



RESOURCE AND WASTE WASTE MANAGEMENT PLANS FOR CONSTRUCTION AND DEMOLITION PROJECTS

BACKGROUND

Resource and Waste Management Plans (RWMP) focus on good practice approaches to prevent waste, reuse materials, reduce waste and better manage C&D wastes that cannot be prevented on development projects. The structure of the plan is flexible and proportionate so it can be applied to projects of different scales. The approaches presented are based on international principles of optimising resources and reducing waste on construction projects through Prevention, Reuse, Recycling, Green Procurement Principles, Off-Site Construction, Materials Optimisation, Flexibility and Deconstruction.

The EPA have developed the [Best practice guidelines for the preparation of resource & waste management plans for construction & demolition projects](#)

In preparing a Resource Waste Management Plan (RWMP) the level of detail presented should be reflective of the scale and complexity of the project and the following tiers are recommended:

Tier 1: For smaller scale projects, below the thresholds presented in Text Box 1, Limerick City and County Council has developed a simplified RWMP, please see details below.

Tier 2: For larger scale projects, including Strategic Infrastructure Developments, Strategic Housing Developments, infrastructure projects (road, rail, gas, energy) or any project above the thresholds presented in Text Box 1, require a bespoke RWMP which follows the requirements set out in the best practice guidelines.

These thresholds are based on the principle of proportionality to ensure larger projects with larger potential resource footprints are required to more actively manage resources relative to small scale project.

Text Box 1: RWMP Thresholds**Developments below the following thresholds may be classed as Tier 1 development:**

- New residential development of less than 10 dwellings.
- Retrofit of 20 dwellings or less.
- New commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 1,250m².
- Retrofit of commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 2,000m²; and
- Demolition projects generating in total less than 100m³ in volume of C&D waste.

Developments above these thresholds are classed as Tier-2 projects**PREPARING A RWMP**

A template resource and waste management plan is provided overleaf for Tier 1 projects.

Please complete this plan and return to Waste Management, Environment, Rural Water and Climate Action Department, Limerick City and County Council, Dooradoyle, Limerick. V94 WV78 or by email to CandDwaste@limerick.ie – if you have any problems completing the form please contact 061-557725/061-556078.

UPDATING YOUR RWMP

Although a RWMP is only required to be submitted as part of the planning application process, the project developers should continue to implement these practices and document these activities into Resource and Waste Inventory Trackers which will develop as the project progresses from design through to construction. Resource and Waste Inventory Tracker Templates can be seen in Appendix H and Appendix I below.

Please note that the information contained within this guidance document does not purport to provide, and should not be relied upon as, a legal interpretation of the EPA's Best Practice Guidelines or any associated legislation.

Resource and Waste Management Plan for Tier 1 Construction and Demolition Projects

Resource Management

Project Details:

Planning Ref: _____ Start Date on Site: _____

Name of Contractor/sub-Contractor/Developer: _____

Address of Contractor/Sub-Contractor/Developer: _____

Name of Site Manager: _____

Name of Resource Manager (RM): _____

RM Telephone No: _____ Email: _____

Address of Development: _____

Project Description:

Site Location: _____

Description of Existing Site Layout: _____

Details of Proposed Site Clearance/ Demolition:

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Description of Development (Maximum 250 words):

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Description of Main Construction Elements:**What designing resource/waste initiatives were adopted for this project:****Examples:**

Timber: Consider alternatives to Plywood hoarding, i.e. reusable PVC hoarding. Order correct timber lengths where possible, reducing off cuts. Require timber pallets to be restocked / returned

Plasterboard: Consider ordering custom lengths to avoid off cuts. Accurately forecast quantities required during tender. Adopt minimal waste allowances. Choose the correct type of plasterboard for the task.

Identify waste prevention resource reuse mechanisms implemented:**Examples:**

Timber: Identify potential take-back scheme e.g. pallets. Directly re-use pallets for site activities / Upcycle. Donations of good quality timber to charitable organisations.

Metals: Directly re-use gates, fencing for site activities.

Stone: Direct reuse on site or off-site

Please provide Key Materials and Quantities:

An estimated Resource Inventory in line with the template provided in Appendix A and an estimated Waste Inventory in line with the template provided in Appendix B to be submitted to the Planning Authority prior to commencement of works.

Appendix A: Resource Inventory Template

Description of Resource	Predicted Volume Generated (tonnes)	Prevention (tonnes) (non-waste)	Reused (tonnes) (non-waste)	What measures have been adopted for prevention or reuse
Concrete				
Bricks				
Tiles and Ceramics				
Wood				
Glass				
Plastic				
Bituminous Mixtures				
Copper, Bronze, Brass				
Aluminium				
Lead				
Zinc				
Iron and Steel				
Tin				
Mixed Metals				
Cables				
Soil and Stone				
Insulation Materials				
Gypsum				

Appendix B: Waste Inventory Template

Low Code	Description	Proposed Volume Generated (tonnes)	Recycled (tonnes) (waste)	Recovered ¹¹ (tonnes) (waste)	Disposed (tonnes) (waste)	Name and NWCPO Ref. No. of the Waste Collector, see Appendix C	Name and Permit Ref. No. of Authorised Site(s) receiving waste, see Appendix D
17 01 01	Concrete						
17 01 02	Bricks						
17 01 03	Tiles and Ceramics						
17 02 01	Wood						
17 02 02	Glass						
17 02 03	Plastic						
17 03 02	Bituminous Mixtures						
17 04 01	Copper, Bronze, Brass						
17 04 02	Aluminium						
17 04 03	Lead						
17 04 04	Zinc						
17 04 05	Iron and Steel						
17 04 06	Tin						
17 04 07	Mixed Metals						
17 04 11	Cables						
17 05 04	Soil and Stone						
17 06 04	Insulation Materials						

¹¹ Recovered here includes energy recovery, backfilling and other recovery

Low Code	Description	Proposed Volume Generated (tonnes)	Recycled (tonnes) (waste)	Recovered ¹¹ (tonnes) (waste)	Disposed (tonnes) (waste)	Name and NWCPO Ref. No. of the Waste Collector, see Appendix 1	Name and Permit Ref. No. of Authorised Site(s) receiving waste, see Appendix 2
17 08 02	Gypsum						
17 09 04	Mixed C&D Waste						
17 01 06*	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances						
17 02 04*	Glass, plastic and wood containing or contaminated with hazardous substances						
17 03 01*	Bituminous mixtures containing coal tar						
17 04 09*	Metal waste contaminated with hazardous substances						
17 05 03*	Soil and stones containing hazardous substances						
17 06 05*	Construction materials containing asbestos						
	Other resources (non-waste materials) (specify as needed)						
	Other wastes (specify as needed)						

APPENDIX C**A Guide to an Authorised Waste Collector Permit Search**

A list of authorised waste collectors in your area can be obtained from the National Waste Collection Permit Office (NWCPO) website by logging on at <https://www.nwcpo.ie/permitsearch.aspx> and carrying out the following steps:

1. Click on “Permit Search”.
2. Click on “Search by EWC” and select (for example) “**17 01 07 mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06**”
3. Click on “Select Counties” and select “**Limerick City and County**”.
4. Click on the “NWCPO Ref” to obtain contact details of the waste collector of your choice.

A sample of EWC’s (LoW’s) used in C&D projects are as follows:

Clean Soil and Stone	EWC 17 05 04
Concrete only	EWC 17 01 01
Bricks only	EWC 17 01 02
Tiles & Ceramics	EWC 17 01 03
Mixture of Concrete, Blocks, Tiles	EWC 17 01 07
Wood	EWC 17 02 01
Glass	EWC 17 02 02
Plastics	EWC 17 02 03
Bituminous Mixtures	EWC 17 03 02
Copper Bronze and Brass	EWC 17 04 01
Aluminium	EWC 17 04 02
Iron and Steel	EWC 17 04 05
Mixed Metals	EWC 17 04 07
Cables	EWC 17 04 11
Dredged spoil	EWC 17 05 06
Insulation material	EWC 17 06 04
Plaster Board	EWC 17 08 02
Mixed Construction and Demolition Waste	EWC 17 09 04
Green Waste	EWC 20 02 01
Soil and Stones (from Gardens and Parks)	EWC 20 02 02

If you have a query on how to use this register you are welcome to phone 061-557725/556215.

APPENDIX D

A Guide to Search for Authorised Construction and Demolition Waste Facilities in each Local Authority.

A list of authorised construction and demolition waste facility in each Local Authority can be found by logging on at <http://facilityregister.nwcpo.ie> and carrying out the following steps:

1. Click on “**By LoW & LA Area**”.
2. Click on dropdown field to “**Select a LA area**” of your choice.
3. Click on dropdown field to “**Choose a LoW**” of your choice. A sample list of LoWs (EWC’s) can be seen in Appendix 1.
4. Under “**Authorisation Reference**” click on the reference number of your choice to obtain the “**Waste Facility Permit/Certificate of Registration details**”.

If you have any queries on how to use this register you are welcome to contact

061-557725/556215.

Waste Auditing

The Site/Waste Manager must

- Retain full records of all movements of construction and demolition waste discards during the construction stage of the Project.
- Ensure full traceability of all material to its final destination. Each consignment of C&D waste taken from the site will be subject to documentation, which will conform with Table 2.
- Retain all dockets relating to waste disposal in your file.
- On completion of project, it is advisable to retain records for a minimum period of **seven years**.

Table 2: Details to be recorded.

Detail	Particulars
Name of Project of Origin	e.g. New Harbour, Motorway
Material being Transported	e.g. Soil, Demolition Concrete, Crushed Asphalt etc.
Quantity of Material	e.g. 20.50 tonnes
Date of Material Movement	e.g. 01/01/2007
Name of Authorised Waste Collector	e.g. Authorised Carriers Ltd.
Destination of Material (authorised waste facility).	e.g. Newtown Residential and Office Development

APPENDIX E

By-Product (Regulation 27) Declarations v. Waste Soil and Stone

Where there is a requirement to import or export clean soil and stone to or from a site or development, appropriate authorisations must be in place. Two potential options available are as follows:

- The deposition of soil and stone as a waste to an authorised waste facility such as a Waste Facility Permit or a Certificate of Registration. A brief description relating to waste facility types and limits is described below and a link for further information is detailed in Option A.
- Alternatively, an application can be made under a By-Product (Regulation 27) Declaration to the EPA where the applicant is declaring that the soil and stone generated from a site or development is a By-Product and not a waste. A link to further information and application process is detailed in Option B.

Please note that in relation to Options A and B, appropriate planning must be in place prior to any application being made.

Option A: Local Authority Waste Facility Permit or Certificate of Registration

A Waste Facility Permit (WFP) or Certificate of Registration (COR) can be obtained from the Local Authority under the Waste Management (Facility Permit and Registration) Regulations 2007 (as amended). The Waste authorisation i.e. WFP/COR must be issued by the Council prior to commencement of importation of any suitable waste material (soil and stone) to the property. A Waste Facility Permit is limited to 200,000 tonnes for soil and stone and a Certificate of Registration is limited to 25,000 tonnes. Link to information on Limerick City and County Council website is shown below

<https://www.limerick.ie/council/waste-facility-permits-and-registrations-enforcement>

Option B: By-Product (Regulation 27) Declaration to the EPA

Under Regulation 27 of the European Union (Waste Directive) Regulations 2011 (as amended) the removal/ importation of soil and stone can also be carried out under a By-Product Declaration to the EPA. In this instance the economic operator is declaring the soil and stone is a by- product and not a waste. Where the site is greenfield a By Product **Registration** application is made to the EPA. A Single Case By- Product **Notification** is made to the EPA where the site is brownfield. Link to website is found below.

<https://www.epa.ie/our-services/licensing/waste/by-products-regulation-27/>

APPENDIX F

Article 28 End of Waste (Recycled Aggregates)

End-of-waste marks the point at which a material transitions from a waste to a secondary product. One example of a possible recycled aggregate is crushed concrete. However, Regulation 28(1) of the European Commission (Waste Directive) Regulations 2011-2020 requires that in order for a recycled/recovered material to cease to be classified as a waste, it must meet criteria set out in an end-of-waste decision. The Agency have published a national decision on end-of-waste setting out criteria for recycled aggregates in decision EoW-N001/2023.

End-of-waste gives waste holders the opportunity to demonstrate, with an appropriate level of rigour, that:

- A waste material can be ‘fully recovered’ and no longer be defined as waste.
- The waste can be used as a ‘secondary’ resource in place of and fulfilling the same role as a non-waste derived or virgin ‘primary’ resource.
- New innovations can transform waste into a valuable resource.
- The fully recovered material can be used without causing overall adverse impacts to the environment or human health.

If you decide to make an end-of-waste application, a link to the EPA website is found below.

<https://www.epa.ie/our-services/licensing/waste/end-of-waste-art-28/>

APPENDIX G**Hazardous Wastes in Construction and Demolition Activities**

Hazardous wastes generated by Construction and Demolition activities such as asbestos, objects and equipment containing PCBs, waste oils, contaminated soil, etc. must be transported by authorised waste collectors who are trained in the proper handling storage and transportation of these hazardous waste materials. A non- exhaustive list of Construction and Demolition waste materials and associated List of Waste Codes can be seen below.

Description	EWCLoW Codes
mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances	17 01 06*
glass, plastic and wood containing or contaminated with hazardous substances	17 02 04*
metal waste contaminated with hazardous substances	17 04 09*
cables containing oil, coal tar and other hazardous substance	17 04 10*
soil and stones containing hazardous substances	17 05 03*
dredging spoil containing hazardous substances	17 05 05*
track ballast containing hazardous substances	17 05 07*
insulation materials containing asbestos	17 06 01*
other insulation materials consisting of or containing hazardous substances	17 06 03*
construction materials containing asbestos	17 06 05*
gypsum-based construction materials contaminated with hazardous substances	17 08 01*
construction and demolition wastes containing mercury	17 09 01*
construction and demolition wastes containing PCB (for example PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)	17 09 02*
other construction and demolition wastes (including mixed wastes) containing hazardous substances	17 09 03*

All Waste Transfer Forms (WTF) relating to disposal of waste and materials containing asbestos or hazardous substances must be submitted to Environment and Climate Action Department, Dooradoyle as proof of appropriate disposal.

Hard Copy to above address or email to CandDwaste@limerick.ie is acceptable.

Appendix H: Resource Inventory Tracker Template

Week No:

Description of Resource	Actual Volume Generated (tonnes)	Prevention (tonnes) (non-waste)	Reused (tonnes) (non-waste)	What measures have been adopted for prevention or reuse	Total Value (€) (if available)
Concrete					
Bricks					
Tiles and Ceramics					
Wood					
Glass					
Plastic					
Bituminous Mixtures					
Copper, Bronze, Brass					
Aluminium					
Lead					
Zinc					
Iron and Steel					
Tin					
Mixed Metals					
Cables					
Soil and Stone					
Insulation Materials					
Gypsum					

Appendix I: Waste Inventory Tracker Template

Week No:

Low Code	Description	Actual Volume Generated (tonnes)	Recycled (tonnes) (waste)	Recovered ¹¹ (tonnes) (waste)	Disposed (tonnes) (waste)	Name and NWCPO Ref. No. of the Waste Collector, see Appendix C	Name and Permit Ref. No. of Authorised Site(s) receiving waste, see Appendix D	Total Cost (€) If available
17 01 01	Concrete							
17 01 02	Bricks							
17 01 03	Tiles and Ceramics							
17 02 01	Wood							
17 02 02	Glass							
17 02 03	Plastic							
17 03 02	Bituminous Mixtures							
17 04 01	Copper, Bronze, Brass							
17 04 02	Aluminium							
17 04 03	Lead							
17 04 04	Zinc							
17 04 05	Iron and Steel							
17 04 06	Tin							
17 04 07	Mixed Metals							
17 04 11	Cables							
17 05 04	Soil and Stone							
17 06 04	Insulation Materials							

Low Code	Description	Actual Volume Generated (tonnes)	Recycled (tonnes) (waste)	Recovered ¹¹ (tonnes) (waste)	Disposed (tonnes) (waste)	Name and NWCPO Ref. No. of the Waste Collector, see Appendix C	Name and Permit Ref. No. of Authorised Site(s) receiving waste, see Appendix D	Total Cost (€) If available
17 08 02	Gypsum							
17 09 04	Mixed C&D Waste							
17 01 06*	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances							
17 02 04*	Glass, plastic and wood containing or contaminated with hazardous substances							
17 03 01*	Bituminous mixtures containing coal tar							
17 04 09*	Metal waste contaminated with hazardous substances							
17 05 03*	Soil and stones containing hazardous substances							
17 06 05*	Construction materials containing asbestos							
	Other resources (non-waste materials) (specify as needed)							
	Other wastes (specify as needed)							

