

Construction Waste Management & Recycling Plan

(Divert a minimum of 50% from landfill)

Date: Sample Date
Project: Sample Project
Location: Sample Location

Owner: Sample Owner

General Contractor: Sample General Contractor
Project Manager: Sample Project Manager

Architect: Sample Architect
Project Architect: Sample Project Architect

Construction Waste & Recycling Manager: Atomic Recycling LLC
Minneapolis, MN
Contact: Contact Person
Phone: 612.623.8888

Off-Site Recycling Facility: Broadway Resource Recovery LLC
111 22nd Avenue North
Minneapolis, MN 55411
MPCA Permit #SW-596

Objective: Attain a minimum recycling rate of 50% to achieve LEED MR2.1 Construction Waste Management, Divert 50% from Landfill for 1 point. *Note: This project may not be LEED certified but the use of this plan assures a recycling rate of at least 72%.*

Recycling and Recovery of the following Waste Materials:

2" Minus Material: Dirt, sheetrock dust, wood shavings, glass cuttings, asphalt shingle granules, small/broken aggregate, etc.

Aggregate: Concrete – precast or cast-in-place concrete, block, asphalt, terrazzo, plaster, brick, clay tile, quarry tile and ceramic tile, marble, and stone, etc.

Asphalt Shingles: Asphalt shingles, bundle wrappers (paper or plastic), cardboard boxes, incidental cans and bottles, tar paper, roof vents, eave and valley tin, etc.

Metals: Metal scrap - Iron, steel, copper, brass, and aluminum from the following sources – Structural members, piping, fasteners, steel studs, siding, wiring, ductwork and sheet metal goods, etc.

“Dirty” Wood: Painted wood and trim, plywood, particle board, oriented strand board, masonite, wood doors, wood cabinets and furniture, etc.

“Clean” Wood: Unpainted, untreated dimensional lumber, timber beams & engineered wood products, wood shipping pallets, crates, etc.



Fiber: Cardboard – clean, corrugated cardboard used for packaging. Paper – clean paper from packaging, etc.

Carpet: Carpet and carpet base determined to be recyclable shall be separated on-site and placed in a separate dumpster for removal and recycling by Atomic Recycling.

Acoustical Ceiling Tile: Ceiling tile determined to be recyclable shall be carefully removed from the ceiling grid, stacked on pallets and shrink wrapped for removal and recycling by Atomic Recycling.

Non-Recyclable Material: Gypsum wallboard, resilient flooring, post-consumer plastics, etc.

<u>Waste Sources</u>	<u>Responsible Party</u>	<u>Responsible Hauler</u>
Site Demolition/Removals		
Trees/Bushes	Sample Demolition Contractor	Atomic Recycling LLC
Asphalt Paving	Sample Demolition Contractor	Atomic Recycling LLC
Concrete Paving	Sample Demolition Contractor	Atomic Recycling LLC
Concrete Sidewalk	Sample Demolition Contractor	Atomic Recycling LLC
Concrete Curb and Gutter	Sample Demolition Contractor	Atomic Recycling LLC
Demolition Phase		
Interior Demolition	Sample Demolition Contractor	Atomic Recycling LLC
Clean Concrete	Sample Demolition Contractor	Atomic Recycling LLC
Clean Masonry	Sample Demolition Contractor	Atomic Recycling LLC
Steel	Sample Demolition Contractor	Atomic Recycling LLC
Roof Removal	Sample Demolition Contractor	Atomic Recycling LLC
Plumbing Removals	Sample Demolition Contractor	Atomic Recycling LLC
Clean Concrete	Sample Demolition Contractor	Atomic Recycling LLC
HVAC Removals	Sample Demolition Contractor	Atomic Recycling LLC
Electrical Removals	Sample Demolition Contractor	Atomic Recycling LLC
Construction Phase		
Concrete	Sample General Contractor	Atomic Recycling LLC
Masonry	Sample General Contractor	Atomic Recycling LLC
Steel	Sample General Contractor	Atomic Recycling LLC
Woods & Plastics	Sample General Contractor	Atomic Recycling LLC
Thermal & Moisture Protection	Sample General Contractor	Atomic Recycling LLC
Doors & Windows	Sample General Contractor	Atomic Recycling LLC
Finishes	Sample General Contractor	Atomic Recycling LLC
Specialties	Sample General Contractor	Atomic Recycling LLC
Conveying Systems	Sample General Contractor	Atomic Recycling LLC
Plumbing	Sample General Contractor	Atomic Recycling LLC
HVAC	Sample General Contractor	Atomic Recycling LLC
Electrical	Sample General Contractor	Atomic Recycling LLC

Responsible Parties Requirements:

Sample Demolition Contractor: All construction waste to be placed in commingled dumpsters and transported to an off-site recycling facility. All scale tickets must be provided to the General Contractor by the 7th of the following month.

Sample General Contractor: All construction waste to be placed in commingled dumpsters and transported to an off-site recycling facility. Provide all scale tickets from the Demolition Contractor to Atomic Recycling by approximately the 10th of the following month.

Procedures for Off-Site Source Separation (assuring at least 72% recycling):

- 1) On-site workforce places construction waste into commingled dumpster(s)
- 2) When dumpster is full contractor calls for a pick-up
- 3) Driver goes to site fills out work order (project name, contractor, size of dumpster, date, etc.)
- 4) Driver hauls load to recycling facility
- 5) Load is weighed and recorded
- 6) Driver dumps load onto tipping floor
- 7) Construction waste goes through recycling process
- 8) Monthly, contractor to receive construction waste and recycling report showing current rate of recycling and project to date rate of recycling

Record Keeping: Atomic Recycling is to keep a record of all loads hauled off-site (both on-site source separated and off-site source separated). Records will include date, dumpster size, material type (construction waste, metal, etc), weight of load, and receiving entity. Records for the recycling facility will include all outbound construction waste and all outbound recycled material, showing dates, weights of loads and receiving entity. The recycling percentage will be calculated as follows: the total recycled tons divided by the total project tons (both on-site source separated and off-site source separated).

Reporting: Approximately the 20th of following month, Atomic Recycling will provide monthly summary reports to the General Contractor.

Broadway Resource Recovery recycles and recovers the following types of waste from the typical construction waste stream:

- 25.0% - 2" Minus Material
- 18.0% - Aggregate
- 9.0% - Shingles
- 8.0% - Metals
- 6.0% - "Dirty" Wood
- 4.5% - "Clean" Wood
- 1.5% - Fiber
- 1.0% - Carpet
- 1.0% - Acoustical Ceiling Tile

74.0% Total Amount Recycled and Recovered

- 12.0% - Gypsum Wallboard
- 0.5% - Resilient Flooring
- 13.5% - Residual-Sent to landfill

26.0% Total Amount of Non-Recycled Material

100.0% Total Construction Waste Stream

According to the MPCA Annual Reports - Broadway Resource Recovery recycles more construction waste than all other construction waste landfills and transfer stations combined.

Construction Waste Recycling - An Essential Element of Sustainable Building Design

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