

# Construction & Demolition Waste Management and Disposal

## Background

Saskatchewan's building and infrastructure history is over 100 years old. Many large building projects constructed in our cities, towns and villages during the boom years from 1908 to 1914 now require renewal or demolition. The economy is strong again in recent years resulting in population growth and demand for construction. The disposal costs at landfills for material for which there is no alternate use (waste construction and demolition (C&D) material) are high due to large volumes, weights and the mixture of several types of waste which may be difficult and costly to compact and cover. In some cases, owners of smaller landfills may be reluctant to accept C&D waste as large amounts of unexpected waste can quickly shorten the life of a landfill. The construction industry has been proactive in minimizing cost and construction material waste in the building of new structures. The potential for recycling or re-use of C&D material could significantly reduce waste disposal at landfills.

## Building and Demolition Permits

The Ministry encourages municipalities to **include a section in their Building and Demolition Permits regarding the preferred handling of construction and demolition waste.**

Demolition waste includes all materials resulting from the dismantling of buildings or structures including roadways, bridges, parking lots or land re-development. (includes wood, drywall, brick, earth, metals, insulation, electrical and plumbing materials, siding, carpeting, roofing material, concrete, culverts and pipes). The permit should indicate if certain types of waste are accepted within the municipality (waste disposal ground or a transfer station). Demolition waste should be divided into waste streams which can be salvaged for reuse in their original form, or recycled for an alternate use. Only mixed un-useable waste should be disposed of at a waste disposal ground.

## Construction and Demolition Waste (C&D)

The **Construction/Demolition (C&D) Material Waste Stream** is defined as bulk refuse originating from construction, demolition, renovation and re-development projects not including asbestos, waste dangerous goods or material contaminated with waste dangerous goods.

C&D material can be separated into several categories, which allow for recycling and re-use. Although this may be time and labour intensive, material for re-use and recycling has increased in popularity and value. High disposal costs at waste disposal grounds, due to volume and weight reduction, can be avoided through material separation.

For information on landfills that may take asbestos material, contact the area landfill or the **Saskatchewan Ministry of Environment Client Service Office at Tel: 1-800-567-4224 (toll free in North America) or 306-787-2584.**

## Unauthorized Disposal

A permit is needed for the construction and operation of a waste disposal ground before any waste may be disposed. Construction or demolition waste which has been unlawfully disposed of at a non-permitted facility is a contravention of **The Municipal Refuse Management Regulations** and is in contravention of **The Environmental Management and Protection Act, 2010** regardless if placed on private or public property. The burning of non-separated C&D waste is prohibited and is in contravention of **The Environmental Management and Protection Act, 2010** unless authorized in a permit. For more information on the requirements for establishing a landfill, transfer station or recycling facility please contact the Ministry of Environment.

Construction or demolition waste which has been unlawfully disposed of on private property in an urban and rural municipality should be handled through local bylaws which are governed by **The Cities Act, The Municipalities Act.**

Construction waste or demolition waste which has been unlawfully disposed of on private property in a northern municipality should be handled by local bylaws through the northern municipality under Section 59 (nuisance buildings) of **The Northern Municipalities Act.**

C&D waste (not mentioned in the table below) that is abandoned upon land that is owned by another person, land that is vested in Her Majesty in right of Saskatchewan or reserved or set aside for the use of the public or into or upon any water shall be considered littering and is subject to **The Environmental Management and Protection Act, 2010**

The following table identifies many of the construction/demolition wastes commonly generated in Saskatchewan and the potential re-use and recycling options for separated materials. Please be advised the contents of this table are a general guide and any re-use or recycling activity may still require certain local municipal or provincial approvals **prior** to re-use.

C&D Activity	Separated Materials	Possible Re-use/Recycling
<b>Road reconstruction</b>	asphalt	crushed and mixed with new asphalt; road sub-base
	concrete (without rebar)	road sub-base; re-used in concrete; concrete blocks; fill material; rip-rap on roads/lagoons
	concrete (with rebar)	fill material; rip-rap
	separated rebar; metal signs; sign posts; guardrails; culverts	re-use for original purpose, processing at a steel mill
	fill materials (earth, gravel, sand)	clean fill material; landscaping material; landfill cover
<b>Excavation/leveling</b>	topsoil	landscaping; residential fill; landfill cover; agricultural
	sand	fill; residential; road construction
	stones	rip-rap; fill; landscaping
	earth contaminated with wood; buried utilities	landfill daily/intermediate cover; disposal at landfill
<b>Site clearance</b>	trees and brush	firewood; landscaping chips; composting; landfill disposal
	soils	landscaping agricultural and residential fill
	mixed concrete, rubble	land reclamation fill; bank stabilization/rip rap landfill disposal
<b>Building C&amp;D Material - Reusable</b>	clean bricks; whole cinder Crete blocks; concrete or stone facades; tiles; ceramics; concrete roofing tiles	re-use for original purpose; landscaping; permanent roadway construction in landfills
	undamaged windows, roofing and metal/vinyl siding; wooden cabinets, counters, flooring, staircases/trim; carpeting; clean insulation; wooden beams/facades	resale for re-use
<b>Building C&amp;D Material - Recyclable</b>	broken bricks, cindercrete blocks; concrete roof tiles, concrete/stone facades, tiles/ceramics	landscaping; crushed clean fill for road sub-base, roadways and rip-rap; use for stabilization of roadbases or fill at landfills; clean fill for land reclamation
	broken window glass, glass fixtures	recycle at glass recycler, for asphalt mix or with rubber crumb
	broken wooden beams; trim; wood scrap; trees	chipping or shredding for landscaping; composting; fuel source
	metal girders, supports, rebar, steel damaged metal siding, roofing	recycle at a steel mill
	scrap aluminum door and window frames	sell to scrap dealer; recycle at an aluminum smelter
<b>Building C&amp;D Material - Disposal</b>	mixed waste not suitable for separation; materials which may not be easily re-used or recycled; e.g. - linoleum flooring, wet and damaged drywall and insulation, broken plumbing, etc.	disposal at an approved waste disposal ground (no waste dangerous goods)
	waste dangerous goods including asbestos	manifesting under Dangerous Goods Transportation legislation, treatment or disposal at approved sites using approved methods only

Note: Material types, quantities and end use of materials will vary depending on the project location, season of the year that the project takes place and the cause of the need for demolition (i.e. age, urban renewal, fire, tornado or flood).

## Contact and References

Saskatchewan Ministry of Environment

Tel: 1-800-567-4224 (toll free in North America) or 306-787-2584

Web: [www.environment.gov.sk.ca](http://www.environment.gov.sk.ca)

Email: [Centre.Inquiry@gov.sk.ca](mailto:Centre.Inquiry@gov.sk.ca)

Report Unlawful Disposal at TIP 1-800-667-7561