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NYMNP

05/10/2018

Date: 5 October 2018
Our ref: 50303/04/HS/JCx/16257516v1
Your ref: NYM/2017/0505/MEIA

Dear Rob

North York Moors: Woodsmith Mine: Application for a Non Material Amendment to Planning Permission NYM/2017/0505/MEIA

On behalf of our client, Sirius Minerals, and in accordance with procedural advice from the Authority, Lichfields is pleased to submit this application for a non material amendment (NMA) to planning permission NYM/2017/0505/MEIA.

This NMA relates to the installation and operation of a Liquefied Natural Gas (“LNG”) plant at Woodsmith Mine.

Background

On 19 October 2015, the NYMNP granted planning permission for the *“Winning and working of polyhalite by underground methods including the construction of a minehead at Dove's Nest Farm involving access, maintenance and ventilation shafts, the landforming of associated spoil, the construction of buildings, access roads, car parking and helicopter landing site, attenuation ponds, landscaping, restoration and aftercare and associated works. In addition, the construction of an underground tunnel between Doves Nest Farm and land at Wilton that links to the mine below ground, comprising 1 no. shaft at Doves Nest Farm, 3 no. intermediate access shaft sites, each with associated landforming of associated spoil, the construction of buildings, access roads and car parking, landscaping, restoration and aftercare, and the construction of a tunnel portal at Wilton comprising buildings, landforming of spoil and associated works”* (Council Reference NYM/2014/0676/MEIA).

On 6 February 2017, the NYMNP granted planning permission for the *“Variation of Condition 5 of planning permission NYM/2014/0676/MEIA to allow minor material amendments relating to that part of the development at the Woodsmith Mine site (formerly known as Doves Nest Farm and Haxby Plantation), including; re-design of foreshafts and shaft construction methodology, changes to building layout and shaft access arrangements, revisions to construction and operational shaft platform levels, revisions to location and layout of surface water attenuation ponds, revisions to groundwater management arrangements and amendments to internal access arrangements”* (Council Reference NYM/2017/0505/MEIA).

Proposal

The proposed works comprise the installation and operation of a Liquefied Natural Gas (“LNG”) plant at the Woodsmith Mine site. The plant is proposed to be located on the ‘additional construction platform’ that was approved as part of Phase 6 (ref. NYM/2018/0401/CVC). As part of this application, it is proposed to modify the platform slightly and, in doing so, sink it into the ground by circa 1 metre for screening purposes.

Details of the proposed LNG plant are shown in the attached drawings and, in summary, will comprise two gas storage tanks (each with a maximum capacity of 24t or 60m³) which will fuel four 1.5MW GE Jenbacher engines, each served by a 10m high emission stack. The LNG plant will be accessible off the B1416, via the existing internal access road, and all component parts of it will have a RAL6008 finish.

Once operational, the LNG plant will provide an additional source of energy to the mine site and generate up to 6MW of power. This will primarily be used to power the winder equipment (that will form part of future planning phases), for which the existing mains electrical power source does not provide sufficient capacity. It will also power other ancillary infrastructure within the mine site.

The submission drawings show how the LNG compound is capable of accommodating an additional two generators (and tank) to meet potential demand in the future (and which would be subject to a separate planning submission at that time).

The environmental impacts of the proposed LNG plant are considered in further detail below.

Air Quality

The development permitted under NYM/2017/0505/MEIA assumed that all power generation at Woodsmith Mine would be provided by diesel generators. The total power requirement was calculated to be 18MW, with 2MW of generation as standby. The generator emissions were to be discharged via two centralised 40m high stacks, with the incorporation of Selective Catalytic Reduction (SCR) abatement technology to reduce NO_x emissions.

It was calculated, based on the expected operational profile of the 18MW of diesel generators, that the total NO_x emission, including the use of SCR, would be approximately 171 tonnes NO_x/year.

The proposed amended scheme seeks to provide power to the site via an 11kV electrical supply, supplemented by an LNG plant served by 10m high stacks. The proposed gas generators are ‘emissions-optimised’ and therefore have lower NO_x emissions than fuel-optimised plant. Given the lower generator power demand due to the 11kV supply, and the lower NO_x emission rates associated with gas fuel when compared to diesel, the total NO_x emission will be approximately 12 tonnes NO_x/year for 6MW of power (i.e. approximately 7% of the consented total emissions).

It is noted that the approved generator farm would be located approximately 250m east of the most sensitive habitat (blanket bog) within Ugglebarnby Moor SAC. The proposed LNG plant would be located approximately 800m from this sensitive area. Across this increased distance there will be greater potential for dilution and dispersion of pollutants before reaching the blanket bog.

The operation of the LNG plant has been considered in the documentation that has been submitted as part of the Phase 6a discharge of condition application (PP. PP-07332343) - see document ref. 40-RHD-WS-70-EN-RP-0006. This also considers the cumulative impact of emissions from road traffic and on-site plant associated with the mine construction. The results of the dispersion modelling carried out for the Phase 6a submission shows that nutrient nitrogen and acid deposition at Ugglebarnby Moor SAC is significantly lower than that presented in the ES and SEI.

The proposed LNG plant therefore results in a significant beneficial impact at Ugglebarnby Moor SAC when compared to the permitted scheme.

Noise

The proposed LNG facility will be delivered in a modular manner and construction noise will be managed in accordance with the Construction Environmental Management Plan (CEMP) (ref. 40-RHD-WS-70-EN-PL-0031) that has been submitted as part of the Phase 6a discharge of condition application. Noise from the operating generators has been modelled within the Noise and Vibration Management Plan (NVMP) (ref. 40-RHD-WS-70-EN-PL-0032) that also forms part of the Phase 6a submission.

The operation of the facility is not an inherently noisy activity, with the plant specification indicating a source noise level of 65 dB(A) at 10m for each of the four 1.5MW GE Jenbacher engines. A delivery of LNG gas can generate noise levels up to 85 dB(A) during the transfer of LNG from the HGV to the storage containers. The process can take up to two hours. The installation, deliveries, and operation of the facility would give rise to negligible noise impacts at all receptors in proximity to the site over day and night time periods. These would be of no greater effect than the approval scheme permitted under NYM/2017/0505/MEIA.

Highways

With regard to transport, the proposed LNG facility would require material and component deliveries during its construction, and ongoing LNG deliveries during its operation.

A key component of the agreed mitigation package for the overall project in relation to transport is the Construction Traffic Management Plan (CTMP). The CTMP sets out the measures, controls and monitoring processes to ensure compliance with the consented peak traffic levels. The key elements to monitoring compliance with the CTMP targets are the provision of traffic counters at the site access and the establishment of the Traffic Management Liaison Group to oversee the implementation, monitoring and enforcement of construction traffic movements.

The Contractors constructing the LNG facility will be required to ensure that their deliveries are planned and programmed to ensure that the target daily vehicle movements are not exceeded. Further details of this are included within the CTMP that was submitted as part of Phase 7 (ref. 40-RHD-WS-70-CI-PL-0011) – see application ref. NYM/2018/0585/CVC.

The permitted scheme forecast that there could be a requirement for up to two deliveries per day¹ of diesel to supply the generators for a peak on a site power demand of up to 20MW. With the reduced site power demand and an installed 11kV electrical supply, the proposed supplementary LNG facility will provide up to 6MW of power. In regard to future LNG deliveries, it is forecast that these will be once every two days via a 20t tanker, increasing to eight to nine per week (less than two per day) at peak power demand.

¹ 1 York Potash Project Mine, MTS and MHF Environmental Statement: Supplementary Environmental Information (Appendix i)

It can therefore be noted that ongoing fuel deliveries would not increase above those vehicle levels already permitted under NYM/2017/0505/MEIA.

Application Submission

The application was submitted via the planning portal (reference PP-07326396) and comprises the following documentation:

- Completed application form;
- LNG / Generator Plant Compound Layout Plan (ref. 40-ARI-WS-7100-CI-18-01026); and
- LNG / Generator Plant Sections (ref. 40-ARI-WS-7100-CI-10-01027)

The requisite planning application fee of £234.00 has been paid online.

We trust this submission provides you with sufficient information to consider this request for a non-material amendment to the approved scheme at Woodsmith Mine. However, should you have any further information requirements, please contact me.

Yours sincerely

James Cox
Senior Planner

Copy – Sirius Minerals