



To: Mostyn Wall,
Uwch-swyddog Lleihau Allyriadau Tirlenwi / Landfill Emissions Reduction Senior
Officer
Rheoleiddio Diwydiant Canol y De / South Central Industry Regulation

22nd June 2023

Dear Mostyn,

RE: Bryn Pica Landfill Permanent Capping Construction Work for 2023 - CQA Plan and Specification Engineering Review

Thank you for providing the document:

*CQA PLAN (CQA Plan Reference: AM5593) and SPECIFICATION FOR PHASE 4A PART
II (2023) PERMANENT CAPPING WORKSAT BRYN PICA LANDFILL SITE
(Specification Reference: AM5593/01).
SIRIUS Environmental, May 2023 for AMGEN CYMRU*

Below are comments, including queries and observations made by Geoscience following a review of the documents submitted by the operator of Bryn Pica Landfill for the proposed permanent capping works for a section of the landfill in 2023.

The works involve:

- the trimming and regrading of the waste surface as required
- Installation of a perched leachate collection trench in the existing waste along the
- north-western (provisional) and south-western edges of the permanent capping area
- placement of the bedding/regulating soils layer
- installation of the lower geocomposite drainage layer (GDL) for gas collection
- installation of the 1mm thick LLDPE flexible membrane liner (FML)
- installation of the upper geocomposite drainage layer (GDL)
- placement of 300mm blinding protection layer and 700mm of the restoration soils layer
- tie-in to adjacent cells permanent capping

- Formation of surface water drainage ditches
- Construction of an unbound/unsurfaced haul road along the eastern boundary
- Gas collection infrastructure for the area will be carried out separately to the capping works

Geoscience have the following comments:

1. The CQA Plan states the capping design for the area of this phase of works is as previously agreed and carried out. However, the initial design report is not referenced, and has not been checked to confirm this.
2. The bedding/regulating soils beneath the lower geocomposite layer and the blinding/restoration soils above the upper geocomposite layer will be imported. NRW should be informed of the sources of these materials as soon as they are known and the Source Evaluation Report(s) submitted prior to the works starting. This should include any additional chemical testing where necessary to confirm their suitability.
3. There is an error in the notes on drawings AM5593/01/02 and AM5593/01/03 for the maximum size particles of the bedding/regulation soils. It should be 63mm (as Table 4 of the specification) not 75mm.
4. The stability calculations for the critical interface between the blinding/restoration soils and the upper geocomposite will be confirmed with interface shear tests of the actual soils used. It is advised these tests are carried out as soon as the source material is known.
5. Seeding of the finished capping is proposed soon after completion. How will the soils be prepared for seeding? Will an additional topsoil layer be added to the restoration soils for example?
6. The CQA Engineer and CQA Inspector have not been appointed. Their CVs should be submitted for review prior to the works starting.

In conclusion, we would recommend that the submission is accepted where the suggested amendments are made.

Kind Regards

Nick Rogers

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