

REBRI Contract Specifications for Waste Management

The following are specifications that could be included in construction contract tender documentation between the principal and the contractor for a construction or deconstruction project.

Waste management goals for the project

[FOR CONSTRUCTION]

- The principal has established that this project shall generate the least amount of waste possible and that processes shall be employed that ensure the generation of as little waste as possible including prevention of damage due to mishandling, improper storage, contamination, inadequate protection or other factors as well as minimising over packaging and poor quantity estimating.
- Of the inevitable waste that is generated, disposal to landfills and cleanfills shall be minimised. This means maximising reuse and recycling of job site waste. At a minimum, the waste materials designated in this specification shall be reused and/or recycled.

[FOR DECONSTRUCTION]

- The principal has established that this project shall generate the least amount of waste possible and that processes shall be employed to ensure this is achieved, including prevention of damage due to mishandling, improper storage, contamination, inadequate protection or other factors.
- Of the inevitable waste that is generated, the waste materials designated in this specification shall be salvaged for reuse or recycled. Waste disposal in landfills and cleanfills shall be minimised. This means careful removal of building parts for reuse or recycling.

REBRI guidelines

In addition to other requirements specified herein, it is a requirement for the work of this project that the contractor is familiar with the REBRI Guide to Reducing Building Material Wastes – see www.rebri.org.nz.

Regulatory requirements

The contractor and any subcontractors shall:

- conform to applicable regulations for disposal and removal of common and hazardous waste
- handle and dispose of all hazardous and banned materials in accordance with national and local regulations – these hazardous and banned materials include but are not limited to asbestos, underground storage tanks, polychlorinated biphenyls (PCBs), abandoned chemicals (petrol, pesticides, herbicides, flammable and combustible substances), freon from cooling equipment, lead-based paints, smoke detectors and mercury-containing switches.

Submission of waste management plan

Within 10 calendar days after receipt of notice of award of contract, or prior to any waste removal, whichever occurs sooner, the contractor shall submit to the principal and engineer a waste management plan. Attached is a sample format to aid the contractor in formulating the plan. The contractor may use this form or provide a custom form containing the same information.

The plan shall contain the following:

- Person(s) responsible for instructing workers and overseeing and documenting results of the waste management
- Waste avoidance or reduction at source measures that will be taken during the project
- Analysis of the proposed job site waste to be generated, including reusable, recyclable and waste materials (by volume or weight).

- Proposed alternatives to landfill and cleanfill disposal – a list of each material proposed to be salvaged, reused, or recycled during the course of the project and the destination. At minimum, the following materials shall be recycled:
 - concrete/brick/concrete block
 - asphalt
 - bricks, tiles and concrete blocks
 - all metal
 - plasterboard
 - vegetation
 - treated timber
 - untreated timber
 - corrugated cardboard
 - plastic and polystyrene
 - soil
 - any building components
 - insulation
- [ADD FOR DECONSTRUCTION]
 - treated and untreated timber lengths and panels
 - heritage architectural elements such as mantle pieces, columns, mouldings etc
 - cabinets and casework
 - electric equipment and light fixtures
 - plumbing fixtures
 - windows, doors and frames
 - hardwood flooring
 - concrete – cast-in-place and precast
 - exterior cladding.
- **Containers and signage:** Description of bins/containers that will be used and the signage that will be used on the containers
- **Materials handling and storage procedures:** Identification of measures to be taken to prevent contamination of materials to be reused or recycled and to ensure materials are consistent with requirements for acceptance by designated facilities.
- **Whether on-site separation will occur and how materials will be stored:** Note that, where space permits, source separation is recommended. Where materials must be co-mingled they must be taken to a processing facility for separation off site.
- **Record-keeping:** The contractor shall maintain a record of waste materials, recycled, reused and disposed of by the project using the REBRI Waste Management Plan and REBRI C&D Waste Transfer Form or a form generated by the contractor containing the same information. For each material recycled from the project, include the amount (in cubic metres or tonnes), or in the case of reuse state quantities by number, type and size of items, and the destination (ie. recycling facility, used building materials yard). For each material landfilled include the amount (in cubic metres or tonnes) of material and the identity of the landfill, cleanfill and/or transfer station. If requested, the contractor should be able to submit to the engineer and/or principal the REBRI Waste Management Plan, REBRI C&D Waste Transfer Form(s) or bills, invoices and other documentation confirming that all materials have been received at the required locations.

Waste management plan implementation

- **Responsibility:** The contractor shall designate an on-site party (or parties) responsible for instructing workers and overseeing and documenting results of the waste management plan for the project.
- **Distribution:** The contractor shall distribute copies of the waste management plan to the job site foreman, each subcontractor, the principal, and the engineer.
- **Instruction:** The contractor shall provide on-site instruction of appropriate separation, handling, and recycling to be used by all parties at the appropriate stages of the project.
- [ALTERNATIVE CLAUSE FOR DECONSTRUCTION]
 - **Instruction:** The contractor shall provide on-site instruction of appropriate deconstruction techniques and handling and storage to maximise, quantity and quality of salvaged materials and to ensure materials meet any requirements for reuse.

- **Separation facilities:** The contractor shall lay out and label a specific area to facilitate separation of materials for recycling and reuse. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid contamination of materials. The requirement for separation will only be waived if the contractor can demonstrate to the principal/engineer that there is insufficient room to accommodate it. If this is the case, the materials must be sent to a processing facility for separation off site.
- **Subcontractors:** The contractor may engage a subcontractor and take responsibility for their waste or make each subcontractor responsible for their own waste. In any case, compliance with these requirements is mandatory.

Note: Definitions of contractor, engineer and principal as per NZS 3910:2013 *Conditions of contract for building and civil engineering construction*.