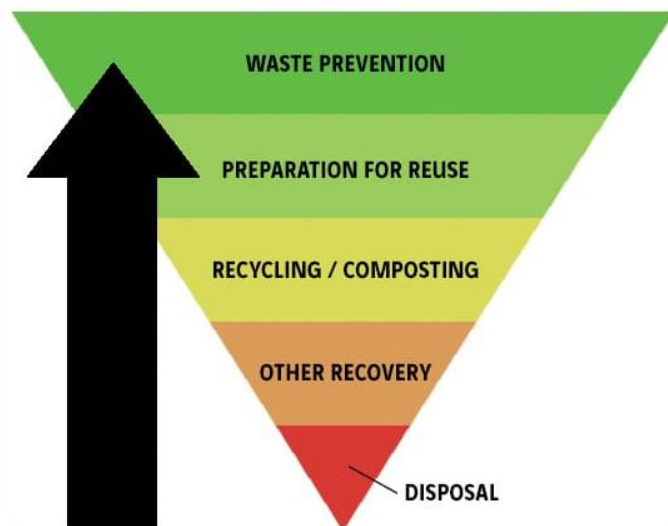


# Waste Management Plan



## Kerdiffstown Landfill Remediation Project

### WASTE HIERARCHY





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**Waste Management Plan**  
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**APPENDIX A – WASTE REGISTER**

## **1.0 INTRODUCTION**

This Waste Management Plan is developed to comply with the requirements of environmental legislation and the orderly management and disposal of waste arising from Kerdiffstown Landfill remediation project.

A Waste is defined as “Any substance or object in the categories set out in APPENDIX A which the holder discards or intends to discard or is required to discard”

This covers a multitude of materials that may be disposed of to landfill, recycled, reused or even materials for recovery. The EU definition of waste is provided under the Council Directive 75/442/EEC as amended and is:

A full list of waste categories is given in the List of Waste Catalogue (LoW), but in short almost anything can be a waste so check with the site Environmental Advisor to make sure you know what category you are dealing with.

Wills Bros is required to handle, store and dispose of all wastes generated in the course of our activities in a manner consistent with the appropriate regulations. In particular, the following rules must be adhered to:

1. Know if a waste is a hazardous waste or not, i.e. a non-hazardous waste.
2. Store wastes in a suitable container, at secure locations in a way that prevents the release of wastes.
3. Label wastes and waste containers in a way that it is clear what is in them.
4. Ensure that wastes are handled only by persons authorised to do so by a license or permit issued by the appropriate authority. This means checking to make sure any waste carrier is exempt or in position of the proper authorisation.
5. Provide documents with any waste transfer that accurately describes the waste and contains the correct List of Waste (LoW) code.
6. Keep records of the amount of waste materials generated handled moved, stored, and disposed of, in a project waste register.

All construction waste arising from the development of the site as approved shall be managed in accordance with all relevant statutory provisions and an agreed site-specific Construction Waste Management Plan. All such waste shall be kept to a minimum, segregated where appropriate, and disposed/recovered at a waste facility authorised under the Waste Management (Facility Permit and Registration) Regulations 2007, as amended, to accept the categories of waste.

All construction and demolition waste shall be managed in accordance with this waste management plan which shall be prepared in accordance with the ‘Best Practice Guidelines on the Preparation of Waste Management of the Environment, Heritage and Local Government and the provision of the Waste Management Plan for the Eastern Region. The plan shall include details to the satisfaction of the Council’s Waste Management Section and the Council’s Waste Enforcement and Licensing Section for all waste to be generated during site clearance and construction phases, and details of the methods and locations to be employed for the prevention, minimisation, recovery and disposal of this material in accordance with the provision of the Waste Management Plan for the Eastern-Midland Region.

## **2.0 PROJECT DESCRIPTION**

The proposed Project is to remediate the Kerdiffstown Landfill site and develop the site as a multi-use public park. This is to be achieved by clearing and reprofiling the existing site, installing an engineered capping system, improving the management of landfill gas, leachate and surface water and provision of landscaped and recreational areas. Refer to Volume A Works Requirements Book A2 Drawings for the current site layout and final remediated site layout.

The facility at Kerdiffstown was operated under Waste License W0047-01 (and subsequent revised license W0047-02) issued by the EPA in 2003. The former landfill and waste processing facility at Kerdiffstown has since closed and has temporary emergency measures installed to minimise environmental risks. Since 2012 the EPA, and following transfer of the project in 2015, Kildare County Council, have been using powers under Section 56 (A) of the Waste Management Act 1996 (as amended) to manage the site and put in place appropriate measures in order to prevent and limit environmental pollution from waste materials which are present on site. An Industrial Emissions License (P1063-01) was issued by the EPA on the 7th March 2019 to allow for the proposed remediation plan.

The works included in this contract in order to achieve the remediation objectives may include, but are not limited to, the following.

- Reprofiling of waste mounds to ensure the capping system works effectively and to facilitate the use of the site as a public park.
- Preparation and placing of a regulation layer in areas to be capped.
- Installation of a permanent capping system across all existing waste areas to prevent rainfall infiltration, to manage surface water runoff, to reduce the production of leachate and to capture landfill gas.
- Installation of new systems to manage and control leachate and landfill gas and which will include the construction of a dedicated Landfill Infrastructure Compound and landfill gas flares (where extracted landfill gas is burned off).
- Construction of a leachate pipeline from the site, which will cross under the Morell River and N7 into Johnstown Pumping Station.
- Construction of a foul/ wastewater pipeline connecting the site with Johnstown Pumping Station. This pipeline will run parallel to the leachate pipeline and will carry foul/ wastewater from the site office and changing room building.
- Installation of surface water drainage to manage water on, and draining from, the site including surface water ponds and a surface water outfall point to the Morell River.
- Decommissioning of existing services, in particular an underground storage tank approximately 20m<sup>3</sup> in capacity. There are also a large number of concrete structures (walls of former buildings) to be demolished.
- Processing of demolished concrete and other waste materials on site to produce engineering grade materials for re-use on site.
- Development of a public park with multi-use sports pitches, car parking, a changing room building, children's playground and a network of paths across the site; and
- Landscaping works across the site including grass seeding, planting of trees and shrubs, and ongoing maintenance of landscaping, including watering, fertilising, grass cutting, weeding etc., for the full maintenance period of the works.

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- There will be a range of potential impacts during the construction works including odours, noise, dust, contamination of surface waters, etc.
- The Kerdiffstown Landfill site is currently closed, in a disused state and poses a long-term risk to the environment due to pollution by landfill gas, odour and leachate. Therefore, there is a need to remediate the site.
- Kildare County Council hold an Industrial Emissions License (Reference P1063-01) issued by the EPA on the 7th March 2019 for the remediation of the Kerdiffstown Landfill site. Kildare County Council, as the license holder, will maintain a full-time presence on the site for the duration of the Works and will require access throughout the site to carry out all monitoring required to comply with the license. Current activities include landfill gas extraction and flaring, as well as leachate collection and removal to a licensed treatment facility by tanker.

### 2.1 Aims of Waste Management Plan

1. To comply with the environmental and waste regulatory and other requirements for this project.
2. To improve material efficiency and project profitability by promoting reuse, recycling, and recovery of waste rather than disposal.
3. Maintaining a full audit trail of waste removed from site and complying with waste duty of care regulations.
4. To increase environmental awareness of our workforce and management. Include site waste management information communicated to all workers in site Environmental Health and Safety Induction Training or as part of continuing site environmental awareness training.

Wills bros have a duty of care to ensure:

1. We classify any waste as either hazardous or non-hazardous, so we can deal with it correctly.
2. Store any waste safely and securely on site and prevent loss of material to air (dust) or water (surface run-off) and avoid nuisance or pollution from the storage of waste material.
3. Follow the rules of best practice and regulations including local ordinances for moving waste off the site.
4. Check that any carrier of waste materials is licensed and keep proof of this – e.g. take a copy of any license and hold it on site.
5. Consider any alternatives that may eliminate or reduce the quantity of wastes generated from the project.
6. Consider all other options before we dispose of waste; in particular, consider these 5 steps known as the ‘Waste Hierarchy’ which include for Reduce, Reuse, Recycle, Recover and Disposal.



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**2.2 Conditions in Industrial Emissions License**

This following is an excerpt from the IEL P1063-01 and is incorporated into this Waste Management Plan by WBL. These clauses form part of Condition 6: Control and Monitoring.

- Off-site Disposal and Recovery
  - 6.20.1 Waste sent off-site for recovery or disposal shall be conveyed only by a waste contractor agreed by the Agency.
  - 6.20.2 All waste transferred from the installation shall be transferred only to an appropriate facility agreed by the Agency.
  - 6.20.3 All wastes removed off-site for recovery or disposal shall be transported from the installation to the consignee in a manner, which will not adversely affect the environment



### **3.0 MANAGING WASTE ON SITE**

As per the Works Requirements, Appendix 2/70AR Management of material in accordance with the Industrial Emissions License. WBL will follow the protocols set out in the appendix which deals with the movement of waste off site for disposal/recovery.

1. The only waste WBL shall be permitted to remove from site shall be:
  - Waste tyres
  - Steel rebar
  - Redundant panels of Herras or palisade fence
2. Stockpiles of excavated and recovered waste shall be stored in designated areas, clearly labelled, appropriately segregated and appropriately protected against erosion, dust generation and burrowing animals.
3. Waste generated or excavated and destined for off-site recovery or disposal shall be stored in designated areas, protected as may be appropriate against spillage, leachate runoff and dust generation. The waste stockpiles shall be appropriately segregated and have clear signage.
4. Acceptance by the ER is required prior to waste or any other material leaving the site. WBL will ensure that an appropriate authorised waste management facility will be in compliance with all relevant EU and national legislation. WBL will give advance notice to the ER of the waste management facilities intended to be used.
5. Any waste leaving site must have a Waste Transfer Document, which registers its movement by recording the Carriers Permit No., and identifying details, its site of origin and the Waste Facility Permit No. of the site to which it is dispatched.
6. Disposal or recovery of waste on-site shall only take place in accordance with the conditions of this license and in accordance with the appropriate national and European legislation and protocols.
7. Waste to be exported out of the State shall only be in accordance with the relevant provisions of the regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14<sup>th</sup> June 2006 on shipments of waste and associated national regulations. No waste classified as green waste in accordance with the EU Shipment of Waste Regulations shall be consigned for recovery without the agreement of the ER.
8. WBL are cognisant of the KCC obligations in notifying the EPA under the Industrial Emissions License in advance of waste being sent off-site and the EPA approval of the proposed facility. WBL will not engage directly with the EPA. All communication and engagement shall be through the ER.
9. WBL shall note that the Employer, as licensee, has a responsibility to ensure that, in advance of transfer to another person, waste shall be classified, packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
10. Hazardous waste generated or excavated at the Site and destined for off-site recovery or disposal shall not be mixed with non-hazardous waste unless accepted in writing, in advance, by the Employer's Representative.

Wills Bros will handle, store, and dispose of any wastes generated during our activities in a manner consistent with the appropriate regulations and best environmental practice. In particular, the following rules apply pertaining to Appendix 2/70AR:

1. Any waste on site must be identified with its appropriate List of Waste (or LOW) code number.

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2. Site waste shall be quantified (in m<sup>3</sup> /kg/tn.) and the amount recorded on the Site Waste Register. Excavation works during the construction stage should be monitored by appropriately qualified personnel and in the unlikely event that contaminated materials are encountered these will need to be segregated from inert soils, temporarily stored (any stockpiles should be lined and covered by heavy duty 1000 gauge plastic) sampled and analysed for relevant parameters (Waste Acceptance Criteria suite e.g. Rilta Disposal Suite) Ref 3.1.3.
3. Any waste leaving site must have a Waste Transfer Document, which registers its movement by recording the Carriers Permit No., and identifying details, its site of origin and the Waste Facility Permit No. of the site to which it is dispatched.
4. Determine, if a waste material is a hazardous waste or not, i.e. a non-hazardous waste or inert waste.
5. Store wastes in a suitable container/skips, at secure locations in a way that prevents the release of materials to the air, surface, or ground waters or to interference from unauthorised persons or wildlife.
6. Label wastes and waste containers in a way that it is clear what is contained therein and use the correct LOW code and any hazard identification label that applies.
7. Ensure that only persons authorised to handle wastes, do so.
8. Make sure the LoW (List of Waste) or (European Waste Catalogue) No. is marked on each waste material.
9. Waste can only leave site with a person holding a valid Waste Collection Permit. This means checking to make sure any waste carrier person and vehicle, hold the proper authorisations.
10. Provide documents with any waste transfer that accurately describes the waste (including the weight of the waste, date, and time), the correct LOW code, the Carriers Permit No., and the Facility Permit No.
11. Keep records of the amount of waste materials generated handled moved, stored, and disposed of, in a project waste register
12. Monthly Report will be provided to confirm waste volumes.

### **3.1 Wastes likely to be produced (Ref. Outline CEMP/EIAR Info.)**

The types of waste currently generated on-site due to ongoing management, maintenance, and security activities at the landfill prior to remediation include:

1. General waste and mixed recyclables from the site office and security huts.
2. Tyres (Zone 3), rebar (Demolition works), redundant herras fencing.
3. Minimal amounts of hazardous waste such as fluorescent lightbulbs, lab reagents, batteries and fuel containers from the site office and security huts.
4. Wastewater from on-site sinks and toilets.
5. Leachate, collected from the lined cell (Zone 3), tankered off-site for disposal, and occasional interceptor waste from the on-site surface water drainage network.

The lined cell located in Zone 3 of the site includes leachate collection facilities. Leachate collects within the lined cell and is tankered off-site to a licensed facility, currently Ringsend WWTP (license D0034-01) for disposal.

Since 2011 there has been an average of 12,142 cubic metres of leachate disposed of in this manner per year, or 1,012 cubic metres per month. The amount of leachate needing to be removed during any time period has been dependent on the amount of rainfall during that period. The waste types

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currently generated by the site are summarised in Table 3-1 below extracted from 2019 Annual Environmental Report.

Table 3-1 Waste generated on site during 2019 (Source: AER, 2019)

Waste Type	EWC Code	Waste Description	Quantity (tonnes)
General Waste	20 03 01	Office and Canteen waste collected in 1100 litre bins at site offices	0.52
Mixed Dry Recyclables	20 03 01	Recycling from office and canteen waste collected in 1100 litre bin at site office	0.29
Construction Materials Containing Asbestos	17 06 05*	Waste Asbestos sheeting from demolition of shed on site.	1.01

The AER 2019 report also states that the total volume of leachate removed off site during 2019 was 10,724m<sup>3</sup>.

Similar waste as described above will be attributed to site compound set up in addition to other waste streams identified in the adjoining paragraphs.

#### 3.1.1 Excavated Material

It is estimated that all of the material excavated during re-profiling works will be reused on-site as part of the remediation of the site. Inspections will be undertaken of the material to ensure suitability for reuse and any opportunity for processing to achieve other uses on site.

As per the Works Requirements, appendix 1/73AR Hotspot Protocol. A hotspot is defined as material uncovered during the works by WBL which lies outside the bounds of the material previously covered on site. This will be considered as any contaminant uncovered which has not been previously assessed. WBL will follow the protocols in the appendix which deals with the excavated hazardous waste. A summary of the clauses is described below:

1. In the event WBL undercover material considered to be a hotspot, WBL will cease work at the location and will inform the ER immediately.
2. WBL and ER will jointly mark out the area of ground considered to be a suspected hotspot. Localised trail holes will be carried out by WBL under the supervision of the ER to determine the extent of the suspected hotspot. WBL shall erect fencing (Herras or equivalent), appropriate signage and any other environmental containment measure requested by the ER.
3. WBL will continue the works in the other areas of the site adjacent to that area of ground fenced off and containing the suspected hotspot.
4. WBL will take a minimum of 3 samples of the material within the hotspot for laboratory and testing and analysis. The testing shall be a detailed assessment of the contaminants most likely to be found in the waste. Waste Acceptance Criteria (WAC) testing shall be performed on the samples. WBL will classify the material in accordance with EPA Guidance: *List of waste and determining if waste is hazardous or non-hazardous*. WBL will provide the results of the testing

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to the ER. The ER shall determine if the material uncovered lies outside the bounds of the materials previously uncovered on site

5. If the material uncovered in the suspected hotspot is deemed by the ER to lie outside the bounds of the material previously uncovered on site, then the ER in conjunction with WBL, shall develop a methodology for treating/removing/burying/altering the works requirements in relation to the hotspot. WBL will implement the agreed methodology for dealing with the hotspot. If the material uncovered is deemed to be hazardous following testing it will be removed off site to a facility licensed to accept hazardous waste.
6. If the material uncovered in the suspected hotspot is deemed by the ER to lie inside of the bounds of the material previously uncovered on site. WBL will resume the works in accordance with the CEMP in the area.

Should any waste material be suspected to be non-compliant, Wills Bros will be required to quarantine that waste by constructing a perimeter bund and placement of a tarpaulin or other suitable cover over the waste until such time as testing is undertaken and waste classification confirmed. In the event that any of the excavated material is deemed to be hazardous, it will be removed for disposal by a licensed waste contractor to a suitably licensed facility.

#### **3.1.2 Hazardous Waste**

See previous section 3.1.1 on the protocols WBL will follow if encountering suspected hazardous waste during excavation works.

As well as hazardous wastes generated by the excavation works, there is a slight possibility of encountering some unknown hazardous waste during the remediation works. If such waste types are uncovered, further investigation, testing and risk assessment will be undertaken to determine the appropriate actions to be taken with regards to compliant removal and disposal of such waste as already discussed in section 3.1.1.

Materials identified as hazardous will be required to be suitably disposed of in a licensed hazardous waste disposal facility. Where practicable, the closest suitable facilities to the proposed Project will be selected to reduce impacts associated with vehicle movements such as air emissions and noise.

There are no facilities within County Kildare which accept hazardous wastes. There are a number of facilities located in Dublin, the closest of which is Rilta which is approximately 17km from the proposed Project. There is also an Enva facility in Dublin which is approximately 25km from the proposed Project. Enva also have a facility in Portlaoise for the treatment of contaminated soils, which is approximately 60km from the site of the proposed Project.

Any such material will be managed in accordance with waste management legislation and the following requirements:

1. Excavation will be targeted, and stockpiling will be managed in order to prevent potential contaminants from being released into the surrounding environment.
2. All hazardous waste will be segregated from non-hazardous waste, with different types of hazardous waste being segregated from each other if safe to do so. Each hazardous waste storage location will be clearly signposted stating the type of waste and that it is hazardous; and
3. A Waste Transfer Form (WTF) will be used to record the transportation of hazardous waste within the State and will be required of any movements of hazardous waste arising during construction of the proposed Project. Should the need arise for the Transfrontier Shipment

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(TFS) of waste, the movement between countries is subject to control procedures under the EU and national legislation and guidance, such as the Waste Management (Transfrontier Shipment of Waste) Regulations, 2007.

4. WBL will ensure the compliant disposal of all wastes during the Remediation Phase of the proposed Project, and as such will be required to retain records of all hazardous wastes. Kildare County Council will monitor that all waste arising as part of the Remediation Phase is handled and disposed of compliantly as per these requirements. Copies of all testing will be retained by the KCC Site Manager.

Hazardous materials (fuels, oils, and chemicals) will be used at the site during the construction stage. As per industry standards any fuel and oils temporarily stored onsite will be stored in double skinned / appropriately banded storage tanks, in a secure dedicated fuels storage location onsite. All other chemicals including paints, varnishes, glues, adhesives, degreasing agents and cleaning agents will be securely stored in a dedicated temporary banded chemical store onsite. All machinery including any generators / pumps used onsite should be checked at the start of each work shift for evidence of any fuel or oil leaks.

Fuel, oil, and chemical spill kits will be available at the designated storage areas, along with the relevant Safety Data Sheet (SDS). SDS documents contain information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with the relevant chemical. All site operatives will receive training in appropriate refuelling methods and machinery checks, and chemical handling methods to be implemented onsite. Taking account of these control measures, along with the fact that the volumes of paints, varnishes, glues, adhesives etc. will be minor or non-existent.

#### **3.1.3 Demolition Waste**

With respect to the demolition of the on-site concrete structures, the rebar will be removed from the site for reuse or recycling. The concrete which arises from the demolition of the concrete structures will be crushed and reused on-site. As the existing concrete walls will be demolished by an excavator attached with either hydraulic muncher or hydraulic breaker, this will adequately separate the concrete from the rebar. The rebar will be separated from the concrete from breaking down the concrete around rebar using the hydraulic muncher and/or breaker. The rebar will be loaded with muncher into the RORO bins which will be located alongside the demolition works where ongoing. The rebar is to be brought to a licensed facility in Naas.

#### **3.1.4 Waste Tyres**

Whole tyres have been used on site to provide an engineering function, being the weighting and anchorage to the temporary (geosynthetic) capping system in the lined cell (Zone 3). As part of the remediation works Wills Bros will explore the possibility in consultation with Kildare County Council and the EPA of reusing the tyres as an engineering function of slope stabilisation, therefore limiting the extent of slope excavation works by infilling and compacting with clean engineered fill.

If an engineering solution is not agreed for the landfill remediation, then the tyres will have to be removed as part of the remediation works as they cannot be disposed to landfill under the Landfill Directive (1999/31/EC).

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#### **3.1.5 Imported Materials**

Materials which will require to be imported to the site to facilitate the remediation works will be appropriately sourced and managed to ensure that the material is of suitable engineering grade for the proposed Project. In so far as is possible, materials will be ordered within a reasonable timeframe of when they will be required on-site. This should prevent waste being generated through over-ordering, or through materials degrading due to long periods of storage on-site prior to use.

As per Schedule A.1 of the IEL P1063-01, the following waste related processes are authorised:

- Re-grading and re-profiling of deposited waste
- Making safe over-steep slopes
- Excavation and re-deposit of waste
- Movement of waste stockpiles
- Treatment of waste, e.g. crushing, screening and preparation for reuse in remediation works
- Extraction, collection and flaring of landfill gas
- Extraction, collection, and dispatch for disposal of leachate
- Processes for the management and mitigation of environmental emissions
- Construction of impermeable cap and installation of drainage network
- Use of imported waste in construction of engineered cap and soil cover systems
- Maintenance and aftercare activities

No additions to these processes are permitted unless agreed in advance with the Agency.

Table 3-2 below shows the table of Waste Acceptance on site as per IEL P1063-01. The table highlights the LoW Code, Waste Type and Maximum quantity (Tonnes).

## **A.2 Waste Acceptance**

**Table A.2 Waste Categories and Quantities**

<b>LoW Code</b>	<b>Waste Type <sup>Note 1</sup></b>	<b>Maximum (Tonnes)</b>
01 04 08	Gravel and crushed rocks for use in drainage layers or aggregate backfill, tracks and as general engineering fill	190,000
01 04 09	Sands and clays for use in regulating layer below capping system.	
17 05 04	Soils and stones for use in the tracks, restoration layer and bunds construction.	
17 05 06	Dried material for use in regulating layer below capping system.	
19 13 02	Soils from soil remediation processes for use in restoration layer and bunds construction.	
20 02 02	Soils and stones for use in restoration layer and bunds construction.	
<b>Total</b>		<b>190,000 <sup>Note2</sup></b>

**Note 1:** Other inert wastes may be accepted for remediation purposes if agreed by the Agency.

**Note 2:** Based on approximate breakdown of 127,500m<sup>3</sup> for waste codes at approximate 1.5 tonnes per cubic metre conversion. This maximum may be exceeded, subject to the Agency's agreement if the licensee demonstrates through measurements that the density is greater than 1.5.

### **3.1.6 Leachate and Effluent**

During the Remediation Phase of the proposed Project, the management of leachate and effluent will need to be maintained at the baseline levels at a minimum. The Leachate Management Plan to be implemented by WBL will ensure continued collection and compliant disposal of leachate being generated from the site.

Works on the leachate pipeline and Landfill Infrastructure Compound shall commence in January 2021. As these elements will be constructed during the early phases of the remediation works, this will allow for the leachate collected in Zone 3 to be discharged from the site through the new system to the Johnstown Pumping Station. Wills Bros will ensure the compliant management and disposal of leachate during the Remediation Phase of the proposed Project in conjunction with KCC.

Discharge of run-off during remediation works will not be permitted as per the Surface Water Management Plan with ponds lined with geomembrane liner to offer additional protection to groundwater during this period. During Phase 1 of the works commencing in January 2021, an attenuation pond will capture surface water runoff in Zone 1A. A temporary percolation pond shall be constructed in Tunney Field. This will allow for excess surface water runoff during works in Zone 1. An infiltration tunnel will be installed in conjunction with the liner install in Zone 1. This in turn will contain the excess surface water runoff. Should a situation arise where run-off levels are becoming higher than can be adequately collected and maintained within the site, the collected water will be tankered off-site by a suitably licensed contractor for disposal at a suitably licensed facility. WBL will observe

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surface water levels daily and continue to review additional measures if required throughout the works.

#### **3.1.7 Wood/Timber**

Timber waste will be segregated in order to prevent contamination by other wastes and will be stored so as to limit the potential for this material to rot. Wooden pallets will be returned to relevant suppliers where possible. Timber offcuts will be reused onsite where feasible. A receptacle for waste wood will be placed in the waste storage area, prior to removal from site for recycling. All such timber will be free from chemical treatment.

#### **3.1.8 Paper, Plastics and Packaging**

Packaging wastes will be segregated (paper / cardboard / plastic / general waste) immediately after unwrapping to prevent any double handling and to limit the potential for onsite littering. Waste packaging will be stored in dedicated containers in the waste storage area for collection and subsequent recycling.

#### **3.1.9 Metals**

Metal waste will be generated during the project, particularly arising from the use of rebar. All waste metal will be segregated onsite for reuse and recycling. Given the significant scrap value associated with metal waste, this waste will be stored in a dedicated container within a secure part of the site, and regular collections from site to the waste recycling facility will limit the potential for unauthorised entry and theft.

#### **3.1.10 Other Wastes**

In addition to the above waste streams, other waste materials will be generated during the construction phase. These residual wastes will typically comprise non-recycling waste such as soiled paper / cardboard / plastics / cloth, canteen food waste, fibreglass, polystyrene insulations, and plasterboard. These materials will be stored separately to all other waste streams in order to prevent any cross contamination. As stated in the Works Requirements Appendix 6/8 in relation to disposal of arisings, from grass cuttings, hedge cuttings, tree and shrub pruning and other operations which shall be collected and disposed of. WBL will ensure the necessary measures to be implemented. This could take the form of excavating and burial on site, if accepted. However, if this option is not feasible, the waste material will be taken away to a licensed facility agreed by the ER. Further review to these options will be carried out as the works progress and will be updated to this plan.

#### **3.1.11 Canteen/Office Waste**

Onsite staff canteens will generate food and packaging waste. Dedicated containers will be provided at each canteen to permit easy segregation of these wastes; brown bins will be provided for compostable food waste, green bins will be provided for dry recyclables (packaging, hard plastic, paper, cardboard, tetrapak etc.) and black bins will be provided for any residual waste.

#### **3.1.12 Mixed C&D Waste**

Any other mixed C&D waste will be collected in containers specifically for mixed C&D waste; these will be removed offsite for subsequent offsite separation and disposal at a waste disposal / recovery facility.



## **4.0 WASTE ACCEPTANCE PROCEDURE (Ref. ER WAP Info.)**

### **4.1 Introduction**

This Waste Acceptance Procedure was prepared by the ER for the Kerdiffstown Landfill Remediation Project. The procedure ensures that all waste accepted during the remediation is controlled and handled appropriately and in compliance with the Industrial Emissions License (P1063-01). This Waste Management Plan will incorporate the procedures outlined in the report developed by the ER.

### **4.2 Source Pre-Approval and Characteristics (Rejection Point 1)**

#### **4.2.1 Importation of material for Remediation Purposes**

All waste and/or by-product and/or end of waste (hereafter material) accepted for recovery will undergo a pre-approval procedure to confirm that the material meets the requirements of this procedure and Industrial Emissions License P1063-01). This includes details on, inter alia: the source of the material, the volume, waste classification (if required), results of waste acceptance criteria (WAC) testing in accordance with EC Council Decision 2003/33/EC, by-product determination from the EPA (where applicable), test results for material that has achieved end-of-waste status (where applicable), and other relevant characteristics of the material that may be deemed necessary. This will include comprehensive waste acceptance, inspection and sampling procedures, as required, as described within this Waste Acceptance Procedure developed by the ER.

It is anticipated that the material will be predominantly soil and stones. The preference is for a single, large source of material to be identified in order to ensure consistency in the material and to reduce the possibility of unacceptable material contaminating acceptable material.

All large sources of the material will be identified in advance and subject to basic characterisation testing at the generating site to confirm that soils at that location can be classified appropriately and that they are appropriate for acceptance to Kerdiffstown Landfill.

WBL will be responsible for the testing of proposed material brought to the landfill. However, Kildare County Council are responsible for inspection and confirmation of the documentation submitted by WBL as part of a pre-approval process. Pre-Approval to deliver material to Kerdiffstown will only be issued by Kildare County Council (KCC) to hauliers holding a valid waste collection permit and a proven track record in the construction, waste management and/or haulage sectors.

All material accepted for restoration purposes of Kerdiffstown Landfill are required to be in accordance with the permitted list of wastes as per table 3-2 above, or by-product- or materials that have achieved end-of-waste status. It is preferred that material will be soil and stones from greenfield sites. Where other sources of material are proposed, it must be free from construction and demolition waste, non-hazardous/ hazardous waste, domestic, commercial or industrial wastes and meet the WAC criteria for inert landfills.

#### **4.2.2 By-products**

WBL will ensure By-products must be accompanied by the EPA determination made in accordance with Article 27 of the European Communities (Waste Directive) Regulations 2011, S.I. No. 126 of 2011.

#### **4.2.3 Documentation on pre-approved sites**

WBL will first submit a list of proposed donor sites for the importation of material to the site. These will be considered and approved by KCC. The list of sites must be made available to the Facility

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Manager at Kerdiffstown Landfill in good time to ensure that approvals can be made prior to any material being brought to site.

No waste and/or by-product will be permitted to enter the site without having been pre-approved.

Kildare County Council shall retain the list of all pre-approved sites. All relevant details, information and documentation relating to the pre-approved sites shall be retained on-site for inspection. It is recommended that this is maintained electronically.

#### 4.2.4 Pre-approved waste Inspections

Materials deemed acceptable by pre-approval will be subject to routine compliance checks to further demonstrate/ confirm that they comply with the basic characterisation and WAC submitted as part of the preapproval process. This compliance analysis will focus on key contaminant indicators. The details of this process are described in table 4-1 below and extracted from the Waste Acceptance Procedure prepared by the ER. The methodology proposed is aligned with the EPA draft guidance 'Waste acceptance criteria and development of soil trigger values for EPA-licensed soil recovery facilities 2017'.

Table 4-1 Waste Acceptance Methodology for Material

Material Type	Minimum Criteria
Greenfield soil and stone	<p>Letter of suitability for the first 5,000 tonnes of soil and stone material received, and a further letter of suitability for each subsequent 5,000 tonnes of soil and stone material received.</p> <p>Each letter of suitability shall be signed by a suitably qualified person<sup>1</sup> and shall include the following:</p> <ul style="list-style-type: none"><li>• Confirm the waste is inert soil and stone from a greenfield site.</li><li>• A description of the source and nature of the soil and stone.</li><li>• The location of the source of the soil and stone (including a map showing the source site boundary).</li><li>• The material is suitable for use as backfill within the Kerdiffstown Landfill</li><li>• The material will not cause environmental pollution at Kerdiffstown Landfill.</li></ul> <p>There is no requirement for testing greenfield soil and stone, unless directed by the EPA. However, it is advisable that the suitably qualified person relies on soil test results to confirm the greenfield status of the source site before signing the letter of suitability.</p> <p>When the material arrives at Kerdiffstown Landfill, a visual check will be conducted at the weighbridge and upon tipping to verify that the material delivered is greenfield soil and stone.</p> <p>Greenfield soil and stone may qualify for designation as a by-product.</p>
Non-greenfield soil and stone	<p>Prior to accepting material from a non-greenfield source site, the Contractor shall provide to the Facility Manager all necessary information on the past use of the site including details on any residual contamination. The Facility Manager will reject non-greenfield sites where soil and/or groundwater contamination have been identified and/or where there is an increased risk of contamination being present.</p> <p>Soil and stone will not be accepted from sites where activities in the past have involved the manufacture or storage of hazardous substances, e.g. chemical manufacturing facilities, oil storage facilities, retail filling stations.</p>

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Material Type	Minimum Criteria
Greenfield and non-greenfield soil and stone	<p>Up to 2% contamination with non-natural materials is acceptable within the soil and stone, i.e. anthropogenic or man-made substances such as rubble, concrete, bricks, metal and bitumen that are non-natural to the environment from which the material was extracted. There is no allowance for chemical contamination.</p> <p>Basic characterisation, compliance testing and on-site visual verification shall be undertaken, including waste classification. Contaminant concentrations within the soil and stone must comply with inert WAC limits.</p> <p>The material is to be used in construction works and as such the parameters required for earthworks materials as stated in the Works Requirements (e.g. Series 600 -Earthworks of the TII Specification for Road Works) must also be met.</p>

Note: 1 The suitably qualified person shall be a degree qualified engineer or scientist, with chartered status or equivalent, with a minimum of 5 years' experience.

The waste acceptance and characterisation process for non-greenfield soil and stone is shown in table 4-2 below.

*Table 4-2 Waste Characterisation for Non-Greenfield Soil and Stone*

Amount of Material	Testing Requirement	Frequency of Testing/Location of Sampling
Greater than 2,000 tonnes from a single source	Basic characterisation <sup>Note 1</sup>	To be carried out off-site prior to agreeing acceptance of the waste at Kerdiffstown.
	Compliance testing <sup>Note 1</sup>	One representative sample will be analysed for every 2,000 tonnes of material received at Kerdiffstown. <sup>Note 3</sup>
	On-site verification <sup>Note 2</sup>	Every load received at the Kerdiffstown.
Less than 2,000 tonnes from a single source	Basic characterisation <sup>Note 1</sup>	Sampling will be undertaken at Kerdiffstown prior to the use of material as backfill. At least one representative sample will be collected from every 2,000 tonnes of material from the collective of single sources, each of which is less than 2,000 tonnes. <sup>Note 3</sup>
	Compliance testing <sup>Note 1</sup>	Every load received at Kerdiffstown

Note 1: **Basic characterisation** constitutes a thorough determination, according to standardised analysis and behaviour testing methods, of the short and long-term leaching behaviour and/or characteristic properties of the waste. Parameters and trigger levels for inert WAC must be met.

Note 2: **On-site verification** are rapid check methods (e.g. visual inspection) to confirm that a waste is the same as that which has been subjected to compliance testing and that which is described in any accompanying documents.

Note 3. A portion of each sample will be retained on site for three years and will be available for inspection/analysis by the Agency.

Contaminant concentrations within the soil and stone will comply with inert WAC limits as set out in EC Council Decision 2003/33/EC.

In the case where there is conflict between table 3-2 and the license requirements, the license requirements will prevail.

There will be a record kept of all inspections and testing and will be made available, when requested.

#### 4.3 Site Entrance (Rejection Point 2)

Each consignment of material arriving at Kerdiffstown Landfill may be inspected under Standard Operating Procedures upon entry to the landfill by trained personnel to ensure it complies with what was agreed with Kildare County Council in the pre-approval stage.

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WBL are to install a weighbridge on site. Kildare County Council shall be authorised to carry out checks on vehicles hauling waste material and/or by-product into the site at the location of the weighbridge.

Upon entry into Kerdiffstown Landfill:

- All loads will be weighed;
- Any description of the waste will be checked to confirm it complies with the license, in particular the acceptable list of waste codes; and
- A record will be made of the waste type, quantity, source, haulier, vehicle license plate and details of the waste collection permit.

Arriving vehicles will access the site at the existing site entrance to Kerdiffstown Landfill and will proceed to the weighbridge. Here the haulier will provide the required waste documentation for verification and recording.

Waste will be accepted at Kerdiffstown Landfill provided that the waste being imported is the same as that described in the accompanying documentation and the accompanying documentation includes a valid identification number.

Loads from hauliers failing to produce the required documentation or where evidence of contaminated or unsuitable material is identified within the consignment, will be rejected and directed off-site.

Records of rejected consignments will be kept for review and appropriate action by the licensee. The Kerdiffstown Landfill manager will be informed immediately of all rejected loads.

Soil and stones imported to the site that are uncovered may be visually inspected at the weighbridge.

Upon acceptance of the documentation and verification of any visual check, the material will be directed towards the tipping area in the active backfilling area using the sites internal haul roads.

#### **4.4 Tipping, On-Site Verification (Rejection Point 3)**

At the tipping area, the driver will be directed where to tip by the relevant machine operator. At this point, it will be visually inspected to ensure that there is no contaminated or unsuitable material intermixed within the load. Suspect contaminated or unsuitable materials will be identified through visual inspection (identification of unusual colour, intermixed wastes etc.) or smell (unusual or distinct odours).

WBL will ensure that contaminated or unsuitable loads identified during this stage will be reloaded and the load directed offsite immediately. If this is not possible, the contaminated or unsuitable materials will be moved to the quarantine area for appropriate storage or immediate removal offsite. The Kerdiffstown Landfill manager will be informed immediately.

Any excessive (>2% as will be determined by a trained operator) quantities of non-inert soil and stone wastes (principally metal, timber, PVC pipes and plastic, concrete and brick) inadvertently imported and accepted at the site will be segregated (mechanically or by hand, as appropriate), stockpiled and transferred to storage skips at the waste quarantine area pending removal offsite to appropriate waste management facilities at the sole expense of WBL.

WBL and/or agents (including hauliers) who, in the opinion of Kildare County Council, import unsuitable material to Kerdiffstown Landfill will be instructed to remove the unsuitable material from the landfill immediately. Furthermore, the importation of material from the source site will be

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discontinued and the site will be removed from the pre-approval list. WBL will reapply for pre-approval. WBL will undertake detailed characterisation and testing, if required, of all waste from the source site to ensure that future loads imported from the source site are clean and free of contamination.

**4.5 Placement, On-Site Verification (Rejection Point 4)**

The unloaded material that has been accepted upon tipping will be moved to the backfilling area immediately upon a dozer becoming available and compacted to avoid fugitive dust nuisance/arising.

During this spreading, placement and compaction operation the material will be visually inspected again to ensure that there is no contaminated or unsuitable material intermixed within the load. Any unsuitable or contaminated material identified at this stage will be segregated and removed to the waste quarantine area and stored pending closer inspection and testing to establish suitability. The Kerdiffstown Landfill manager will be informed immediately. WBL are committed to the removal of contaminated or unsuitable material off-site at the earliest opportunity which will be at the sole expense WBL who imported the material.

**4.6 Waste Acceptance Procedure Flow-Chart**

Figure 4-1 below was prepared by the ER and gives a flow chart of the soil and stone waste handling and inspection process.

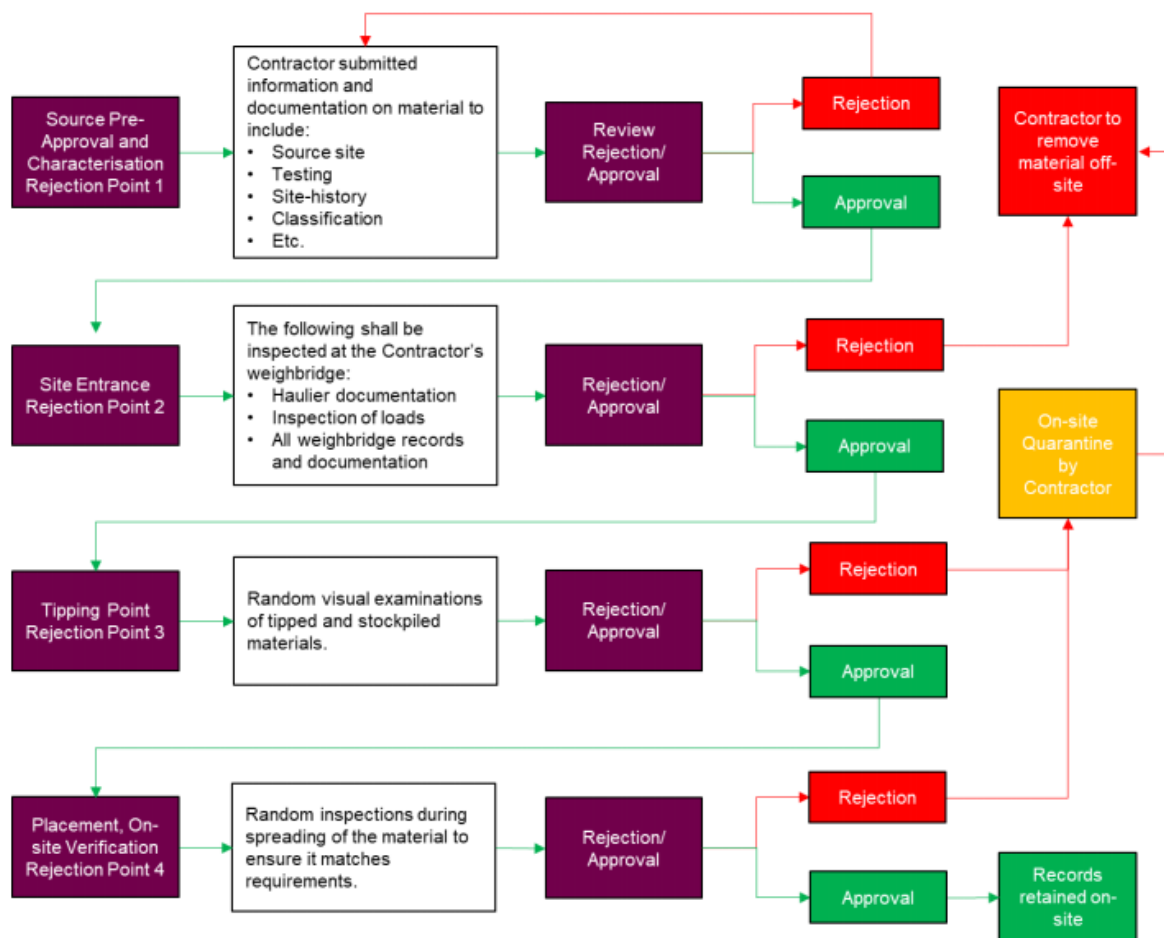



Figure 4-1 Waste Acceptance Procedure Flow-chart. Source: Waste Acceptance Procedure (RPS, 2020)





## 5.0 WASTE MINIMISATION

Wills Bros Ltd will look for ways to Prevent, Reuse, Recycle, Recover and Dispose waste arising in the course of their work.

<p><b>Paper</b></p>	<p>Office paper is to be recycled, sensitive documents will be shredded or securely held until shredding and recycling. Paper with plastic coatings, glues and compounded paper plastic materials cannot be recycled. Wills Bros will use licensed waste contractors to recycle its paper and cardboard waste.</p>	 <p>The sign features a green header with 'WASTE MANAGEMENT' in white. Below it, 'MIXED WASTE ONLY' is written in bold black text. The central graphic shows icons for Paper (a crumpled sheet), Plastic (a bottle and bag), Cardboard (a box), and Tin (a can). The Wills Bros logo is in the bottom left, and the slogan 'ARE YOU SURE THIS WASTE?' is at the bottom.</p>
<p><b>Cardboard</b></p>	<p>Separate cardboard and keep dry for recycling. Remove labels and documents glued to the cardboard and remove plastic tape.</p>	 <p>This sign is identical to the one for Paper, showing 'MIXED WASTE ONLY' with icons for Paper, Plastic, Cardboard, and Tin.</p>
<p><b>Packaging Plastics</b></p>	<p>Separate plastic containers in accordance with the type of plastic for recycling or return to suppliers</p>	 <p>This sign is identical to the others, showing 'MIXED WASTE ONLY' with icons for Paper, Plastic, Cardboard, and Tin.</p>
<p><b>Scrap Metal</b></p>	<p>Clean any scrap metal and place in collection skips. Aluminium and other nonferrous metals will be segregated from ferrous metals</p>	 <p>The sign features a green header with 'WASTE MANAGEMENT' in white. Below it, 'METAL WASTE ONLY' is written in bold black text. The central graphic shows icons for metal scrap, including a wheel and a pile of metal. The Wills Bros logo is in the bottom left, and the slogan 'ARE YOU SURE THIS WASTE?' is at the bottom.</p>



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<p><b>Biodegradable Waste for Compost</b></p>	<p>Site welfare leftovers (brown waste) can be composted.</p>	 <p>The sign features a green header with 'WASTE MANAGEMENT' in white. Below it, 'ORGANIC WASTE ONLY' is written in bold black text. An image of various food scraps is shown in the center. At the bottom left is the Wills Bros logo, and at the bottom right is the text 'ARE YOU SURE THIS WASTE?'.</p>
<p><b>Hazardous Waste</b></p>	<p>Hazardous wastes must be stored away from other types of waste. Proper rules of segregation and storage must be followed. In the case of hazardous wastes consult the on-site Environmental, Health and Safety Site Co-ordinator, and seek appropriate advice.</p>	 <p>The sign features a green header with 'WASTE MANAGEMENT' in white. Below it, 'HAZARDOUS WASTE ONLY' is written in bold black text. An image of various chemical containers is shown in the center. At the bottom left is the Wills Bros logo, and at the bottom right is the text 'ARE YOU SURE THIS WASTE?'.</p>
<p><b>Timber</b></p>	<p>Wherever possible uncontaminated timber wastes such as pallets, off-cuts, damaged timber will be segregated and recycled. Delivery pallets to be stacked in on site dedicated waste storage area for recovery and reuse.</p>	 <p>The sign features a green header with 'WASTE MANAGEMENT' in white. Below it, 'TIMBER WASTE ONLY' is written in bold black text. An image of stacked timber and a pallet is shown in the center. At the bottom left is the Wills Bros logo, and at the bottom right is the text 'ARE YOU SURE THIS WASTE?'.</p>
<p><b>Mixed Residual Waste</b></p>	<p>Such waste will be minimised and disposed of with a licensed waste collector. Waste Oil and Oil Products: Consult the Environmental, Health and Safety Site Co-ordinator, and seek appropriate advice.</p>	 <p>The sign features a green header with 'WASTE MANAGEMENT' in white. Below it, 'MIXED WASTE ONLY' is written in bold black text. An image showing icons for paper, plastic, cardboard, and tin is shown in the center. At the bottom left is the Wills Bros logo, and at the bottom right is the text 'ARE YOU SURE THIS WASTE?'.</p>

**5.1 Storing Wastes**

Limited amounts of waste materials may be stored on site temporarily in covered skips/containers prior to disposal in a dedicated waste storage area within the site compound. This area will have appropriate site signage (as identified below) to enable correct segregating of waste on site by personnel into dedicated skips/containers.



Wills Bros require management of all waste materials in a manner consistent with the law and public policy as expressed in the Waste Hierarchy.

## 5.2 Opportunities for Waste Minimisation

The project Quantity Surveyor shall ensure that materials are ordered so that the quantity delivered, the timing of the delivery and the storage is not conducive to the creation of unnecessary waste. Opportunities for waste minimisation in the project include:

1. All uncontaminated excavated material to be kept on site for reuse in constructing bunds and landscaping.
2. Non-hazardous millings from existing road reused and incorporated into the works as processed engineering grade fill.
3. Other miscellaneous waste arising, including a small volume of a variety of waste streams will be generated:
  - Paper and cardboard will be recycled.
  - Plastic will be segregated at source and kept as clean as possible prior to placement in a covered container for recycling.
  - Timber will be recycled.



## **6.0 STAFF TRAINING**

A copy of this Waste Management Plan will be made available to all relevant personnel on site and a copy stored in our offices on site. All site personnel and any subcontractors will be instructed about the objectives of this Waste Management Plan during induction and informed of the responsibilities which fall upon them as a consequence of its provisions.

### **6.1 Waste Manager – Training and Responsibilities**

WBL will nominate a Waste Manager for the duration of the project. The Waste Manager will be responsible for the efficient operation of onsite waste management procedures; they will also be responsible for ensuring that all waste removed offsite is appropriately characterised (under the correct LoW / LOW code), transported and disposed of in accordance with all relevant waste management legislation. It will be the Waste Managers responsibility to maintain all waste management and disposal / recovery records onsite throughout the project. These site records should be made available for viewing by the Client, Employers Representative, and statutory consultees (KCC, EPA) as required.

The Waste Manager will be appropriately trained by Wills Bros Environmental Manager in the correct documentary procedure, waste auditing and best practice methods in onsite waste minimisation and waste management. It will be the Waste Managers responsibility to implement the Project C&D WMP during the construction stage. Onsite toolbox talks with site operatives to highlight any specific waste management concerns will also be carried out should the need arise.

### **6.2 Site Operatives – Training and Responsibilities**

All site personnel will receive waste management information as part of their initial site briefing. The initial briefing will include a discussion of the key points set out in the project C&D WMP, along with the specific procedures to be implemented onsite in order to segregate and appropriately store the generated waste, and key control measures such as refuelling procedures and oil, fuel and chemical storage requirements. This will ensure that all onsite personnel are familiar with the site-specific waste management strategy. The project C&D WMP will be available onsite for the full duration of the construction stage.

## **7.0 WASTE REPORTING**

Waste records will be maintained on site in the format of the Waste Register (Appendix 1). The register is to be updated continually by the Waste Manager, throughout the project. A copy of records of all material (each and every separate load/collection/disposal) removed from the site will be maintained on site, available for inspection at all times. Final details of the quantities and types of waste arising from the project will be made available to appropriate representatives.

### **7.1 Tracking and Documentation Procedures for Off-Site Waste**

The nominated Waste Manager for the project will be responsible for ensuring correct tracking and documentation procedures are undertaken for all waste removed from site during the project. Each consignment of waste removed from site will be tracked and recorded by Wills Bros Ltd. A site record detailing the date, truck registration, waste type, estimated volume and destination will be filled onsite for each consignment, along with the corresponding truck docket, and weighbridge record at the offsite disposal / recovery destination. A copy of the relevant waste collection permits and waste permit/ waste license for the relevant disposal / recovery facilities will be available onsite for the duration of the project.

### **7.2 Waste collected/ Generated (during 2-year defects period)**

WBL will continue to liaise with the ER during the works and will determine the waste collected and generated during the 2-year defects period. A plan will be added to this plan on how WBL will plan to manage this action.

# **APPENDIX A**

## **WASTE REGISTER**

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Origin of waste (Location)	Source of Waste	EWC (Code)	Hazardous Waste (Y/N)	Description of Waste	Qty. (Tn.)	Destination of waste (name of location)	Licence or Permit number of destination WFP#	Carrier Permit #	TFS notification number (if required)
Insulation containing asbestos		17 06 01*	Y						
Other insulation containing dangerous substances		17 06 03*	Y						
Other insulation materials		17 06 04	N						
Other construction materials containing asbestos		17 06 05*	Y						
Concrete		17 01 01	N						
Bricks		17 01 02	N						
Tiles and ceramics		17 01 03	N						
Concrete, bricks, tiles and ceramics (alone or in mixtures) containing dangerous substances		17 01 06*	Y						
Concrete, bricks, tiles and ceramics in mixtures, containing no dangerous substances		17 01 07	N						

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Origin of waste (Location)	Source of Waste	EWC (Code)	Hazardous Waste (Y/N)	Description of Waste	Qty. (Tn.)	Destination of waste (name of location)	Licence or Permit number of destination WFP#	Carrier Permit #	TFS notification number (if required)
Wood - untreated		17 02 01	N						
Glass - uncontaminated		17 02 02	N						
Plastic - excludes packaging waste		17 02 03	N						
Treated wood, glass, plastic (alone or in mixtures) containing dangerous substances		17-02-04*	Y						
Bituminous mixtures containing coal tar		17-03-01*	Y						
Other bituminous mixtures		17 03 02	N						
Coal tar and tarred products		17 03 03*	Y						
Copper, bronze and brass		17 04 01	N						
Aluminium		17 04 02	N						
Lead		17 04 03	N						
Iron and steel		17 04 05	N						
Tin		17 04 06	N						
Mixed metals		17 04 07	N						
Metals containing dangerous substances		17-04-09*	Y						

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Origin of waste (Location)	Source of Waste	EWC (Code)	Hazardous Waste (Y/N)	Description of Waste	Qty. (Tn.)	Destination of waste (name of location)	Licence or Permit number of destination WFP#	Carrier Permit #	TFS notification number (if required)
Cables containing oil, coal tar and other dangerous substances		17-04-10*	Y						
Other cables		17 04 11	N						
Soil and stones containing dangerous substances		17 05 03*	Y						
Other soil and stones		17-05-04*	Y						
Dredging spoil containing dangerous substances		17 05 05*	Y						
Other dredging spoil		17 05 06	N						
Gypsum materials containing hazardous materials		17 08 01 *	Y						
Other gypsum materials		17 08 02	N						
Containing organic solvents or other dangerous substances		08 01 11* (20 01 27*)	Y						
Not containing organic solvents or other dangerous substances		08-01-12 (20-01-28)	N						
Paint or varnish remover		08-01-21*	Y						
Paint cans		Refer to Packaging	Y						

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Origin of waste (Location)	Source of Waste	EWC (Code)	Hazardous Waste (Y/N)	Description of Waste	Qty. (Tn.)	Destination of waste (name of location)	Licence or Permit number of destination WFP#	Carrier Permit #	TFS notification number (if required)
Paint cans		Refer to Packaging	Y						
Containing organic solvents or other dangerous substances		08-04-09* (20-01-27*)	Y						
Not containing organic solvents or other dangerous substances		08-04-10 (20-01-28)	N						
Adhesive or sealant containers Containers must be empty to be classified as packaging waste.		Refer to Packaging	Y						
Other clean material, unmixed - excluding packaging		20-01-39 20-01-40 20-01-01 20-01-02 20-01-11	N						
Mixed clean material -		15-01-02 20-01-39 15-01-04 20-01-40 15-01-01	N						

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Origin of waste (Location)	Source of Waste	EWC (Code)	Hazardous Waste (Y/N)	Description of Waste	Qty. (Tn.)	Destination of waste (name of location)	Licence or Permit number of destination WFP#	Carrier Permit #	TFS notification number (if required)
Mixed clean material - including packaging		15-01-02 20-01-39 15-01-04 20-01-40 15-01-01 20-01-01 15-01-07 20-01-02 15-01-09 20-01-10	N						
Empty packaging contaminated with residues of dangerous substances – e.g. paint cans, intermediate bulk containers (IBCs) and drums		15-01-10*	Y						
Empty packaging contaminated with residues of non-dangerous substances		15-01-02 15-01-04 15-01-01 15-01-07 15-01-09	N						