



PLANNING STATEMENT
Planning Permission 17/00011/WASVOC

February 2018
Kate Lister –Director of Compliance, Biogen (UK) Ltd

Applicant:
BIOGEN (UK) Ltd.
Milton Parc
Milton Ernest
Beds
MK44 1YU

INTRODUCTION

This planning statement has been prepared by BIOGEN (UK) Ltd., Milton Parc, Milton Ernest, Beds, MK44 1YU and is submitted in support of the install of a new high temperature flare at the:

Biogen Westwood AD Plant
Bedford Road
Rushden
Northamptonshire
NN10 0SQ

The plant operates under an Environmental Permit EPR/FP3137GF/V007 issued by the Environment Agency (EA).

This application seeks to amend the approved plans as listed under condition 20 of Planning Consent 17/00011/WASVOC to allow for the relocation and inclusion of a new high temperature flare.

JUSTIFICATION

The site operates under an Environmental Permit and is required by the permit to ensure that the biogas produced in the process is combusted under controlled conditions. During periods of breakdown or maintenance of the Combined Heat and Power (CHP) units, the biogas shall be directed to an emergency flare to ensure controlled combustion. During a routine planned maintenance visit to the existing flare, it was identified that the existing flare had reached the end of its operational life and was beyond economic repair.

Furthermore, since the original flare was installed, the Environment Agency has updated their technical guidance and newer installations are now required to deploy high temperature flares which operate to 1000°C with a 0.3 second residence time. This higher specification flare ensures fuller combustion and lower emissions. This application therefore seeks to upgrade to this improved specification.

REASON FOR REPOSITIONING OF THE FLARE

During consultation with a number of flare manufacturers/suppliers, it became apparent that the current location was not appropriate for a high temperature flare for the following reasons:

- There is a requirement for a 30m heat zone (existing structures, namely, the storage tanks would interfere).
- Accessibility would be an issue for installation and ongoing maintenance.
- Condensate recovery would be challenging with long lengths of pipework.
- There is no existing CCTV coverage for monitoring purposes.

A site walk through was conducted to identify the most appropriate location. Due to the heat zone requirement and the safety and operational requirements to minimise gas storage and improve operational reliability, the location is limited to that shown on Drawing WW-18-043. The revised location satisfies the points noted above and reduces the additional infrastructure that would be required if located elsewhere.

BUND MODIFICATIONS

The previous submission required modification to the existing bund. Unfortunately, when the detailed design was finalised it required more extensive bund modification which became cost prohibitive. The change in location has already been communicated to the EA and they are satisfied that the new location is suitable and will be granting a revised permit variation on this basis.

THE SITE AND ITS SURROUNDINGS – VISUAL & GENERAL AMENITY

Having regard to Policy 22 of the Northamptonshire Minerals and Waste Local Plan, consideration has been given to the siting and design of the flare. The local landscape is predominantly one of arable farmland defined by mature hedgerows. To the West, a combination of trees and mature hedgerows bounding both the site and adjacent fields, as well as the trees planted as part of the development on the South-Western boundary help to screen from the A6 and settlements further West. To the North-West of the site, there are a number of hedgerows and mature trees, mostly associated with the residential properties along Avenue Road. In addition, there are further mature hedgerows on the arable ground which assist to screen the site.

[For Reference, the Flare Stack is 11m tall and Storage Tank 3 is 10m Tall.](#)
[Storage Tank 2 viewed from the North Face in front of the new Flare Position is 12.2m tall.](#)
[The Digesters are over 18m tall.](#)

The flare stack will benefit from a dull finish to reduce the risk of 'mirror' or 'glare' effects, again this will reduce any visual impact. The flare stack is 11metres, this is to ensure adherence to the heat zoning requirements and those of the EA with regards to air dispersion modelling to ensure suitable dispersion. The flare is defined as an emergency flare in the Environmental Permit, its use is therefore restricted to periods of surplus gas, predominantly due to CHP downtime. If operated for more than 10% of a year it requires emissions testing and notification to the EA. Its use will be minimised as far as possible.

The flare selected is defined as an 'enclosed thermal combustor' to minimise noise and radiation. The burners also fire in a circular blanked lined combustion chamber. The chamber lining has good acoustic properties designed to reflect noise. Its use will be minimised and, in any case,, its acoustic properties are enhanced from the existing flare so any noise is likely to be negligible.

The ancillary components, includes; an the gas train pipework, control panel and condensate recovery system.

CONCLUSION

This application supports the upgrade of the emergency flare to meet current legislative requirements. The location of the site and current structures combined with the mitigation measures deployed and minimal usage of the flare will result in negligible impact on any receptors.