system as a whole details of any abatement equipment and pollution control devices to be installed as part of that section of the drainage system a proposed timetable for completion of any additional improvement works for that section of the drainage system or, if applicable, the drainage system as a whole <p>For each phase of development granted by variation EPR/DP3139LA/V003 the site drainage report must be agreed in writing by the Environment Agency before that phase commences, unless the Environment Agency has given prior written permission for operations to commence.</p>
5	Extractive Exhaust Emissions Testing	<p>The operator shall carry out a gas homogeneity test in line with BS EN 15259.</p> <p>At least three calendar months (or any other date as agreed with the Environment Agency) prior to the first scheduled round of periodic extractive exhaust emissions testing (post operational acceptance) the operator shall submit the results of the homogeneity test together with proposals and justification for ongoing monitoring strategy and practices.</p>
6	Above and below ground pipework	<p>The operator shall submit an inspection, monitoring and maintenance programme of above and below ground pipework to the Environment Agency for approval. It shall consider all above and below ground pipework associated with the transfer of diesel, lubrication oils and condensate. It shall also set out what actions the operator would take upon being alerted to a leak in the above or below ground pipework system.</p>

Conditions 3.1.1, 3.6.1 and 3.6.4 refer to table S4.1 which is amended as follows:

Table S4.1 Point source emissions to air – emission limits and monitoring requirements (Excluding start up, shut down and unit operation at loads of <55% MCR for A1, A2, A3, A51 and A52)						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab A Avon 1533 fired on natural gas via stack through silencer	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	160 mg/m ³	Daily average	Continuous	Predictive Emissions Monitoring as described in the application or otherwise agreed in writing by the Environment Agency
				95% of validated hourly averages within a calendar year		
A2 (Principal Emission)	Combustion unit Cab B Avon 1533 fired		160 mg/m ³	Daily average		

Table S4.1 Point source emissions to air – emission limits and monitoring requirements (Excluding start up, shut down and unit operation at loads of <55% MCR for A1, A2, A3, A51 and A52)

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Points plan, drawing number Figure 3)	on natural gas via stack through silencer			95% of validated hourly averages within a calendar year		
A3 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab C Avon 1533 fired on natural gas via stack through silencer		160 mg/m ³	Daily average		
				95% of validated hourly averages within a calendar year		
A51 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab D Solar Titan 130 fired on natural gas via stack through silencer		50 mg/m ³	Daily average		
				95% of validated hourly averages within a calendar year		
A52 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab E Solar Titan 130 fired on natural gas via stack through silencer		50 mg/m ³	Daily average		
				95% of validated hourly averages within a calendar year		
A1 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab A Avon 1533 fired on natural gas via stack through silencer	Carbon Monoxide (CO)	750 mg/m ³	Daily average	Continuous	Predictive Emissions Monitoring as described in the application or otherwise agreed in writing by the Environment Agency
				95% of validated hourly averages within a calendar year		

Table S4.1 Point source emissions to air – emission limits and monitoring requirements (Excluding start up, shut down and unit operation at loads of <55% MCR for A1, A2, A3, A51 and A52)

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A2 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab B Avon 1533 fired on natural gas via stack through silencer		750 mg/m ³	Daily average		
				95% of validated hourly averages within a calendar year		
A3 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab C Avon 1533 fired on natural gas via stack through silencer		750 mg/m ³	Daily average		
				95% of validated hourly averages within a calendar year		
A51 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab D Solar Titan 130 fired on natural gas via stack through silencer		40 mg/m ³	Daily average		
				95% of validated hourly averages within a calendar year		
A52 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab E Solar Titan 130 fired on natural gas via stack through silencer		40 mg/m ³	Daily average		
				95% of validated hourly averages within a calendar year		
A1 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab A Avon 1533 fired on natural gas via stack through silencer	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂) and Carbon	--	Minimum of five distinct measurements taken at stable operating conditions.	When operational hours in any year are less than or equal to 2,200 hours; discontinuous, every 2 years	Oxides of Nitrogen: BS EN 14792 Carbon Monoxide: BS EN 15058 or as agreed in writing with the Environment Agency
A2 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab B Avon 1533 fired					

Table S4.1 Point source emissions to air – emission limits and monitoring requirements (Excluding start up, shut down and unit operation at loads of <55% MCR for A1, A2, A3, A51 and A52)

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Points plan, drawing number Figure 3)	on natural gas via stack through silencer	Monoxide (CO)			When operational hours in any year are greater than 2,200 hours; discontinuous, every year or every 4,380 operational hours, whichever is sooner.	
A3 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab C Avon 1533 fired on natural gas via stack through silencer					
A51 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab D Solar Titan 130 fired on natural gas via stack through silencer					
A52 (Principal Emission Points plan, drawing number Figure 3)	Combustion unit Cab E Solar Titan 130 fired on natural gas via stack through silencer					
A6	Lube oil store breather vent	No parameters set	No limit set	--	--	--
A7-A31, A39-A46	Vents from Cab units A, B & C	No parameters set	No limit set	--	--	--
A32	Pressure relief valve on depressurisation plant	No parameters set	No limit set	--	--	--
A33	Water bath heater exhaust gases	No parameters set	No limit set	--	--	--
A34	Gas pressure relief valve on water bath	No parameters set	No limit set	--	--	--
A47-A50	Offices	No parameters set	No limit set	--	--	--

Table S4.1 Point source emissions to air – emission limits and monitoring requirements (Excluding start up, shut down and unit operation at loads of <55% MCR for A1, A2, A3, A51 and A52)

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A54	Standby generator diesel oil tank breather vent	Diesel fume	No limit set	--	--	--
A55	Standby generator exhaust (emergency use and testing only)	Products of combustion	No limit set	--	--	--
A56	Scrubber pressure relief vent	No parameters set	No limit set	--	--	--
A57	Scrubber pressure relief vent	No parameters set	No limit set	--	--	--
A58	Compressor Cab A casing vent	No parameters set	No limit set	--	--	--
A59	Compressor Cab B casing vent	No parameters set	No limit set	--	--	--
A60	Compressor Cab C casing vent	No parameters set	No limit set	--	--	--
A61	Compressor Cab D casing vent	No parameters set	No limit set	--	--	--
A62	Compressor Cab E casing vent	No parameters set	No limit set	--	--	--
A64	Scrubber vent	No parameters set	No limit set	--	--	--
A65	Lube oil breather vent, Cab D	No parameters set	No limit set	--	--	--
A66	Lube oil breather vent, Cab E	No parameters set	No limit set	--	--	--
A67	Fuel gas vent, Cab D	No parameters set	No limit set	--	--	--
A68	Fuel gas vent, Cab E	No parameters set	No limit set	--	--	--

Table S4.1 Point source emissions to air – emission limits and monitoring requirements (Excluding start up, shut down and unit operation at loads of <55% MCR for A1, A2, A3, A51 and A52)

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A69	Dry gas seal vent, Cab D	No parameters set	No limit set	--	--	--
A70	Dry gas seal vent, Cab E	No parameters set	No limit set	--	--	--
A71	Station emergency vent	No parameters set	No limit set	--	--	--
A72	Station emergency vent	No parameters set	No limit set	--	--	--

Schedule 3 – conditions to be added

Plan is subject to National Security.