GP Biotec Waste Storage Permit (SR2010 No17.)

Environmental Permit EPR/BB3099CG

Surrender Site Report

Table of Contents

1.0 Introduction

1.1 Purpose of Surrender Site Report

This Site Surrender Report has been prepared by Lucy Owen, Marches Biogas supporting GP Biotec Ltd, in compliance with the requirements and discussions with NRW (Natural Resources Wales) regarding the site activities are now outside the scope of the SR2010 No.17 permit; storage of wastes pending recovery by land treatment.

In March 2022 the decision was undertaken in cooperation with NRW to submit a surrender application of permit BB3099CG and include the waste storage site as part of the installation permit AD3233DW. A surrender of waste permit BB3099CG is required as the site activities of pre -treatment of blending solids and liquids prior to being fed into the AD plant is outside of the permitted activities.

This Report has been developed to demonstrate to the satisfaction of NRW that the site has not deteriorated as a result of permitted activities; and that the site remains to a satisfactory state. In reference to the Regulatory Guidance Note, RGN 9: Surrender the legal test for surrender is – 'that the necessary measures have been taken – (a) to avoid a pollution risk resulting from the operation of the regulated facility; and (b) to return the site of the regulated facility to a satisfactory state, having regard to the state of the site before the facility was put into operation.'

It has been determined by NRW that this process is a Low Risk Surrender; where activities could in principle pollute land or groundwater but the operator can show through waste acceptance records (where applicable) and pollution control measures that the legal test set out above has been met. A report is required but not one involving intrusive monitoring data.

1.2 Description of Waste Storage Facility

GP Biotec is located at Great Porthamel Farm, Talgarth, Powys LD3 0DL.

GP Biotec Waste Storage facility is part of GP Biotec's overall Anaerobic Digestion site operations, processing waste from a variety of sources, but predominantly a mixture biodegradable waste from abattoirs, food processing plants, as well as farm energy crops (grown by the Sites affiliated farm business), converting them into biogas and digestate (biofertiliser). The biogas is converted into electricity and heat. A proportion of the heat is used to heat the parts of the plant which require it and to heat Site offices and other buildings. The electricity produced is metered into the National Grid and sold to a renewable energy supplier.

The digestate is spread onto farmland owned and/or managed by GP Biotec's affiliated company GP Services (a farm business and haulage company).

GP Biotec Waste Storage consists of a concrete bunded area with a sealed drainage system which receives solids wastes tipped prior to mixing and blending before the AD process. The concrete area is adjacent to the 30,000 litre steel panelled storage tank which holds liquid digestate. Images 1 and 2 below show the site areas.
The concrete area is included as part of the overall site's daily checks, ensuring the site infrastructure is well maintained and no signs of leaks, cracks or damage to the tank and concrete pad.

Image 1: Glass coated panelled storage tank.

Image 2: Concrete area including Bunding

1.3 Operational changes since Site Report

There have been no major changes made to the site since the issue of the original site permit in in 2019.

Since March 2022 when the activities of pre -treatment of blending solids and liquids prior to being fed into the AD plant were outside of the permitted activities, these activities have ceased on site.

2.0 Operational Activities

2.1 General Activities

The waste storage site operates under a SR2010 No17 permit for the Storage of wastes prior to use. Traffic / vehicle access to site is straightforward and convenient. The site can be accessed via a lane from GP Biotec main AD installation site and farmyard area down to the storage site.

The waste storage site is a separate small site located 380m away from the installation AD plant. The site has no close sensitive receptors, the nearest sensitive receptor is over 500m away at 755m. To the west of the site lies the Afon Llynfi. The site receives and stores processed, pasteurised digestate prior to land spreading.

During the time of the NRW visit in 2022 the site was being used as a backup for mixing and blending of solids and liquid wastes prior to digestion as the feed system was undergoing upgrading at the AD installation facility AD3233DW. Therefore, the activities fell out of scope of the SR2010 No.17 permit. It was discussed with NRW that the best practical measures going forward was to keep the waste storage facility within the ability to act as a 'backup' to the feed system on the installation AD plant, therefore surrendering the current permit and making a variation to the installation permit to include the storage area.

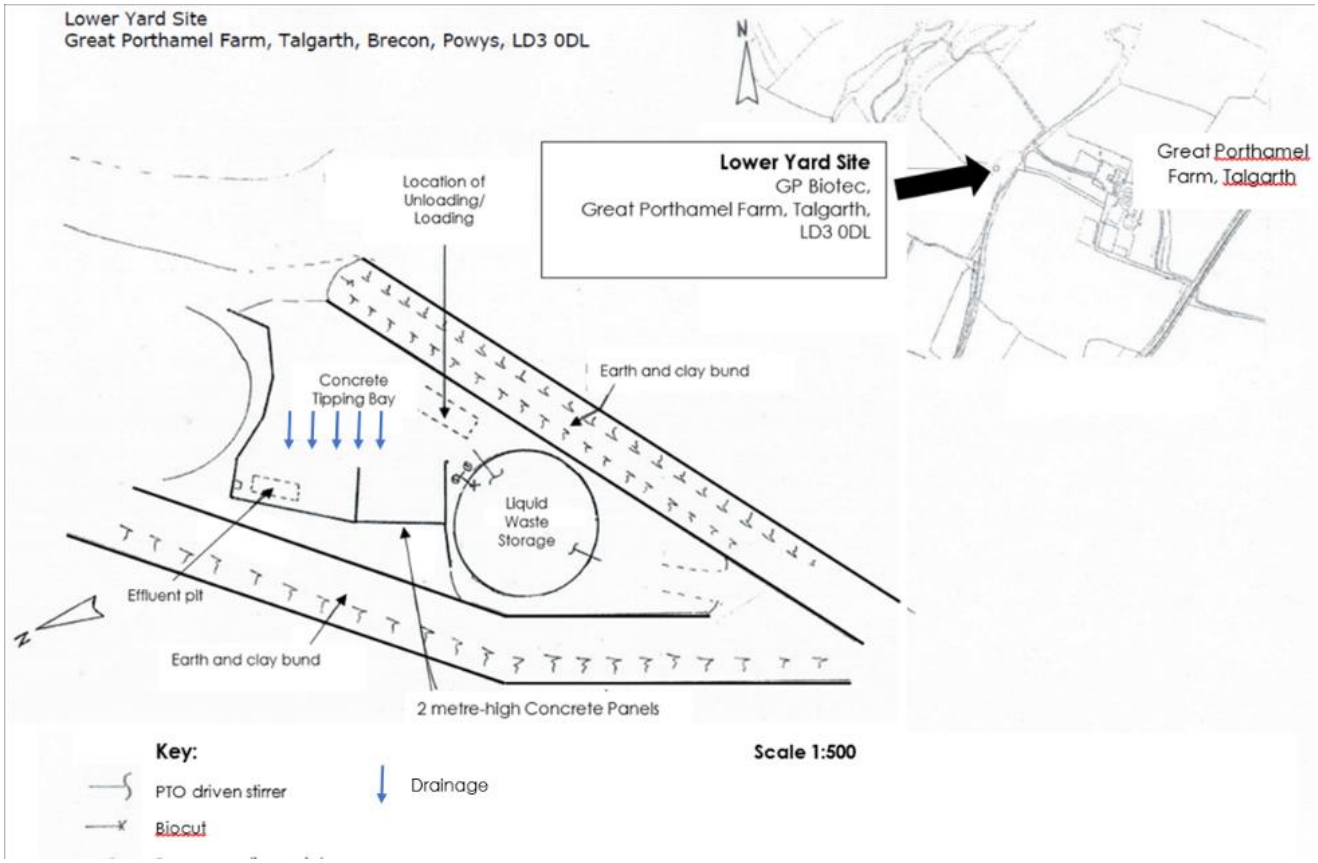
2.2 Potentially Polluting Activities

Due to the nature of activities undertaken on site, no pollutants or chemicals are used or stored on the storage site that could cause potential harm to the environment. The site has implemented controls to ensure that any digestate stored on site is contained within the bunded area and liquid tank. The drainage system is a sealed system so all liquids and rainwater is captured and pumped directly up to the installation AD site to aid dry matter control.

2.3 Site Drainage Arrangements

The site is concrete bunded with an gradual sloping gradient into the effluent capture pit, where any liquids are pumped directly into the Liquid storage tank and/or pumped directly up to the installation AD site.

Please reference Lower Yard Site Plan below.



2.4 Emissions

As stated within the site permit there shall be no point source emissions to land or water. All liquids (digestate) in containers shall be provided with secondary containment. The site has a 2 meter high concrete panel bund with an earth and clay bund surrounding that. The site area is also all concreted ensuring no runoff of liquids and an effluent capture pit located within the concrete pad. The liquids storage tank also has level control to prevent over filling from occurring.

2.5 Waste Management

Given the site activities taking place on site, with minimal activities any waste that is generated on site such as operator rubbish is brought up to the main Porthamel farm and disposed of correctly in the waste bins or recycling.

3.0 Site History & Monitoring Arrangements

3.1 Land Pollution History

During the operation of the permit, an EMS was maintained, and no records of pollution events have been recorded.

3.2 Incidents / Communications History

The site has undergone annual site inspections by the NRW since being operational in 2019. All inspections have been reported and recorded on compliance assessment reports, all saved within the sites management system.

Most recent CAR forms reference are:

ComplianceAssessmentReportCAR_NRW0039864
ComplianceAssessmentReportCAR_NRW0037771

There have been no reported incidents relating to site from pollution.

4.0 Description of steps take to ensure satisfactory state and removal of pollution risks

Additional considerations below have been taken to ensure that the site is in satisfactory state and that pollution risks have been removed.

4.1 Infrastructure Monitoring Records

The site operators undertake daily and weekly checks site checks as part of the overall GP Biotec AD management system and on site monitoring.

The site checklists includes, primary and secondary containment, visual inspections for cracks, leaks and damage to infrastructure.

The waste storage site concrete panel bunding walls and concrete pad area remains in very good condition with no visible damage or weak areas, therefore no posing a risk of pollution through seepage or damage to the infrastructure.

4.2 Environmental Monitoring Records

Again, as part of the site operations daily checks, an odour assessment is undertaken of the site and local surrendering areas. Odour monitoring records form an important part of the site checks and management of odour incidents. No odours associated with the waste storage facility have been reported, odour related issues are closely associated with the spreading of digestate not on site storage. The site also operates an odour control system which also mitigates any potential sources of odour release.

In accordance with NRW confirming the site is a low risk surrender, no environmental monitoring of land or groundwater is proposed, there will be no requirement to report any associated data to NRW.

4.3 Pollution incidents and Remediation

There have been no pollution incidents, during the life of the Permit at the Waste storage facility, that require remediation.

4.4 Surrender Data

Due to the reasons listed within this application; it is not proposed for any intrusive investigations or soil sampling, to accompany the Operators request to surrender their Environmental Permit.