

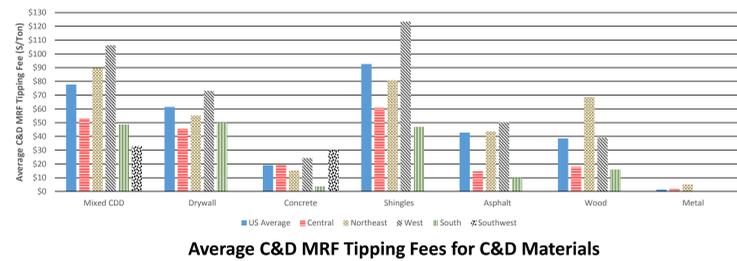


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Motivation

- Construction and demolition materials (C&D) are estimated to represent up to two times the total amount of MSW produced in the US.
- To promote sustainable materials management, it is vital to understand the factors that influence how C&D is managed and the current status of C&D recycling across the US.



Objectives

- Review C&D recycling and management in the US with respect to the following:
 - Job site C&D management practices
 - The types of processing facilities are currently used to recover materials
 - End uses for recovered C&D
- Identify, classify and evaluate factors that influence C&D recycling
- Consider how green building materials and certification programs affect C&D management
- Discuss environmental and health concerns that impact C&D recyclability



Air Classifier for C&D Sorting



C&D Scrap Metal Stockpile

Examples of Observed Recovered C&D Material End Uses

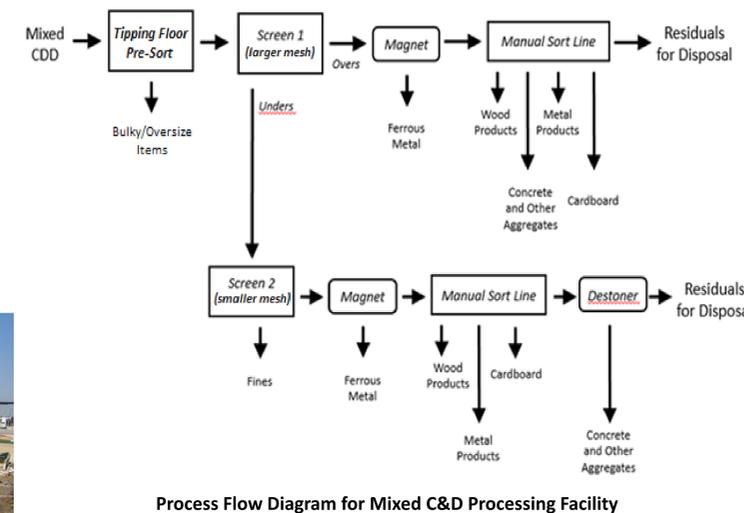
- Aggregate/construction fill – concrete, masonry products
- Pavement production – old pavement, asphalt shingles
- Land application/soil amendment - land clearing debris mulch, ground drywall
- Fuel – chipped wood products, C&D processing residuals



Concrete Cone Crusher

Lessons Learned

- Some portions of the C&D stream are prevalently recycled (e.g., concrete, asphalt pavement) but markets are still under development for others (e.g., drywall, C&D fines).
- There are a variety of interrelated factors that influence C&D recycling, including:
 - Economic - e.g., haul costs, material market prices
 - Regulations – e.g., C&D definition, mandated recycling
 - Material specific – e.g., contamination, markets
- Local regulations can serve as a strong driver for enhancing C&D recycling rates.
- C&D cross contamination with harmful materials is a major concern for C&D recycling and can be minimized by segregating the materials at the jobsite.
- Green building materials and certification programs have the potential to serve as a market driver for increased C&D recycling.



Intended End Users

Office of Land and Emergency Management
EPA Regions and States.



C&D Wood Grinding

Next Steps

- Potential web portal to connect C&D generators, processing facilities and end users
- Cost-benefit analysis of the material-specific C&D recovery at disposal sites
- Further evaluation of C&D fines for suitability as a soil fill substitute.



Mixed C&D Processing Facility

Acknowledgment: Contractual support by RTI international and IWCS Consultants