PLANNING STATEMENT
Planning Permission 17/00011/WASVOC

September 2017
Kate Lister – Head 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-17-038. The revised location satisfies the points noted above and reduces the additional infrastructure that would be required if located elsewhere.

BUND MODIFICATIONS
The revised location will require some minor modification to the existing bund. Pre-application discussions have already taken place with the EA to vary the Environmental Permit to reflect these changes. The modifications will be approved as part of the permit application and the Rolton Group (the original designers of the AD Plant and its associated bund) have been appointed to design, oversee the construction of and produce a Construction Quality Assurance
(CQA) report to satisfy the EA (this will be done in accordance with CIRIA C736). The top level of the wall slopes are to match the bund level and will follow the profile of the bund as can be seen in Drawings 170447-RGL-ZZ-00-DR-S-510-0001 & 2. This design will therefore not be visually intrusive. The specification of the bund retaining wall is further detailed in ‘NBS Specification for Biogen Westwood – Bund Retaining Wall’ Rev S4-PO1.

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.

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.

Drawing WW-17-038 illustrates the ancillary components, this includes; an extension to the existing concrete pad, the concrete retaining wall which will be embedded into the existing earth bund, 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.