Lawrence Landfill Ltd

Halfway House, Pope Hill

Haverfordwest

SA62 3NX

Waste Recovery Plan

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Contents

1. Purpose

The purpose of this document is to provide the Waste Recovery Plan (WRP) required by Natural Resources Wales (NRW) to assist in their identification of the works to be carried out at Lawrence Landfill Ltd as a waste recovery rather than a waste disposal operation.

2. Introduction

Track Environmental have been instructed by Lawrence Landfill Ltd to assist in the development of this Waste Recovery Plan. The plan has been produced in line with the guidance and requirements laid out in the Environment Agency's (EA) Regulatory Guidance Series, No EPR 13; Defining Waste Recovery: Permanent Deposit of Waste on Land (20th March 2010).

The purpose of the guidance is to set out the NRW/EAs approach to determining whether an activity involving the permanent deposit of waste on land is recovery or waste disposal. This approach has been based upon a legal test derived from the Waste Framework Directive and European case law. In order to satisfy the requirements of this test, this document lays out site-specific details, the requirement and design of the scheme and critically, addresses five questions that clearly demonstrate the difference between waste recovery and disposal. They include a requirement to demonstrate the clear benefit of the scheme, the material suitability for the scheme use, the minimum amount of material required, the material as a substitute for non-waste material and completion to an appropriate standard. Once addressed, it is believed that the proposed operation will be defined as a waste recovery rather than disposal event.

2.1. Site Location

This WRP relates to land at Lawrence Landfill Ltd, Halfway House, Pope Hill, Haverfordwest, SA62 3NX (hereafter 'the Site'), shown edged GREEN on the plan in Plate 1, at section 6.1 of this document. Hereafter 'the plan'. The site is located approximately 2 miles South of Haverfordwest, off the A4076, Road. Grid Reference SM 93670 12132.

2.2. Site Description

The Site formally Popehill farmland, is now Lawrence Landfill Ltd quarry and recycling facility along with associated buildings within the green edge shown on plate 1.

2.3. Site History

Established since 1990, Lawrence Landfill Ltd is an Inert Waste Disposal Facility. As part of a variation to the Standard Rules permit to incorporate further waste types and activity operations on site. The site would like to recovery waste soil material in the construction of a noise attenuation bund.

3. The Scheme

3.1. The Requirement for the Scheme

Please refer to LL Planning Decision Doc and LL Planning Supporting Documents enclosed within the WRP Folder.

Lawrence Landfill Ltd (LL) applied to extend its quarry and recycling operations to Pembrokeshire Local Authority (PLA) in August 2009. PLA approved the application and condition 9 within the LL Planning Decision Doc states:

The proposed noise attenuation bund indicated on Drawing Number LL/08/04 (PLEASE REFER TO LL Planning Supporting Documents for the Drawing) shall be constructed to its full height at dimensions prior etc.

Reason: To protect the amenity of local residents.

3.2. Design Principles

The design of the works in brief, the works shall undertake to;

- Constructed the noise attenuation bund to the dimensions approved in LL Planning Decision document and drawn in LL/08/04.
- The main body of the bund will be constructed using inert quality protocol aggregate and virgin stone material from the quarry on site.
- The bund would then be capped using the CLO material no more than 2m in depth which would be grassed as specified within the planning document. Calculation of 20,000 tonnes of capping material is required to cover the bund.

A Risk Assessment and Method Statement have been developed for these works (by Lawrence Landfill Ltd) and include in the scope of the works;

4. Waste Recovery Plan

4.1. The Clear Benefit

In their regulatory guidance, EPR 13, Defining Waste Recovery; NRW require that;

"For an activity to be considered waste recovery there must be a clear benefit. Waste deposited with no resulting benefit is disposal"

The construction of the noise attenuation bund using Compost like material (CLO) would avoid the use of virgin topsoil or peat materials meeting BS3882. The CLO material has been tested using the BS3882 testing method as well as chemical testing. Please refer to LL CLO BS3882, LL CLO 1, and LL CLO Test.

The CLO does marginally fail the BS3882 spec but would be suitable and appropriate to use in this application. The CLO passes all Generic Assessment Criteria for residential, commercial and industrial uses. Please refer to LL CLO Test.

Unfortunately the CLO material can't be put into PAS 100 compost also as the EWC is not accepted in the Quality protocol. By using the CLO as a topsoil and subsoil replacement it would avoids using 20,000 tonnes of virgin soil material.

4.2. Material Suitability for Scheme Use

The EPR give a *"list of wastes examples that may be recovered on land. The list identifies which wastes are likely to be appropriate for a particular use"*

The list is derived from the European Waste Catalogue (EWC) lists of wastes given in Appendix 5.5. The waste types to be used in the restoration will fall under these EWC codes. The code that is of particular relevance to this operation is: 19 13 02 soil and stone. All materials required for use already would be on site. Inert QP aggregates, quarried stone. Using the CLO material would remove the need to import any virgin soil sub or top soil materials onto site.

The CLO material has been tested using the BS3882 testing method along with chemical analysis. Please refer to LL CLO BS3882 & LL CLO TEST.

4.3. The Minimum Amount Required

"You must show that the amount of waste proposed is no more than is needed for the scheme".

Please refer to LL Planning decision document and LL Planning supporting documents. Please refer to drawing LL/08/04 which shows the levels and size of the noise bund required.

Calculation of 20,000 Tonnes of CLO would be used in the construction of the Noise Attenuation Bund.

4.4. The Material as a Substitute for Non-Waste Material

"Showing that the proposal would have a realistic likelihood of being undertaken using non-waste materials would be a strong indicator that the activity is a recovery operation".

The project would use virgin top soil and sub soils to cap the bund in order to grass the area as set within the PLA decision document. The bund is required to be constructed prior to the recycling activities expand into the quarried area.

4.5. Completion to an Appropriate Standard

"It is important that any justification for a recovery operation has been well thought through, and has been designed to give an effective and lasting benefit".

The scheme has been designed to give an effective and lasting benefit by using a recycled CLO material instead of virgin material. The Noise bund is to be constructed to protect the amenity of Local Residents. In the design of the scheme, many stakeholders have been consulted, including;

- Pembrokeshire Local Authority
- Natural Resources Wales
- Track Environmental Ltd

With guidance relied upon from;

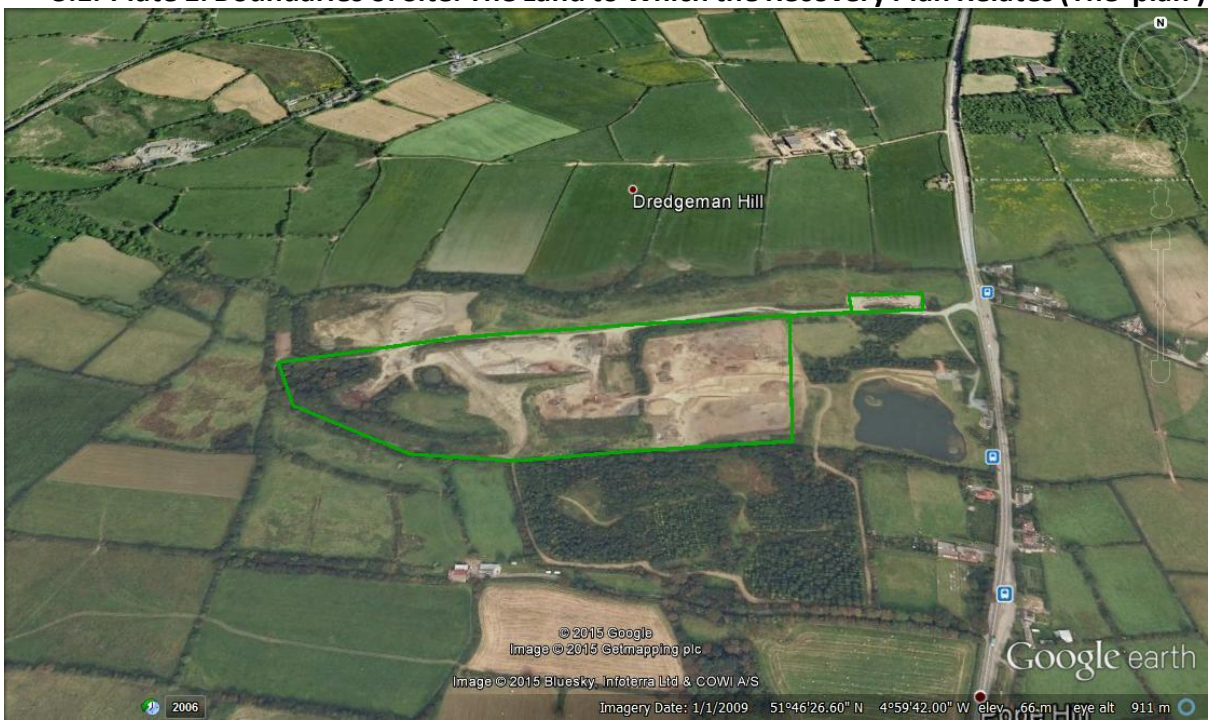
- Tir Cynnal
- Glastir

The material would be suitable to be used and recovered in the construction of the sound bund, totally reducing the need to use virgin materials. The CLO would be used to replace the requirement of sub and top soils. The CLO would be set for permanent grassland for non-agricultural use.

This consultation process and agreement on the final design, has ensured that the works shall be carried out to an appropriate standard as set in condition 9 of the Planning decision document.

5. Appendix

5.1. Plate 1. Boundaries of Site. The Land to Which the Recovery Plan Relates (The 'plan')



5.2. Waste Types that may be Suitable in Typical Waste Recovery to Land Uses

Waste Types and uses			
Waste Code	**Description**	**Typical uses(see key)**	**Additional Notes(see key)**
01 01	**wastes from mineral excavation**		
01 01 02	Wastes from non metalliferous excavation	A,B,E,F	
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**		
01 04 08	waste gravel and crushed rocks other than those containing dangerous substances	A,B,E,F	
01 04 09	waste sand and clays	A,B,E,F	
02 02	**waste from preparation and processing of meat, fish and other foods of animal origin**		
02 02 02	mollusc or crustacean shells from which the flesh has been completely removed	C	1
02 04	**wastes from sugar processing**		
02 04 01	soil from cleaning and washing beet	B,E,F	
10 01	**wastes from power stations and other combustion plants (except 19)**		
10 01 01	bottom ash and slag from power stations(Furnace Bottom Ash)	A	2
10 01 02	PFA from Power Stations	A,B	2
10 01 05	Gypsum (solid only)	E	
10 01 07	Gypsum (sludge only)	E	
10 01 15	Incinerator bottom ash and slag	A	8
10 02	**wastes from the iron and steel industry**		
10 02 01	waste from processing of slag	A	
10 02 02	unprocessed slag	A	
10 09	**wastes from casting of ferrous pieces**		
10 09 03	furnace slag	A	
10 10	**wastes from casting of non-ferrous pieces**		
10 10 03	furnace slag	A	
10 12	**waste from manufacture of ceramic goods, bricks, tiles and construction products**		
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)	A,B,D	
10 13	**wastes from manufacture of cement, lime and plaster and articles and products made from them**		
10 13 14	waste concrete and concrete sludge	A	
17 01	**concrete, bricks, tiles and ceramics**		
17 01 01	concrete	A,B,D	
17 01 02	bricks	A,B,D	
17 01 03	tiles and ceramics	A,B,D	
17 01 07	mixtures of concrete, bricks, tiles and ceramics	A,B,D	
17 03	**bituminous mixtures, coal tar and tarred products**		

17 03 02	road base and road planings other than those containing coal tar	D	4
17 05	**soil (including excavated soil from contaminated sites) stones and dredging spoil**		
17 05 04	soil and stones	A,B,E,F	3
17 05 06	dredging spoil (unless it contains dangerous substances)	B	6
17 05 08	track ballast, soil and stones other than those containing dangerous substances	A,B,D	5
19 01	**wastes from incineration or pyrolysis of waste**		
19 01 12	bottom ash and slag(incinerator bottom ash)	A	8
19 08	**wastes from waste water treatment plants not otherwise specified**		
19 08 02	washed sewage grit (waste from desanding) only	E,F	
19 08 99	stone filter media (if cleaned to remove sewage contamination) only	A, B, D	
19 12	**Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**		
19 12 05	Glass	A	
19 12 09	minerals (for example sand, stones)	A,B	7
19 12 12	soil substitutes other than that containing dangerous substances only	E, F	
19 12 12	treated bottom ash including IBA and slag other than that containing dangerous substances only	A	
19 13	**Wastes from soil and groundwater remediation**		
19 13 02	solid wastes from soil remediation other than those containing dangerous substances	B	3
20 02	**Garden and park wastes(including cemetery waste)**		
20 02 02	soil and stones	A,B,E,F	

Key to Table Codes

A. Structural fill for building, stabilising ramps, drainage, road construction.
B. Construction of noise bunds, screening bunds, flood defence bunds, containment bunds, golf courses. Landscaping associated with construction work. Restoration of mineral workings. General fill material.
C. Surface treatment of roads, tracks etc. Drainage.
D. Road/track construction and repair, hard surfacing, car parks etc.
E. Agricultural Improvement schemes.
F. Ecological improvements, wetland schemes, lakes

Source; Environment Agency's Regulatory Guidance Series, No EPR 13; Defining Waste Recovery: Permanent Deposit of Waste on Land (20th March 2010).