Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Anglesey Energy Limited

Mona Anaerobic Digestion Plant
Mona Industrial Estate
Gwalchmai
Isle of Anglesey
LL65 4RJ

Variation number

EPR/AP3033HY/V010

Permit number

EPR/AP3033HY

Mona Anaerobic Digestion Plant
Permit number EPR/AP3033HY

Introductory note

This introductory note does not form a part of the notice.

The following notice gives notice of the variation and consolidation of an environmental permit.

This is a permit variation following the publication of the revised Best Available Techniques (BAT) Reference Document (BRef) Waste Treatment. The associated BAT conclusions to this document were published on the 17 August 2018 in the Official Journal of the European Union.

This variation incorporates the changes required by the Industrial Emissions Directive following a statutory review of permits in the Waste Treatment sector. These include the amendment of the wording of several permit conditions relating to notifications, changes to emission limits and monitoring requirements. The interpretation section of the permit has also been updated and the opportunity has been taken to consolidate the original permit and subsequent variations.

We are satisfied that the operator will be compliant with the published BAT conclusions which will apply from 17 August 2022.

The rest of the installation is unchanged and continues to be operated as follows:

Mona Industrial Park is situated within a rural area adjacent to the Mona airfield, operated by the Ministry of Defence and was once part of the airfield. There are several residential properties located close to the site. The village of Gwalchmai lies to the West, Bodffordd to the North and Rhostrehwfa to the East. Other major landmarks include the Cefni Reservoir lie to the North East.

Access to the industrial park is directly off the A5 which has been replaced as the main arterial route in Anglesey by the A55.

The industrial site has similar users i.e. a waste transfer station opposite, but most activity is situated around the entrance to the estate. The area is predominantly rural in its setting and supports numerous farms and associated businesses. Adjacent businesses include a poultry farm and highways depot.

Four Special Areas of Conservation were identified within 10km of the site and a Site of Specific Scientific Interest within 2km of site.

The permit is for the operation of an anaerobic digestion plant which utilises the breakdown of organic matter by naturally occurring bacteria in the absence of air resulting in the production of biogas and bio-fertiliser.

The feedstock associated with this plant is predominantly chicken litter, glycerine, dairy DAF effluent and biomass including maize and rye silage. The total annual throughput is 49,500 tonnes per year.

The permit is required to authorise the Recovery of non-hazardous waste with a capacity exceeding 100 tonnes per day involving biological treatment, which is an activity covered by the description in Section 5.4 Part A (1)(b)(1) in Schedule 1 of the Environmental Permitting Regulations. A second listed activity 4.3 Part A(1)(a) authorises the further treatment of the material to produce an ammonium based fertiliser.

The process involves solid wastes being delivered into the building in vehicles which will discharge the waste into an unloading bay. The main solid material for the plant is chicken litter, this will be stored within a building which benefits from an odour control system. The chicken litter will be transferred from the building to the feed hoppers in the yard by a telehandler, from the feed hoppers the chicken litter enters the primary digesters. The silage will be stored outside within covered silage clamps and transferred to the feed hoppers by telehandler, from the feed hoppers the silage enters the primary digesters.

Raw liquid waste materials will be discharged from tankers outside the building into a raw waste tank which will feed the primary digesters, the primary digester tanks have a capacity of 2592m^3 each. This is a gas tight cylindrical system in which the anaerobic digestion takes place. All tanks that are outside of the main containment area are fully bunded. The digester tanks, storage tanks and post digester tank are located within a containment area that is sealed and bunded. Gas is produced from this process which will be used to fuel a gas engine with a total thermal input of 4.68MW. The gas engines will in turn produce electricity. The digestate is stored within an enclosed tank prior to further treatment or removal from site.

Material from the post digester is then fed into a solid and liquid separation process. The plant comprises of the pasteurisation, separation, drying and evaporation processes along with the in-vessel composting process (including press screw separation).

The digestate treatment operations being carried out consist of two drying systems; evaporator and belt dryer. Each is equipped with a washing/scrubbing system which removes ammonia from the air flow leaving the dryer unit. To remove the ammonia the acid-base reaction principle is used by adding sulphuric acid to the ammonia washing system., which leaves as an ammonium sulphate solution. Ammonium sulphate has properties equal to typical fertilisers. The dry material (compost) is then stored in a separate building prior to removal off-site. If any of the digestate is not sent for further treatment it will be removed from site via sealed pipe-work to a sealed tanker.

The schedules specify the changes made to the permit. Schedule 1 of the notice specifies the conditions that have been varied and Schedule 2 comprises a consolidated permit which reflects the changes being made.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit		
Description	**Date**	**Comments**

Application EPR/AP3033HY/A001	Duly made 13/10/10	
Additional information requested	15/12/10	
Additional information received	06/01/11	
Additional information received	15/02/11	
Additional information received	01/03/11	
Permit determined EPR/AP3033HY/A001	27/06/11	
Application for variation EPR/AP3033HY/V002	Duly Made 20/02/12	Change of technical provider. Change of operator name
Additional information requested	16/03/12	Requested by email
Additional information received	15/03/12	Received by email, part only
Additional information received	20/03/12	Received by email, remainder
Additional information requested	23/03/12	Requested by email
Additional information received	03/04/12	Received by email
Variation notice EPR/AP3033HY/V002 Issued	11/05/12	
Variation notice EPR/AP3033HY/V003 Issued	23/05/12	Admin variation
Application EPR/AP3033HY/V004	Duly Made 11/04/16	
Additional information received	16/05/16	Gas Flare Specification
Additional information received	25/05/16	Information received relating to the Site Condition report and site boundary
Additional information received	01/07/16	Revised waste codes table
Additional information received	30/06/16	Revised Site Boundary Plan
Variation notice EPR/AP3033HY/V004 Issued	06/09/16	Consolidated permit issued
Application EPR/AP3033HY/V005	Duly Made 25/07/16	
Additional Information requested	22/09/16	Schedule 5 request sent – additional air quality modelling
Additional information received	28/10/16 and 22/12/16	Information received relating air quality assessment and containment solutions

Additional information received	20/01/17	Information received relating to containment solutions
Consolidated permit EPR/AP3033HY/V005 issued	24/04/17	Consolidated permit issued
Application EPR/AP3033HY/V006	18/08/17	NRW led variation to amend conditions relating to bio-aerosols
Application EPR/AP3033HY/T007	Duly made 23/10/17	Application to transfer the permit in full where management remains largely the same to 4D AD Services Limited.
Transfer determined EPR/AP3033HY/T007	08/12/17	Full transfer of permit complete
Application EPR/AP3033HY/T008	Duly made 19/12/18	Application to transfer the permit from 4D AD Services Limited to Optimal Biogas Limited
Transfer determined EPR/AP3033HY/T008	04/01/19	Permit transferred in full.
Application EPR/AP3033HY/T009	Duly made 05/03/20	Application to transfer the permit from Optimal Biogas Ltd to Anglesey Energy Limited
Transfer determined EPR/AP3033HY/T009	20/03/20	Permit transferred in full to Anglesey Energy Limited
Regulation 61 Notice sent to the Operator	24/03/20	Issue of a Notice under Regulation 61(1) of the EPR. Natural Resources Wales initiated review and variation to vary the permit following the publication of the revised Best Available Techniques (BAT) Reference Document (BRef) for Waste Treatment.
Regulation 61 Notice response	20/09/20	Response received from the operator.
Natural Resources Wales initiated variation determined EPR/AP3033HY/V010	26/05/21	Varied and consolidated permit issue to Operator.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

The Natural Resources Body for Wales ("Natural Resources Wales") in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates

Permit number
EPR/AP3033HY

issued to

Anglesey Energy Limited ("the operator")

whose registered office is

80 Guildhall Street
Bury St. Edmunds
Suffolk
England
IP33 1QB

company registration number **12083139**

to operate **an installation** at

Mona Anaerobic Digestion Plant
Mona Industrial Estate
Gwalchmai
Isle of Anglesey
LL65 4RJ

to the extent set out in the schedules.

The notice shall take effect from 26/05/2021

Signed	Date
Holly Noble	**25/05/2021**

Authorised on behalf of Natural Resources Wales

Schedule 1

All conditions have been varied by the consolidated permit as a result of a Natural Resources Wales initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.