

WRA Waste Wood Classification (WWC) Update

Vicki Hughes - WRA Board Technical Lead and McPhee Associates Limited



Enva Acceptable Materials Guide – Valid until 31st Aug 2023.

Acceptable Materials Guide



Manchester | Version 0.1

Grade A+	Grade A
Soft White Wood including: Pallets, Off Cuts, Cable Drums, Scaffold Boards, Floor Boards, Skids.	All Grade A+ type material plus: Plywood, OSB, Hardwood, Solid Timber and Plain Chipboard.
All above materials must be made from soft white wood and be free from paint, dirt and cannot be charred or rotten.	Wood must not include window frames or doors.

Grade B	Grade C				
All Grade A+ and A type material plus: Window Frames and Doors, MFC (Melamine Faced Chipboard), Melamine and Untreated Decking and Fence Panels.	All Grade A+, A and B type material plus: Hardboard, Civic Amenity Wood Waste and MDF.				
Loads will be graded according to the lowest grade of wood contained in the mix as determined by Enva Wood Recycling.					

All types of metals will be accepted within all grades except plastic coated wire

Unacceptable Materials



We do not accept; Paper, plastic, cardboard, felt, glass, black bags, foam, fabric, plastic coated wire, hazardous wood waste including any creosote and cac treated railway sleepers, telegraph poles, treated fence panels, treated decking, hardcore, formica, greenwaste, soil, burnt or charred material or bricks.

Excessive contamination of loads with unacceptable materials will result in the loads being rejected or excess charges being applied.

For further information call your Account Manager on 0161 370 2360

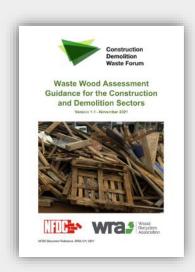


WWC Results Sampling/Testing completed in April 2020

Results to date:

- HWRC small amounts of haz content in fence posts and decking from household stream –
 0.06% (600 tonnes)
- Diminishing and won't exist from 2023 onwards
- C&D stream all construction and most demolition waste wood non haz
- Not enough evidence either way on haz content of structural timbers, external joinery and tiling battens from pre-2007 buildings
- EA issued RPS 249 and RPS250 & SEPA and NRW have confirmed positions
- Industry guidance developed to ensure waste wood is correctly identified and segregated.







Waste Wood Classification – Household (HWRC)

HWRC RPS 249 expires April 2024 and allows business as normal for now

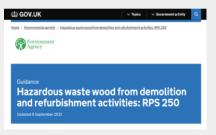


- On-going sampling & testing of fence posts and decking from circa 40 WRA members sites
- To prove that hazardous content reducing and will no longer be there in the future
- Specific sampling process being followed with verified testing houses and test criteria
- Industry sharing results to further knowledge



Waste Wood Classification - Demolition

HWRC RPS 250 expires Sept 2023 and allows business as normal for now



- Following 5 years evidence gathering, C&D stream only has 10 potentially hazardous items (Amber)
- These are items from pre 2007 buildings only
- These represent tiny proportion of demolition
 stream estimated at 0.08% (4 k tonnes)
- Ongoing testing required to remove more items from the Hazardous list



What do you need to do now?

- Regulatory Duty of Care Must Assess in line with RPS250
 - Review waste wood onsite inline with industry Acceptable Material Guidance
 - Potentially haz or unknown wood items should be externally tested via recognised test houses
 - Use WRA01 (HWRC) or WRA02 (C&D) test suites to ensure data is captured and shared
 - If confirmed as hazardous, consign using Hazardous Consignment Note
 - Up to 31st Aug 2023
 - Segregate, if possible, from non haz wood
 - If not possible blend with non-haz wood and estimate % of hazardous
 CRUCIAL POINT to ensure overall volumes reported are not over stated
 - Move under dual EWC codes to Reprocessor



The Risk of not continuing to test

Potential Haz (Amber) Item	Producer - C & D Company	Transfer Station / MRF	Wood Reprocessor		Biomass Plant or End-Use Storage Site
	KG's	T's	000'TS		000,000'Ts
3kgs	Small Quantity (KG's) potentially haz material in 5 tonne skip = 5 tonnes consigned Haz	Processed through or tipped in wood bay = 20 tonne consigned Haz.	Each and every day all raw material mixed so despatched as Haz Annual output = 50KT	>	Will record / receive *3MT Haz Material
Volume permit variations		In the thousands?	In the hundreds?		~100 (Plant plus 1 storage site. (Markinch has 4)



Ongoing Position

- RPS250 will be withdrawn on 1st Sept 2023
- All Amber items will become hazardous at that point unless tested
- All wood processors will be updating Acceptable Material Schedules to exclude the Amber items, unless testing proof is supplied.
- Hazardous items need to be sent for specialist disposal £200 + per tonne
- Panel Board and Biomass Operators will NOT take hazardous wood
- Risk is that if not separated then larger volumes of waste wood could be classified and charged as hazardous for no reason
- Only 1 or 2 operators who can currently process hazardous waste wood
- Huge impact on recycling targets for local authorities



Why is sampling so important?

- To confirm IF items are hazardous or not small volume will impact on ongoing C & D wood usage
- Demonstrate environmental credentials to customers & regulators by providing evidence to support better use of a resource in line with Environmental Sustainability Reporting.
- Provide credible data to EA and other regulators
- Reduce paperwork, delays and costs on sites
- Use existing mature wood supply chain outlets
- Ensure no waste wood gets wasted or goes to the wrong destination – loss of recycling and recovery options



WRA Quick Guide

See WRA-Demolition-Wood-Quick-Guide.pdf (woodrecyclers.org)

IDENTIFY . T 1. Fence Posts (Not Fence f	2. Decking ▼	OR CONSIGN?
3. Barge Boards, Fascias and Soffits 🕶	External Joinery (wooden windows and conservatories)	5. External doors ▼
6. Roof Timbers	7. Tiling and Cladding Battens	a. Timber Frames / Joists
below, and IF deemed Hazardous consist the actual weight of the specific items r	iot just the full load weight. These items s ley be blended within a non-hazardous wo IC codes 17 02 0.4* and 001 37* and ly with the RPS250	, which needs to be completed fully including hould be segregated and only

Safety equipment worn to colle	the middle no ect the sample its have been h ment must also curely wrapped m with the con	smaller than 150m s must be clean and andled, new glove: be cleaned between d in airtight packagen pleted information	m long – which should be sent to if free from any sources of hydroc, should be worn for subsequent s en each item. ng (e.g. rubble sacks secured with inside the packaging.	arbon or meta amples. Cros	contaminat	ion of
	reion and pac					
Company Name:						
Site Name:						
Location:						
Contact name:						
Telephone:						
Sample Type (Use new form for ea	ch different w	and tumels				
Wood Type	Approx. Age	Enclosed	Sample Source - HWRC,	EWC Code		
		Sample (Tick as appropriate)	Household, Transfer Station, Construction Site or Other	(Tick as ap		
		appropriates	(Please specify)'	17 02 04*		
Fence Post (NOT fence panels)	N/A					
Decking N/A	N/A					
The items below are only relevan	it if from pre 20	007 buildings				
Barge Boards						
External Fascia						
Soffit boards						
External Joinery						
External Door						
Roof Timber						
Tiling Cladding						
Tiling Battens						
Timber Frames						
Timber Joists						
Test Required: WRA01 – HWRC or Sample Unique Reference Numbe used on required Chain of Custool Completing this request form me	r (To be provide Form for that	ed by person sendi laboratory)	ng sample to chosen laboratory a	nd same uniqu	by your lab o	or via the
Hazardous Waste Online platform. WRA to satisfy the EA's testing crit			ation will be identifiable. Please s			on to allow
Name:			Signature:			
This will ensure we can complete th	he assessment	t on behalf of the in	dustry. We appreciate your input.			
)2 are specifically		34		

Other Examples













Other Examples











Use Quick Guide to Detail Samples

INSTRUCTIONS FOR WASTE WOOD CLASSIFICATION TESTING & SAMPLE COLLECTION 1. Please ensure that the samples taken are from whole pieces of the items identified over leaf Then take a cross section from the middle no smaller than 150mm long - which should be sent to the lab. 2. Safety equipment worn to collect the samples must be clean and free from any sources of hydrocarbon or metal contamination and where suspected creosote posts have been handled, new gloves should be worn for subsequent samples. Cross contamination of 3. Any sample preparation equipment must also be cleaned between each item 4. The samples will need to be securely wrapped in airtight packaging (e.g. rubble sacks secured with cable ties or shrink wrapped) for posting and must have this form with the completed information inside the packaging. Please complete the information below and put this sheet in with the sample Company Name: Location: Contact name Sample Type (Use new form for each different wood type): 17 02 04* 19 12 06* 20 01 37 Fence Post (NOT fence panels) N/A Decking N/A Soffit hoards External Joinery Tiling Cladding Tiling Battens Timber Joists Test Required: WRA01 - HWRC or Householder Sourced (...) or WRA02 - C & D or Householder Sourced (Sample Unique Reference Number (To be provided by person sending sample to chosen laboratory and same unique reference number to be used on required Chain of Custody Form for that laboratory). Completing this request form means you give permission for your results to be shared with the WRA either directly by your lab or via the Hazardous Waste Online platform. The only information shared will be the test result, the wood type and the geographic location to allow WRA to satisfy the EA's testing criteria. No specific company information will be identifiable. Please sign below to confirm this:

This will ensure we can complete the assessment on behalf of the industry. We appreciate your input

Any results obtained using WRA01 or WRA02 are specifically for this piece of work and cannot be relied upon for any other purpose. If you have any queries at all, please do not hesitate to contact 0330 325 0490 or julia.turner@woodrecyclers.org

See <u>WRA-Demolition-Wood-Quick-Guide.pdf</u> (woodrecyclers.org) for full version

INSTRUCTIONS FOR WASTE WOOD CLASSIFICATION TESTING & SAMPLE COLLECTION

- Please ensure that the samples taken are from whole pieces of the items identified over leaf.
 Then take a cross section from the middle no smaller than 150mm long which should be sent to the lab.
- Safety equipment worn to collect the samples must be clean and free from any sources of hydrocarbon or metal contamination and
 where suspected creosote posts have been handled, new gloves should be worn for subsequent samples. Cross contamination of
 samples must be avoided.
- 3. Any sample preparation equipment must also be cleaned between each item.
- 4. The samples will need to be securely wrapped in airtight packaging (e.g. rubble sacks secured with cable ties or shrink wrapped) for posting and must have this form with the completed information inside the packaging.

KEY POINT:

Items are from Pre-2007 Buildings only

Demolition Site Sample Collection and Testing

- Ensure that the samples taken are from whole piece of waste wood
- Cross section no smaller than 150 mm long in airtight packaging
- DO NOT send in multiple samples from the same piece
- DO NOT sample obviously creosoted wood that would be rejected at a wood site. Always use Acceptable Material Guidance to assess first.
- Give each sample a unique reference code using the first three letters
 of your company followed by the first three letters of your site location,
 then add in DEM (Demo) and then sequential numbering
- WRA will help provide clarity with all the above if requested



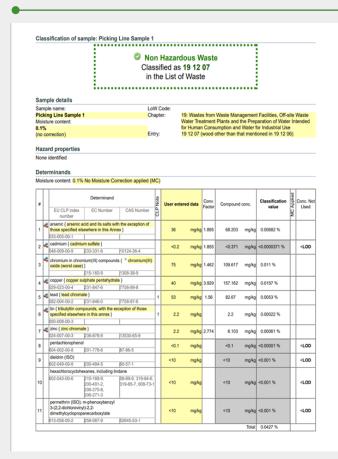
WRA 01 & WRA02 Testing Suites

WRA01 & WRA02 Testing Suites - August 2022

		WRA01 HWRC	WRA02 C & D
Arsenic	As	х	х
Barium	Ba	х	х
Cadmium	Cd	х	х
Chromium	Cr	х	х
Copper	Cu	х	x
Lead	РВ	x	х
Mercury	Hg	х	х
Nickel	Ni	x	x
Selenium	Se	х	x
Zinc	Zn	х	х
PAH - Speciated (EPA 16)			х
Antimony	Sb		х
Dieldrin			х
Lindane			х
Permethrin			х
Pentachlorophenol (PCP)			х
Moisture Content		х	x
Tin	Sn		x
Where Tin >25mg/kg			
Tributyltin			х
Sample Prep			
Acid Peroxide Extraction		x	x
No smaller than 150 mm long		х	х



Process & Analysis of Results



- All results will be processed through the WRA profile on HazWasteOnline to provide a report to UK Regulators and / or yourselves if required
- Laboratory will upload raw results to HazWasteonline to provide impartiality and confidentially of data sources.
- We ideally need 300 + individual samples to prove items Haz or Non Haz
- Ensure you agree to share your data with WRA to effect change!



WRA Member Laboratories

MARCHWOOD, PART OF CAWOOD

Unit 1A.2A Marchwood Industrial Park

ALFRED H KNIGHT (Prescot)

solidfuels@ahkgroup.com

Kings Business Park
Kings Drive
Prescot
L34 1PJ
Ken Hepburn
0151 481 5850
www.ahkgroup.com/markets/solid-fuels/

Southampton
Hampshire
SO40 4BL
Ben Rowe
02380 786979
cawood.co.uk/marchwood/

Marchwood

Ben.rowe@marchwood-scientific.co.uk

SOCOTEC UK Ltd

Renewable Energy Unit 3 Canal Street Burton on Trent DE15 0YZ

Anna Lloyd anna.lloyd@socotec.com

07803 262 082 socotec.co.uk

Always send your samples with:

- 1. A Quick Guide form for each Sample fully completed and test identified.
- 2. A Chain of Custody form for each batch of samples
- 3. Other Laboratories can be used but always use WRA01 and / or WRA02 approved testing suites and forms to allow the right data to be captured.
- 4. If sites don't **share data**, then we won't get to required numbers to confirm haz wood types so please give permission to share data with WRA.

Conclusions

- Collect as many samples of Amber Items before 31st Aug
- Send for WRA02 testing to recognised labs using correct paperwork
- Check reprocessor Acceptable Material Schedules asap
- Speak to clients to update understanding and cost implications
- Update site layouts and container requirements Haz and Non Haz wood containers will be needed
- Ensure that the on-site **procedures are updated** before 1st Sept
- Expect more regulator visits to site to check compliance
- GIVE PERMISSION TO SHARE DATA TO WRA

THANK YOU



Q&A





Thank you!



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http://www.woodrecyclers.org/

