

# **PLR SERVICES MANAGEMENT SYSTEMS**

## **CROESCARNEINION CLOSED LANDFILL**

***Environmental Permit – EPR/VP3899FS***

### **RESTORATION PLAN**



**September 2019**

**CONTRACT – HAR/CF/1/19**

***PLR SERVICES***

***07703 470326***

|                                |                    |                         |                    |
|--------------------------------|--------------------|-------------------------|--------------------|
| <b>Report Type:</b>            |                    | ENVIRONMENTAL           |                    |
| <b>Report Issue:</b>           |                    | FACTUAL/INTERPRETIVE    |                    |
| <b>Contract:</b>               |                    | HAR/CF/1/19             |                    |
| <b>Reference:</b>              |                    | CLOSED LANDFILL SITE    |                    |
| <b>Action point:</b>           |                    |                         |                    |
|                                | <b><i>Name</i></b> | <b><i>Signature</i></b> | <b><i>Date</i></b> |
| <b>Originator:</b>             | P REES             |                         | SEPTEMBER 2019     |
| <b>Title:</b>                  | CONSULTANT         |                         |                    |
| <b>Checked &amp; Approved:</b> | P.REES             |                         | SEPTEMBER 2019     |
| <b>Title:</b>                  |                    |                         |                    |

The interpretation referenced within this report is in part based upon information, knowledge and results made available from externally supplied sources at the time of the report issue. Full reliance is placed upon the accuracy of such and thus any responsibility for incorrect information supplied from these sources cannot be accepted.

# **RESTORATION PLAN**

SITE: CROESCARNEINION FARM CLOSED LANDFILL,

PERMIT HOLDER: E. DAVIES (previously G. DAVIES)

PERMIT REFERENCES: WDL 053/89 and EPR/VP3899FS

CONTRACTOR: R. HARRY

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### 1. Introduction

The Croescarneinion Farm Landfill site is located at Rhiwderin, Gwent and the site has been operated by the current holder's family since approval was issued by Newport Borough Council in 1989 (1).

Since that time a small number of modifications were issued to date with the changes due to the Waste Management Licensing (2) and Environmental Protection Act with a revised Permit number issued (3).

### 2. Waste acceptance

Wastes of the type listed within Schedule B of the Licence have been accepted to date and in conjunction with procedures such as the 'Duty of Care' and landfilled by the Permit Holder contractor as and when these came available.

More latterly restrictions have been placed upon the Holder/Contractor as to the volume/weight of waste to be accepted by the site regulators which has slowed the landfill completion (4).

### 3. Requirements

In conjunction with the above and more latterly NRW have investigated the site with due regard for the types of waste held on site with notice issued to their removal as deemed necessary to bring the wastes present into compliance (5)

### 4. Application of permitted materials

Wastes accepted after the available void has been filled include those deemed suitable for restoration/capping etc. to include the soils won during the excavation process to form the landfill footprint (6) e.g. top soils etc. stockpiled on site for future use.

## 5. Existing position

Currently and due to the restricted waste acceptance imposed then restoration of the site has slowed which has prompted NRW requesting further information to develop the potential closure/surrender of the EP (5).

Thus a series of measures have been undertaken to clarify this:

- A topographical survey (7)
- A trial pit investigation (8)
- Sampling and testing assessment (9)
- Removal of unsuitable wastes deposits (11)

### 5.1 Survey

The topographical survey report (previously supplied) presents the existing landform (7) overlaid with the final levels (red) and has shown the following:

1. The existing input indicates a shortfall of approx.15,000 cubic metres
2. Based upon this and on proposed/allowed inputs then it is estimated that at least a further 36 months is required to reach the required levels. This has been based upon the existing level and that to reach the levels agreed in the original approval.
3. Agreement with the regulatory authorities is required to confirm this.
4. On landfill completion and to reach levels it is proposed that a further survey is then completed to confirm levels – no allowance has been made for potential settlement due to the nature of the allowed wastes e.g. solid types.
5. The restored area had been originally agreed to be grassed and thus potentially returned to use for agriculture in conjunction with the original approval (1 & 2).

### 5.2 Trial Pit Investigation report

This was requested by NRW (5) to confirm that previously deposited wastes were in compliance with any future closure/surrender under the guidance issued at this time. It is worthy of note and to take due account that the site is not planned to enter into closure/surrender due to the remaining void and thus lack of completion to finished levels.

This on-site work and report did not reflect any issues during the process but is currently with NRW for review and comment as appropriate.

### 5.3 Sampling/testing assessment

During meetings with NRW it was determined that the previous two years of work (9) performed in 2009 was not on file which had been performed in conjunction with EA requirements at that time (10).

Further limited work was performed at the same time as the TP work which was not dissimilar to the 2009 reporting levels.

### 5.4 Wastes Removal

In conjunction with the NRW Notice (5) for wastes removal the Holder has arranged this with evidence via WTN etc. and to be supplied under separate cover (12).

## 6. Restoration

With reference to the above the following is noted:

- The survey indicates there is a shortfall of approx.15,000 cubic metres of suitable materials including that of restoration required to complete the profiling of the site.
- It has been estimated that a further 36 months would be required to allow sufficient materials for completion to approved levels.
- The proposed French drain (6) designed to encourage any SW ingress to dissipate is in the order of 300m long by 5m wide and approx. 2m deep and to be made up of suitable construction type wastes e.g. brick, stone etc. to construct.
- The survey plan shows an existing stockpile of approx. 2500 cubic metres.

## 7. Monitoring

It is proposed that the ongoing monitoring is to be performed in line with that previously agreed within the EP and NRW (EA) approval (10) unless the TP report review indicates otherwise.

This will allow simple comparison as to the results obtained at that time and if there were any significant changes from now until site closure.

Currently the monitoring points are (11):

- within the edge of the landfilled area whereupon LFG is measured with no adverse data to date.
- Surface water is removed from a small stream located at the lower western edge of the filled area.
- Groundwater to date had been removed from a small well located within the adjoining property again to the west of the filled area.

## 8. References & Appendices

1. WDL 053/89
2. WML 30077
3. EPR /VP3899FS
4. Planning appeal decision notice APP/G6935/A/08/20904563 (dated 23/04/09)
5. NRW Statutory Notice (dated 23/04/19)
6. Site plan (appendix 1)
7. Survey (appendix 2)
8. Trial Pitting report submitted –Ref. ETL/SSF/CFL/001 (dated 07/19)
9. Sampling/testing report (appendix 3) – dated – 2007 to 2009)
10. WML monitoring requirements (appendix 4)
11. Monitoring Plan – 09 19 (appendix 5)
12. Waste removal records – WTN to be included as supplied by E. Davies – EP holder