LLW Repository Ltd

Waste Acceptance Procedure

Waste Forecasting Guide

WSC-GUI-WFO – Version 3.0 – September 2013

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1. Introduction

LLW Repository Ltd provides a range of treatment and disposal services to Customers across the UK to support the management of lower activity radioactive waste through the Waste Services Contract (WSC). Our services include the treatment of metallic, combustible and supercompactable wastes as well as the disposal of Very Low Level Waste (VLLW) and Low Level Waste (LLW). This Guide forms part of our Waste Acceptance Procedure (WAP).

1.1. Waste Acceptance Procedure

The WAP is the collective term used for the arrangements that Customers follow to consign waste to LLW Repository Ltd for treatment and / or disposal. It forms part of the WSC and it is a requirement for Customers to follow the WAP when consigning waste to LLW Repository Ltd. This Guide, and the associated Process Diagram, Forms and Templates are also part of the WSC.

The WAP is split into a series of logical Processes that cover all aspects of waste management from forecasting through characterisation to treatment and disposal. The Processes are:

- Waste Forecasting
- Waste Assurance
- Waste Characterisation
- Waste Enquiry
- Waste Consignment
- Waste Receipt

Each Process within the WAP can consist of a Process Diagram, a Guide, and various Forms and Templates.

Process Diagrams

Each Process within the WAP is detailed in a Process Diagram. This Diagram highlights the key steps in each process and defines the actions that the Customer, LLW Repository Ltd and the Supplier will take to complete the process.

Guides

Each Process is supported by a Guide, i.e. this document. The Guide provides additional details about each process step, information requirements, actions and the objectives of the Process. The Guide also explains how each Form should be completed and the role of any Templates that LLW Repository Ltd completes.

Forms

Forms are used to provide relevant information at specific points within each Process. The Forms are to be completed by the Customer and submitted to LLW Repository Ltd. Forms can be completed electronically and submitted to LLW Repository Ltd by e-mail.

Templates

Templates are completed by LLW Repository Ltd and issued to the Customer to provide relevant information within a Process, such as a Quotation or an Approval. Templates will be completed electronically and issued to the Customer by e-mail.

1.2. Process Guide

This Guide provides support to Customers following the WAP to consign waste to LLW Repository Ltd under the WSC. It supports the relevant Process by providing details about each process step, the information requirements, key actions and the objectives of the relevant Process.

This Guide also details how Customers should complete each Form required by the Process and introduces the Templates that are issued by LLW Repository Ltd.

It should be read in conjunction with the WAP Overview document which introduces each Process within the Procedure. The Overview document also explains the types of waste which can be consigned and the pre-requisites that must be met by Customers before using and / or completing a Process.

1.3. Help and Support

If you need any assistance or have any questions regarding this Guide, Process Diagram, or the associated Forms and Templates, please contact the LLW Repository Ltd Customer Team by telephone: (01946) 770300 or by e-mail: customerteam@llwrsite.com

2. Waste Forecasting Process

The Waste Forecasting (WFO) Process must be completed and approved before a Customer can consign waste to LLW Repository Ltd through the WSC.

The WFO Process allows Customers to provide LLW Repository Ltd with a regular forecast of their Treatment and Disposal Volumes, Disposal Activity Content and Waste Packaging requirements.

Customers following the WFO Process must define the overall quantity of waste to be consigned over the forthcoming 5 year period for each Waste Service option. This process is undertaken every 6 months to achieve a rolling 5 year forecast. The WFO Process is an ongoing process between the Customer and LLW Repository Ltd for the duration of the WSC.

For each submission the process begins with the Customer compiling their requirements for the next 5 years in the WFO Form and submitting it to LLW Repository Ltd. The first two years are to be completed on a monthly basis and the remaining three years are annual summaries.

Where a Customer submits a Joint Waste Management Plan (JWMP), the forecast submitted as part of the WSC should align with the data provided in Appendix 1 of their JWMP. If during the course of the year the Forecast is amended the JWMP should be revised to reflect these changes during the 6 monthly revision of the JWMP.

This process is reviewed every 6 months to provide a rolling 5 year forecast. This approach is intended to allow Customers to improve their near term consignment forecasts in light of changing waste quantities and encourages the Customer and LLW Repository Ltd to continually consider forecasts over the short-term.

Customers must also detail any other treatment or disposal routes they intend to use outside the services provided by LLW Repository Ltd through the WSC to create a National picture of waste routes being used by the nuclear industry on behalf of the Nuclear Decommissioning Authority (NDA).

This information will be used by the NDA to demonstrate to key stakeholders and Regulators that the UK Nuclear Industry Low Level Waste Strategy is being successfully implemented. This information is also vitally important in securing the future of Vault 9 for disposal, as LLW Repository Ltd is obliged to demonstrate to the Waste Planning Authority, under the Vault 9 Planning Permission, that Customers are using alternative waste treatment and disposal options where possible.

Customers can choose how to approach completion of the WFO Form so that it best fits with their organisation or operations. For example, forecasts could be submitted at a Company or Site level.

Following review of the forecast, LLW Repository Ltd will issue an Allocation of volume and radioactivity capacity for disposal at the LLW Repository Site. For Waste Packaging requirements, LLW Repository Ltd will ensure that sufficient waste containers are available to meet Customer requirements.

In addition to this Guide, the WFO Process consists of:

- Waste Forecasting Process Diagram (Reference: WSC-PRO-WFO)
- Waste Forecasting Form (Reference: WSC-FOR-WFO)

The following sections of this Guide explain the Process Diagram and introduce any Templates produced by LLW Repository Ltd. Appendix 1 provides detailed guidance on the information required to complete any Forms associated with this Process.

All Customers are required as part of their contractual agreement to submit a WFO.

If a Customer fails to submit a WFO they will be contacted immediately and requested to provide a completed submission. If a WFO is still not received after an agreed period of time, a forecast of ‘zero’ volume and radioactivity will be generated by LLW Repository Ltd and returned to the Customer for endorsement.

If a response is not provided, LLW Repository Ltd will not be able to guarantee either a volume or radioactivity allocation at the LLW Repository Site during the 5 year period covered in their WFO submission.

It will also put at risk LLW Repository’s ability to manufacture and supply containers at short notice and mean that we are unable to inform our Framework Suppliers of your waste forecast demands for disposal or treatment which could potentially result in additional costs.

Customers are able to vary their WFO at any point throughout the year.

2.1. Waste Forecasting Form Review

The initial LLW Repository Ltd assessment of Customers WFO submissions consists of a series of data quality and alignment checks. The consignments of previous years and other

information received from the Customer concerning operational and decommissioning plans are taken into account when assessing the waste volumes and activity allocation requests. Each section of the WFO Form is then checked against the corresponding points listed below.

Metallic Waste Treatment

The review will consider the capacity available from LLW Repository Ltd's Service Suppliers and the capability to support the volume and rate of consignments forecast. It will also consider the secondary waste resulting from treatment, to be disposed at the Low Level Waste Repository.

Combustible Waste Treatment

The review will consider the capacity available from LLW Repository Ltd's Service Suppliers and the capability to support the volume and rate of consignments forecast. It will also consider the secondary waste resulting from treatment, to be disposed at the Low Level Waste Repository.

Supercompactable Waste Treatment

The review will consider the capacity available from LLW Repository Ltd's Service Suppliers and the capability to support the volume and rate of consignments forecast. It will also consider the secondary waste resulting from treatment, where applicable, to be disposed at the Low Level Waste Repository.

Very Low Level Waste Disposal

The review will consider the capacity available from LLW Repository Ltd's Service Suppliers and the capability to support the volume and rate of consignments forecast.

Low Level Waste Disposal

The review will consider the volume of waste forecast to be disposed of at the LLW Repository Site and the capability to support the volume and rate of consignments forecast.

Radioactivity

LLW Repository Ltd must ensure that the total of all Customer radioactivity allocation requests does not exceed the annual radiological limit specified in the Low Level Waste Repository's Environmental Permit for disposal issued by the Environment Agency (Reference: EPR/YP3293SA).

Numerous scenarios exist where the sum of all Customer allocation requests are greater than the Low Level Waste Repository's annual authorised limit. If this situation arises LLW Repository Ltd will enter into a period of Customer consultation in order to agree appropriate action to complete a fair and equitable activity allocation.

The distribution of Radioactivity allocation is likely to be the most common reason to prevent a WFO Form being approved by LLW Repository Ltd. Customers are encouraged to be as accurate as possible when forecasting their requirements.

LLW Repository Ltd will ensure that *approved* WFO Forms are issued to Customers prior to the start of the forecasted period i.e. by 1st April or 1st October respectively.

Packaging Services

The review will consider the Customers forecast against LLW Repository Ltd's strategic stock holding of containers. This will highlight any requirement to place orders for the manufacture of new packages, prior to Customer Purchase Orders being placed through the Packaging Services Process. In addition, LLW Repository Ltd will seek clarification when forecasts are made that do not align with the quantity of forecasted waste volumes.

Other Services

The review will consider the Customers request for services such as Dangerous Goods and Safety Advice Services (DGSA), Transport Services and Waste Loading Plan (WLP) Services against LLW Repository current programme of work. This will highlight where extra resources may be required to meet the needs of the Customer.

2.2. Monitoring

LLW Repository Ltd will monitor Customer performance against their forecasts. Where other Customers may be able to utilise surplus allocations, LLW Repository Ltd will facilitate transfers of allocation between Customers. LLW Repository Ltd's overall aim for forecasting is accurate and realistic forecasts from Customers. Over forecasting prevents other Customers from using services, under forecasting may result in access to services being restricted and poor performance against a forecast hinders operational planning for the packaging, treatment and disposal services.

2.3. Process Diagram

The WFO Process Diagram can be found in the Customer Portal of LLW Repository Ltd's website: www.llwrsite.com

The Process Diagram outlines the key process steps and responsibilities within each Process of the WAP. There are three rows on the diagram to represent the responsibility of each Party:

- Customer
- LLW Repository Ltd
- Waste Treatment and / or Disposal Service Supplier

Each action or responsibility identified in a Process Step will be undertaken by the relevant party. In general, these actions and responsibilities may be carried out by any person working for or on behalf of the relevant organisation. However, in certain situations, it may be necessary for steps to be taken by a key role holder identified in the WSC. The vertical dotted lines on the Process Diagram split the process into sub-sections that represent key points in the process such as the submission of a Form or the approval of a submission. These sub-section markers are designed to aid navigation through the steps.

2.4. Step by Step Guide

This Section provides a detailed Step By Step guide through the Process Diagram identifying actions, roles and responsibilities and performance measures within the WFO Process. The Step Numbers relate directly to the WFO Process Diagram.

The WSC places responsibilities upon the Service Manager and the Customer Representative for the WFO Process. This Step by Step Guide should therefore be read in conjunction with the relevant sections of Schedule 1 of the WSC – Conditions of Contract.

LLW Repository Ltd has identified Performance Measures within the Step by Step Guides of each WAP process. A Performance Measure means a set timescale for completing a step within the WAP.

If the process step cannot be completed in this timescale, the Service Manager and the Customer Representative may agree additional time to complete the process step. Failure to meet a Performance Measure by any Party will not invoke any formal contractual action. However, regular poor performance against one or more Performance Measures will be discussed by the Service Manager and the Customer Representative to identify actions to improve performance.

Step	Process Guidance, Actions and Performance Measures	Responsibility
1	WFO Forms are submitted to the LLW Repository Ltd Customer Team e-mail address. Completed WFO Forms must be submitted by the 1st March and 1st September. *Performance Measure:* Customers must submit completed WFO Forms by 1st September and 1st March each year to secure the allocations, services and packages they require for the forthcoming year.	Customer
2	Following receipt of the WFO Form, the Inventory Team will review the request against Volume and Radioactivity capacity limits for the services and check availability of Package Stocks with Suppliers.	LLW Repository Ltd
3	LLW Repository Ltd will determine if the WFO is acceptable and can be approved. Consideration is made against each section of the Form inline with Review Criteria.	LLW Repository Ltd
4	If the WFO Form cannot be approved, LLW Repository Ltd will communicate this to the Customer along with details of the reasons why and possible alternatives. If alternative options cannot be agreed, the WFO Form would be rejected and LLW Repository Ltd will issue a signed rejected WFO Form. If alternative options can be agreed with Customer, the WFO Form will be amended and approved. The process diagram indicates that this would restart the process at Step 1. However, this would follow a streamlined version of the process dependent on the specific scenario. This restart is necessary as several Customers may have been required to amend their forecasts and LLW Repository Ltd must re-check that the Repository limits are not exceeded following multiple changes.	Customer
5	LLW Repository Ltd will issue an approved and signed WFO Form before the official start date of the forecasted period by	LLW Repository Ltd

Step	Process Guidance, Actions and Performance Measures	Responsibility
	either 1st April or 1st October respectively. *Performance Measure:* LLW Repository Ltd will ensure that approved WFO Forms are issued to Customers prior to the start of the forecasted period i.e. 1st April or 1st October for each of the six month forecasting periods.	
6	Information may be extracted from Customers WFO Forms and provided to Waste Services Suppliers to provide an indicative forecast of future waste arisings against specific services. This will aid Treatment and Disposal Service Suppliers in managing their operational planning and bidding for work under LLW Repository Ltd framework contracts.	LLW Repository Ltd
7	Supplier receives forecasting information.	Supplier
8	Throughout the year the Customer can review and amend their WFO Form at any time. Any amendments should be submitted to the LLW Repository Ltd Customer Team e-mail address.	Customer

3. Forms

3.1. Waste Forecasting Form

The WFO Form is to be completed by Customers wishing to use LLW Repository Ltd's waste treatment and / or Disposal Services through their existing WSC.

Customers using the WFO Form must complete the form every six months as fully as possible, defining the overall quantity of waste to be consigned over the forthcoming 5 year period (2 year period broken down by financial reporting periods plus 3 annual summaries) for each Waste Service option and alternative treatment and disposal services not provided by LLW Repository Ltd.

The WFO Form requires Customers to complete the following sections:

Section	Purpose
Customer Information	Provides essential Customer Information and Contact Details for use in conjunction with the WFO Process.
Forecast Information	Provides the forecasting information for all waste the Customer intends to consign including those routes outside the services provided by LLW Repository Ltd through the WSC and also the container requirements under the Packaging Service.

Appendix 1 provides page by page visual guidance to support Customers in completing the WFO Form.

4. Templates

There are no Templates associated with the WFO Process. All the required information is addressed in the WFO Form.

Appendix 1: Waste Forecasting Form Completion

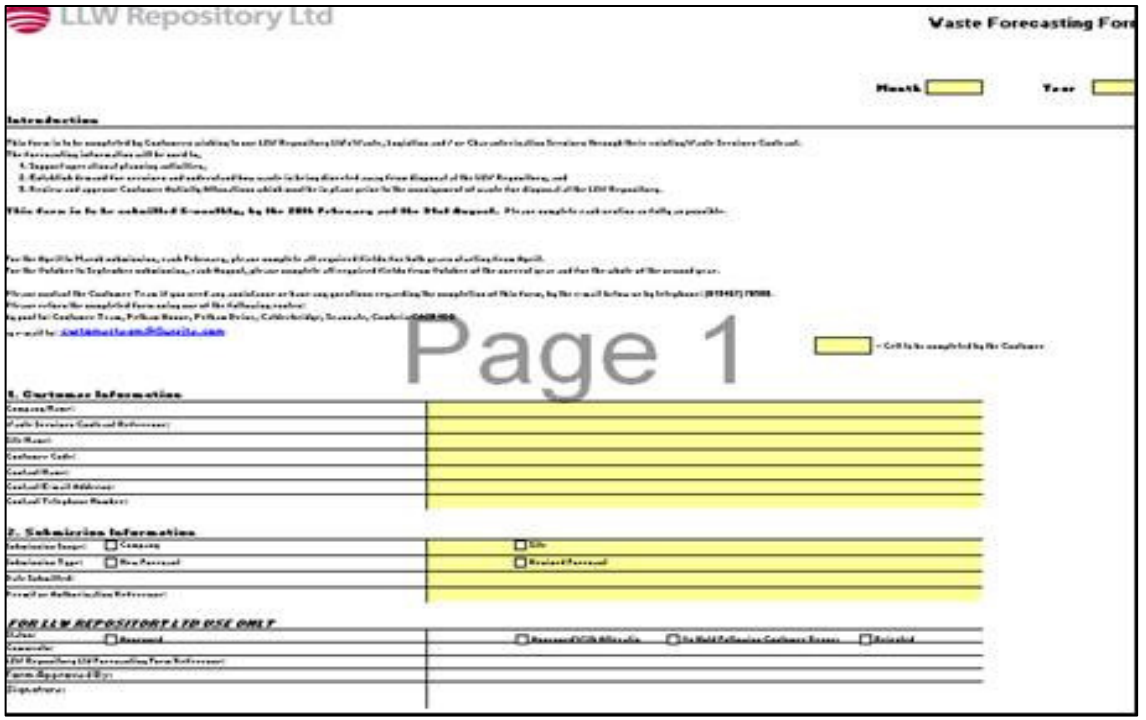
The **Customer Information** section provides the contact information for LLW Repository Ltd for the duration of the Forecasting period. The information required in this section is standard for all LLW Repository Ltd WAPAP Forms.

The **Company Name** is the company who is managing the volume of waste being Forecasted, and the progress through the WAP, not necessarily the Site Owner, and holds the WSC with LLW Repository Ltd.

The **Site Name** refers to the Site where the waste exists, not the registered office of a company (if different).

The **Customer Code** can be found within the Contract Data Schedule of the Customer's WSC

The **Contact Name** and contact details should be for the person LLW Repository Ltd communicates with for this Enquiry.



Enter the **Calendar Year(s)** this Forecasting Form relates to. For April–March state the year. For October–September state both years that will be covered.

Submission Information defines the scope of the forecast for a Customer. The Form can be submitted at Site or Company level. Complete the type of forecast, i.e. is this a new submission or a revision to an existing forecast.

The last section is used by LLW Repository Ltd to support the Form through the process following submission.

The **Forecast Information** section relates to the volumes required for Treatment and / or disposal.

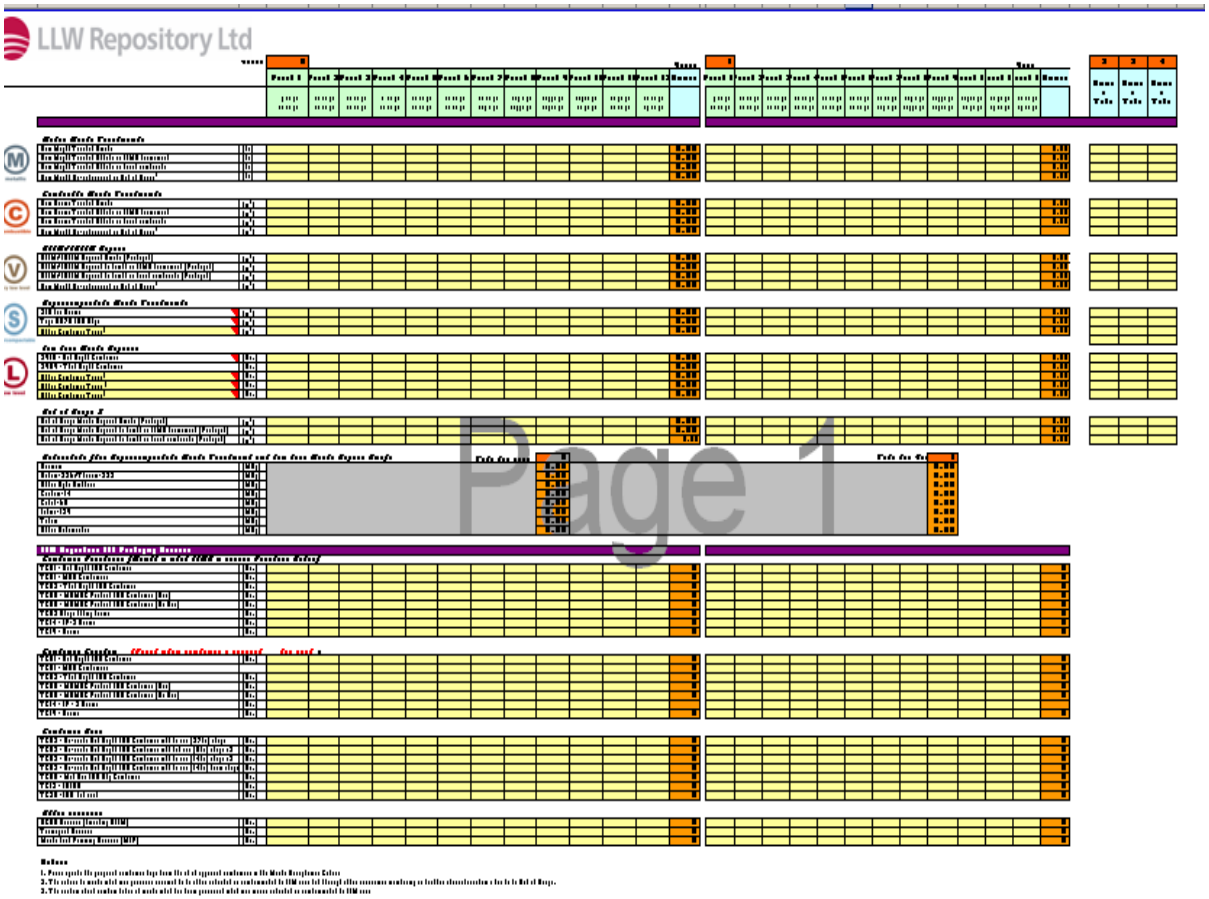
Metallic Waste Treatment: complete how many **tonnes** are predicted to be shipped in which period. This should be forecast with the raw weight of metal, disregarding any packaging. The agreement on packaging options will be managed later in the WAP.

Combustible Waste Treatment: complete how many **m^3** are predicted to be shipped in which period. This should be forecast with the raw volume of material, disregarding any packaging. The agreement on packaging options will be managed later in the WAP.

Very Low Level Waste disposal: complete how many **m^3** are predicted to be shipped in each period. This should be forecast with the raw volume of material, disregarding any packaging. The agreement on packaging options will be managed later in the WAP.

Supercompactable Waste Treatment: complete how many drums or ISO Skips will be shipped in which period.

Low Level Waste Disposal: complete how many ISO Containers of each type will be delivered in which period. For “Other Container Types”, please specify which type and associated volumes.



The **Radioactivity** section only requires a forecast for the total Radioactivity content of the waste over the next 24 months.

Customers need only enter a single value of MBq for each row, inclusive of ‘Other Radionuclides’ as required.

Note: The April to March forecast will also require the customer to complete a total in December to ensure LLW Repository Ltd is within its EA annual disposal limits.

Other Treatment and Disposal Routes complete the volumes of waste that are to be treated / disposed outside the services provided by LLW Repository Ltd through the WSC.