



Title: 3 R's – Waste Management	Section: 19	Issue Date: February 2022
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19.1 Policy Statement

CF recognizes that to operate our business that impinges upon certain aspects of the environment in a responsible and ethical manner, the need has arisen to plan and organize a pro-active and positive approach to dealing with environmental issues. It is the intention of SR management and personnel that they will adhere to this approach to the best of their abilities. The importance of reducing, reusing and recycling construction waste on our projects will be a focus of this proactive approach. The implementation of a waste management plan will put less stress on landfill sites and benefits such as preserving raw materials, protecting the environment and energy use will be realized.

19.2 Source Separation Program

Each project must have a method of separating at a minimum, the 4 basic waste categories

(if applicable):

- Wood
- Corrugated cardboard
- Steel and other metals
- Drywall

Other materials that may also be included in a separation program, which should also be identified by the audit, can be:

- Rigid plastic, plastic film, and polystyrene packaging;
- Wooden shipping pallets
- Doors and hardware
- Thermal insulation
- Ceiling tiles
- Architectural hardware such as curtain rods
- Leftover paint
- Carpeting, and hardwood flooring; and
- Window glass

The processing of waste material may involve the compaction, size reduction and separation of materials. If you are crushing on site check to ensure that the local noise bylaws are being adhered to.

There are two primary methods to separate waste:

- Onsite: Have separate bins designated for each material to be specifically separated in their own container
- Transfer station: Sometimes due to project size, cost etc. it is not practical to have multiple waste bins onsite. It is also acceptable to send all waste to a transfer station where all waste is separated into the minimum 5 categories (cardboard, brick/concrete, steel, wood and drywall). However, if a project



chooses to utilize a transfer station there must be supporting documentation showing follow up that the transfer station is actually separating waste. This can be accomplished by a visit to the transfer station, or verification from the source receiving the separated waste etc.

Consider on-site conditions to determine the separation method and collecting, handling storing, and removing.

- Plan for bin size
- Material type
- Location of collection
- Ensure the material is transferred on a regular basis so that housekeeping does not become an issue.
- Control where the material is to be collected and ensure it is not cross contaminated by other products.

Hauling

- Contact a hauler to remove all the waste generated material from the project
- Ensure they provide you with all the appropriate documentation
- All contracts with disposal companies should include the provision that all material removed from site will go an approved facility and comply with legislated requirements.

The source separation program is key to maintaining reuse and recycling strategies onsite and must be posted in the workplace and communicated to all workers.

Subcontractors are required to adhere to source separation and plan objectives. If a subcontractor elects to utilize their own disposal bin onsite, they must provide CF with a record of the disposal for documentation purposes.

Completion

All documentation should be kept onsite for the duration of the project and maintained for at least five years with project documentation.

19.3 Hierarchy for Common Materials

Types of Construction Waste Material

Wood

Wood waste generally covers the following components:

- Pallets
- Wood building material
- Site excavation wood

Reduce:

- Review design of the project – for optimal use of the lumber, subflooring and sheathing.
- Provide detailed framing layouts to ensure accurate lumber ordering.
- If possible have studs and joists precut to reduce on-site waste.
- Plan for the salvage of demolition lumber. Contact companies that buy recovered wood.
- Use prefabricated wood, roof and floor systems where these products are



produced off site - centralize waste at the manufacturing location versus the project.

- Buy kiln dried lumber and store properly to reduce waste from warping and shrinking.

Reuse:

- Organize a central cutting area – reusable cutoffs can be kept for bridging, blocking and back framing.
- Transport leftover lumber to other projects.
- Reuse salvaged timbers and other dimensional lumber from demolition.
- Send all pallets to a repair facility where they can be rebuilt for reuse.

Recycle:

Wood can be re-cycled into products such as press wood, panel-board, chipboard, pressed logs, landscape covering, absorbent, etc.

- Hardwood can be recycled and used for central heating plants.
- Most wood chippers/grinders accept wood embedded with nails, staples and fasteners.

Disposal:

- To discourage excessive dumping of wood products, certain landfills raise tipping fees. In fact, many landfill operations will require that this material be brought to sorting and recycling facilities.

Ferrous and Non-Ferrous Metals

These types of waste products normally associated with construction activity are:

- Structural steel
- Steel studs
- Electrical products – cable trays, wire etc
- Mechanical products – pipes, equipment, containers etc
- Roofing products – metal flashing, siding etc
- Re-bar

A variety of arrangements can be made with recyclers including having special containment equipment brought to the project to facilitate the collection process.

Reduce:

- Order material efficiently to minimize waste.
- Measure and cut material accurately.
- Plan mechanical and electrical runs to reduce material.
- Locate electrical panel near area of greatest need.
- Keep accurate inventory of surplus material to reduce over-supply at future projects.

Reuse:

- Store cuttings in a central location for reuse.
- Use surplus material for the projects

Recycle:

- Scrap dealers pay for and recycle metals. Investigate pick-up and transport options.



Disposal:

- Most disposal facilities generally prohibit the disposal of large quantities of metal products. Discuss with recycle scrap dealers.

Corrugated Cardboard

Most cardboard comes from packaging material. This product is readily recyclable.

Reduce:

- Purchase materials in bulk to reduce packaging.
- Require suppliers to deliver with minimal packaging.
- Give preference to suppliers who will retrieve their material packaging.

Reuse:

- Cardboard boxes can be used for material storage

Recycle:

- Can be recycled into paperboard boxes, cores, and manufactured into new corrugated boxes.
- Other building material for example, roofing felt, fibreboard and floor underlay.
- Many companies will provide storage bins on the project to collection purposes.

Disposal:

- Bring to a recycling facility.

Drywall and Gypsum

Drywall is a significant contributor to the project waste stream.

Reduce:

- Evaluate from plans to minimize cutting.
- Purchase in stock sizes consistent with room dimensions.

Reuse:

- Small pieces can be placed in the cavities of uninstalled interior wall panels. (before this is done check with the local authorities to ensure this practice is acceptable)
- Check cut off pile before cutting pieces from a new sheet.

Recycle:

- This product is difficult to recycle because it may be contaminated by paint, plaster, wallpaper, vinyl etc.
- There are special recycling facilities to accommodate used drywall and gypsum, check the local jurisdiction to ensure it is reasonable to use these facilities.
- Clean waste gypsum can be applied as soil abatement.

Disposal:

- Although degradable, gypsum gives off hydrogen sulfide when breaking down. Disposal should occur only under proper conditions and approved facilities for this use.



Plastics and Vinyl

Sophisticated methods now allow for the recycling of all sorts of plastics for example, bags, drainage tiles, siding, traffic cones, floor tiles etc.

Reduce:

- Where possible use plastic packaging.
- Used standard dimensions to reduce cutting of plastic products, such as tiles, siding etc.
- Design plumbing runs to reduce the amount of pipe required.

Reuse:

- PVC piping can be reused for plumbing on other projects. Check with local authorities for specific requirements.

Recycle:

- Recycling is complicated by the need to separate plastics. Contact your local plastic recycler for assistance.

Disposal:

- Plastic wastes are high in volume and they do not degrade in landfills. Additional

Environmental Practices includes:

Shops

- Catches and collects all oils and fluids for proper disposal, recycling, or re-use used oil is burned as alternative fuel in asphalt plants.
- Crushes used oil filters to extract all oil, then sends filters for recycling of metal.
- Uses biodegradable cleaners, degreasers, and detergents in normal shop usage (eg. citrus cleaning products).
- Sets up proper above-ground fuel storage and oil storage with containment dykes surrounding them.

Supply Routes

- Follow all rules and regulations pertaining to the transportation of dangerous goods.
- Follow proper reporting in case of spills and emergency response procedures.
- Request owner/operators to monitor and maintain the condition of their vehicles to manufacturer's standards.

Materials

- Use environmentally friendly materials wherever possible.
- Follow proper procedures when handling hazardous goods.
- Recycle and reuses materials whenever possible.

Service of Equipment

- Serviceman catch and collect all used fluids and equipment parts (filters) that can be recycled or reused.