



# **Report with the separation protocol set in CONSORCIO**

Executive summary

Date: 05/06/2019

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Number and name of deliverable: D2.1 Report with the separation protocol set in CONSORCIO (CVI).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 690103

## 1. Objective

The document aims to establish what separation protocol should follow the bulky waste not suitable for reuse in the local conditions of the collection facilities of CONSORCIO to provide the most efficient way materials to be used as a basis for research to obtain high added value recycled products

## 2. Metodology

Bulky waste from the Civic Amenity Sites (CAS) closest to Caudete de las Fuentes plant was accumulated in this plant according to the proposed classification, in order to test the quantities collected from each flow.

Once obtained the information of quantities collected according to the proposed segregation, the distribution of containers is reconsidered and decisions are made as to what separation makes sense in the CAS and what separation makes sense in sorting facilities.

## 3. Results

After accumulating the corresponding bulky waste streams during the three weeks of testing in October and November 2016, and separating in the sorting facility of Caudete de las Fuentes materials not separated in origin (bulky textiles, hard plastics and various types of mattresses), the following results are obtained:

The quantity of mattresses collected would allow, in the case of container availability, to pick up foam mattresses and springs separately, avoiding manipulating the waste in the sorting facility.

Likewise, it would be possible to collect in a separate container hard plastic, in case there is room for an additional container.

On the contrary, the amount of bulky textiles is so small that it does not justify the separate collection of this flow.

## 4. Conclusions

We understand that the most effective provision of containerization to obtain the materials subject to the URBANREC project is as follows (the characteristics of all large containers in the CAS are detailed, adding containers dedicated to waste not subject to the present project):

A1.- Container for garden debris  
20 02 01 biodegradable waste (garden and park waste)

A2.- Container for construction and demolition waste  
17 09 04 mixed construction and demolition wastes

A3.- Container for non-hazardous bulky WEEE  
20 01 36 discarded electrical and electronic equipment other than those mentioned in codes 20 01 21, 20 01 23 and 20 01 35

A4.- Container for ferrous scrap

20 01 40 metals  
20 01 36 discarded electrical and electronic equipment

A3-4.- Container for ferrous scrap and non-hazardous bulky WEE.

20 01 40 metals

In the event of a lack of space, waste in categories A3 and A4 may be collected in a single container

B1.- Container for bulky wooden items. (Furniture, boards, etc. with little proportion of improper materials such as glass, metal or plastics)

20 01 38 Wood

B2.- Container for furniture made of various materials. (Wood, metal, textiles, foams...)

20 03 07 Bulky waste

B3.- Container for mattresses (PU Foam mattresses, latex mattresses, spring mattresses...)

20 03 07 Bulky waste

B3.1.- Container for foam mattresses

20 03 07 Bulky waste

B3.2.- Container for spring mattresses

20 03 07 Bulky waste

If additional containers are available, it is advisable to dedicate different containers to the collection of foam mattresses and springs, thus avoiding the handling of the same in the sorting facility.

B4.- Container for mixed bulky waste (Any bulky waste not included in the precedent categories)

20 03 07 bulky waste

B5.- Container for bulky hard plastics

20 01 39 plastics

If additional containers are available, it is advisable to dedicate a container to the collection of hard plastics, thus avoiding sorting this stream from the mixed bulky waste container in the sorting facility.

## 5. Annexes

Dimensions of the typical container to manage bulky waste in CONSORCIO (CVI).

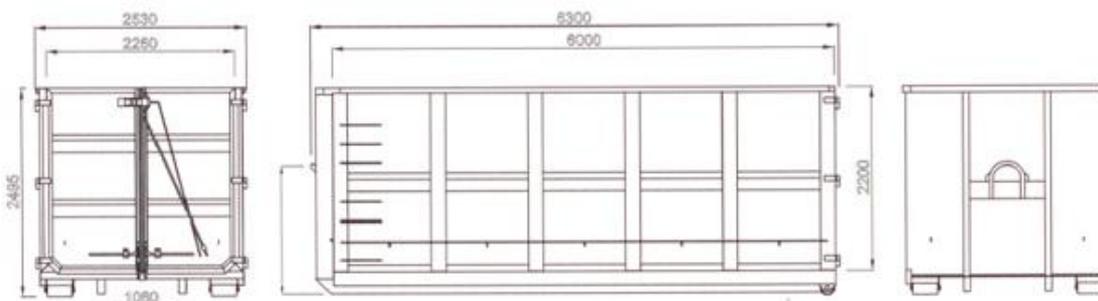


Figure 1. Typical container for the management of bulky waste

Images of the typical arrangement of large volume containers in a CONSORCIO CAS.



Images 1 and 2. Typical disposal of large volume containers at a CAS

Images of the different flows accumulated during the test.



Image 7. Material collected from B1.- Container for bulky wooden items. (Furniture, boards, etc. with little proportion of improper materials such as glass, metal or plastics) 20 01 38 Wood



Image 8. Material collected from B2.- Container for furniture made of various materials. (Wood, metal, textiles, foams...) 20 03 07 Bulky waste



Image 9. Foam mattresses sorted in Caudete from B3.- Container 20 03 07 Bulky waste



Image 10. Spring mattresses sorted in Caudete from B3.- Container 20 03 07 Bulky waste



Image 11. Bulky hard plastics sorted in Caudete from B4.- Container for mixed bulky waste 20 03 07 Bulky waste