

WASTE ACCEPTANCE PROCEDURE

Environmental and sustainability solutions provided to
BRYN AGGREGATES LIMITED

WRM-LTD.CO.UK



This report was prepared by **Walker Resource Management Ltd (WRM)** within the terms of its engagement and in direct response to a scope of services. This report is strictly limited to the purpose and the facts and matters stated in it and does not apply directly or indirectly and must not be used for any other application, purpose, use or matter. In preparing the report, WRM may have relied upon information provided to it at the time by other parties. WRM accepts no responsibility as to the accuracy or completeness of information provided by those parties at the time of preparing the report. The report does not take into account any changes in information that may have occurred since the publication of the report. If the information relied upon is subsequently determined to be false, inaccurate, or incomplete then it is possible that the observations and conclusions expressed in the report may have changed. WRM does not warrant the contents of this report and shall not assume any responsibility or liability for loss whatsoever to any third party caused by, related to, or arising out of any use or reliance on the report howsoever. No part of this report, its attachments or appendices may be reproduced by any process without the written consent of WRM. All enquiries should be directed to WRM.

Document Title	Waste Acceptance Procedure
Client	Bryn Aggregates Limited
Revision	v3.0
Date	23/09/2024
Document Reference	EPR-OP02
Project Reference	1238/J05
Author: Alex Holley	Reviewer: Martin Ropka
	

Copyright ©

All material on these pages, including without limitation text, logos, icons and photographs, is copyright material of Walker Resource Management Ltd (WRM). Use of this material may only be made with the express, prior, written permission of WRM. This document was produced solely for use by the named client to whom the document refers. The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of WRM. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests.

REVISION LOG

Revision	Details	Date
0.1	Initial draft	25/07/2023
0.2	Internal review	28/07/2023
0.3	Client review	19/08/2023
1.0	First issue	23/08/2023
1.1	Draft update	12/04/2024
2.0	Second issue	12/04/2024
2.1	Draft update following Schedule 5 Notice	23/09/2024
3.0	Third issue	23/09/2024

CONTENTS

1.0	PURPOSE.....	1
2.0	PROCEDURE OVERVIEW	2
2.1	Sources of Waste	2
2.2	Pre-Acceptance Procedure for Waste Collection	3
2.3	Acceptance of Waste at the Facility.....	4
2.4	Determination of Testing Regime.....	11
2.5	Rejection of Waste at the Site.....	13
2.5.1	Rejection on arrival on Farm Site.....	13
2.5.2	Rejection on Quarry Site.....	13
2.6	Traceability of Input Materials.....	14
3.0	ROLES AND RESPONSIBILITIES.....	14

1.0 PURPOSE

This document aims to outline the procedure which must be followed by Bryn Aggregates Limited (hereon referred to as Bryn Aggregates) whilst receiving waste from third party companies either via collections from third party sites or receipt of deliveries. Bryn Aggregates are required to restore the existing quarry in line with Condition 18 of their planning permission for the operation of the quarry. Bryn Aggregates are seeking to use inert general fill waste, and soil waste material to help restore the areas of the quarry, in which the site proposes to accept materials from local waste suppliers to enable the engineering/restoration operation to take place. Hazardous wastes are never accepted at the facility and will be rejected immediately on inspection. The waste recovered on site will originate from local developments.

2.0 PROCEDURE OVERVIEW

The procedure has been split into its component parts for ease of reference by site operatives. Conditions to be applied when site operatives are following the procedure are also indicated below.

2.1 Sources of Waste

The source of waste material used in the deposit for recovery activity shall be small local landscaping contractors or utilities companies. This waste may be direct delivered to the quarry site for recovery or it may arrive on site via the neighbouring Materials Recycling Facility (MRF). All waste arriving at the wider farm site is directed to the farm weighbridge. Here, the weighbridge operator shall carry out the acceptance checks detailed in Section 2.2 above. On completion of these checks, the weighbridge operator shall accept the waste and direct the vehicle to the quarry site for immediate deposit for recovery, reject the waste as per the procedure in Section 2.3.1 above or direct the waste to the MRF site for treatment. This third option is taken if it is identified that the waste cannot be immediately deposited at the quarry site or if physical contamination is visibly present in the waste on inspection at the weighbridge. The waste will therefore either be stored separately on the MRF site until the waste can be deposited at the quarry site or it will be treated at the MRF site in the form of screening to remove the physical contaminants. Once the waste is ready to be deposited at the quarry site and/or once the contamination has been removed, the waste shall be directed to the farm weighbridge again for the weighbridge operator to carry out the acceptance checks detailed in Section 2.2 above once more. Here, the waste will either be accepted and directed to the quarry site for deposit for recovery or will be rejected again. Figure 1 below shows the route that waste arriving at the weighbridge can take in the form of a flow diagram.

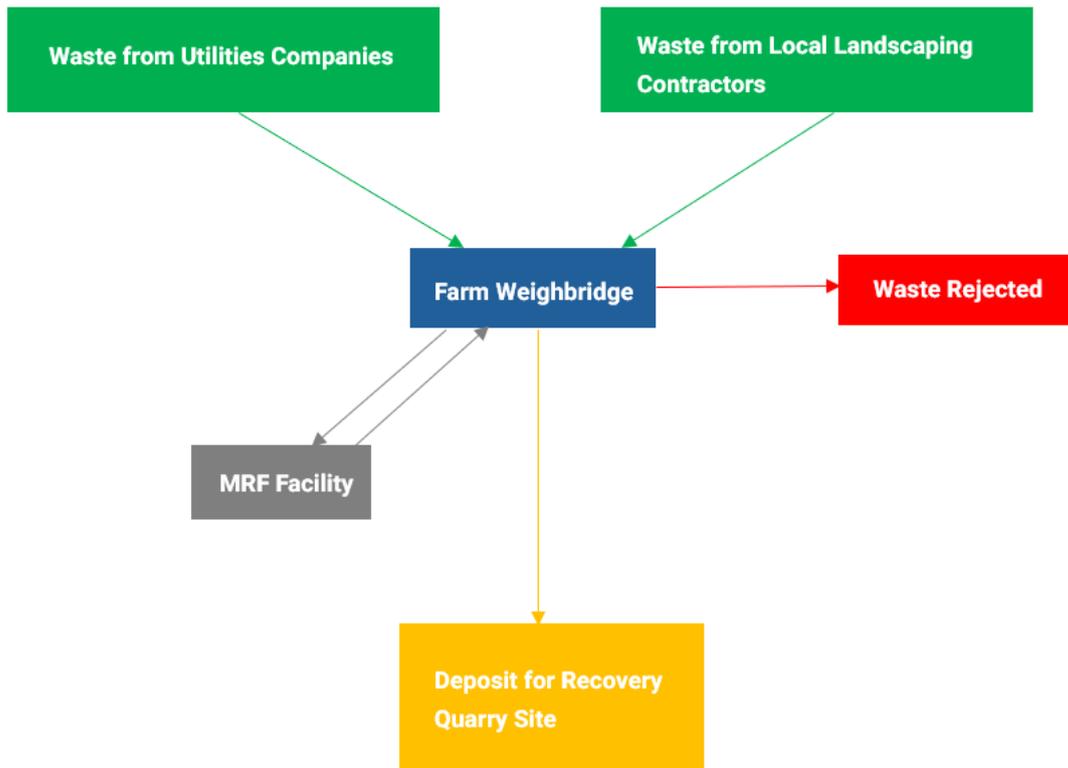


Figure 1 - Waste Route at Site

2.2 Pre-Acceptance Procedure for Waste Collection

Bryn Aggregates shall undertake diligent checks on all potential waste suppliers. Before agreeing to accept a delivery of waste, the following information about the characteristics of the waste shall be obtained and documented within the site office:

- The full address where the waste was produced;
- The identity of the producer;
- All the reasonably identifiable previous uses of the producer site where the waste is excavation waste;
- The process giving rise to the waste;
- The physical appearance of the waste including colour and texture;
- Where a weighbridge isn't used a metric conversion factor for volume (cubic metres) to weight (tonnes) for each waste stream; and,
- The quantity of waste to be imported.

Material used for the general fill will be inert WAC (Waste Acceptance Criteria) tested by a UKAS accredited laboratory before each waste stream is accepted onto site for the first time

from each individual source if required (see Section 2.3 below). This testing is in line with the 2003/33/EC: Council Decision of 19 December 2002¹ (the Council Decision) establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC. If the proposed waste material is deemed appropriate for collection by the Site Manager i.e. all analysis is inside the trigger limits for inert waste as per Section 2.1.1 of the Council Decision, waste loads can start to be received at the facility. The Site Manager will notify the supplier of Bryn Aggregate's decision. Records detailing the points above shall be maintained within the site office for each waste stream which is accepted on to site.

2.3 Acceptance of Waste at the Facility

The full list of waste types that are permitted to be accepted onto site can be seen in Table 1 and 2 below.

Personnel shall ensure that the site has the required number of qualified staff on site prior to the waste acceptance and rejection procedures, and that the site has capacity to recover any incoming waste.

Personnel shall also ensure that the site will not breach any Permit conditions by means of the type or quantity of waste accepted onto site. The permitted quantity of waste that can be accepted and deposited on site on is 705,900m³.

Level 1 – Basic Characterisation

No waste will be accepted at the site unless it has been subjected to an appropriate basic characterisation procedure. The minimum information to be collected includes:

- the EWC code of the waste;
- the full address where the waste was produced;
- the original source of the waste;
- the identity of the producer;
- all the reasonably identifiable previous uses of the producer site where the waste is excavation waste;
- the process giving rise to the waste;
- the physical appearance of the waste including colour and texture;
- confirmation and evidence that the waste has been classified as non-hazardous;

¹ <https://www.legislation.gov.uk/eur/2003/33/annex#>

- where a weighbridge isn't used a metric conversion factor for volume (cubic metres) to weight (tonnes) for each waste stream;
- the quantity of waste to be imported;
- details of any treatment undertaken on the waste; and
- evidence of compliance with these procedures.

All waste producers are required to complete a Waste Questionnaire to ensure the materials suitability and quality. All Waste Questionnaires will be reviewed by the Technically Competent Manager (or otherwise appointed representative) to ensure the suitability of the material prior to acceptance at the site.

All waste types listed in Table 1 are included in NRW's *Prepare a management system for a deposit of waste for recovery activity guidance* as the types of waste a producer may not need to test. Consistent with the recovery guidance, where the waste is from a single waste stream (from only one source) and where there is no suspicion of contamination the waste will be accepted without testing. These materials will be recovered as general fill. The maximum quantity of this waste material to be accepted onto site is 620,000m³ (992,000 tonnes).

Table 1 – Waste types that may be accepted as general fill

01 Waste resulting from exploration, mining, quarrying and physical and chemical treatment of minerals	
01 01	wastes from mineral excavation
01 01 02	Wastes from mineral non-metalliferous excavation
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 06
01 04 09	Waste sand and clays
17 Construction and demolition wastes	
17 01	concrete, bricks, tiles and ceramics
17 01 01	Concrete ¹
17 01 02	Bricks ¹
17 01 03	Tiles and ceramics ¹
17 01 07	Mixtures of concrete, bricks, tiles and ceramics ¹
17 05	soil stones and dredging spoil
17 05 04	Soil and stones other than those mentioned in 17 05 03 ²

19 Wastes from waste management facilities	
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	Minerals (for example sand, stones) only ³
20 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	
20 02	separately collected fractions (except 15 01)
20 02 02	Soil and stones ⁴

Notes:

¹ As per the Council Decision, selected C&D waste can be accepted without testing: with low contents of other types of materials (like metals, plastic, soil, organics, wood, rubber, etc). The origin of the waste must be known. No C&D waste from constructions, polluted with inorganic or organic dangerous substances e.g. because of production processes in the construction, soil pollution, storage and use of pesticides or other dangerous substances etc. unless it is made clear that the demolished construction was not significantly polluted. No C&D waste from constructions, treated, covered or painted with materials, containing dangerous substances in significant amounts.

² As per the Council Decision, this can be accepted without testing excluding topsoil, peat; excluding soil and stones from contaminated site. Soil and stones will not be accepted directly from contaminated sites. They will be sampled and a site-specific risk assessment will be carried out.

³ Residual fines from mechanical treatment of mixed wastes at transfer stations will not be accepted at the site.

⁴ As per the Council Decision, can be accepted without testing if only from garden and park waste.

All waste types listed in Table 2 are waste codes that will be used in the top 1m soil formation layer as part of the restoration of the quarry, feature in NRW's Deposit for Recovery Guidance and may not need testing. Consistent with the recovery guidance, where the waste is from a single waste stream (from only one source) and where there is no suspicion of contamination the waste will be accepted without testing. The maximum quantity of combined waste types in Table 2 to be imported to site is approximately 85,900m³ (137,440 tonnes).

Table 2 - Waste types that may be accepted as soil formation layer

01 Waste resulting from exploration, mining, quarrying and physical and chemical treatment of minerals

01 01	wastes from mineral excavation
01 01 02	Wastes from mineral non-metalliferous excavation
17 Construction and demolition wastes	
17 05	soil stones and dredging spoil
17 05 04	Soil and stones other than those mentioned in 17 05 03 ¹
19 Wastes from waste management facilities	
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	Minerals (for example sand, stones) only ²
20 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	
20 02	separately collected fractions (except 15 01)
20 02 02	Soil and stones ³

¹ As per the Council Decision, this waste can be accepted without testing excluding topsoil, peat; excluding soil and stones from contaminated site. Soil and stones will not be accepted directly from contaminated sites. They will be sampled and a site-specific risk assessment will be carried out.

² Residual fines from mechanical treatment of mixed wastes at transfer stations will not be accepted at the site.

³ As per the Council Decision, this waste can be accepted without testing if only from garden and park waste.

Level 2 – Compliance Testing for General Fill Material

Level 2 compliance testing comprises testing periodically to determine whether the waste complies with the results of the basic characterisation testing and the site-specific conditions of the Permit. Additional samples will be collected by the waste producer and analysed for the parameters as shown on Table 3.

Table 3 - General fill waste acceptance testing suite and limits

Parameter	Parameters determined on the waste – total concentration using BS EN 12457	
Total organic carbon (%w/w)	3%	-
Loss on ignition (%w/w)	10%	-
BTEX (mg/kg)	6	-
PCBs (7 congeners) (mg/kg)	1	-
Mineral oil C10-C40 (mg/kg)	500	-
PAHs (mg/kg)	100	-
pH	>6	-
	Limit values (mg/kg) for compliance leaching test using BS EN 12457 at L/S 10 l/kg	Equivalent leachability (mg/l)
As	0.5	0.05
Ba	20	2
Cd	0.04	0.004
Cr total	0.5	0.05
Cu	2	0.2
Hg	0.01	0.001
Mo	0.5	0.05
Ni	0.4	0.04
Pb	0.5	0.05
Sb	0.06	0.006
Se	0.0	0.01
Zn	4	0.4
Chloride	800	80
Fluoride	10	1
Sulphate	1000	100
Phenol index	1	0.1
Dissolved Organic Carbon	500	50
Total Dissolved Solids	4000	400

If the waste received at the site is from a regularly generated source, then the results of compliance testing carried out by the waste producer will be reviewed periodically. The period of review will vary with the type of waste with a minimum period of:

- once per year for homogenous waste generally contains the same or similar components, or
- three times per year for heterogenous waste containing a wide range of different components or new waste sources.

BS3882:2015 Compliance Testing for Soil Formation Layer

As set out in Table 2 above, the list of acceptable waste codes for use as a topsoil is different to that for the waste to be used as general fill. It is therefore to be expected that this material will have slightly different testing requirements. The criteria for materials selected for topsoil as described in BS 3882:2015 Specification for topsoil shall be followed. This British Standard has two classifications of topsoil; multipurpose or specific purpose (acidic, calcareous, low fertility, low fertility acidic or low fertility calcareous). It states that multipurpose topsoil is the grade suited to most situations where topsoil is required and it is for this reason that this classification is chosen as the most appropriate for this application. The parameters which shall be analysed for and their limit values are displayed in Table 4 below.

Table 4 - Topsoil waste acceptance testing suite and limits

Parameter	Limit value	Method of test
Soil texture <2mm fraction (% m/m)	Dependent on soil textural class	BS ISO 11277
Maximum coarse fragment content (% m/m):		BS ISO 11277
>2mm	30	
>20mm	10	
>50mm	0	
Mass loss on ignition (%):		Annex D of BS 3882:2015
Clay 5% to 20%	3 – 20	
Clay 20% to 35%	5 - 20	
Soil pH (measured in water)	5.5 to 8.5	BS ISO 10390
Plant nutrient content:		BS 7755-3.7
Total nitrogen (% m/m)	>0.15	
Extractable phosphate (mg/L)	16 – 140	
Extractable potassium (mg/L)	121 – 1,500	
Extractable magnesium (mg/L)	51 - 600	
Carbon:nitrogen ratio	<20:1	Annex D of BS 3882:2015 and BS 7755-3.7

Electrical conductivity (uS/cm ¹)	3,300	Annex H of BS ISO 3882:2015
Potentially toxic elements (by soil pH) (mg/kg dry solids):		BS ISO 16729
Zn (Nitric acid extractable)	<200 - <300	
Cu (Nitric acid extractable)	<100 - <200	
Ni (Nitric acid extractable)	<60 - <110	
Visible contaminants (% m/m) (air-dried solids)	<0.5	Annex J of BS 3882:2015
.....of which plastics	<0.25	
Sharps, number (air dried soil)	Zero in 1kg air-dried soil	Annex J of BS 3882:2015

If the waste received at the site is from a regularly generated source, then the results of compliance testing carried out by the waste producer will be reviewed periodically. The period of review will vary with the type of waste with a minimum period of:

- once per year for homogenous waste generally contains the same or similar components, or
- three times per year for heterogenous waste containing a wide range of different components or new waste sources.

Level 3 – On-site Verification

Verification testing will comprise a visual inspection of the incoming waste and verification of the accompanying documentation. The basic characterisation information will be available prior to the acceptance of the waste at the site.

All incoming waste loads to the site will be checked. On arrival of each load of waste at the Gelliargwellt Farm weighbridge, the Duty of Care (DoC) documentation will be reviewed by the site personnel to confirm that it conforms with the basic characterisation. Once it is determined that the waste is potentially suitable for acceptance at the site, a visual inspection where possible of the waste will be carried out at the weighbridge to confirm that the waste conforms with the description on the DoC documentation. If any waste does not conform with the description in the DoC documentation or if on the DoC documentation the waste described is unsuitable for acceptance for deposit at the site, the waste will be rejected.

The site personnel and plant operative will be trained to recognise the types of waste that may be accepted at the site and to identify the details which should be presented on the DoC documentation. A record will be kept of the date and time of waste deliveries, the quantities and the nature of waste deposited at the site, the name of the company, the name of the

representative delivering each load of waste and the vehicle registration number. DoC documentation for the waste received will be kept on record for the statutory period which comprises 6 years.

Any waste which is identified at the weighbridge as unsuitable for deposit at the site will be rejected. The event will be recorded in the site diary.

In the unlikely event that waste items admixed with the waste are identified as unsuitable following deposit in the restoration area they will be re-loaded into the delivery vehicle and removed from site or isolated from the restoration area and placed in a skip or other container located in the MRF isolation area. When the skip/container is full it will be removed for management at a suitably permitted waste management facility. The event will be recorded in the site diary.

Additional samples will be collected by Bryn Aggregates and analysed for the same parameters as used in the Level 2 compliance testing suite at a minimum period of:

- once per year for homogenous waste generally contains the same or similar components,
- three times per year for heterogenous waste containing a wide range of different components or new waste sources, whenever there is a suspicion of contamination.

2.4 Determination of Testing Regime

In line with NRW's Deposit for Recovery Guidance and the Council Decision, it is considered that should all of the basic waste characterisation information be available, be from a single source and carry no risk of contamination, the following waste codes will not require testing by the waste producer prior (except to test it for classification) to acceptance on site:

- 01 01 02
- 01 04 08
- 01 04 09
- 17 01 01
- 17 01 02
- 17 01 03
- 17 01 07
- 17 05 04
- 20 02 02

This shall apply to both local landscaping contractors that bring waste to site and utilities companies. However, should any of the basic waste characterisation information be unavailable, should the waste be from multiple sources e.g. two houses in the same load from a landscaping contractor or should there be a known risk of contamination on the basis of the waste characterisation information e.g. excavation material from a former petrol station site, the waste shall be tested by the producer prior to arrival at the quarry site to demonstrate that the relevant criteria in Section 2.3 can be met.

This shall also apply to material that is brought to site from the neighbouring MRF site (19 12 09) on the condition that the basic waste characterisation information is known, the only treatment carried out was the removal of physical contamination and the waste from a single source. Should the basic waste characterisation be unknown, additional treatment have been carried out or the waste be from multiple sources, then the waste shall be tested by the producer prior to arrival at the quarry site to demonstrate that the relevant criteria in Section 2.2 can be met. Whilst the Council Decision considers that waste from transfer stations or recycling facilities may not be regularly generated and therefore testing of each load would be required, the waste from the neighbouring Bryn Recycling MRF site is considered to sit outside of this because of the specific activity that would take place on material received on it. As described in Section 2.1 above, the waste material may just be stored on the MRF site should the waste not be able to be deposited directly at the quarry site on arrival or the only treatment activity carried out on an individual load would be the screening of the waste to remove materials such as metal, plastic or glass. Any waste material received from other transfer stations or treatment facilities would be required to undergo the testing described in Section 2.3 above.

As described in Section 2.3 above, if the waste received for recovery is from a regularly generated source, then the results of any compliance testing carried out by the waste producer will be reviewed periodically. The period of review will vary with the type of waste with a minimum period of:

- once per year for homogenous waste generally contains the same or similar components, or
- three times per year for heterogenous waste containing a wide range of different components or new waste sources.

Waste from the Bryn Recycling MRF site shall be considered heterogenous and any testing carried out shall be reviewed 3 times a year. Any test results from waste from utilities companies shall be reviewed once per source of the waste whilst those from the small

landscaping companies shall be reviewed 3 times a year as the sources are likely to be more variable and heterogenous.

Additional samples will be collected by Bryn Aggregates and analysed for the same parameters as used in the Level 2 compliance testing suite at a minimum period of:

- once per year for homogenous waste generally contains the same or similar components,
- three times per year for heterogenous waste containing a wide range of different components or new waste sources, whenever there is a suspicion of contamination.

Therefore, samples shall be taken 3 times a year from the MRF site, 3 times a year from small landscaping companies and once per year per source of waste from utilities companies.

2.5 Rejection of Waste at the Site

Waste can be rejected at two points along the waste acceptance process:

2.5.1 Rejection on arrival on Farm Site

The first rejection point is when the vehicle first enters the farm site via the weighbridge and weighbridge hut. If the driver brings a waste transfer note, the EWC code assigned to the waste is checked and cross referenced against the environmental permit. If the EWC code of the waste does not match one of the codes allowed in the environmental permit, then the waste is instantly rejected and the vehicle exits the site without unloading the waste.

If the driver does not bring a waste transfer note, the waste will be rejected. Again, if the EWC code of the waste does not match one of the codes allowed in the environmental permit then the waste is instantly rejected. In the unlikely event that it is one of Bryn Aggregates own fleet of vehicles that brings a load of waste that is rejected at the weighbridge, the driver will return the load of waste to the site from which it came. Where the vehicle and waste have been brought onto site by a third-party company, the vehicle exits the site without unloading the waste.

2.5.2 Rejection on Quarry Site

Where waste has been accepted at the farm weighbridge, the vehicle is directed to the quarry site and the load is tipped onto the area where it is to be used for engineering works. At this point, the waste is visually inspected. Any waste that is seen to not match the description and EWC code assigned to it is rejected. Also, where the waste contains excessive contamination,

it is again rejected. Where possible, the waste is immediately reloaded onto the vehicle for return to the site from which it came and the vehicle leaves the farm site via the weighbridge for documentation to be completed. If this is not possible, all contrary waste is segregated, and an arrangement is made to have the waste removed from site within 48 hours.

2.6 Traceability of Input Materials

A record system shall be maintained connecting sources of materials with delivery dates. This is achieved via the information / documentation collected for every load of waste that arrives on site.

3.0 ROLES AND RESPONSIBILITIES

The Site Operatives Shall:

- Site Operatives, including third-party contractor operatives, are responsible for implementing the waste acceptance procedure for all loads. They are also responsible for checking loads once offloaded and performing an official visual inspection. Drivers of waste carrying vehicles are responsible for ensuring correct use of the weighbridge when waste is accepted onto and transported off site.

The Site Managers Shall:

- The Site Manager, which could be employed by a third-party, is responsible for ensuring supply agreements are completed with prospective waste suppliers as well as requesting necessary sampling be carried out for any incoming wastes prior to its arrival on site. The Site Manager is responsible for the analysis of the results once received. The Site Manager shall also be ultimately responsible for ensuring all operatives stationed at the key acceptance areas are trained and educated with regards to the procedure to enforce it effectively.