

NRS
Nuclear Restoration
Services

DD/REP/0014/325

Issue 2

Trawsfynydd Deposit for Recovery Permit Application


Environment Management System Summary

June 2025

Trawsfynydd Deposit for Recovery Permit Application – EMS Summary


Heather Barker, Sam Fuller and Russell Jones

Author: Sam Fuller and Russ Jones

Signature: 

Date: 16 June 2025

Lead Verifier: Heather Barker

Signature: 

Date: 16 June 2025

Authorised for issue: Sion Richards

Signature: 

Date: 16 June 2025

Review/Revision register

Version	Date	Author	Amendments/Change
1	March 2025	S. Fuller & R. Jones	
2	June 2025	S. Fuller & R. Jones	Insertion of Appendix Six



OFFICIAL

Distribution List

Nuclear Restoration Services Ltd



OFFICIAL

Table of Contents

1.0	Introduction	5
2.0	EMS Summary	5
	APPENDIX ONE: PD-010.....	7
	APPENDIX TWO: F-318.....	8
	APPENDIX THREE: LRQA CERTIFICATION.....	9
	APPENDIX FOUR: CONSTRUCTION ENVIRONMENT MANAGEMENT PLAN.....	10
	APPENDIX FIVE: M-023: INTRODUCTION TO THE SAFETY, SECURITY & ENVIRONMENT MANAGEMENT PROSPECTUS	11
	APPENDIX SIX: KEY CONTROL MEASURES FOR WASTE ACCEPTANCE	12

1.0 Introduction

Nuclear Restoration Services Ltd (NRS) is preparing an Environmental Permit (EP) application to authorise the Deposit of Waste for Recovery (DfR) in the improvement and extension of a laydown area for reactor dismantling at the Trawsfynydd Nuclear Power Station (the Site). The site houses a twin reactor power station currently undergoing decommissioning. It is located on a 15.5 hectare (ha) site in Eryri National Park, within the Meirionnydd area of Gwynedd, North Wales, LL41 4DT.

This Environment Management System (EMS) summary has been prepared in support of the EP application.

2.0 EMS Summary

At the highest level, document PD-010 (Management System, see **Appendix 1**) provides a summary of the NRS management system. An extract from PD-010 detailing the structure of the management system is shown below (figure 1). The management system takes an integrated, process-based approach in which several processes are identified that address all the activities required to deliver the company mission while complying with the necessary legal, governance and contractual obligations.

APPENDIX D: MANAGEMENT SYSTEM HIERARCHY AND COMPLIANCE

DOCUMENT HIERARCHY

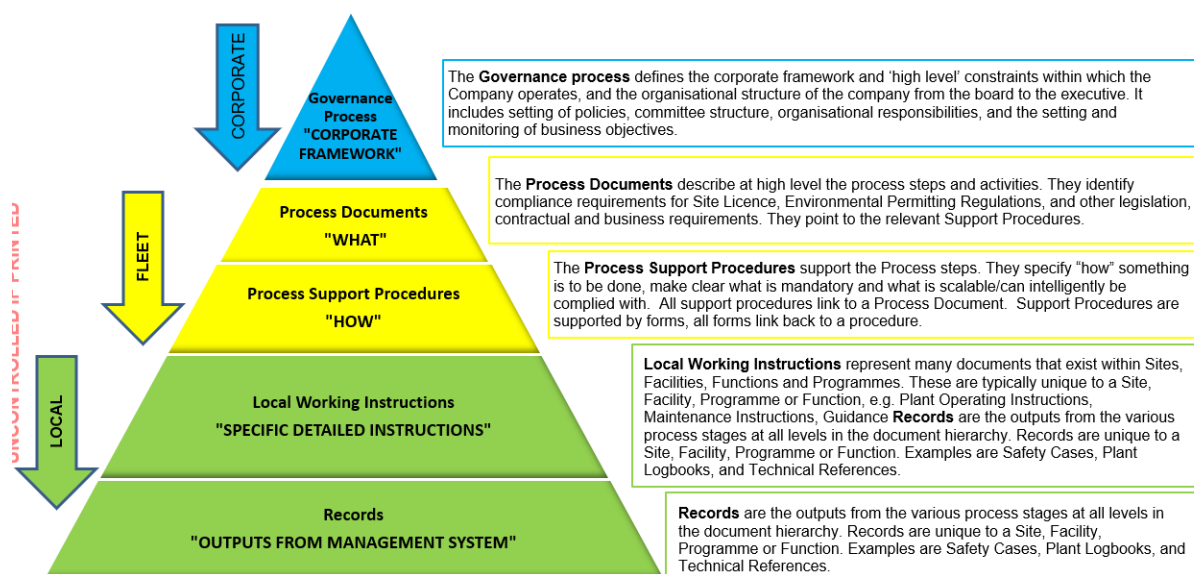


Figure 1 Management system hierarchy and compliance

A key supporting process document which assures compliance with specific regards to EMS requirements is PD-012 (Environmental Management). This describes the controls necessary for an effective environmental management system. The environmental management system is embedded throughout the Integrated Management System (IMS) across many of the common processes. PD-012 also provides a compliance matrix against the requirements of BS EN ISO 14001:2015, and the management system is certified to this standard (see **Appendix 3**). The overall objective is to identify, control and improve, as appropriate, the impact of our activities in the following key areas, whilst ensuring compliance with relevant legal and other requirements:

- Releases to air.
- Releases to water.
- Land quality.
- Waste management.
- Resource use.
- Biodiversity and heritage.
- Transport.

Another key supporting process document is PD-026 (Waste Management) which specifically describes the key processes required for compliant waste management, both radioactive and non-radioactive waste. An important requirement of PD-026 is that each site is required to produce a Waste Management Compliance Matrix (F-318) which specifically maps company-wide and site level procedures/documents to the relevant waste regulatory regime compliance requirements. An extract from F-318 can be found in **Appendix 2**. The compliance matrix for Trawsfynydd has been updated to incorporate the compliance requirements for the Deposit for Recovery permit. Key supporting site-level documentation, identified in the matrix, will be reviewed and updated prior to the commencement of any permitted activities to ensure the permit requirements are fully incorporated. A Construction Environmental Management Plan (CEMP) was also prepared in support of the planning application, this document is included in **Appendix 4** and will form part of the suite of procedures in managing the DfR activity. The management system ensures that all activities will be undertaken in accordance with Technically Competent Management (TCM) requirements. NRS is in the process of upskilling relevant personnel, if this is not achieved in time, arrangements will be put in place to ensure cover from a third-party Certificate of Technical Competence holder, such that TCM compliance is assured.

A more detailed summary of the NRS management system, can be found in **Appendix 5** (Company Manual M-023: Introduction to the Safety, Security & Environment Management Prospectus).

The specific measures for waste acceptance have been outlined in **Appendix 6**. Live site procedures referred to in **Appendix 2** (F-318) will be updated prior to the commencement of operations to incorporate the measures in **Appendix 6**.



OFFICIAL

APPENDIX ONE: PD-010

[Link to PD-10 in NRS Company Management System](#)



OFFICIAL

APPENDIX TWO: F-318

[Link to F-318 in NRS Company Management System](#)



OFFICIAL

APPENDIX THREE: LRQA CERTIFICATION



OFFICIAL

APPENDIX FOUR: CONSTRUCTION ENVIRONMENT MANAGEMENT PLAN

TRAWS-L28302-DOC-0232 Issue 01



OFFICIAL

APPENDIX FIVE: M-023: INTRODUCTION TO THE SAFETY, SECURITY & ENVIRONMENT MANAGEMENT PROSPECTUS

APPENDIX SIX: KEY CONTROL MEASURES FOR WASTE ACCEPTANCE

[NOTE – Entire New section inserted June 2025 – yellow highlight not applied to aid reading]

1. Purpose

To ensure that only suitable waste types meet the conditions of the DfR permit and Waste Recovery Plan are accepted within the DfR permit boundary. This procedure, and associated waste transfer and acceptance form (TRAWS-F915-DFR), outlines the steps for pre-acceptance, acceptance, verification and record keeping, in accordance with the following guidelines:

- [How to comply with your environmental permit](#) - see page 41
- [Natural Resources Wales / Prepare a management system for a deposit of waste for recovery activity](#) – Waste acceptance procedures
- [2003/33/EC: Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC](#)

2. Scope

Applies to **ALL** waste received at the North End area, as outlined in the permit boundary in Drawing **TRA-3210-LA-42970-01-SA** submitted with this application. The scope of the permitted activity is limited to storage of wastes pending recovery, and subsequent use of waste in extending and improving the laydown area, as per the associated application documents. The associated waste treatment (crushing and screening) and storage activities are covered by Part B Mobile Plant Permit and NWFD2 exemption (see **Figure A6.1** box model below) however where these activities will also be undertaken within the permitted area, waste acceptance procedures will apply at the point any waste is received into the area covered by the DfR permit boundary, this will ensure that all waste movements into the area covered by the DfR permit are compliant. The WRAP protocol will be fully utilised in the production of suitable material for use under the permit. Resultant 6F2 material produced under WRAP will act as a substitute for virgin materials in extension and improvement of the North End laydown area to support future planned Reactor Dismantling activities. Testing to ensure conformance with WRAP will be undertaken on the processed material as part of that process, in accordance with the measures outlined in the WRAP protocol, however this is outside the scope of this procedure which concerns Waste Acceptance.

The box model in **Figure A6.1** shows a conceptual layout. **A detailed schematic with specific locations for each campaign must be in place prior to commencement of each campaign.** This will be confirmed with the RHBR Principal Contractor. DfR activities are shown in blue, activities authorised under Part B mobile plant, or excluded under NWFD2, are shown in green.

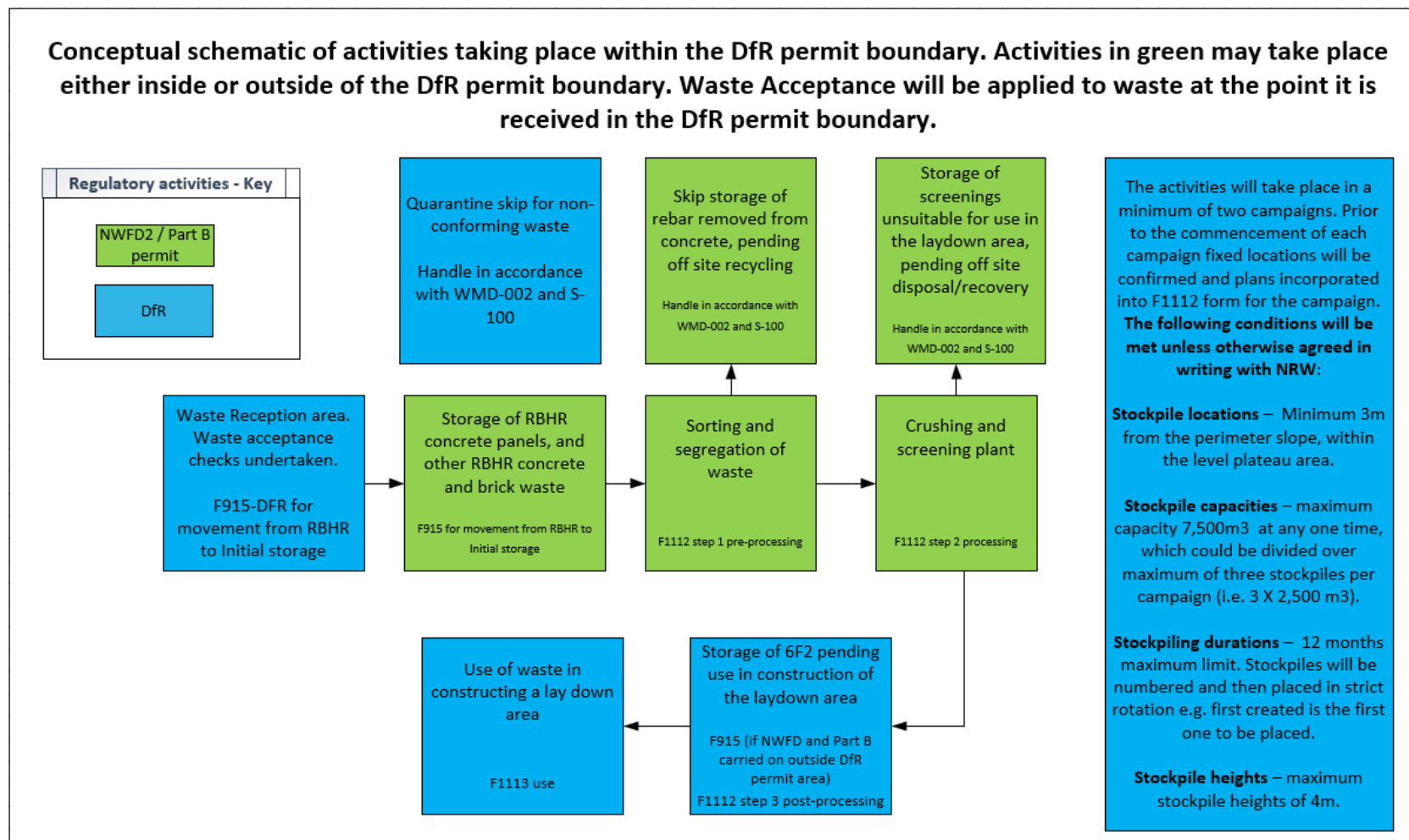


Figure A6.1 Conceptual layout

3. Responsibilities (in regards to Waste acceptance)

Technically Competent Manager (TCM) – Specific (NRS) role for ensuring compliance with site Deposit for Recovery (DfR) permit. Responsible for ensuring waste acceptance procedures are followed in full.

Waste Engineer (WE) – NRS role. Responsible for assuring that RHBR controlled waste is adequately classified, stored and handed over to the DfR area for recovery.

Waste Supervisor (WS) – Principal contractor or NRS role. Responsible for assuring that RHBR controlled waste is adequately classified, stored and handed over to the DfR area for recovery.

4. Pre-acceptance

The waste will be from a single source, the Reactor Building Height Reduction (RBHR) demolition project, and has been characterised prior to undertaking any demolition works, in accordance with NRS Company Standard S-100 Management of Controlled Wastes, and S-324 Characterisation Management to ensure material hazardous properties, radiological contamination, and presence of asbestos, are identified, to support appropriate management and ensure waste is managed and classified appropriately. This process ensures concrete is adequately assessed and areas suspected of contamination (based on visual indicators such as painted surfaces or oil/chemical contamination, or based on records pertaining to historic use which may have given rise to contamination) are tested to confirm presence of hazardous properties. Asbestos surveys were also carried out as part of characterisation. All material will be confirmed as Out of Scope (non-radioactive) and cleared for asbestos (in accordance with Control of Asbestos Regulations) prior to being classified.

Section 2.1.1 of The Council Decision 2003/33/EC (waste acceptance at landfills) confirms the proposed waste types are acceptable as inert waste without testing if:

- *they are single stream waste of a single waste type (although different waste types from the list may be accepted together if they are from a single source); and*
- *there is no suspicion of contamination and they do not contain other material or substances such as metals, asbestos, plastics, chemicals, etc. to an extent which increases the risk associated with the waste sufficiently to justify their classification as non-inert.*

In regards the proposed EWC codes included in the permit, The Council Decision further states testing is not required with the following guidelines:

- (*) Selected construction and demolition waste (C & D waste): 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 usage 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.

The following suite of characterisation reports:

- TRAWS/L28302/DOC/0154 Pre-Demolition Assessment of Materials Against Clearance Thresholds [includes non-rad assessment to support WM3 classification]

- TRAWS/L28302/DOC/032 Pre-Construction Information: Trawsfynydd RBHR.
- TRAWS/L28302/DOC/080 RBHR Awareness of Radiological Requirements and DOC/0170 regarding 'Additional surveys to support Radiological Requirements.

have been incorporated into this procedure to support classification of concrete, bricks, tiles and ceramics as non-hazardous and Out of Scope.

In the event of any amendments to the characterisation plans., the TCM shall be notified, to ensure arrangements are sufficient and procedures updated as necessary.

Key Pre-acceptance Control Measure:

Prior to approval of transfer of any waste to the DfR area waste must be classified in accordance with WM3 by personnel competent in hazardous waste classification¹, to confirm it consists only of the EWC codes/descriptions listed below, and must exclusively consist of waste from the RBHR project:

List of Waste Codes	Description
17 01	Concrete, Bricks, Tiles and Ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and Ceramics
17 01 07	Mixtures of Concrete, Bricks, Tiles and Ceramics

All material characterised in accordance with TRAWS/L28302/DOC/0154 and TRAWS/L28302/DOC/032 confirming, for the waste types above, there is no contamination and waste can be classed as a single source in accordance with Section 2.1.1 of The Council Decision 2003/33/EC (waste acceptance at landfills) and therefore no further testing required.

Prior to the commencement of a transfer of waste from the RHBR area to the DfR area, **Form TRAWS-F915-DFR Part A (copy included below)** shall be completed which includes confirmation of:

- Unique record sheet identification number.
- Pre-acceptance and rad clearance info is pre-populated with reference to the characterisation report above. WE or appointed WS to sign-off.
- SIC Code, Waste Owner/Project, PWMP number and Intended recovery operation all pre-populated. WE or appointed WS to sign-off.
- Source and description of the waste including quantity.
- LOW code(s) assigned following classification with WM3. Provide a written description under and tick the appropriate LOW Code; include the volume of material expected to be consigned.
- Insert asbestos clearance number, ACP to sign.

¹ WM3 states users should be "competent in hazardous waste and have some knowledge of chemistry to fully utilise all aspects of the guidance".

- Part A sign-off by Waste Engineer or Appointed Waste Supervisor.

Once complete, form to be sent to the TCM.

5. Waste acceptance checks upon delivery

Operational measure:

Prior to the acceptance of any wastes within in the DFR permit boundary a detailed schematic which incorporates specific locations for the activities in Figure A6.1 shall be in place and agreed by the TCM.

Waste Acceptance:

Consignments raised in TRAWS-F915-DFR Part A will only be received within the agreed date/time period; under oversight of the TCM or his/her delegate. Material or waste otherwise deposited will be subject to site investigation and event reporting procedures.

TCM (or delegate) to undertake waste acceptance checks on each consignment when received in the DfR reception area. Visually inspect the material to check that it is consistent with the description in TRAWS-F915-DFR part A (pre-acceptance criteria). TCM (or delegate) to Record in TRAWS-F915-DFR Part B (copy included below):

- Circle LoW code for the waste
- Confirm Part A complete
- Enter Date
- Check Part A complete
- Confirm TCM (or delegate's) assessment of quantity, description, and LoW classification consistent with Part A.
- Check for no visual contamination or non-conforming materials.
- Accept or Reject and highlight reason.

If the load does not match pre-acceptance description it should be rejected in accordance with section 6.0 below. If the load is acceptable it shall be placed in the pre-processing stockpile.

6. Rejection and non-conformance

Criteria for rejection:

- Waste is not on the permitted list.
- Documentation is incomplete or incorrect
- Waste shows signs of contamination or is not as described
- Waste is not suitable for recovery under WRAP and subsequent placement in accordance with the DfR permit.

If documentation checks and visual checks indicate non-conformance, reject the load and instruct the carrier to move it to the quarantine area immediately. In addition to record keeping requirements below, the event shall be raised on Q-PULSE.

Post-acceptance, should any further non-compliant materials be detected, material shall be placed in the quarantine area and an event raised on Q-PULSE. Should such a circumstance arise, all waste acceptance shall cease pending an investigation to confirm

why the non-conformance was not detected at the point of delivery, operations shall only resume where the TCM is satisfied that inspection and documentation measures are adequate to prevent recurrence.

Rejected waste shall be sent off-site for recovery or disposal as appropriate.

7. Record Keeping

All approvals of transfer and waste acceptance of waste to the DfR area to be kept by the TCM and securely stored within the Waste team filing system.

The data captured on

- TRAWS-F-915-DFR forms,
- WRAP Materials Management Plan Records (site forms F1112 and F1113), and
- quantities for off site transfer of waste produced in the DfR area (i.e. metal rebar and out of spec crusher arisings)

shall be recorded on a spreadsheet, held by site Waste Team, to provide an auditable trail of all controlled waste activities occurring within the boundary of the DfR permit.

This data should be reviewed periodically to ensure material quantities and the stockpile storage periods are not approaching limits in the DfR permit.

8. Review

Any modifications to these arrangements may be made as required, subject to TCM confirmation that the revised arrangements conforms to the requirements of the guidance referenced in section 1.0. The TRAWS-F915-DFR form may in future be migrated to a fully digital format and/or converted into a season-ticket model for recurring waste transfers.

Unique ID: _____		
PART A To be completed and signed prior to transfer to the DfR area		
Pre-Acceptance: All material characterised in accordance with TRAWS/L28302/DOC/0154 & 0170, and managed in accordance with TRAWS/L28302/DOC/032. These processes confirm, for the waste types below, there is no contamination and waste can be classed as a single source in accordance with Section 2.1.1 of The Council Decision 2003/33/EC (waste acceptance at landfills) and therefore no further testing required.		
Radiological Clearance: All Material will consist of clean list items as covered in: TRAWS/L28302/DOC/0190 & 080.		Project Waste Management Plan ref: TRAWS/L28302/PWMP/0804
SIC Code 96090 Other service activities n.e.c.	WASTE OWNER – Project / Department RBHR Project NRS Trawsfynydd, Blaenau Ffestiniog, Gwynedd, LL41 4DT	INTENDED RECOVERY OPERATION (INERT INFILL/HARDCORE/OTHER) as agreed in PWMP Use in extension and improvement of the North End Laydown area. Rebar to be removed, and waste to be processed to 6F2 prior to final placement.
WM3 List of Waste (LoW) code (Tick code that applies):		Volume (volumetric calculation with appropriate conversion factor) (m ³)
<input type="checkbox"/> 170101 Concrete		
<input type="checkbox"/> 170102 Brick		
<input type="checkbox"/> 170103 Tiles and Ceramics		
<input type="checkbox"/> 170107 Concrete, Bricks, Tiles and Ceramics		
Description: (i.e. Concrete panels, concrete rubble, or brick masonry):		
Confirmation of asbestos clearance. Insert certificate/Reference number:		Asbestos Competent Person (ACP): Print Name: Signature: Date:
Waste Engineer or appointed Waste Supervisor giving approval: By signing this form I confirm that the information provided on this form is true, accurate and complete. I also confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011, Print Name: Signature: Date:		

Unique ID: 					
PART B To be completed and signed upon acceptance of the material into the DfR area.					
Acceptance site: DfR Permit Area [PERMIT NUMBER] , NRS Trawsfynydd, Blaenau Ffestiniog, Gwynedd, LL41 4DT					
Provenance. Circle LoW code	Confirm quantity matches part A (tick)	Date	Waste Acceptance (TCM or appointed person to confirm)	ACCEPT /REJECT (A/R)	Reasons for Rejection (Circle)
170101			Confirm <u>ALL</u> of the following: Part A complete Description, quantity, origin and EWC code in Part B matches Part A. Waste visually matches Part A description, and visually no contamination or non-declared materials		Unpermitted EWC code
170102					Documentation incomplete
170103					Contamination or not as described
170107					Unsuitable for recovery via WRAP
Comment (if rejected):					
NOTE: If rejected, material must be immediately moved to the designated quarantine area.					
I confirm the waste is accept as having been asbestos cleared, and has been classified and meets the acceptance criteria for storage and recovery in accordance with the DfR Permit. TCM (or appointed person) Print Name: Signed: Date:					