

Management Guide for Construction and Demolition Debris



A guide to the proper diversion and disposal of
Construction and Demolition debris in Nova Scotia



1.0 Introduction

This guide is for Construction and Demolition (C&D) debris generators. It details provincial and municipal regulations and best management practices for the proper disposal and recycling of Construction and Demolition (C&D) debris at both private and public receiving sites.

The provincial Environment Act and Solid Waste-Resource Regulations challenged Nova Scotians to reduce waste disposal by fifty percent by the year 2000. This goal was reached in 2005. The Province has subsequently amended the Environment Act and set a new disposal target of 300kg/capita by 2015. Nova Scotia's Solid Waste-Resource Strategy aims to divert waste in order to improve the environment and create sustainable industries. Construction and demolition (C&D) debris greatly impacts the provincial disposal rate. More C&D debris must be diverted in order to meet the provincial target. The proper disposal and recycling of C&D debris has been recognized as a challenge for both municipalities and the private sector across Nova Scotia

Construction and Demolition (C&D) debris is estimated to account for 25 to 30% of the entire waste stream. In Nova Scotia, this is approximately 175,000 to 200,000 tonnes of C&D debris disposed per year. C&D materials have what some call embodied energy. This is potential energy and resource savings that are lost if C&D debris is disposed of in a landfill.

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2.0 Definitions

2.1 Construction and Demolition Debris

“construction and demolition debris” means materials which are normally used in the construction of buildings, structures, roadways, walls and other landscaping material, and includes, but is not limited to, soil, asphalt, brick, mortar, drywall, plaster, cellulose, fibreglass fibres, gyproc, lumber, wood, asphalt shingles and metals (hereafter referred to as “C&D Debris”).

2.2 Municipal Solid Waste

“municipal solid waste” means garbage, refuse, sludge, rubbish, tailings, debris, litter and other discarded materials resulting from residential, commercial, institutional and industrial activities which are commonly accepted at a municipal solid waste management facility, but excludes industrial waste from an industrial activity regulated by an approval issued under the Environment Act, S.N.S. 1994-95, c.1.Act (hereafter referred to as “MSW”).

2.3 Construction and Demolition Debris Disposal Site

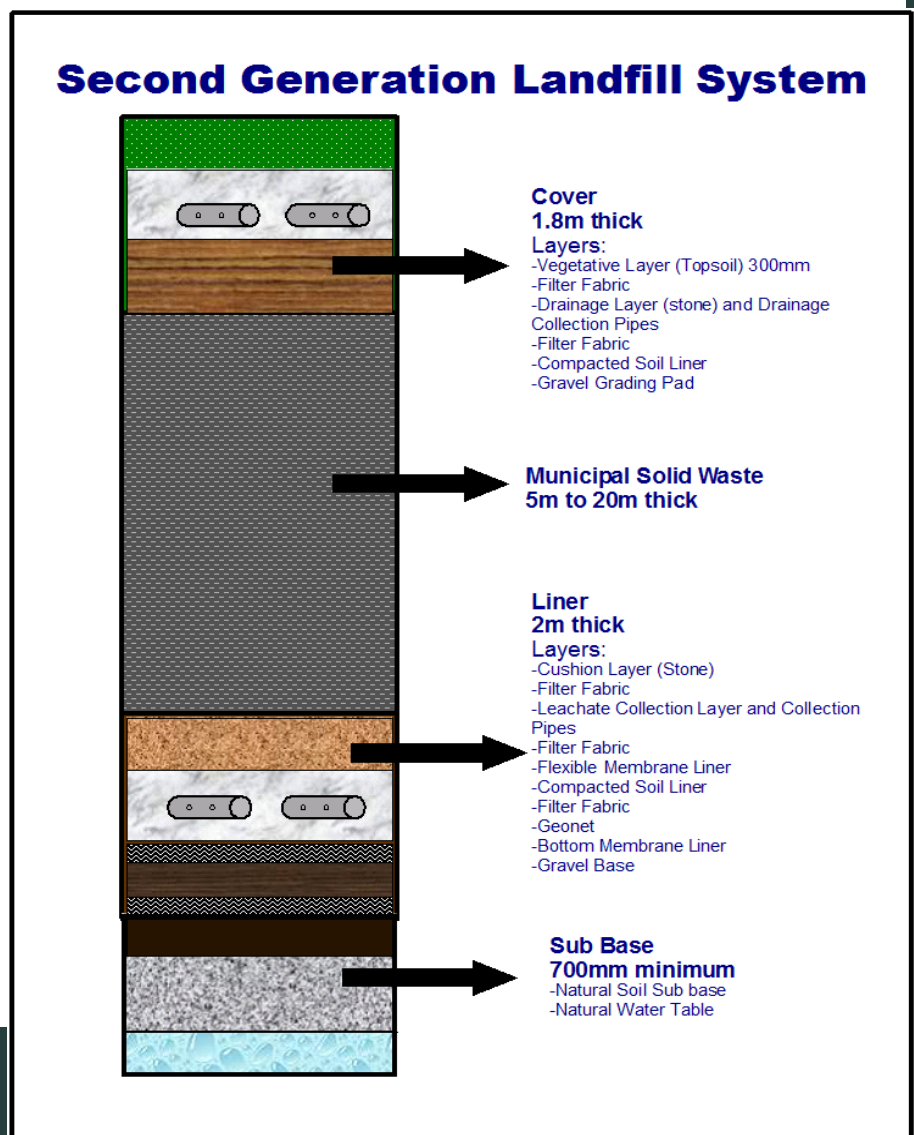
“construction and demolition debris disposal site” means a provincially approved site used for the permanent disposal of C&D Debris (hereafter referred to as a “C&D Debris Disposal Site”).

2.4 Second Generation Municipal Solid Waste (MSW) Landfill

“second generation MSW landfill” means a fully-contained, monitored disposal site which includes a double composite liner, consisting of geomembranes and natural substances, a leachate collection system and landfill gas management system.

2.5 Construction and Demolition Materials Processing Site

“construction and demolition materials processing site” means lands and/or buildings or part of a building used to sort, alter, grind, or otherwise process, C&D Materials for reuse or recycling into new products.



3.0 Background

Nova Scotia Environment: Materials Banned from Disposal Sites

Banned Materials	Ban Implementation Date
Redeemable Beverage Containers	April 1996
Corrugated cardboard	April 1996
Newsprint	April 1996
Used Tires	April 1996
Lead-acid (automotive) batteries	April 1996
Leaf and yard waste	June 1996
Waste paint	April 1997
Compostable organic material	June 1997
Steel/tin/glass food containers	April 1998
LDPE and HDPE bags and packaging	April 1998
Televisions/ computer monitors	February 2008
Desktop, laptop and notebook computers	February 2008
Computer printers (includes those that have scan/fax options)	February 2008
Computer scanners	February 2009
Audio and video playback and recording systems	February 2009
Telephone and fax machines	February 2009
Cell phones and other wireless devices	February 2009



3.1 Waste Management Regions in Nova Scotia

Region 1 – Cape Breton

Region 2 – Eastern Region

Region 3 – Northern Region

Region 4 – Halifax Region

Region 5 - Valley Region

Region 6 – South Shore/West Hants

Region 7 – Western Region



4.0 C&D Debris

There are over twenty provincially approved C&D debris disposal sites located across the province and seven second generation municipal solid waste (MSW) landfills. Not all MSW landfills accept C&D debris for disposal. In addition, there are a number of C&D debris transfer and processing facilities that receive C&D debris but do not dispose of the debris on-site.

There are two types of C&D debris 1) Requires management at an approved facility or 2) Can be used as clean fill (inert). See examples in the chart below.

An Approval is not required for the disposal of inert C&D debris. These items can be used for clean fill where permitted by municipal bylaw.

Non-inert waste is regulated and must be disposed at an approved site/processor. The tonnage is reported to Nova Scotia Environment annually. All designated C&D waste is calculated in the Provincial Disposal/Diversion data.

<u>C&D DEBRIS TYPES</u>	<u>EXAMPLES</u>
Requires management at an approved facility	Asphalt shingles, coated and treated wood (ex. creosote timbers), wallboard/drywall, windows, siding, carpet, flooring, plastic plumbing, tiles, insulation, counter top, tubs, house wrap (ex. Tyvec), vapor barrier, flat roof, doors, ceramics, porcelain (tiles & toilets), plaster
Considered inert and should be diverted from landfill	Rock (excluding rock containing a sulphide bearing material), aggregate, soil, bricks, mortar, concrete, asphalt pavement, porcelain or ceramic materials, trees, brush, limbs, stumps, root balls, organic mat, and milled wood that is free of adhesives, coatings or preservatives

4.1 List of Acceptable vs. Non-Acceptable materials for an Approved C&D Facility

Prior to the demolition of a building, all materials not attached/affixed to the structure must be removed and disposed or diverted properly (ex. furniture, wall hangings, rugs, etc.). Please refer to the chart below for materials that are or are not accepted at an approved C&D facility.

Acceptable Materials for Disposal at an Approved C&D Facility	Non-Acceptable Materials for an Approved C&D Facility- Must be Recycled or Disposed of at an Approved Landfill or Transfer Station
Creosote timbers	Caulking tubes
Pressure treated wood	Paint cans (full or empty)
Plywood	Other adhesive containers
Built-up glued wood sections	Non-solid wood furniture
Particle or chip board	Mattresses
Painted wood	Curtains and other textiles
Sawdust/ wood chips	Air handling units
Gypsum board	Large electrical components– capacitors, transformers, switching gear, motor control centres
Plastic/ vinyl building materials	Fuel tanks
Insulation– fiberglass, Styrofoam™, and other	Contaminated soils
Build up roofing	Used sandblast or shotblast waste
Carpeting	
Vinyl flooring and linoleum	
Ceiling tiles	
Wiring	
Nails	
Light fixtures	
Piping	

4.2 C&D Approved Facilities

C&D debris disposal sites are only approved for the disposal of C&D debris. All other waste from a construction, demolition or renovation project must be managed through an approved means such as reuse, recycling or composting, or properly disposed of in a municipal solid waste landfill. Some municipalities have additional bans. Please see the following Contact List to get local requirements, sorting guides, and to learn about tipping fees. Check local websites for current information.

Most Solid Waste Regions do not allow the exportation of C&D waste outside their regional boundaries. Contact the local Municipality in which the waste is generated for further details.

Cape Breton (Region 1)		
Facility Name	Location	Phone/ Website
Baddeck Waste Management Facility	Baddeck, Victoria County	902-295-2026
CBRM C&D Landfill	Grand Lake Road, Sydney, CBRM	902-563-5593
Kenloch Waste Management Facility	Kenloch, Inverness County	902-787-3502
Richmond Waste Management Facility	West Arichat, Richmond County	902-226-3988

Antigonish/ Guysborough/ Pictou (Region 2)		
Facility Name	Location	Phone/ Website
Atlantic Supermarket Contractors Ltd.*	Linacy, Pictou County	902-755-3213
Beech Hill Waste Management Facility	Beech Hill Road, Antigonish County	902-863-1117 www.antigonishcounty.ns.ca
Guysborough Waste Management	Boylston, NS	902-232-2316 www.modg.ca
St Mary's Transfer Station	Geogogan, Hwy 7, Goldenville, NS	902-522-2659 www.saint-marys.ca
Marinus Verhagen C&D Disposal Site*	Linacy, Pictou County	902-752-6411
Pictou County Solid Waste Management Facility	Mount William, Pictou County	902-396-1495

*** Accepts C&D Waste ONLY (no municipal solid waste)**



4.2 C&D Approved Facilities Continued...

Cumberland/ Colchester/ East Hants (Region 3)		
Facility Name	Location	Phone/ Website
Colchester Containers*	Middle Stewiacke, Highway 289, Colchester County	902-673-2808
Cumberland Central Landfill C&D Site	2052 Little Forks Rd, Cumberland County	902-667-5141
Mount Pleasant C&D*	350 Dixon Rd, Cumberland County	902-447-3381
Colchester Balefill Facility	188 Mingo Rd, Kemptown Colchester	902-895-4777 www.colchester.ca/tipping-fee-schedule
East Hants Waste Management Centre	1306 Georgefield Road, Hants County	Hotline: 1-888-873-3332 Manager: 902-883-7098, ext. 104 www.easthants.ca

Halifax Regional Municipality (HRM) (Region 4)		
Facility Name	Location	Phone/ Website
Halifax C&D Recycling Ltd.*	16 Mills Drive, Goodwood	902-876-8644
Halifax C&D Recycling Ltd.*	188 Ross Rd, Westphal	902-876-8644

Valley Region (Region 5)		
Facility Name	Location	Phone/ Website
Arlington Heights C&D Limited*	1481 Arlington Road West, Hampton, Annapolis County	902-665-4650
South Mountain C&D and Recycling*	2181 North River Rd, Kings County	902-678-3657
Torbrook C&D Disposal and Recovery*	Torbrook, Uhlman Branch Rd, Annapolis County	902-765-9199
Rice's 201 C&D Disposal Site*	4736 Highway 201, Annapolis County	902-665-2375
Eastern Management Centre	100 Donald Hiltz Connector Rd., Kentville NS	902-679-1325 Toll free: 1-877-927-8300
Western Management Centre	343 Elliot Rd., at Exit 19 off 101 North of Lawrencetown	902-679-1325 Toll free: 1-877-927-8300

* Accepts C&D Waste ONLY (no municipal solid waste)

4.2 C&D Approved Facilities Continued...

South Shore (Region 6)		
Facility Name	Location	Phone/ Website
Lunenburg Regional Community Recycling Centre	908 Mullock Road, Whycott Settlement	902-543-2991
Kaizer Meadow Environmental Management Centre	450 Kaizer Meadow Rd (off Highway #14), Chester, NS	902-275-2330
Barrington C&D Disposal Site*	Goose Lake Rd, Shelburne County	902-637-2015
Shelburne Material Recovery Facility*	4571 Highway #3, West Green Harbour, NS	902-656-3273
Region of Queens Waste Management Facility	3750 Highway #8, Liverpool NS	902-350-1084
West Hants Waste Management Facility	1659 Walton Woods Rd, Cogmagun, NS	902-757-2308

Yarmouth/ Digby (Region 7)		
Facility Name	Location	Phone/ Website
Clare Transfer Station	919 Bonnie Rd, Meteghan, Digby County	902-645-2993 www.wastecheck.com
Digby Salvage & Disposal*	220 Upper Cross Rd, Digby County	902-245-2657 www.wastecheck.com
Yarmouth County Solid Waste Park- C&D Landfill	1934 Hardscratch Rd, Yarmouth County	902-742-5852 www.wastecheck.com

* Accepts C&D Waste ONLY (no municipal solid waste)



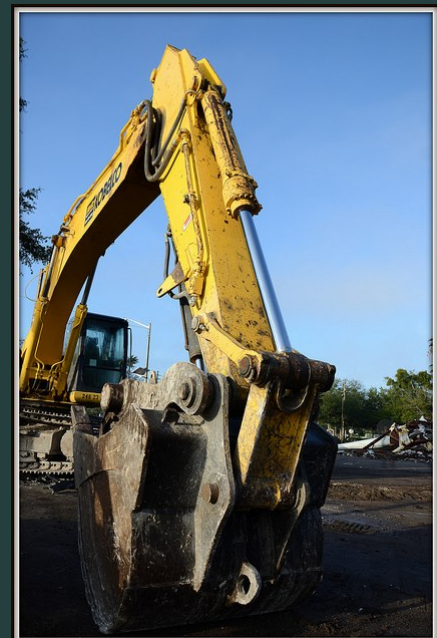
4.3 Municipal Solid Waste Landfills

Receive municipal solid waste (MSW) according to their operations approval. No provincially banned materials, explosive, radioactive, liquid waste, etc. Contact for hours of operation, site rules and applicable tipping fees.

List of MSW Landfills	
Facility Name	Phone
Colchester Balefill Facility 188 Mingo Rd Kemptown NS B6L 2K4	902-895-4777 Fax: 902-897-0453
Cumberland Central Landfill 2052 Little Forks Road, Little Forks, NS	902-667-5141 Fax: 902-667-5873
Guysborough Waste Management Facility 151 Waste Management Rd, Hwy 16 Boylston, NS	902-232-2316 Fax 902-232-2422
Kaizer Meadow Environmental Management Facility 450 Kaizer Meadow Rd, Chester NS B0J 1J0	902-275-2330 Fax: 902-275-4771
Region of Queens Waste Management Facility 3750 Highway 8, Liverpool NS B0T 1K0	902-350-1084 Fax: 902-354-7473
West Hants Waste Management Landfill 1569 Walton Woods Rd., Scotch Village NS B0N 2G0	902-757-2308 Fax: 902-757-0292

Halifax Regional Municipality (HRM) *DOES NOT Accept C&D Waste

Facility Name	Phone
Otter Lake Waste Processing and Disposal Facility Exit 3, Hwy 103 200 Otter Lake Dr	902-490-5960 Fax: 902-490-6690



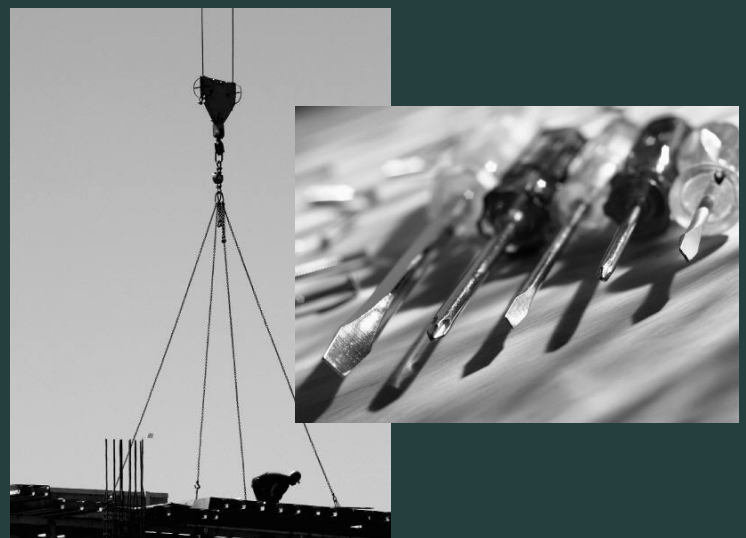
4.4 Waste Transfer Stations

Transfer stations also accept waste that is not accepted at C&D approved facilities. Waste is transported from the transfer station to the landfill for disposal. Contact for hours of operation, site rules and applicable tipping fees.

Cape Breton (Region 1)	
Facility Name	Phone
CBRM Waste Transfer Station Facility 716 Spar Road Sydney, NS B1P 7J8	902-563-5599
Richmond County Transfer Station 634 Highway 206 RR 1 West Arichat NS B0E 3J0	902-226-3988
Baddeck Transfer Station 445 Old Margaree Road Baddeck, NS	902-295-2026
Dingwall Transfer Station 99 Dump Road Cape North, NS	902-383-2548
Kenloch Waste Management Facility 420 West Lake Ainslie Road Kenloch, NS B0E 1N0	902-787-3502

Antigonish/ Guysborough/ Pictou (Region 2)	
Facility Name	Phone
Pictou County Solid Waste Management Facility 220 Landfill Rd. Mount William B2H 5C6 pcwastemgmt.com	902-396-1495
Beech Hill Waste Management Facility 1356 Beech Hill Rd, Antigonish http://antigonishcounty.ns.ca/transfer-station.htm	902-863-4744
St Mary's Transfer Station 150 Cape Geogogan Rd, Hwy 7, Goldenville http://www.saint-marys.ca/st-marys-transfer-station.html	902-522-2659

Cumberland/ Colchester/ East Hants (Region 3)	
Facility Name	Phone
East Hants Waste Management Centre 1306 Georgefield Road Hants County www.easthants.ca	1-888-873-3332



4.4 Waste Transfer Stations Continued...

HRM (Region 4)

* For municipal solid waste (MSW) please refer to section 4.3 for the disposal facility in HRM

South Shore (Region 6)

Facility Name	Phone
Lunenburg Regional Community Recycling Centre 908 Mullock Road Whynott's Settlement, Lunenburg Co. http://www.communityrecycling.ca/hours-and-location	902-543-2991

Western Region (Region 7)

Facility Name	Phone
Yarmouth County Transfer Station 1934 Hardscratch Rd, Yarmouth NS www.wastecheck.com	902-742-5852
Clare Transfer Station 919 Bonnie Road, Meteghan NS www.wastecheck.com	902-645-2993
Digby Transfer Station 245 Upper Cross Rd, Digby NS www.wastecheck.com	902-245-2015

Valley Region (Region 5)

Facility Name	Phone
Eastern Management Centre 100 Donald Hiltz Connector Rd. Kentville Industrial Park http://www.vwrm.com/Disposal_Locations.html	902-679-1325 or 1-877-927-8300
Western Management Centre 343 Elliott Rd. Lawrencetown, Annapolis County http://www.vwrm.com/Disposal_Locations.html	902-679-1325 or 1-877-927-8300



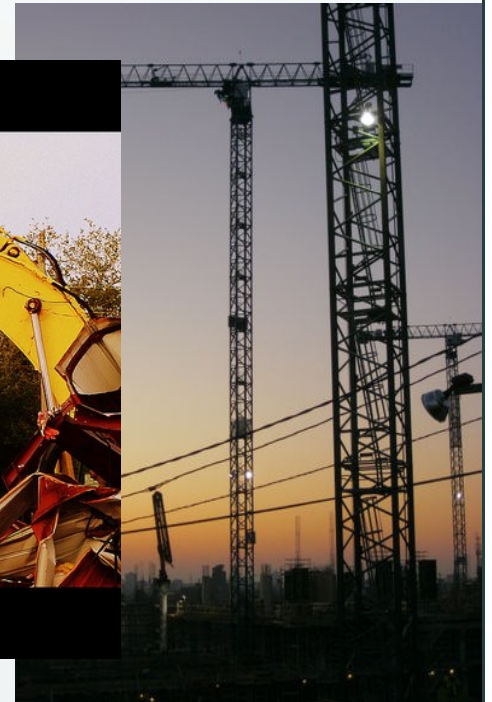
5.0 Local Nova Scotia Environment Offices

Please contact your local Nova Scotia Environment Office for more information on provincial C&D guidelines.

For up to date information on Regional Offices, visit: <http://novascotia.ca/nse/dept/division.emc.asp>

Western Region	Contact
Bridgewater, Kentville & Yarmouth 136 Exhibition Street Kentville, NS B4N 4E5	Phone: 902-679-6086 Fax: 902-679-6186
Kings & Annapolis Counties 136 Exhibition Street Kentville, NS B4N 4E5	Phone: 902-679-6088 Fax: (902) 679-6186
Lunenburg & Queens Counties 60 Logan Road Bridgewater, NS B4V 3J8	Phone: 902-543-4685 Fax: 902-527-5480
Digby, Yarmouth & Shelburne Counties 13 First Street Yarmouth, NS B5A 1S9	Phone: 902-742-8985 Fax: 902-742-7796

Central Region	Contact
HRM, East Hants, West Hants 30 Damascus Road, Suite 115 Bedford Commons, Bedford NS B4A 0C1	Phone: 902-424-7773 Fax: (902) 424-0597
Halifax Peninsula and all areas West to Lunenburg County, Hants and Halifax County West of Highway #101	Phone: 902-424-8183 Fax: 902-424-0597
South Dartmouth and Eastern Shore to Guysborough County, Bedford Basin to Grand Lake/ Hants County border East of Highway #118	Phone: 902-424-3856 Fax: 902-424-0597
Hants and Halifax County East of Highway #101. Bedford East of Highway #213. Fall River to Bedford Basin along Woodland Ave.	Phone: 902-424-3852 Fax: 902-424-0597



5.0 Local Nova Scotia Environment Offices Continued...

Northern Region	Contact
Northern Regional Office for (Amherst, Antigonish, Truro, Pictou, Colchester County) 36 Inglis Place, 2nd Floor P.O. Box 824, Truro, NS B2N 5G6	Phone: 902-893-5880 Fax: 902-893-0282
Cumberland County 71 East Victoria St. Amherst, NS B4H 1X7	Phone: 902-667-6205 Fax: 902-667-6214
Antigonish & Guysborough Counties 155 Main Street, Suite 205 Antigonish, NS B2G 2B6	Phone: 902-863-7401 Fax: 902-863-7411
Colchester County 36 Inglis Place, 2nd Floor P. O. Box 824, Truro, NS B2N 5G6	Phone: 902-893-5880 Fax: 902-893-0282
Pictou County 20 Pumthouse Road R. R. #3 New Glasgow, Nova Scotia B2H 5C6	Phone: 902-396-4194 Fax: 902-396-4765



Eastern Region	Contact
Port Hawkesbury & Sydney 1030 Upper Prince Street, Suite 2 Sydney, NS B1P 5P6	Phone: 902-563-2100 Fax: 902-563-2387
Sydney 1030 Upper Prince Street, Suite 2 Sydney, NS B1P 5P6	Phone: 902-563-2100 Fax: 902-563-2387
Richmond Co. Southern Inverness Town of Mulgrave Community of Auld's Cove 218 MacSween Street, Suite 12 Port Hawkesbury, NS B9A 2J9	Phone: 902-625-0791 Fax: (902) 625-3722
CBRM Victoria Co. Northern Inverness 1030 Upper Prince Street, Suite 2 Sydney, NS B1P 5P6	Phone: 902-563-2100 Fax: 902-563-2387



6.0 Special Handling – Hazardous Materials

Hazardous materials generated at construction, renovation, and demolition sites must be properly managed to avoid fines or environmental liability. Proper management of hazardous waste includes identification, accumulation, and disposal.



6.1 Asbestos

Asbestos waste must be managed according to Asbestos Waste Management Regulations (made under Section 84 of the Environment Act). "Asbestos waste" means a brittle waste material containing asbestos fibre or asbestos dust in a concentration greater than 1% by weight. It must be disposed of at an approved landfill site. Please call ahead to your local landfill or C&D disposal site to inquire about their disposal policies and pricing. See the chart below for approved Asbestos disposal locations. When demolishing an old building (prior to 1980, and even as late as 1985), it is the responsibility of the generator to complete a hazardous material report on the structure and offer it to the disposal site for confirmation on composition of debris. Disposal site operators have the responsibility to ask, if not offered a hazardous material report on demolitions of old buildings. If structure is old, and a hazardous material report was not given when asked, the C&D site operator has the right to refuse material .

Asbestos Disposal Sites	
Facility Name	Phone
Beech Hill Waste Management Facility 1352 Beech Hill Road, Antigonish County, NS	902-863-4744
Pictou County Solid Waste 220 Landfill Rd., Mount William NS	902-396-1495
Marinus Verhagen C&D Disposal Site Linacy St., New Glasgow NS	902-752-6411
Tervita Environmental Service Located on 188 Mingo Road, Kemptown NS	902-468-9000
Cumberland Central Landfill 2052 Little Forks Road, Little Forks, NS	902-667-5141
Kaizer Meadow Environmental Management Facility 450 Kaizer Road, Chester NS	902-275-2330
Yarmouth County Solid Waste Park 1934 Hardscratch Road, Yarmouth NS	902-742-5852



6.2 Lead Paint

C&D debris coated with lead paint can be disposed of in a C&D debris disposal site, provided that only the lead fails the leachate test.

6.3 Contaminated Soil

Soil that is not contaminated is inert and does not require special disposal. "Contamination" normally refers to concentrations of chemicals in the soil that have been determined to exceed acceptable standards for the particular land use. Contaminated soil is provincially regulated. Lab test results determine if treatment is required at a contaminated soil treatment facility. Please refer to the following list of Soil Treatment Facilities in Nova Scotia. Contact second generation landfill sites to see if the soil's contamination level could be allowed to be used as daily cover.

Soil Treatment Facilities		
Facility Name	Contact	Accepted Materials
Victoria County Bioremediation Facility - Municipality of County of Victoria	445 Old Margaree Road, Big Baddeck Victoria County ph: (902) 295-3660	Petroleum hydrocarbon impacted soil
Environmental Soil Services Limited	10601 Hwy 4, Broadway Pictou County ph: (902) 752-5932 fax: (902) 752-7220	Petroleum hydrocarbon impacted soil
Atlantic Soils and Associated Management Limited	Mount William Pictou County ph: (902) 396-4110 fax: (902) 396-1810	Petroleum hydrocarbon impacted soil
Tervita Environmental Services	188 Mingo Road Kemptown Colchester County ph: (902) 468-9000 fax: (902) 468-7185	Petroleum hydrocarbon impacted soil
Envirosoil Limited	Rocky Lake Quarry Halifax County ph: (902) 835-3381 fax: (902) 835-7300	Petroleum hydrocarbon, barium based drilling mud waste ("drill mud waste") and polycyclic aromatic hydrocarbon ("PAH") contaminated soil, PERC, PCP
Clean Earth Technologies	203 Aerotech Dr., Enfield, NS, B2T 1K3 Halifax County ph: (902) 835-9095 fax: (902) 835-9010	Petroleum hydrocarbon, PAH, metals impacted soil and sulphide bearing material contaminated with TPH & PAH.
SRT Soil Remediation Technologies	Conrads Quarry, Waverley Halifax County ph: (902) 435-7645 fax: (902) 462-0318	Petroleum hydrocarbon impacted soil
Yarmouth County Petroleum Contaminated Soil Remediation Facility	1932 Hardscratch Rd., South Ohio, Yarmouth County Ph: (902) 742-5852	Petroleum hydrocarbon impacted soil



6.4 Creosote Timbers

Disposal determined on a case by case basis. Contact local solid waste disposal facility for clarifications.



6.5 Mercury Containing Products

Currently there is no province-wide standard for disposal of mercury containing products (ex. Mercury thermostat). Mercury containing waste may be managed through a hazardous waste collector. See service companies below.

6.6 Other Hazardous Wastes

There are other waste materials that are considered hazardous and must be disposed of properly. Some examples include: oil, propane, and other chemicals. This can be done through third party waste collection companies. Please refer to the chart below for contact information of three companies that provide service across the province.

Hazardous Waste Collection Companies

Company Name	Phone	Website
Atlantic Industrial Services 660 MacElmon Road Debert, NS, B0M 1G0	902-662-3358 Fax: 902.662.3337	www.envirosystemsglobal.com/ companies/atlantic-industrial- services/
Clean Harbours 640 McElmon Road Debert, NS B0M 1G0	1-800-444-4244	www.cleanharbors.com/
Newalta 3 Spectacle Lake Drive, Scot Pine Building Dartmouth, NS B3B 1W8	902-720-4002 Toll Free: 1-866-870-2771 Fax: 902-720-4003	www.newalta.com/



7.0 Other Waste Management Programs

When working on a construction site, there might be some other types of waste that you may come across. Here is a list of some other wastes that are banned from disposal and require special management. The following information and more can be found on RRFB Nova Scotia's website, www.putwasteinitsplace.ca.



Refundable Beverage Containers-

When consumers purchase regulated beverage containers, they pay a deposit. Consumers can then return the containers to an ENVIRO-DEPOT™ for a refund. To see a list of Enviro-Depots, visit: <http://putwasteinitsplace.ca/envirodepot.asp>.

Tires-

When consumers purchase on-road passenger tires, they pay a one-time environmental fee to support the costs of collecting and processing used tires. The fee is dependent on the size and type of tire purchased. Nova Scotians can return up to four regulated tires at a time to any tire retailer in the province - free of charge. Unwanted or worn-out tires should be left at the tire retailer when buying new tires.

If your business requires a tire pick up, please contact RRFB Nova Scotia toll-free at 1-877-313-RRFB (7732).



What's Included (return to retailer):

- Car and truck tires
- Motorcycle tires
- Camper tires
- Trailer tires

Unwanted or worn-out tires returned to the tire retailer must be off the rim and free of mud and debris.

What's NOT Included:

- Tires larger than 24.5 inches
- Off-road tires from All Terrain Vehicles (ATVs)
- Tires from farming and other heavy equipment

Contact your local municipality for information on the proper disposal of these types.



7.0 Other Waste Management Programs Continued...

Leftover Paint-

When consumers purchase paint, they pay a recycling fee to support the costs of collecting and processing unused paint. Nova Scotians can return leftover paint to any ENVIRO-DEPOT™ facility across the province, free of charge. For up to date information about the types of paint accepted, the recycling fee, and a full list of drop-off locations, please visit their website at: www.productcare.org.



Electronics-

EPRA (Electronic Products Recycling Association) manages unwanted electronic products (excluding cell phones). If your electronic product has reached its end-of useful life, residents and businesses in Nova Scotia can recycle these electronics, free of charge through industry-led stewardship programs. For up to date information about EPRA Drop-off Centre locations, the types of electronics accepted and recycling fees, please visit their website at: www.recyclemyelectronics.ca/ns/.



Cell Phones (and batteries)-

Call2Recycle® is a North American used battery and cell phone collection program. For up to date information about drop-off locations, please visit their website at: www.call2recycle.ca.

Recycle My Cell is a Canadian program that manages unwanted devices, including cellphones, smartphones, wireless PDAs, device batteries and pagers. For up to date information about drop-off locations, please visit their website at: www.RecycleMyCell.ca.



Waste Oil-

Retailers who sell motor oil must either accept used oil or provide a collection depot within five kilometers of their business. This ensures that all Nova Scotians have a convenient place to deliver their used oil for reprocessing.



Cardboard-

A lot of cardboard can be generated from construction, demolition, and renovation projects. Cardboard must be separated from the other waste streams, broken down and recycled. Please refer to section 14.0 for Regional contacts for information on drop-off locations. If contracting a collection service, request a separate bin/collection for cardboard boxes. Most facilities require that cardboard be kept clean and dry for recycling.



8.0 C&D Reuse, Recycling, and Diversion

There are some C&D materials that can be reused, recycled or diverted from landfill. This is important to increase diversion and to reduce negative environmental impacts. Recycling C&D debris increases economic activity and value added opportunities. Diverting material away from landfill supports provincial and municipal recycling objectives. If you have some innovative ideas to divert C&D debris from disposal, please contact RRFB Nova Scotia or Nova Scotia Environment (NSE) Solid Waste Unit.

8.1 Clean Wood

Clean wood is wood that is free of adhesives, coatings and preservatives. It can be diverted if segregated from the other waste materials and debris. When segregated, its disposal and/or management is not regulated by Nova Scotia Environment (NSE) regulations. It can be used for biomass, or mulched/chipped for beautification or as a bulking agent for compost.

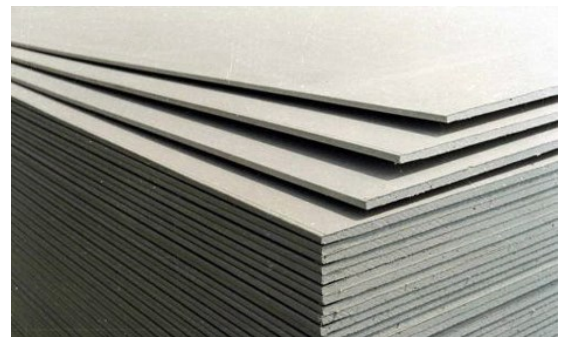


8.2 Composite and Coated Wood

Composite and coated wood products currently have limited diversion potential (ex. chip board, medium-density fiberboard [mdf], plywood, painted, pressure treated etc.) This material can be chipped and used for landfill site road amendment, or as alternate daily cover. Research projects are considering its use as a bulking agent in compost and for energy recovery. Most composite and coated wood could be used with wallboard to produce animal bedding.

8.3 Clean and Coated Wallboard/Drywall

Clean drywall (cut-offs from new construction) can be used as a compost amendment. Wallboard can be processed to remove the paper. The remaining gypsum can be used for many purposes including recycled back into new wallboard, as a soil amendment, and by the cement industry. Wallboard can also be mixed with C&D debris wood, processed and used as animal bedding. Wallboard can also be processed and used for daily landfill cover or chipped and spread as final landfill cover for pH control to increase vegetative growth (*please note if applicable: the LEED Certification program does not recognize landfill cover as a diversion option). For more information on these diversion options, please contact RRFB Nova Scotia or NSE Solid Waste Unit.



8.4 Roofing Materials

Asphalt shingles can be processed to make two value-added products: 1) Asphalt grit for use in pavement, and 2) Asphalt flake for use as an alternative energy source (please contact Halifax C&D Recycling Ltd. For more information). The Lunenburg Rails to Trails Project has developed a specification for a trail cover that consists of ground asphalt shingles and aggregate. Mixed roofing materials must be disposed of at an approved facility.



8.5 Metal

Many municipal sites accept metal. Metal scraps can also be sold to scrap metal dealers for recycling. Please see the chart below for a list of some larger scrap metal dealers. There are some smaller local dealers across the province as well. Please consult with your local municipality or business directories for contact information.

Scrap Metal Dealers		
Company Name	Phone	Website
John Ross & Son LTD Halifax, Goodwood, Truro	Halifax: 902-450-5633 Goodwood: 902-479-0344 Truro: 902-893-9429	www.jrsons.ca
Limar Bathurst NB	506-383-0625	
BMI Limited, Bridgewater	1-877-370-3403	www.bmiltd.ca



9.0 Responsibilities

There are various responsibilities involved in the management of construction and demolition waste, for both the waste generator and the disposal site operators.



9.1 Generator Responsibilities

It is the responsibility of any generator of construction and demolition debris to employ reasonable and practical means, including source reduction, reuse or recycling, in order to prevent construction and demolition debris from being disposed at a Construction and Debris Disposal Site. Some municipalities require permits with a monetary deposit that allows for the tracking of C&D waste. When demolishing an old building (prior to 1980, and even as late as 1985), it is the responsibility of the generator to complete a hazardous material report on the structure and offer it to the disposal site for confirmation on composition of debris. Disposal site operators have the responsibility to ask, if not offered a hazardous material report on demolitions of old buildings. If structure is old, and a hazardous material report was not given when asked, the C&D site operator has the right to refuse material.

9.2 Expectations of Management at an Approved C&D Facility

The approval holder is responsible to ensure that there is direct supervision of the site during operating hours. Other responsibilities include:

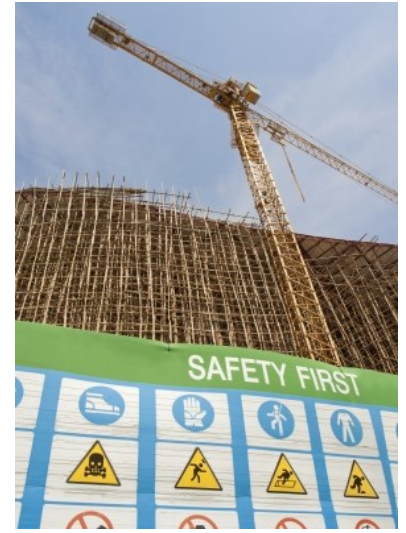
- all loads must be inspected by the supervisor of the site prior to unloading;
- the owner/operator of the facility shall accept only C&D debris;
- no industrial waste shall be accepted at the site unless otherwise approved by the Administrator in the terms and conditions of the approval;
- no municipal solid waste is to be accepted at C&D debris disposal sites. Municipal solid waste is only accepted at second generation landfill sites and transfer stations;
- no liquid wastes are to be accepted;
- the approval holder is responsible for controlling litter and all loads must be secure.

The approval holder also has the right to refuse any load that may pose undue risk, adverse effects to the environment or is in contravention to their approval.

10.0 Best Management Practices

The following activities have been found to be effective for managing materials that have various financial, environmental, sustainability and legal impacts.

- know your regional contact (section 14.0)
- know your municipal rules and regulations for management and disposal;
- understand variable tipping fees for sorted and unsorted;
- separate as much as possible at the site of generation
- processing on site could reduce volume and therefore reduce transportation costs;
- increases eligibility for Environmental Certification Programs (ex. LEED and BOMA)



Questions to Consider Before Project Begins

Renovation and New Construction

- What are the possibilities for reusing existing materials to complete the project? For instance rather than installing new kitchen cabinets, might a fresh coat of paint or the addition of interesting trim and new hardware spruce up the kitchen just as well?
- Does the project design use standard material sizes in order to minimize cutoffs and waste?
- Can materials be salvaged during the construction process and then reused within the same project? For instance at the Ecology Action Centre, wood cut-offs were dropped in between the wall studs to minimize wood leaving the site. This strategy also improved sound insulation between the rooms.
- How accurate can you be about quantities when purchasing?
- Can you select materials with less packaging?
- What might local salvage/building reuse centres have that could be used in the project? Because their stock is changing all the time it is worth checking in often.
- How do builders on the project intend to process and reuse the materials on site?

Building Removal

- Who in the community might have a use for waste materials being generated on the project?
- Is it possible to hire a deconstruction professional instead of a demolition expert? Deconstruction takes more time, but is more environmentally responsible, can generate income for the project, local employment and is great for public relations.
- What are the options for moving the building rather than demolishing it?
- Is an addition to the existing structure an alternative to demolition and reconstruction?
- What are the estimated tipping fees for the C&D materials being generated from the project?



“Questions” resource: Ecology Action Centre, Construction and Demolition Toolkit: <http://www.ecologyaction.ca/content/waste-not-toolkit-online>

11.0 C&D Tracking

It's important to understand the composition of your construction or demolition project prior to issuing a tender. Track various material types to ensure proper disposal or processing. This assists in developing best management practices and reduces potential liabilities.

- Develop a waste management plan
- Information and requirements of disposal could be included in the tender document so that all contractors know prior to bidding the project
- Ensure compliance with provincial and local regulations
- Recycling and reuse goals and targets could be set and measured



12.0 Local Requirements for Disposal, Processing, and Recycling

Municipal Bylaws and Policies

Municipalities are empowered through the Municipal Government Act (MGA) to have the responsibility to govern the management of municipal solid waste. Some Municipalities or Regions impose financial penalties, rejection of waste, or loss of privileges.

Some municipal bylaws/policies could include:

- **Separation of C&D materials**

Certain materials such as drywall, clean wood and asphalt shingles are required to be segregated when they arrive for disposal, processing and/or recycling.
- **Exportation of Waste**

Exportation of waste means that waste generated within a defined area in a region/municipality may not be permitted to be transported outside of those boundaries.
- **Designated Disposal Sites**

Some municipalities designate certain disposal sites to be used for specific materials. Check with your local municipality for more information.



13.0 Reasons to Recycle

The C&D debris stream provides many opportunities to divert large quantities of often valuable and recyclable materials from landfills. Some reasons to recycle include the following:



Environmental stewardship:

- Reducing, reusing and recycling saves valuable natural resources and energy needed to make new products from virgin material
- Reducing waste conserves natural resources & saves money



Economical:

- Sites set up to be recycling friendly sites are more efficient
- Less waste means lower costs
- Some material (e.g. metal) is worth money
- Contractors could haul their own waste which could save money
- Creating local recycling jobs and businesses improves the economy for everyone



Clean & Safe Site:

- A site that has on-site recycling will tend to be cleaner
- Clearly marking locations for various streams of waste, whether or not material is stored in containers or stockpiles, your site will be more organized, space on site will be better used, and workers are less likely to become injured as a result of clutter



Positive Publicity:

- By publically displaying recycling diversion rates on the site, contractors display a 'greener' public image



Proactive :

- With the rising interest in LEED certification and other green building standards for new construction, contractors who are currently recycling on-site will be well-positioned to bid for those jobs



Ease:

- If the site is well organized, on-site recycling is easy & does not require a lot of extra time



14.0 Resources

Regional Contacts

Region 1:

- Cape Breton Regional Municipality, Phone: 902-563-5054, www.cbrm.ns.ca/solidwaste.html
- Inverness, Phone: 902-787-3502, www.inverness-ns.ca
- Victoria, Phone: 902-295-3144, www.victoriacounty.com/waste-management-services.html
- Richmond, Phone: 902-226-3988, www.richmondcounty.ca/
- Port Hawkesbury, Phone: 902-625-7895, www.townofporthawkesbury.ca/garbage-recyclables

Region 2:

- Antigonish / Guysborough, Phone: 902-232-2563, www.erswm.ca
- Pictou, Phone: 902-396-1495, www.pcwastemgmt.com

Region 3:

- East Hants, Phone: Solid Waste Hotline 1-888-873-3332, www.easthants.ca
- Cumberland, Phone: 902-667-5141, www.cjsma.ns.ca
- Colchester, Phone: 902-897-0450 x.104, www.colchester.ca/solid-waste-management



Region 4:

- Halifax Regional Municipality, Phone: 902-490-7176, www.halifax.ca/recycle/
- HRM By-Laws: www.halifax.ca/legislation/bylaws/hrm/documents/By-LawL-200.pdf

Region 5:

- Annapolis and Kings Counties, Town of Hantsport, Valley Waste, Phone: 902-679-1325 or 1-877-927-8300, www.vworm.com



Region 6:

- Town and District of Lunenburg, Chester, Bridgewater, Mahone Bay, Region of Queens, Town and District of Shelburne, District of West Hants, Windsor, Lockport, Barrington and Clark's Harbour, Phone: 902-624-1339, www.ecomom.org

Region 7:

- Yarmouth and Digby Counties, Waste Check, Phone: 1-800-569-0039, www.wastecheck.com

14.0 Resources Continued...

Ecology Action Centre, Construction and Demolition Toolkit:

<http://www.ecologyaction.ca/content/waste-not-toolkit-online>

NSE– Environment Act– Strategy:

<http://www.gov.ns.ca/nse/waste/>

Resource Recovery Fund Board (RRFB):

www.putwasteinitsplace.ca

CaGBC Atlantic Chapter:

<http://www.cagbc.org/AM/Template.cfm?Section=Atlantic>

Valley Waste C&D Guide:

http://www.vwrm.com/pdfs/2013/131107_CD_DebrisManagement.pdf

BOMA (Building Owners and Managers Association) of Canada:

<http://www.bomacanada.ca/>

LEED Canada:

www.cagbc.org

Construction Association of Nova Scotia (CANS):

www.cans.ns.ca

Dalhousie University, Office of Sustainability– Roshelle Owen:

http://www.dal.ca/dept/sustainability/about/Office_Staff.html

Nova Scotia Homebuilders Association:

www.nshomebuilders.ca

HRM C&D Brochure

<http://www.halifax.ca/wrms/cdrdebris.html>



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Summary

This guide is intended to assist those in Nova Scotia with the proper management of Construction & Demolition debris.

Content will be updated when necessary.

If you have you have any questions or comments regarding the content of this guide please send your inquiries to:

info@erswm.ca

Thank you,
Regional Waste Reduction Coordinators of Nova Scotia

