

## Permitting Decisions- Variation

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We have decided to grant the variation for Huntington Compressor Station operated by National Grid Gas PLC.

The variation number is EPR/DP3139LA/V004.

The variation is for the following changes to the permit: Changes to the drainage design philosophy, Changes to the bunding philosophy, Alteration to the volume (increase) and location of diesel oil storage tank, Addition of an on-site vehicle fuelling point on the diesel oil storage tank, Relocation of the proposed engineering workshop, A change to the stated stack height from 20.6m to 21.3m, Update to the Technical Description to reflect the design for permanent access provision (stack emissions testing), Minor change in compressor shaft seal selection on the new units and Addition of one further emission point to allow better control over emergency station venting and potentially reduce natural gas (methane) emissions.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

### Purpose of this document

This decision document provides a record of the decision-making process. It:

- highlights [key issues](#) in the determination
- summarises the decision making process in the [decision considerations](#) section to show how the main relevant factors have been taken into account

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

## Key issues of the decision

Each of the changes proposed by the operator are discussed below:

### 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 the oil interceptors (one oil interceptor will remain), inclusion of a 440m<sup>3</sup> 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.

There will be a reduction in the drainage storage capacity from 874m<sup>3</sup> to 860m<sup>3</sup> as a result of the changes described. Attenuation capacity will continue to provide 98% of the volume of the original design. This remains sufficient to retain the entire contents of all storage tanks on the installation. The storage tanks are: two lubrication oil storage tanks 6m<sup>3</sup> each, two condensate storage tanks 2m<sup>3</sup> each and a diesel storage tank 25m<sup>3</sup>.

The oil interceptor has been removed and is replaced with an attenuation storage tank linked to an oil detection probe (conductivity probe). This is an automated system with an isolation valve closing upon detection of any oil. The probe will be calibrated to allow for the detection of low level spills that can be managed by the remaining oil interceptor, and more significant releases which would result in closure of isolation valve retaining the oil within the attenuation tank.

Following any significant spill the oil entrained within the drainage system would be pumped out, measured and compared with the volume of the system loss. An assessment would be made of any residual oils and action taken to remove these by excavation or flushing of the tank and pipework. Increased monitoring of the oil interceptor would be undertaken whilst these actions were being taken.

Inspection and maintenance procedures are requested through the existing improvement condition IC4. This requires information to be provided at each phase of the development of the site drainage infrastructure.

The proposed changes have been risk assessed and we agree with the conclusion of this work that the revised drainage system does not alter the level of protection provided.

We agree with the proposed measures.

### Changes to the bunding philosophy

The bunding arrangements for the two 6m<sup>3</sup> lubrication oil storage tanks associated with the two gas compressor systems and the two 2m<sup>3</sup> condensate storage tanks associated with the two gas separators have changed. 110%

secondary containment will still be provided for both tanks, in addition to tertiary containment. The general drainage arrangements have also changed with a 125mm kerbed area installed to prevent run off onto grassed areas, with other drainage changes as described above.

**2 x Lubrication oil tank 6m<sup>3</sup> each**– Each lubrication oil tank has the following: Secondary containment is provided by the compressor skid frame, which can retain 15m<sup>3</sup>. Tertiary containment is provided by the acoustic enclosure, which can retain 18m<sup>3</sup>. Both secondary and tertiary containment can retain the entire contents of the lubrication oil tank.

The skid frame is a steel structure with all joints fully welded. All drainage points have closed /locked valves and gasketed blind flanges are in place to allow for the manual controlled removal of any spilled oil which may be within the skid frame. The bund is internal and so is not subject to the risk of rainwater ingress. The skid frame is considered to provide suitable containment.

The acoustic enclosure is a steel work frame with acoustic panels bolted to the frame. The panels have gasket connections providing an acoustic and liquid seal. The enclosure is mounted on a concrete slab with a durable grout seal connecting the enclosure to the ground. The seal has been installed in line with the manufacturer's requirements. It will be checked as part of the onsite inspection process. The containment volume calculated is based upon the height of the doorways which are the threshold of protection. Entry points cut in the enclosure for cables are sealed with a multifunctional sealant to prevent any leakage. The enclosure is considered to provide suitable containment.

There are concrete sumps beneath both the skid frame and acoustic enclosure which act as further containment in the unlikely event that the skid frame and acoustic enclosure fail.

High and low level alarms are fitted to the lubrication oil tank.

**2x Condensate storage tanks 2m<sup>3</sup> each** – The tanks are located within a bund formed of 200mm high walls, which extend around the compressor plant. The bund provides 19m<sup>3</sup> of containment capacity, which significantly exceeds the capacity of both of the condensate tanks (4m<sup>3</sup>).

Any condensate that enters the bunded area is fed by gravity to an intermediate sump with a capacity of 1.4m<sup>3</sup> before entering the containment sump which has a capacity of 4.7m<sup>3</sup>. The capacity of the containment sump is 110% of both condensate storage tanks. The containment sump is located away from the compressor plant to minimise fire risk.

High and low level alarms are fitted to the condensate storage tank.

We agree with the proposed measures

#### 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. This will be in the form of an integral bund which will be compliant with the Oil Storage Regulations 2001. The tanks will have high and low level monitoring to detect any leaks.

The filling and emptying line will be double skinned and will drain to the road tanker bunk or generator bund.

We agree with the proposed measures.

#### 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. These will include ability to isolate the area in the event of a spill using a penstock valve preventing any spill escaping into the environment.

We agree with the proposed measures.

#### Relocation of the proposed engineering workshop

The relocation of this building from the north of installation to west of the installation. There is no additional risk to the environment.

We agree with the proposed change.

#### 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. As such there is no need to re-examine any air emissions assessment.

We agree with the proposed change.

#### 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.

We agree with the proposed change.

#### Minor change in compressor shaft seal selection on the new units

An alternative gas shaft seal will be used. There is no additional risk to the environment.

We agree with the proposed change.

#### Addition of one further emission point to allow better control over emergency station venting and potentially reduce natural gas (methane) emissions

There will now be two emergency shut down vents installed instead of one. 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, when venting is necessary the emissions will be reduced.

More precisely, the new configuration allows the station suction (intake) side of the pipework to be vented separately from the station discharge (outlet) side of the pipework, thus allowing greater control over which pipework is vented at any time, avoiding unnecessary methane emissions. Notwithstanding this modification, it remains operator's policy to minimise station venting as far as practicable through operational controls and practices. For example, during planned maintenance a mobile gas recompression rig is available to allow emissions to be captured.

We agree with the proposed change.

#### Above and below ground pipework

As part of the Schedule 5 Notice response (28/02/2022) and additional information provided on 22/04/2022 the operator provided further details of the above and below ground pipework. All pipework will be subject to inspection, monitoring and maintenance details of which will be provided through Pre-operational Condition 6 in Table S1.4 of the permit.

All above ground pipework has fully welded joints where-ever possible. Any flanged joints are associated with drip trays, absorbent mats or similar. The pipework is supported with steel support frames and has crash barriers included when it is near any site road.

There are two areas of subsurface pipework through which oil is transported under normal operating conditions:

- Lube oil lines between the compressor enclosure and the lube oil cooler equipment
- Diesel oil lines between the bunded diesel oil tank and the standby generator.

These pipes are not buried at any point, instead they are installed within sealed service ducts. This provided in the event of any leakage and allows for periodic inspection along their entire length. Flanged joints are avoided where possible, with drip trays, absorbent mats or similar provided where a flanged joint is required.

Both the flow and return fuel pipework will be a 'Durapipe PLX' secondary contained medium density polyethylene (MDPE) pipe, complete with trace heating and insulation. Should the inner skin of the fuel line leak then this will fill up the outer sleeve, leaking back into the generator container. The generator container has leak detection and on activation will close the motorised valve at the tank, stopping the fuel line from leaking further.

We agree with the proposed measures.

## **Decision considerations**

### **Confidential information**

A claim for commercial or industrial confidentiality has been made.

We have accepted the claim for confidentiality.

An existing confidentiality agreement is in place with the Environment Agency for this installation. This is with regards to any drawings of diagrams pertaining to the layout of the site. The application has been submitted in line with this agreement. We accept the approach taken. Only versions of the application and additional information provided during the determination that have been redacted by the operator in line with the agreement are included on the public register.

We consider that the inclusion of the relevant information on the public register would prejudice the applicant's interests to an unreasonable degree.

The decision was taken in accordance with our guidance on confidentiality.

### **Identifying confidential information**

We have identified information provided as part of the application that we consider to be confidential.

We have excluded any drawings or diagrams relating to the site layout from the public register.

The decision was taken in accordance with our guidance on confidentiality.

### **The regulated facility**

We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN2 'Defining the scope of the installation' and Appendix 1 of RGN 2 'Interpretation of Schedule 1'.

The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.

### **The site**

The operator has provided a plan which we consider to be satisfactory.

This shows the extent of the site of the facility.

The plan is not included in the permit due to the aforementioned confidentiality agreement.

## **Site condition report**

The operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.

A memorandum was provided as part of the Schedule 5 Notice response to update the site condition report. This considered the additional portions of land that are included in the permit as part of this variation. The site condition report submitted with the original application (EPR/ DP3139LA/A001) considers the whole site including the portions of land being included as part of this variation. There have been no pollution incidents on these portions of land. Therefore, the condition as described in the original application still represents the baseline for the purposes of any future permit surrender.

## **Nature conservation, landscape, heritage and protected species and habitat designations**

We have checked the location of the application to assess if it is within the screening distances we consider relevant for impacts on nature conservation, landscape, heritage and protected species and habitat designations. The application is within our screening distances for these designations.

We have assessed the application and its potential to affect sites of nature conservation, landscape, heritage and protected species and habitat designations identified in the nature conservation screening report as part of the permitting process.

We consider that the application will not affect any site of nature conservation, landscape and heritage, and/or protected species or habitats identified.

We have not consulted Natural England.

The decision was taken in accordance with our guidance.

## **Environmental risk**

We have reviewed the operator's assessment of the environmental risk from the facility.

The operator's risk assessment is satisfactory.



## **General operating techniques**

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in table S1.2 in the environmental permit

## **Pre-operational conditions**

Based on the information in the application, we consider that we need to include pre-operational conditions.

- Preoperational Condition 6 has been added to the permit. This requires the operator to submit an inspection, maintenance and monitoring programme for all above and below ground pipework. These documents have not yet been produced. We will need to review these once completed to ensure the procedures in place are suitable to minimise environmental risk.

## **Growth duty**

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit variation.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards

applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.