Cyfoeth Naturiol Cymru
Natural Resources Wales

Natural Resources Wales permitting decisions

South Hook LNG Terminal Company LTD.
South Hook LNG Terminal Decision Document

Contents

Variation

The variation number is: EPR/XP3538LD/V005

The operator is: South Hook LNG Terminal LTD.

The Installation is located at: South Hook LNG Terminal, Dale Road, Herbrandston, Milford Haven, Pembrokeshire, Wales,SA73 3SU

We have decided to issue the variation for South Hook LNG Terminal operated by South Hook LNG Terminal Company Limited.

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:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

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

Key issues of the decision

1. Outline of application

South Hook LNG Terminal LTD. have applied to vary their existing environmental permit to remove the requirement of continuous emission monitoring on two of the submerged combustion vaporisers (SCVs). There are a total of sixteen SCVs Fourteen SCVs have periodic monitoring requirements only, with the permit specifying that one SCV in each phase (1&2) must also have continuous monitoring, and the Operator having installed CEMS on A8 and A11 as a result. Therefore, the removal of continuous monitoring on the two SCVs will mean there is no longer any continuous monitoring requirements on any SCVs at the installation.

There will be no change to any of the emission limit values for any of the SCVs. There will be no change to the existing periodic monitoring requirements all the SCVs.

2. Outline of our decision

We have assessed the Operator's proposal against all relevant legislative, best available techniques (BAT) and guidance requirements and are satisfied that the removal of CEMS is compliant with all legislative requirements.

We have come to this decision based on the following:

- There is no environmental backsliding as there is no change to the emissions or emission limits from the SCVs.
- Previous monitoring data over the last 5 years did not show any breach of the ELVs on any SCV, with the average ELV
- For SCV A8 and A11 periodic monitoring has been required since the permit was granted and will continue.
- The requested changes are compliant with all legislative requirements
- For reasons explained by the Operator and the plant's operating regime we agree that the continuous monitoring is no longer necessary

3. How we reached our decision

3.1 Receipt of the application

The Application was received 25/08/2022 and accepted as duly made up recipient of the application on 16/09/2022. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination.

The applicant made no claim for commercial or industrial confidentiality. We have not identified any information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.

Consultation was not required for this variation. This decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.

3.2 The facility

The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations (England and Wales) 2016 (EPR) and the following directly associated activities:

- Section 1.1 Part A(1)(a): Burning any fuel in an appliance with a rated thermal input of 50 megawatts or more
- Schedule 25A Medium Combustion Plant directive for 1 x Submerged combustion vaporiser

Directly associated activity:

- Receipt and storage of liquefied natural gas

The permit regulates the operation of 16x submerged combustion vaporisers (SCVs) which are used for the regassification of liquefied natural gas (LNG). Each SCV is 32 MW and the total thermal input of the 16 SCVs is 512 MW but the site is only permitted run at a thermal capacity of 480 MW at any one time and the site is permitted to operate a maximum of 15 SCVs at any one time.
One SCV (emission point A18) was commissioned after the 20 December 2018 and is therefore a new medium combustion plant (MCP) under Schedule 25A of EPR. The fifteen other SCVs are each an existing MCP as they were first put into operation prior to 20 December 2018.

Each SCV discharges combustion products to air via its own individual exhaust stack. As the aggregated thermal input is over 50 MW the site is permitted as a Section 1.1 Part A(1) activity and subject to Chapter II of Industrial Emissions Directive (IED). As detailed in the original permit application decision document (2003) the plant is not considered a Large Combustion Plant and therefore Chapter III of IED does not apply. It was determined in the original permit application by the Environment Agency Wales, now NRW, that it was not technically practicable to aggregate the SCVs into one emission point.

3.3 Legislation

All relevant legislation has been considered in the determination and we consider there are no legislative requirement that mandate continuous monitoring is required. NRW is satisfied that this decision is compatible with its general purpose of pursuing the sustainable management of natural resources in relation to Wales and applying the principles of sustainable management of natural resources.

3.4 Best Available Techniques

In the absence of any published BAT conclusions for S1.1 Part A(1) activities that are not within scope of the 'BAT Conclusions for Large Combustion Plants', Environmental Permitting Note 1/1(18) provides guidance on what may be considered BAT and in particular what the regulator should consider when setting continuous monitoring:

- The level of risk to local air quality or other sensitive receptors
- Variability in operating conditions (e.g. waste types and feed rate)
- Absence of secondary dust abatement or reliance on cyclones

There is no change to the emissions limits as part of the variation therefore the level of risk to air quality is low and has previously been deemed acceptable for permitting. The fuel for the SCVs is natural gas therefore there is no variability in fuel type. Secondary dust abatement is deemed not required due to combustion of natural gas with negligible dust emissions. In conclusion, we consider the requested change does not conflict with any requirements as stated in the Environmental Permitting Note 1/1(18).

Medium Combustion Plant Directive & SG Regulations

The plant are subject to the MCPD as each unit is between 1 and 50 MW thermal input and not subject to Chapter III of IED. Fifteen SCVs are considered existing MCP including A8 and A11 and the relevant MCPD compliance date is 01/01/2025. However, the existing permit requirements are more stringent than the MCPD requirements. The existing NOx ELV (107 mg/Nm^3) is tighter than the one contained within the MCPD (200 mg/Nm^3) and the proposed monitoring frequency (quarterly) is more frequent than that contained within the MCPD (annually). The SG Regulations

contain only an ELV for NOx (190 mg/Nm^3) with three-yearly monitoring, therefore again, less stringent than the existing permit conditions.

In conclusion, we consider the requested change compliant with the requirements of Schedule 25A and B of EPR, MCPD and the SG Regulations.

In further determining whether we consider the change to be in accordance with BAT we have considered the following constraints of continuous monitoring:

- There is operational inflexibility as the operator must run the two units with the CEM fitted as opposed to other units. This has resulted in the facility not being fully optimised and affecting the operator's ability to carry out routine maintenance of the two SCVs equipped with CEMs.
- The purpose of CEMS is to provide continuous assurance that ELVs are being met, particularly when process or feedstock variations mean that emission fluctuation is expected. Neither is the case here, and historic CEMS and periodic monitoring data has shown emissions below the ELV. The CEMS, which were originally proposed by the applicant and specified in the permit on a precautionary basis, have shown themselves now to be no longer necessary. Having periodic and continuous monitoring of NO_x from the same source (A8 and A11) specified on the permit is un-necessary repetition.
- The continuous monitoring standard specified in the original permit does not meet current modern standards.

Monitoring

We have accepted the Applicant's proposal and removed the continuous monitoring of two SCVs (A8 and A11). The existing periodic monitoring will remain with a monitoring frequency of quarterly for both oxides of nitrogen and carbon monoxide.

Reporting

In line with the changes to monitoring we have updated the reporting requirements to remove the reporting of the continuous monitoring. The existing periodic monitoring for the two SCVs (A8 and A11) will remain with an annual reporting frequency. Reporting forms have been amended to reflect the changes.

OPRA

The OPRA score at permit issue remains unchanged at 170.