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# Item No. 13.1.1 Environment and Sustainability Standing Committee May 1, 2025

TO: Chair and Members of the Environment and Sustainability Standing Committee

**FROM:** Cathie O'Toole, Chief Administrative Officer

**DATE:** April 1, 2025

SUBJECT: Amendments to By-Law L-200 Respecting Licensing of Construction and

Demolition (C&D) Recycling and Disposal Operations

#### **ORIGIN**

Effective July 5, 2023, amendments to the *Environment Act*, S.N.S. 1994-95, c .1 changed requirements for Environmental Approvals for construction and demolition (C&D) debris storage, transfer, processing, and disposal sites. These changes prompted the need to update HRM By-Law L-200 Respecting Licensing of Construction and Demolition (C&D) Materials Recycling and Disposal Operations, which was identified as a priority in the 2024/2025 Public Works Business Plan.

#### **EXECUTIVE SUMMARY**

Construction and demolition (C&D) debris refers to material such as drywall, plaster, cellulose, fibreglass fibres, gyproc, lumber, wood and asphalt shingles.

HRM By-Law L-200, the *C&D Materials Recycling and Disposal License By-Law* (By-Law L-200) was enacted in 2001 to:

- Maximize diversion from landfill through recycling of C&D debris;
- Increase economic activity and value-added processing through recovery of C&D debris;
- Provide an opportunity to properly dispose of C&D debris that cannot be recycled; and
- Ensure minimal environmental, land use and nuisance impacts from the operation of C&D debris processing and disposal operations.

Effective July 5, 2023, amendments were made to the *Solid Waste-Resource Management Regulations* of the *Environment Act* prompting new provincial guidelines for C&D storage, transfer, processing and disposal. The primary outcomes of the 2023 guidelines include:

- Requirements for sites storing, transferring or processing C&D debris to hold an Environmental Approval from NSECC. Previously this approval was only required for disposal sites.
- Ban on disposal of treated wood in C&D disposal sites. These materials may continue to be reused or disposed of in a municipal solid waste landfill.
- Enhancements to groundwater monitoring, stockpile limitations and cell construction guidelines.

**RECOMMENDATION ON PAGE 2** 

There are currently three active C&D facilities in HRM, all owned and operated by Halifax C&D Recycling Limited. Prior to the 2023 amendments to the NS Environment Act, the Antrim Disposal Site was the only C&D site in HRM that was required to hold an Environmental Approval from NSECC. As Environmental Approvals were not required by NSECC for transfer, storage and processing facilities at the time it was developed, By-Law L-200 provided a level of environmental oversight and accountability to ensure proper management of C&D debris.

Where NSECC has assumed regulatory oversight of and has broader jurisdiction over all C&D facility types, HRM has an opportunity to amend By-Law L-200 to reduce duplication between the regulations and allow the municipality to place more focus on diversion of C&D debris and mitigating nuisances to the community (i.e., litter).

#### **RECOMMENDATION**

It is recommended that the Environment and Sustainability Standing Committee recommend that Halifax Regional Council:

 Adopt By-law L-202, the purpose of which is to amend By-law L-200, Respecting Licensing of Construction and Demolition Recycling and Disposal Operations, including repealing Administrative Order 27, Respecting Materials That Shall Not Be Disposed Of In A C&D Disposal Site, as set out in Attachment B of this report.

#### **BACKGROUND**

#### Municipal C&D Oversight

Construction and demolition (C&D) debris refers to material such as drywall, plaster, cellulose, fibreglass fibres, gyproc, lumber, wood and asphalt shingles.

HRM By-Law L-200, the *C&D Materials Recycling and Disposal License By-law* (By-Law L-200) was enacted in 2001 to:

- Maximize diversion from landfill through recycling of C&D debris;
- Increase economic activity and value-added processing through recovery of C&D debris;
- Provide an opportunity to properly dispose of C&D debris that cannot be recycled; and
- Ensure minimal environmental, land use and nuisance impacts from the operation of C&D debris processing and disposal operations.

C&D Processing Facilities, Transfer Stations and Disposal Sites within HRM require a license from the Municipality to operate. The by-law is considered highly progressive in that it requires operators to maintain an annual diversion rate of 75% from processing facilities and transfer stations in order to maintain their license in good standing.

There are currently three active C&D facilities in HRM, all owned and operated by Halifax C&D Recycling Limited and include:

- Transfer and Processing Facility 16 Mills Drive in Goodwood (opened in 1995)
- Transfer Station 188 Ross Road in Westphal (opened in 2000)
- Disposal Site Antrim (opened in 2003)

As an Environmental Approval<sup>1</sup> from NSECC was only required for C&D disposal sites, the By-Law L-200 license requirements for transfer and processing facilities were developed to include requirements typically associated with Environmental Approvals, including bonding, provision of an operational plan and limitations on separation distances and stockpiling.

To support the economic viability of operating a C&D site, HRM prohibits the export of C&D debris outside the boundaries of HRM, as outlined in By-Law S-600<sup>2</sup>. Furthermore, C&D debris must be disposed of at a licensed C&D site, as this type of material is generally not accepted at the Otter Lake Waste Management Facility<sup>3</sup>.

#### Nova Scotia Facility Guidelines for Construction and Demolition Debris

Effective July 5, 2023, amendments were made to the Nova Scotia Environment Act (*Solid Waste Regulations*), prompting new provincial guidelines for C&D storage, transfer, processing and disposal. These amendments were prompted by a departmental review of sites across the province in response to fires, groundwater impacts and community concerns. The review determined the need for provincewide standards for all facilities managing C&D debris.

The primary outcomes of the 2023 guidelines include:

- Requirements for sites storing, transferring or processing C&D debris to hold an Environmental Approval from NSECC. Previously this approval was only required for disposal sites.
- Ban on disposal of treated wood<sup>4</sup> in C&D disposal sites. These materials may continue to be reused or disposed of in a municipal solid waste landfill.
- Enhancements to groundwater monitoring, stockpile limitations and cell construction guidelines.

The guideline document developed by NSECC<sup>5</sup> outlines the minimum requirements for the construction, operation, and monitoring of C&D storage, transfer, processing, and disposal facilities in support of the provincial regulations.

#### Land Use Planning for Construction and Demolition Sites

Planning and Development is responsible for policy and regulation involving Construction and Demolition relating to land use (location, landscaping, siting, built form, definitions, etc) and methods of approval (e.g. site plan approval).

In 2002, policy and regulation were introduced into the planning documents throughout the region. The planning documents now require review to align with updated provincial legislation and By-law 200. Further, Council has passed a motion to consider ways to better mitigate impacts on residential properties, such as appropriate locations for Construction and Demolition (C&D) facilities, provisions for buffering and screening, to consider planning tools for regulating C&D facilities, and any necessary public or industry engagement. The staff report to address these issues is targeting return to Council in Fall, 2025.

<sup>&</sup>lt;sup>1</sup> An Environmental Approval is issued by NSECC to outline site specific conditions and limitations. This ensures an operation meets environmental standards and does not adversely impact the surrounding environment. C&D sites are regulated by <u>Division III – Municipal Waste</u>, <u>Part 2</u>: <u>Solid Waste of the Activities Designation Regulations (Section 66 of the *Environment Act*).</u>

<sup>&</sup>lt;sup>2</sup> The Municipality may export solid waste materials to licensed disposal facilities outside its boundaries if the volumes of solid waste delivered to municipal facilities exceed the capacity of the facilities to handle the materials.

<sup>&</sup>lt;sup>3</sup> Small amounts of C&D debris collected as part of the residential curbside program are accepted at the Otter Lake Facility.

<sup>&</sup>lt;sup>4</sup> NSECC definition of "treated wood" means wood chemically treated during manufacturing for the purpose of resisting decay. The new guidelines limit disposal (in C&D disposal sites) of mixed loads containing over 20% by weight of treated wood.

<sup>&</sup>lt;sup>5</sup> <u>Solid Waste Management Facility Guidelines for Construction and Demolition Debris Storage, Transfer, Process and Disposal. Effective July 5, 2023</u>

#### **DISCUSSION**

Prior to the 2023 amendments to the NS Environment Act, the Antrim Disposal Site was the only C&D site in HRM that was required to hold an Environmental Approval from NSECC. As Environmental Approvals were not required by NSECC for transfer, storage and processing facilities at the time it was developed, By-Law L-200 provided a level of environmental oversight and accountability to ensure proper management of C&D debris.

Where NSECC has assumed regulatory oversight of and has broader jurisdiction over all C&D facility types, HRM has an opportunity to amend By-Law L-200 to reduce duplication between the regulations and allow the municipality to place more focus on diversion of C&D debris and mitigating nuisances to the community (i.e., litter). The diversion of C&D debris, reinforced by the minimum 75% diversion rate and enforcement of flow control measures (i.e., C&D debris generated in HRM stays within the boundaries) promotes diversion from landfill disposal and supports the provincial goal of reaching 300 kg per capita disposal by 2030.

Amending the by-law has the added impact of reducing administrative burden in support of Regulatory Modernization and red tape reduction. The contents of Administrative Order 27, which lists material prohibited from disposal in a C&D disposal site and specifies minimum recycling targets, will be merged into By-Law L-200. As such, Staff has deemed it appropriate to repeal Administrative Order 27 to increase administrative efficiency. As well as simplifying legislative documentation, this consolidation provides HRM with the ability to lay charges should an operator of a C&D facility not meet diversion targets.

Highlights of the proposed amendments to By-Law L-200 include:

- Term of license to align with the length of the term of the Environmental Approval from NSECC (which could be five to ten years).
- Annual reporting requirements that outline plans for diversion of material and innovation in developing recycling markets.
- Adoption of a litter management plan and a diversion strategy.
- License renewal fee changed from \$50 annually to \$500 per term.
- Updated insurance requirements:
  - Commercial General Liability coverage of \$5 million (increased from \$2 million)
  - Environmental Impairment Liability coverage of \$5 million (new requirement)
- Penalties for non-conformance with diversion targets.

Conditions of the license will also require the applicant to provide to HRM a copy of their Operation and Maintenance Manual (Operating Manual), a comprehensive document that is required as part of the Environmental Approval. The Operating Manual includes detailed descriptions of:

- Site plan, stockpile heights and separation distances
- Operational procedures, movement of traffic
- Emergency contingency plans
- Air quality, noise and odour controls
- Environmental monitoring program, testing schedule

The Operating Manual is further reviewed by NSECC to ensure any site-specific considerations are accommodated, in addition to general environmental controls. This could include items ranging from placement and number of groundwater monitoring wells to litter control measures.

In addition to the Operating Manual, NSECC requires proof of financial security in an amount that covers estimated costs to rehabilitate the site should the operation fail, or the operator abandon the site. This surety is made payable to the Province who would then be responsible for remediation of the site, if needed.

#### **Treated Wood**

Treated wood encompasses two major types including pressure treated lumber and creosote timbers. From a regulatory point of view, all treated wood is now defined by the Province as solid waste and not C&D debris. Therefore, treated wood is permitted to be exported from the Municipality for disposal at municipal solid waste landfills similar to all other Institutional, Commercial, and Industrial (ICI) waste.

Currently Halifax C&D accepts pressure treated lumber in dedicated or mixed loads at the Halifax (Mills Dr.) and Dartmouth (Ross Rd.) locations. As this material can be diverted from disposal, there are no changes to how this will be managed going forward.

Diversion opportunities for creosote timbers are limited. Therefore, disposal at a municipal landfill is the only option for this material. Small quantities of creosote timber (i.e. from a residential property) fall under the threshold for acceptance of material and will continue to be managed by Halifax C&D. In cases where large volumes of timbers are generated (e.g., wharves and railroad ties), generators are permitted to export this material for disposal at a municipal landfill.

As mentioned, the Otter Lake Waste Management Facility does not generally accept C&D debris outside of small curbside loads collected as part of the residential curbside program. This standing policy has been in place to support By-Law L-200's 75% diversion objective. Staff have currently prepared a draft policy to allow acceptance of C&D debris at Otter Lake only in circumstances related to major emergency events, if needed. A copy of the draft policy is included as Attachment D. Staff are currently consulting the Otter Lake Community Monitoring Committee with respect to the draft C&D policy. No changes are being suggested relative to regular operations or to allow acceptance of treated wood, as most of this will continue to be accepted by Halifax C&D. In cases where large volumes of creosote timbers are generated, this material can be exported for disposal as ICI waste.

#### FINANCIAL IMPLICATIONS

The proposed amendments outlined above do not result in material financial implications at this time.

#### **RISK CONSIDERATION**

The risk associated with proposed amendments are considered low. Under the Environmental Approval requirements, risks associated with C&D operations are further mitigated through oversight by NSECC including related to groundwater and surface water quality and financial assurance.

#### **COMMUNITY ENGAGEMENT**

No community engagement was conducted in the development of the By-Law. The public will have an opportunity to comment on the proposed By-law amendments through the public notification process.

#### **ENVIRONMENTAL IMPLICATIONS**

C&D debris accounts for approximately 20% of the total waste disposed of in HRM. Maintaining oversight of this material and promoting diversion is critical for both HRM and the province to reach waste diversion goals and the 300 kg per person disposal target by 2030. Furthermore, under the Environmental Approval requirements, C&D facilities will receive increased environmental oversight of these facilities from NSECC.

#### **ALTERNATIVES**

The Environment and Sustainability Standing Committee could refuse to recommend that Regional Council approve amendments to By-Law L-200. This is not recommended as maintaining the status quo licensing process will create additional reporting and red tape for site operators.

#### **LEGISLATIVE AUTHORITY**

Halifax Regional Municipality Charter, S.N.S. 2008, c. 39

188(1) The Council may make By-laws, for municipal purposes, respecting:

(f) businesses, business activities and persons engaged in business...

188(2) Without restricting the generality of subsection (1) but subject to Part VIII, the Council may, in any by-law

..

- (e) provide for a system of licences, permits or approvals, including any or all of
- (i) establishing fees for licences, permits or approvals, including fees for licences, permits and approvals that may be in the nature of a reasonable tax for the activity authorized or for the purpose of raising revenue, which fees may be set or altered by policy,
- (ii) prohibiting any development, activity, industry, business or thing until a licence, permit or approval is granted,
- (iii) providing that terms and conditions may be imposed on a licence, permit or approval, the nature of the terms and conditions and who may impose them,
- (iv) setting out the conditions that must be met before a licence, permit or approval is granted or renewed, the nature of the conditions and who may impose them,
- (v) providing for the duration of licences, permits and approvals and their suspension or cancellation for failure to comply with a term or condition or the by-law or for any other reason specified in the by-law;
- 335 The Council may make By-laws respecting solid waste, including, but not limited to:
  - (b) regulating the disposal, collection and removal of solid waste...
  - ...
- (d) licensing persons engaged in the business of removing or collecting solid waste, regulating the operation of the business and prohibiting, in whole or in part, the operation of such a business by a person not holding a licence;

Administrative Order 2017-002-ADM, Charter of Governing Principles for Regulation.

Administrative Order One, the Procedures of the Council Administrative Order, Schedule 5

- 3. The Environment and Sustainability Standing Committee shall:
  - (a) advise the Council on matters respecting solid waste management, including the responsibility to receive reports and to keep the Council informed respecting all matters related to the solid waste management program in the municipality; ...

#### **ATTACHMENTS**

Attachment A – Provincial Guidelines

Attachment B - Showing Proposed Amendments to By-Law L-200

Attachment C – Amending By-Law L-202

Attachment D – Otter Lake Construction and Demolition Debris Policy (Draft)

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# Solid Waste Management Facility Guidelines

for Construction and Demolition Debris Storage, Transfer, Process and Disposal

Effective July 5, 2023



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**Version Control**: Signed by the Deputy Minister of Environment and Climate Change on March 8, 2023, with effective date of July 5, 2023. Replaces the *Construction and Demolition Debris Disposal Site Guidelines*, 1997, previously amended October 9, 2003.

## 1 About this Guideline

The purpose of this guideline is to provide guidance and outline the acceptable minimum requirements for siting, constructing, operating and rehabilitating a Solid Waste Management Facility for the storage, transfer, processing and disposal of construction and demolition debris (C&D Facility). Final assessment of applications for an Approval for the construction and operation of a C&D Facility will be on a case-by-case basis. Nova Scotia Environment and Climate Change (herein referred to as the Department) may impose terms and conditions in an Approval that exceed the minimum requirements outlined below to prevent adverse effects.

## 2 Legislation

This guideline references the following provincial Acts, Regulations and Departmental Guidelines, as amended from time to time.

- a) Environment Act, S.N.S. 1994-95, c.1
- b) Solid Waste-Resource Management Regulations
- c) Activities Designation Regulations
- d) Sulphide Bearing Material Disposal Regulations
- e) Approval and Notification Procedures Regulations
- f) Contingency Planning Guidelines
- g) Guidelines for Environmental Noise Measurement and Assessment

## 3 Definitions

For the purpose of this guideline, a term defined in the Activities Designation Regulations Division III Part 2 or Solid Waste Resource Management Regulations has the same meaning when used in this guideline.

"abandoned" means site operations have stopped for a minimum of 36 consecutive months or notification of abandonment has been received in accordance with the Approval and Notification Procedures Regulations.

"active area" means the area occupied by the disposal cell, including rehabilitated disposal cells, any structure(s), storage area, processing location, leachate treatment systems, settling ponds, wastewater management infrastructure, and/or overburden associated with construction and demolition debris activities. The active area excludes access roads.

"professional hydrogeologist" means a person with hydrogeology training and experience, licensed to practice in accordance with the Geoscience Profession Act or a professional engineer.

**"industrial waste"** means garbage, refuse, sludge, rubbish, tailings, debris, litter and other discarded materials resulting from industrial or commercial activities requiring Approval under Division V of the Activities Designation Regulations.

From the effective date of this guideline until July 5, 2023 when the term is defined in the *Solid Waste Resource Management Regulations*, the definition of "treated wood" for the purpose of this guideline means:

"treated wood" means wood chemically treated during manufacturing for the purpose of resisting decay;

After July 5, "treated wood" shall have the same definition of as provided in the Solid Waste Resource Management Regulations.

## 4 Guideline

## 4.1 Siting and Separation Distance Requirements

- (1) Applications for Approval to construct or expand a C&D Facility must be accompanied by a letter from the municipal unit stating that the proposed C&D Facility meets all applicable zoning, planning restrictions and such other by-laws as may be required.
- Unless otherwise provided for in this Section or directed in an Approval issued by the Department, a C&D Facility must meet the minimum separation distances measured from the boundary of the active area to the feature listed in Table 1.
  - (a) Separation distances apply only to features present on the date the Approval Application is received by the Department.
  - (b) The minimum separation distances do not apply to the approved active area if the Approval was issued prior to the effective date of this Guideline, unless the C&D Facility has been abandoned or fails to maintain an active Approval.

- (c) Future expansion of the active area for existing facilities must meet the separation distances.
- (3) An Administrator may impose additional terms and conditions in an Approval increasing a minimum separation distance in Table 1, in order to prevent adverse effects.

Table 1: Minimum separation distances

Fea	ature	Horizontal Distance (m)
A)	Watercourse (top of bank) and Wetland (boundary) or marine water body	30
B)	Property line of C&D Facility (PID(s))	30
C)	Municipal drinking water supply	See section 5) below
D)	Foundation of any off-site structure used for commercial, industrial, residential, or institutional purpose	90
E)	Off-site dug or drilled drinking water supply well (other than municipal drinking water supply)	90

- (4) An Administrator may reduce the minimum separation distance required for feature B in Table 1, if the Administrator is satisfied that the reduction would not cause an adverse effect and the applicant has provided both of the following:
  - (a) a copy of an easement which has been recorded in the registry of deeds, from the affected property owner(s) granting and permitting the encroachment on the minimum separation distance; and
  - (b) a satisfactory written explanation of why the alternate separation distance is necessary, including evidence that reduced separation distances at the site will not create the potential for adverse effects.
- (5) For feature C in Table 1, the minimum separation distances for a municipal drinking water supply are as follows:
  - (a) outside the municipal drinking water supply's Source Water Protection Area, and
  - (b) outside the boundary of any provincially designated Protected Water Area.

- (6) An Administrator may reduce the minimum separation distance required for feature C in Table 1 if the Administrator is satisfied that the reduction would not cause adverse effects and the applicant for an Approval has provided the following:
  - (a) a satisfactory written explanation of why the alternate separation distance is necessary; and
  - (b) written confirmation from the municipal drinking water supply operator that they are satisfied that the reduced separation distance creates no potential adverse effects and would not contravene any regulations or by-laws applicable to the municipal drinking water supply, or municipal source water protection plans.
- (7) An Administrator may refuse to approve a reduction in the minimum separation distances in Table 1, if any of the following apply:
  - (a) allowing the reduced separation distance would cause adverse effects which do not align with the intent of the Act, Regulations or this Guideline;
  - (b) the reasons or evidence provided supporting the request to reduce the minimum separation distance are insufficient and do not in the opinion of the Administrator align with the intent of the Act, Regulations, or this Guideline; or the minimum separation distances set out in Table 1 can be met.

## 4.2 General C&D Facility Design, Construction, and Operation

- (1) The C&D Facility design must be prepared and signed by a professional engineer.
- (2) The C&D Facility design must be approved by an Administrator prior to construction.
- (3) All phases of construction shall be overseen by a professional engineer, or technologist who works under the supervision of a professional engineer.
- (4) Written certification by a professional engineer is required, within 6 weeks of project completion, stating that the construction and installation of the C&D Facility meets the requirements of the approved drawings and specifications.
- (5) The certification must confirm that all as-built drawings and any other relevant documentation have been turned over to the Approval Holder(s) by the professional engineer.

- (6) C&D Facilities for storing, transferring, processing and disposal of C&D must be designed and constructed in accordance with the following minimum requirements, unless otherwise provided in the Approval. All facilities must have:
  - (a) Controlled entry and exit infrastructure;
  - (b) Weigh scales;
  - (c) Legible signage at the entrance of the C&D Facility that includes:
    - (i) days and hours of operation,
    - (ii) a list of acceptable/unacceptable waste, and
    - (iii) emergency contact numbers
  - (d) Exposed areas are to be stabilized to prevent erosion and sedimentation.
- (7) All facilities must have the following operational requirements:
  - (a) Direct supervision of the C&D Facility is required during the hours it is open and accepting materials.
  - (b) Litter must be controlled.
  - (c) Measures must be in place to prevent illegal dumping and vandalism.
  - (d) Air quality, noise, odours, and dust must be controlled and as a minimum follow the requirements stated in Appendix B.
  - (e) An effective vector control program that includes but is not limited to birds, insects, and rodents, must be in place.
    - (i) If the Department deems the vector control inadequate, additional control measures or changes to the operation may be required.
  - (f) Daily inspections must occur to maintain good housekeeping practice and appropriate action is to be taken to reduce vector and litter problems.
- (8) Waste acceptance
  - (a) Unless otherwise approved by an Administrator, Facilities can only accept and store, transfer, process and dispose of C&D debris and are prohibited from accepting municipal solid waste, industrial waste, hazardous waste, asbestos waste, or designated materials from Schedule "B" of the *Solid Waste Resource Management Regulations*.

- (b) All loads of C&D waste are to be inspected prior to unloading for the presence of municipal solid waste, industrial waste, hazardous waste, liquid waste, treated wood, or designated materials from schedule "B" of the *Solid Waste Resource Management Regulations*.
  - (i) Procedures shall be in place to manage unacceptable materials that are received.
  - (ii) As of July 5, 2023, treated wood is banned from disposal at all C&D facilities in Nova Scotia.
  - (iii) At a minimum, Approval Holders will enact the treated wood ban in accordance with the procedures established in Appendix C.
  - (iv) Treated wood can be accepted for storage, transfer, and processing, but it is not permitted at the disposal area unless authorized in writing by the Department.

### 4.3 Groundwater, Surface Water and Leachate

- (1) Surface water draining and controls infrastructure for the active area is required, including but not limited to, sedimentation ponds.
- (2) A groundwater, surface water and leachate monitoring program, including monitoring wells and surface water sampling locations, in accordance with Appendix "A" is required. The plan must be prepared by, signed by, and carried out under the supervision of a professional hydrogeologist.
  - (a) The Department reserves the right to modify groundwater surface water and leachate monitoring locations, parameters and frequency and to require remedial measures based on the results of monitoring data and/or site inspections.
  - (b) An applicant can request an alternate to the required groundwater surface water and leachate monitoring program where:
    - (i) the C&D Facility operation is limited to storage, transfer and processing, and;
    - (ii) the applicant demonstrates to the satisfaction of the Department that alternative design is capable of achieving an equivalent or higher level of protection. Any proposal for an alternative design will be assessed on the technical merits of the design and will be evaluated on a case-by-case basis.

- (3) Groundwater surface water and leachate quality compliance criteria will be set by the Department for each site and these criteria must be met by the Approval Holders.
- (4) The determination of compliance criteria both on and off site by the Department includes an evaluation of the protection of groundwater quality for drinking water resources as well as protection of surface water quality for healthy aquatic life.
- (5) Information in Appendix A indicates how elevated natural background, or baseline groundwater conditions for sites may be accounted for in submissions to the Department, with respect to monitoring and potential triggers for action.
- (6) The Approval Holder(s) shall replace, at their expense, any water supply which has been lost or damaged as a result of the designated activity, as authorized and required by the Department.

## 4.4 C&D Storage, Transfer, and Processing

- (1) Storing, transferring and processing activities shall be designed, constructed and operated in accordance with the following minimum requirements, unless otherwise provided in the Approval:
  - (a) Individual stockpiles of material must meet the minimum clearances and not exceed the maximum base and height listed in Table 2.
    - (i) The clearance requirement stated in Table 2 between stockpiles and a building on the property is permitted to be waived where an individual stockpile area has a base area not greater than 5 m2.

Table 2: Stockpile size limits and required separation distances

	ckpiled terial	Max Base Area, m <sup>2</sup>	Max Height of Storage, m	Clear Space Around each stockpile (m)	Clear space between stockpile(s) and building(s)
A)	Mixed C&D debris, dimensional lumber or brush piles	1 000	≤ 3 >3 but ≤6	twice the height of storage to a max of 12	15
B)	Wood Chips	15 000	18	9	15
C)	Pallets	1 000	3	15	15

(2) C&D debris stored for the purpose of diverting for beneficial reuse that could deteriorate due to precipitation and produce leachate, shall be managed to prevent deterioration. Materials include but are not limited to drywall, cardboard, and architectural salvage.

## 4.5 C&D Disposal Cell

- (1) Disposal cells shall be designed, constructed, and operated in accordance with the following minimum requirements, unless otherwise provided in the Approval:
  - (a) The disposal cell must have a minimum thickness of 1 m of soil liner (or alternate) across the entire cell with a maximum hydraulic conductivity of 1 x 10-6 cm/sec:
    - (i) The soil may be amended, if required, with an admixture such as bentonite clay in order to achieve the required hydraulic permeability; however, the hydraulic conductivity must be uniform throughout the entire thickness of the soil.
    - (ii) An alternative to the soil may be considered. Any alternate shall be subject to the same qualifying requirements for application.
  - (b) The base of the soil liner shall be a minimum of 1 m above the maximum seasonal high elevation of the water table. Prior to construction, water table elevations must be measured over a one-year period by hydrogeological testing methods submitted for review and acceptance by the Department;
  - (c) The disposal cell shall have a leachate collection layer situated immediately above the soil liner and constructed:
    - (i) To provide a means of collecting leachate without exceeding a leachate depth in this layer of 300 mm;
    - (ii) With the ability to convey leachate to a common point;
    - (iii) With a minimum hydraulic conductivity of 1x10-3 cm/sec;
    - (iv) Sloped such that it can adequately drain the leachate. The sloping should account for the possibility of settling occurring beneath the collection system network;
    - (v) With adequate protection placed above the leachate collection system to prevent clogging of this layer.

- (d) Disposal cell vertical expansion must be structurally stable and capable of supporting anticipated loads.
- (2) Cover material, for the active disposal cell, shall be placed in accordance with the plan for cover placement approved by the Administrator and shall include:
  - (a) A minimum of 15 cm of compacted soil once per month or another frequency as determined by an Administrator.
  - (b) Cover otherwise to be used weekly or as required to control litter.
- (3) Treated wood is prohibited from use as cover material at the C&D Facility.
- (4) The final disposal cell cover system shall be constructed in accordance with the following requirements:
  - (a) A grading pad consisting of a minimum of 300mm thick structural fill material capable of supporting the material above, and designed to accommodate settling and consolidation of the waste material such that ponding of water does not occur on the surface;
  - (b) A low hydraulic conductivity layer, to limit surface water infiltration, consisting of a minimum of 750 mm soil with a hydraulic conductivity of 1 x 10-6 cm/sec or less:
    - (i) The soil must be protected during and after construction from damage due to frost, desiccation, over-hydration, differential movement and impact. It is to be constructed in layers such that it can achieve uniform compaction throughout its entire thickness;
    - (ii) The soil may be amended, if required, with an admixture such as bentonite clay in order to achieve the required hydraulic permeability; however, the hydraulic conductivity must be uniform throughout the entire thickness of the soil;
    - (iii) An alternative to the soil may be considered. Any alternate shall be subject to the same qualifying requirements for application; and
  - (c) A vegetative layer consisting of a minimum of 300 mm of topsoil with vegetative surface to stabilize the final cover system from the forces of wind, water erosion and to provide low-maintenance surface.

## 4.6 Alternate Design, Construction, and Operation

- (1) The Department may require additional design features including, but not limited to, liner systems, leachate treatment systems, other control infrastructure.

  Additional requirements may be based on the volume and type of material to be disposed of, as well as the proximity and type of receptors that could be impacted.
- (2) In the event an alternate design to the minimum requirements is proposed, it is the responsibility of the applicant to demonstrate to the satisfaction of the Department that the alternative design can achieve an equivalent or higher level of protection. Any proposal for an alternative design will be assessed on the technical merits of the design and will be evaluated on a case-by-case basis.

## 4.7 Security and Insurance

- (1) In accordance with the *Activities Designation Regulations*, privately owned, Solid Waste Management Facilities that dispose of C&D debris must:
  - (a) provide financial security in the manner specified by the *Approval and Notification Procedure Regulations*, and
  - (b) obtain insurance in the amount required by the Department subject to any terms that the Minister prescribes.

#### 4.8 Records

- (1) The following records are to be maintained for a period of five (5) years and made available to the Department upon request:
  - (a) The quantity and type of waste per load received;
  - (b) The quantity of waste disposed annually. If the waste is sent offsite for disposal, include the name of the receiving facility;
  - (c) The quantities and types of designated material(s) from schedule "B" of the *Solid Waste Resource Management Regulations* removed and sent for beneficial reuse or for disposal at an approved facility and the name of the receiving facility;
  - (d) The quantities of treated wood removed and sent for beneficial reuse or for disposal at an approved facility and the name of the receiver;

- (e) The quantities and type of any other unauthorized wastes removed and sent for disposal at an approved facility and the name of the receiving facility;
- (f) Complete records of inspections, maintenance, repairs;
- (g) The date and quantity of monthly soil covered applied, including the:
  - (i) the area of the active disposal cell that required cover;
  - (ii) estimated density of soil used, and;
  - (iii) total weight of soil used.
- (h) The date and quantity of other cover material applied.
- (i) The details of any release to the environment;
- (j) Information required in Appendix C: Treated Wood Compliance Level;
- (k) The complaints received and the steps taken to determine the cause of the complaint, the corrective measures taken to alleviate the cause and prevent its recurrence;
- (I) A copy of the Annual Report, and;
- (m) Any other information requested by the Department.
- (2) Records are to be submitted on an annual basis in accordance with the requirements of the DATACALL as operated by DivertNS on behalf of the Department.
- (3) Operation and Maintenance Manual with the following information is required to be kept at the C&D Facility at all times and made available to the Department upon request:
  - (a) Drawings and specifications of the C&D Facility;
  - (b) A complete description of the operational procedures;
  - (c) Monitoring well logs and surface water monitoring logs, including the location plans showing the monitoring points;
  - (d) Contingency plans to deal with wastes that are not acceptable for disposal;
  - (e) A procedure for maintaining the disposal records; and
  - (f) A copy of the Approval.

- (4) A contingency plan, in accordance with the Department's Contingency Planning Guideline, as amended from time to time, is required on how emergency issues including but not limited to fire, explosions and spills will be addressed. The contingency plan:
  - (a) Must be reviewed and updated annually, or more frequently whenever equipment or procedures change;
  - (b) Must be communicated to staff, including any changes;
  - (c) Must be located at the site at all times and made available to the Department or fire and emergency personnel, if requested; and
  - (d) Shall be sent to the local fire department.
- (5) Employees are to be trained in accordance with the contingency plan and those training records are to be kept at the C&D Facility for a period of 5 years and made available to the Department, if requested.
- (6) All necessary materials and equipment must be available at all times to respond to emergencies in accordance with the C&D Facility's Contingency Plan.

## 4.9 Annual Report

- (1) Each year an Annual Report for ground water, surface water and leachate is to be prepared. The Report shall be prepared and signed by a professional hydrogeologist and include, but not be limited to, the following information:
  - (a) A summary of all groundwater, surface water and leachate monitoring data specified in Appendix A and compared with applicable criteria. The data is to be presented in table format;
  - (b) A review of field methodologies, including sampling techniques;
  - (c) A description of the groundwater, surface and leachate water monitoring network;
  - (d) A review of the current groundwater, surface water and leachate monitoring program and recommendations or modifications, as applicable;
  - (e) The current and historical static water elevation data in tabular format, groundwater gradients and flow direction;

- (f) The current and historical groundwater and surface water and leachate quality including an analysis of spatial and temporal trends with comparison to applicable water quality objectives and historical (baseline) data in tabular format, as applicable;
- (g) Laboratory certificates of analysis, as applicable;
- (h) The identification of any non-compliance with the groundwater, surface water and leachate compliance criteria set for the C&D Facility; and,
- (i) Any current or proposed corrective actions to address non-compliance issues identified.
- (2) The annual report shall be available in hard copy and digital format, maintained for the duration of the approval, and made available to the Department upon request.

#### 4.10 Rehabilitation and Closure

- (1) A final rehabilitation plan is to be submitted to the Department for Approval at least sixty (60) days prior to abandonment of the C&D Facility.
- (2) The rehabilitation plan shall include but not be limited to the description of the:
  - (a) Construction and maintenance of a surface water management system;
  - (b) Post-closure monitoring programs at the site, including, but not limited to, the inspection and maintenance of the final disposal cell cap, leachate management, surface water and groundwater monitoring; and
  - (c) Decommissioning/removal of buildings and auxiliaries.
- (3) The rehabilitation plan shall be implemented once deemed acceptable by the Department.

#### **APPENDIX A:**

## Groundwater Surface Water and Leachate Monitoring Program Hydrogeological and Surface Water Assessment

## Hydrogeologic Assessment

Prior to the establishment or expansion of a C&D Facility, a report shall be prepared by a professional hydrogeologist and submitted to the Department, which includes plans, specifications, and descriptions of the hydrogeologic conditions of the C&D Facility, adjacent and nearby properties, and the regional area in which the C&D Facility is located, including at a minimum, the following;

- (1) A general description of the regional geologic and hydrogeologic conditions occurring within 5 km of the C&D Facility. This description should identify any unstable soils or bedrock, indicate the location and nature of any boundaries to groundwater movement, and characterize the significance of groundwater resources and the use made of these resources;
- (2) A description of local hydrogeologic conditions occurring at the C&D Facility, adjacent and other properties within 500 m of the C&D Facility, and the description shall indicate how local conditions relate to regional conditions,
- (3) A baseline Water Well Survey of all existing water supply wells within 500 m of the C&D Facility is required. All water well locations for the survey must be field located and visited. The survey is to include information on the water well construction details, sampling for water quality assessment and a water quantity assessment;
- (4) A detailed hydrogeologic and geotechnical investigation of the C&D Facility which establishes soil, rock, and baseline groundwater conditions at the site must be implemented prior to submission of the Part V application. Baseline monitoring, well water table elevation monitoring, and water quality monitoring must be conducted quarterly for one year prior to submission of the Part V application. Investigations must include a determination by industry standard hydrogeological practices and description of the following, at a minimum:
  - (a) local geology, faulting and stratigraphic descriptions,
  - (b) borehole fracture and RQD (rock quality designation) descriptions,

- (c) water table elevations,
- (d) piezometric groundwater levels,
- (e) hydraulic conductivities determined in each monitoring well using well hydraulic testing (e.g. slug tests),
- (f) vertical and horizontal hydraulic gradients,
- (g) groundwater flow directions,
- (h) baseline groundwater quality, and
- (i) if the 95th percentile parameter baseline value exceeds the quality criterion for a parameter, a statistical trend analysis of subsequent monitoring data is to be conducted to evaluate parameter concentrations for increases due to site activity;
- (5) An interpretation of the results of the detailed hydrogeologic investigation of the C&D Facility, including plans, specifications, and descriptions; and,
- (6) An assessment of the suitability of the C&D Facility for waste disposal purposes considering the regional, local, and site specific hydrogeologic conditions, the design of the C&D Facility, and the contingency plans for the control of leachate and landfill gas.

#### Surface Water Assessment

Prior to the establishment or expansion of a C&D Facility, a report shall be prepared by a professional hydrogeologist, professional engineer or surface water specialist and submitted to the Department, which includes plans, specifications, and descriptions of the surface water conditions of the C&D Facility, adjacent and nearby properties, and the regional area in which the C&D Facility is located, including at a minimum, the following:

(7) A general description of the surface water features occurring within 5 km of the C&D Facility that is based on the contributing/receiving drainage area, catchment, subwatershed or watershed that is sufficiently large to assess the range and extent of potential effects. This description will include, but not be limited to, flood plains, natural watercourses, wetlands, drainage paths and boundaries, streamflows, surface water quality, and sources of water supply;

- (8) A description of the local surface water features occurring at the C&D Facility, and adjacent and other properties within 1000 m of the C&D Facility, and the description shall include how local feature relate to regional features;
- (9) A detailed surface water investigation of the C&D Facility to assess water quality, quantity, and habitat conditions of the surface water features identified on the C&D Facility; and,
- (10) A description and monitoring details for all surface water management at the site to include: site drainage/runoff, surface water collection and discharge locations and volumes, sampling of discharge water quality and the use of sedimentation and treatment ponds as well as other features, including but not limited to engineered wetlands.

## **Operation and Monitoring**

#### Groundwater Monitoring

Prior to the establishment or expansion of a C&D Facility, a groundwater monitoring plan is to be prepared by a professional hydrogeologist and submitted to the Department for review and acceptance. The groundwater monitoring network must be designed to adequately characterize and monitor groundwater quality, considering geological and hydrogeological conditions and all potential sources of contamination, as well as established points of compliance. Each C&D Facility must have a groundwater monitoring program which includes, but is not limited to the following:

- (11) The location and design of groundwater monitoring wells including:
  - (a) A minimum of one groundwater monitoring well installed hydraulically up-gradient of the C&D Facility;
  - (b) A minimum of three monitoring wells installed hydraulically down-gradient and surrounding of the C&D Facility;
  - (c) An evaluation of monitoring well completion depths, including the potential need for multi-level installations, to be acceptable to the Department;
  - (d) Groundwater monitoring well locations may include compliance points established at some distance outside the C&D Facility active area, adjacent to surface watercourses and in intermediary or other areas of the site, as required by the Department;

- (e) The number and location of monitoring wells will be dependent on the size of the C&D Facility active area and site conditions. These locations are to be provided to the Department for review and acceptance. In most cases, more than the minimum (4) groundwater wells will be required due to the size of sites and location of water resource features.
- (12) Sampling methodologies must use industry best practices and include, but not be limited to the following:
  - (a) correct purging of monitoring wells prior to sampling, and
  - (b) field filtering for groundwater dissolved parameters.
- (13) Representative samples of groundwater within the C&D Facility shall be:
  - (a) A minimum baseline collection of one year groundwater data with quarterly measurement is required (i.e. every three months) prior to commencement of site operations, or as otherwise approved by the Department. Parameters sampled are to include those in column 1 of Schedule 1 for quarterly samples and column 3 of Schedule 1 for one (1) annual sample.
  - (b) For a minimum of two years following commencement of site operations, sampling obtained quarterly from all groundwater monitoring wells and analyzed for the parameters listed in column 1 of Schedule 1; and
  - (c) Obtained from selected wells, determined by the Department in consultation with the Approval Holder, on an annual basis for the enhanced monitoring parameters listed in column 3 of Schedule 1.
- (14) After the minimum two-year sampling period, the Approval Holder can request the frequency of sampling be reduced to semi-annual sampling by submitting a report providing rational acceptable to the Department.
- (15) The Department reserves the right to modify groundwater monitoring well locations, parameters, and frequency, and to require remedial measures based on the results of monitoring data and/or site inspections.

## Surface Water and Leachate Monitoring

A program for monitoring surface water and leachate quality, quantity, and biological features shall be conducted including, at a minimum, the following:

- (16) Representative samples of surface water and leachate being discharged from the C&D Facility and of any waterbody, including upstream control locations (which must be included during the same event as sampling of any other surface water locations), which may be affected by leachate, stormwater runoff, or sediment from the C&D Facility, shall be:
  - (a) Obtained quarterly, and be analyzed for the parameters listed in column 2 of Schedule 1 and for other parameters of concern identified in the surface water assessment or as required by the Department;
  - (b) Obtained from selected locations, including leachate/effluent discharge, determined by the Department in consultation with the Approval Holder, on an annual basis for the enhanced monitoring parameters listed in column 3 of Schedule 1.
- (17) Annual monitoring of biological features to assess the composition and any changes to the benthic community present in any waterbody, located downstream of active areas of the C&D Facility, that may be affected by leachate, stormwater runoff, or sediment from the C&D Facility;
- (18) The Department reserves the right to modify surface water locations, parameters, and frequency, and to require remedial measures based on the results of monitoring data and/or site inspections.

Schedule 1: Groundwater, Leachate and Surface Water Monitoring Parameters

PARAMETER GROUP	COLUMN 1	COLUMN 2	COLUMN 3
	Groundwater	Surface Water and Leachate	Enhanced monitoring parameters for select groundwater, Surface Water and Leachate
General	Alkalinity	Alkalinity	
Chemistry	Aluminum	Aluminum	
and Metals	Ammonia	Ammonia	
	Antimony	Antimony	
	Arsenic	Arsenic	
	Barium	Barium	
	Boron	Boron	
	Cadmium	Cadmium	
	Calcium	Calcium	
	Chloride	Chloride	
	Chromium	Chromium	
	Conductivity	Conductivity	
	Copper	Copper	
	Iron	Iron	
	Lead	Lead	
	Magnesium	Magnesium	
	Manganese	Manganese	
	Mercury	Mercury	
	Nickel	Nickel	
	Nitrate	Nitrate	
	Nitrite	Nitrite	
	Total Kjeldahl Nitrogen	Total Kjeldahl Nitrogen	

PARAMETER GROUP	COLUMN 1	COLUMN 2	COLUMN 3
	Groundwater	Surface Water and Leachate	Enhanced monitoring parameters for select groundwater, Surface Water and Leachate
General	рН	рН	
Chemistry	Hardness	Hardness	
and Metals (continued)	Total Phosphorus	Total Phosphorus	
(continued)	Potassium	Potassium	
	Sodium	Sodium	
		Suspended Solids	
	Total Dissolved Solids	Total Dissolved Solids	
	Sulphate	Sulphate	
	Uranium	Uranium	
	Vanadium	Vanadium	
	Zinc	Zinc	
Organics		Biochemical Oxygen Demand (BOD <sub>5</sub> )	
	Chemical Oxygen Demand	Chemical Oxygen Demand	
	Dissolved Organic Carbon	Total Organic Carbon	
	Phenol	Phenol	
Field		Temperature	
Parameters	рН	рН	
	Conductivity	Conductivity	
		Dissolved Oxygen	
	Monitoring well water levels	Flow	

PARAMETER GROUP	COLUMN 1	COLUMN 2	COLUMN 3
	Groundwater	Surface Water and Leachate	Enhanced monitoring parameters for select groundwater, Surface Water and Leachate
Volatile			Acetone
Organic			Benzene
Compounds (VOC)			Bromodichloromethane
(VOC)			Bromoform
			Bromomethane
			Carbon tetrachloride
			Chlorobenzene
			Chloroform
			Dibromochloromethane
			1,2-Dichlorobenzene
			1,3-Dichlorobenzene
			1,4-Dichlorobenzene
			Dichlorodifluoromethane
			1,1-Dichloroethane
			1,2-Dichloroethane
			1,1-Dichloroethylene
			cis-1,2-Dichloroethylene
			trans-1,2- Dichloroethylene
			1,2-Dichloropropane
			cis-1,3-Dichloropropylene
			Ethylbenzene
			Ethylene dibromide
			n-Hexane
			Methyl ethyl ketone
			Methylene chloride

PARAMETER GROUP	COLUMN 1	COLUMN 2	COLUMN 3
	Groundwater	Surface Water and Leachate	Enhanced monitoring parameters for select groundwater, Surface Water and Leachate
Volatile			Methyl isobutyl ketone
Organic			Methyl-t-butyl ether
Compounds (VOC)			Styrene
(continued)			1,1,1,2-Tetrachloroethane
,			1,1,2,2-Tetrachloroethane
			Tetrachloroethylene
			Toluene
			1,1,1-Trichloroethane
			1,1,2-Trichloroethane
			Trichloroethylene
			Vinyl chloride
			m&p-Xylene
			o-Xylene
			Xylenes, TotalSEMI
ТРН			TPH (gas, fuel/lube ranges)
PAH			Acenaphthene
			Acenaphthylene
			Anthracene
			Benzo(a)anthracene
			Benzo(a)pyrene
			Benzo(b/j)fluoranthene
			Benzo(g,h,i)perylene
			Benzo(k)fluoranthene
			Chrysene
			Dibenz(a,h)anthracene

PARAMETER GROUP	COLUMN 1	COLUMN 2	COLUMN 3
	Groundwater	Surface Water and Leachate	Enhanced monitoring parameters for select groundwater, Surface Water and Leachate
PAH			Fluoranthene
(continued)			Fluorene
			Indeno(1,2,3-cd)pyrene
			1-Methylnaphthalene
			2-Methylnaphthalene
			Naphthalene
			Phenanthrene
			Pyrene
Chlorophenols			2-Chlorophenol
			2,4-Dichlorophenol
			2,4-Dimethylphenol
			2,4-Dinitrophenol
			Pentachlorophenol
			Phenol
			2,4,5-Trichlorophenol
			2,4,6-Trichlorophenol

## APPENDIX B: Air Quality, Noise and Odour

## **Air Quality**

- (1) Air emissions from the C&D Facility cannot contribute to an exceedance of the maximum permissible ground level concentrations of the contaminants specified in the Air Quality Regulations.
- (2) Monitoring of ambient air contaminants shall be conducted at the request of the Department.
  - (a) The number and location of the monitoring station(s) shall be established by a qualified person retained by the Approval Holder(s) and
  - (b) The proposed plan submitted to the Department for acceptance; this may include point(s) beyond the property boundary of the Site.
- (3) The use of oil as a dust suppressant is prohibited.

#### Noise

- (4) Noise generated from the activity must comply with the equivalent sound level criteria identified in the Nova Scotia Environment and Labour "Guidelines for Environmental Noise Measurement and Assessment" dated May 18, 2005, as amended from time to time.
- (5) Noise shall be monitored at the request of the Department. The number and location of the monitoring station(s) for noise measurement shall be established by a qualified person retained by the C&D Facility. The proposed plan must be deemed acceptable by the Department.

#### **Odours**

- (6) Procedures shall be in place to ensure that odours from any material are minimized, and
- (7) If the Department determines that the designated activity is generating excessive odours, the Approval Holder(s) shall be required to take any measures required by the Department to address those odours, including but not limited to reducing or ceasing operation.

## **APPENDIX C: Treated Wood Compliance Level**

The Department assesses both the risk of an activity and an Approval Holder's willingness to comply when determining our response to non-compliance with the Environment Act and its regulations.

As of July 5, 2023, treated wood is banned from disposal at all Construction and Demolition (C&D) facilities in Nova Scotia.

The Department will consider an Approval Holder's willingness to comply with this ban, in part, through the establishment and implementation of a progressive compliance level, auditing and diversion program.

## **Compliance Level**

- (1) As of July 5, 2024, all C&D disposal facilities shall not permit any load to arrive at the disposal cell of their C&D Facility if the amount of treated wood in the load exceeds 20% by weight, as amended from time to time.
- (2) All loads accepted for audit or sorting must be processed at a location other than the disposal area unless authorized in writing by the Department. The Department will develop an auditing protocol before July 5, 2024.
- (3) This compliance level is subject to change by the Department at any time. The Department will provide a minimum of one year notice prior to the effective date of any new compliance level for the treated wood ban.

## **C&D Disposal Facility Requirements**

- (4) As of July 5, 2023, the following actions must be taken by the Approval Holders for all C&D disposal facilities:
  - (a) All Approval Holders are to establish an educational program for the treated wood ban, that includes but is not limited to, the development of educational material for distribution to their clients (including any resources that may developed by the Department), visible C&D Facility signage, and online notification.

- (b) Educational material will describe the ban and the auditing and diversion program to be implemented at the C&D disposal Facility.
- (c) Signage indicating the treated wood ban is to be posted at the C&D disposal Facility in a location easily visible to all clients approaching or entering the C&D Facility.
- (d) Notice of the treated wood ban is to be placed on the Approval Holder's webpage and/or other online platforms.
- (5) As of July 5, 2024, Approval Holders will include the identification of treated wood in their visual inspection program:
  - (a) Loads that are visually estimated to approach or surpass the compliance level must be sorted and the treated wood must be redirected.
  - (b) Physical auditing of the visual inspections for accuracy are to be completed twice a year for sites receiving below 5,000 tonnes of C&D waste per year and four times a year for sites equal to or larger than 5,000 tonnes per year by sorting and removing the treated wood from selected loads and determining the percent by weight of the treated wood in the selected loads.
  - (c) Records must be kept of every load that fails visual inspection and how the load was managed (ex. audited, sorted, redirected).
  - (d) Records of the visual inspections, sorting and auditing must be made available to the Department upon request.
- (6) As of July 5, 2025, the following actions must be taken by the Approval Holders for all C&D disposal facilities:
  - (a) Approval Holders will continue to use their visual inspection program.
  - (b) In addition, Approval Holders will be required to conduct physical audits of visual inspections at least four times a year for sites receiving below 5,000 tonnes of C&D waste per year and eight times a year for sites equal to and larger than 5,000 tonnes per year that conform to the following requirements:
    - (i) Loads containing treated wood will be directed to a sorting area and will separate out and determine the percent by weight of
      - 1. Treated wood;
      - 2. Other unacceptable non-C&D waste; and
      - 3. Acceptable C&D material for disposal.

(ii) Records of the results of the physical audits will be kept and made available to the Department upon request.

## **Department Audits**

(7) On or after July 5, 2025, the Department staff may require the Approval Holder to perform physical audits of selected loads at any time. Compliance and enforcement action may be taken in response to non-compliance with the treated wood disposal ban or any other non-compliance discovered during an inspection.





# HALIFAX REGIONAL MUNICIPALITY BY-LAW L-200

# RESPECTING LICENSING OF CONSTRUCTION AND DEMOLITION MATERIALS RECYCLING AND DISPOSAL OPERATIONS

WHEREAS it is the desire of the Halifax Regional Municipality to:

- a) Maximize diversion from landfill through recycling of construction and demolition debris in keeping with the Halifax Regional Municipality Solid Waste Resources Strategy;
- b) Increase economic activity and value-added processing through recovery of construction and demolition debris;
- c) Provide an opportunity to properly dispose of construction and demolition debris that cannot be recycled;
- d) Ensure minimal environmental, land use and nuisance impacts from the operation of construction and demolition debris processing and disposal operation.

## **SHORT TITLE**

1. This by-law shall be known as By-Law Number L-200 and may be cited as the "C&D Materials Recycling and Disposal License By-Law".

#### INTERPRETATION

- 2. In this By-Law:
  - a) **Administrator** means the person appointed by the Chief Administrative Officer to administer this by-law, or **his** their designate.
  - aa) Appeals Committee means the Appeals Committee established pursuant to Halifax Regional Municipality By-Law A-100, the Appeals Committee By-Law.
  - b) Construction and Demolition Materials, hereinafter referred to as C&D Materials, means materials which are normally used in the construction of buildings, structures, roadways, walls and other landscaping features material, and includes, but is not limited to, soil, asphalt, brick, concrete, ceramics, porcelain, window glass, mortar, drywall, plaster, cellulose, fiberglass fibres, lumber, wood, asphalt shingles and metals.

- Construction and Demolition Materials Disposal Site, hereinafter referred to as a C&D Disposal Site, means land and /or buildings or part of a building where C&D Materials, or Residue remaining from C&D Processing Facilities, are disposed of by land application or burying, and shall not include the use of inert C&D Materials approved by the Department, for site rehabilitation within gravel pits and quarry operations licensed by the Province of Nova Scotia.
- c) Construction and Demolition Materials Processing Facility, hereinafter referred to as a C&D Processing Facility, 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, or sorted for subsequent transport for disposal, and shall not include a Used Building Material Retail Outlet, an operation that processes inert C&D Materials on the site of generation and the material processed does not leave the site except for inert C&D materials described in Subsection 9(3), deconstruction of a building on site, a municipal processing facility for used asphalt and concrete, or facilities associated with reclamation of a gravel pit or quarry operations licensed by the Province of Nova Scotia or forestry manufacturing processing.
- d) Construction and Demolition Materials Disposal Site, hereinafter referred to as a C&D Disposal Site, means land and /or buildings or part of a building where C&D Materials, or Residue remaining from C&D Processing Facilities, are disposed of by land application or burying, and shall not include the use of inert C&D Materials, approved by the Provincial Department of the Environment and Labour, for site rehabilitation within gravel pits and quarry operations licensed by the Province of Nova Scotia. Repeal.
- e) Construction and Demolition Residue, hereinafter referred to as C&D Residue, means material remaining from the processing and/or sorting of C&D Materials for which there is no reasonable use or potential use or market. Construction and Demolition Materials Transfer Station, hereinafter referred to as a Transfer Station, means land and/or buildings or part of a building at which C&D Materials are received and sorted for subsequent transport for disposal or to a C&D Processing Facility.
- f) Construction and Demolition Materials Transfer Station, hereinafter referred to as a Transfer Station, means land and/or buildings or part of a building at which C&D Materials are received and sorted for subsequent transport to a C&D Disposal Site or a C&D Processing Facility. Construction and Demolition Residue, hereinafter referred to as Residue, means material remaining from the processing and/or sorting of C&D Materials for which there is no reasonable use or potential use or market.
- fa) **Department** means the Nova Scotia Department of Environment and Climate Change, or such other department listed under the *Public Service Act* whose

- Minister is responsible for the administration of Acts, orders and regulations relating to the environment.
- g) **Hazardous Substance** means any hazardous, toxic, or dangerous substance or material, and includes any substance or material declared or defined to be a hazardous or toxic substance in or pursuant to any applicable law.
- ga) Operator includes the owner of the property where any portion of a C&D Processing Facility, a Transfer Station or a C&D Disposal Site is located.
- gb Solid Waste means garbage, refuse, sludge, rubbish, tailings, debris, litter and other discarded materials resulting from residential, commercial, institutional and industrial activities.
- h) Stockpile means a pile of C&D Material which is either processed or unprocessed. Repeal.
- i) Used Building Material Retail Outlet means land and/or buildings or part of a building where C&D Materials are sorted and available for resale with incidental and minimal alteration of the materials and where activity primarily occurs inside a building.
- j) Watercourse means the bed and shore of every river, stream, lake, creek, pond, spring, lagoon or other natural body of water, and the water therein, within the jurisdiction of the Province of Nova Scotia, whether it contains water or not. Repeal.
- k) Inert Construction & Demolition Materials means rock (excluding rock containing a sulphide bearing material), aggregate, soil, bricks, mortar, asphalt pavement, trees, brush, limbs, stumps, root balls, and organic mat.

  Repeal.
- 1) "Appeals Committee" means the Appeals Committee established pursuant to Halifax Regional Municipality By-law A-100, the Appeals Committee By-law; Repeal.

## LICENSE REQUIREMENTS

- 3. (1) No person shall operate a C&D Processing Facility, Transfer Station or a C&D Disposal Site in Halifax Regional Municipality without having first obtained and maintained in effect a license granted by Halifax Regional Municipality therefore.
  - (1A) No Person shall operate a C&D Processing Facility, Transfer Station or a C&D Disposal Site in Halifax Regional Municipality without having first obtained and maintained in effect an Environmental Approval granted by the Department.

- (2) The application for a C&D Processing Facility, Transfer Station or a C&D Disposal Site license shall be made in writing to the Administrator.
- (3) The application for a C&D Processing Facility, Transfer Station or a C&D Disposal Site license shall include:
  - a) The name, home and business address of the **applicant** Operator, and the name and address of the owner if other than the **applicant** Operator;
  - b) A description of the activities to be carried on at the site; A comprehensive diversion strategy or plan which demonstrates the ability to achieve targets outlined in Section 9 of this By-Law which shall include but is not limited to:
    - (i) forecast of incoming tonnage and type;
    - (ii) forecast processing method and output products;
    - (iii) forecast of expected diversion rate;
    - (iv) processing details (e.g., sorting, shredding);
    - (v) identification of material end uses and markets;
    - (vi) forecast of Residues to be disposed;
  - ba) A Litter Management Plan outlining measures to be taken to limit the impact of litter related to the site on the local community, which shall include but is not limited to:
    - (i) physical controls (e.g., fencing);
    - (ii) site and vicinity inspection and cleanup frequency;
    - (iii) incoming load inspection and education related to secured loads; and
    - (iv) consideration for mitigating community litter related to operations;
  - c) An insurance policy and bond or letter of credit meeting the conditions of Section 5;
  - ca) A declaration informing the Administrator of any environmental convictions or offences related to the site committed by the Operator

pursuant to the Nova Scotia *Environment Act*, S.N.S. 1994-95, c 1 and the regulations made thereunder, or Halifax Regional Municipality By-Laws, or Orders issued by any Court of Law in Canada or regulatory body, if applicable from 5 years prior to the date of application;

- cb) A declaration confirming with the Administrator that no environmental convictions, offences or Orders related to the site against the Operator have occurred since the time of the issuance of the most recent license;
- d) A development permit issued by the Development Officer of the Halifax Regional Municipality for the use of the site as a Transfer Station, a C&D Processing Facility, **and if applicable**, or a C&D Disposal Site;
- e) If the application is for a C&D Disposal Site, a C&D Processing Facility or a Transfer Station, the approval The Environmental Approval issued under the Nova Scotia Department of the Environment and Labour Environment Act Solid Waste Resource Management Regulations or subsequent amendments;
- f) A license fee in the amount of \$50 \$500;
- g) A Site Plan approved under Section 10; Repeal;
- h) An Operation Plan approved under Section 10; Repeal;
- i) a) A Records Management Plan which meets the requirements of approved under Section 8; and
  - b) A letter from Nova Scotia Department of Environment and Climate Change that the site is not in violation of the Environment Act. Repeal.
- A copy of the Operation and Maintenance Manual submitted as part of the Environmental Approval, approved by the Department and which addresses the conditions specified in Section 10.
- (4) If the application meets all of the requirements of Subsection (3), the Administrator shall issue a C&D Processing Facility License, Transfer Station License, or a C&D Disposal Site License, as the case may be, to the Operator.
- (5) A license issued under this By-Law shall expire on the same date as the Environmental Approval issued by the Department, unless the license has otherwise been revoked by the Municipality prior to that date 31st day of December next following the date of issue.
- (5A) Where the Department has revoked or suspended the Environmental Approval, the Administrator may suspend or revoke the license.

- (6) The Administrator shall maintain a permanent record of each license issued pursuant to this By-Law.
- (7) A **L**license issued under this By-Law shall be issued to a particular person and in respect of a particular location. Subject to the approval of the Administrator, a license may be transferred to a new **owner** Operator of the property for which the license was issued.

#### RENEWAL OF LICENSE

4. A Transfer Station, C&D Processing Facility or C&D Disposal Site License may be renewed upon payment of an annual license fee in the amount of \$50 provided that the license holder continues to meet all of the requirements of this By-Law and submits proof satisfactory to the Administrator the license holder has complied with the annual reporting requirements contained in Section 8.

## INSURANCE AND BONDING

- 5. (1) The owner of a C&D Processing Facility, Transfer Station or a C&D Disposal Site shall maintain a minimum of \$2,000,000 of third party liability insurance in effect at all times. The Operator of a C&D Processing Facility, Transfer Station or a C&D Disposal Site shall maintain Commercial General Liability insurance with limits of not less than \$5,000,000 per occurrence, in effect at all times. Halifax Regional Municipality shall be included as an Additional Insured.
  - (2) The owner of a C&D Processing Facility, C&D Disposal Site, and C&D Transfer Station shall post a bond or letter of credit in a form acceptable to the Administrator from a bonding company or financial institution acceptable to the Administrator in the amount of \$50,000 for a C&D Processing Facility or Disposal site and \$10,000 for a C&D Transfer Station. The Operator shall maintain an Environmental Impairment Liability insurance with limits of not less than \$5,000,000 per occurrence, in effect at all times. The policy is to cover any environmental liabilities for incidents, including damage and clean up, that arises out of the work being performed at a Transfer Station, C&D Processing Facility, or C&D Disposal Site, and any associated third-party claims. Halifax Regional Municipality shall be included as an Additional Insured.
  - (3) A bond posted pursuant to subsection (2) shall be used for the removal of material that has accumulated under Section 10. Repeal.
  - (4) The application of a bond pursuant to subsection (3) shall not absolve the operator of a C&D Processing Facility, C&D Disposal Site, and C&D Transfer Station from any liability arising from the operation of the facility. Repeal.

## SUSPENSION OR REVOCATION OF LICENSE

- 6. (1) The Administrator may from time to time enter upon any property or structure which is the subject of a license under this By-Law and carry out an inspection of that location to ensure compliance.
  - (2) A license issued under this By-Law may be suspended or revoked by the Administrator on the violation of any of the provisions of this By-Law. Notice of suspension, revocation or refusal to issue a license shall be in writing to the Operator.
  - (3) Based on the findings of an inspection carried out under any part of this By-Law, the Administrator may require, by notice in writing, a plan to identify actions that will be taken to align the operation with license and regulatory requirements within a specified timeframe.
  - (4) The Administrator may, at their discretion and based upon the findings of an inspection carried out under any part of this By-Law, require by notice in writing a plan regarding diversion or compliance with any provision of this By-Law within the time specified in the notice or such additional time to be granted by the Administrator.
  - (5) A failure to comply with a notice given pursuant to this Section is an offence.

#### APPEAL

- 7 (1) Any person whose application for a license under this By-Law has been refused, suspended or revoked by the Administrator may appeal such refusal, suspension or revocation to the Appeals Committee.
  - (2) Such appeal shall be in writing in the form of a notice, and shall be filed with the Municipal Clerk, within fifteen (15) days of such refusal, suspension or revocation, and shall clearly state the grounds for such appeal.
  - (3) A copy of such notice shall be served within such time upon the Administrator.
  - (4) The Appeals Committee shall hear such appeal at such time and place as it determines and may confirm such refusal or revocation by the Administrator or may direct the Administrator to issue or reinstate the license.
  - (5) If the Appeals Committee directs the Administrator to issue or reinstate such license they shall immediately do so.

## RECORDS

8. (1) All loads of C&D Material, processed material or FResidue arriving or leaving a Transfer Station, C&D Processing Facility or a C&D Disposal Site shall be weighed and records shall be kept of all loads.

- (2) The Operator of a Transfer Station, C&D Processing Facility or C&D Disposal Site shall, at the end of each month of operation, report to the Administrator, in a form acceptable to the Administrator, the total weight and nature of all materials received and removed from at the site, and the destination of facility for all materials removed from the Site for beneficial reuse or disposal in accordance with municipal and provincial regulations.
- (3) The Operator of a Transfer Station, C&D Processing Facility or C&D Disposal Site shall report to the Administrator on an annual basis and no later than January 31 of each year:
- (a) the end of year tonnage report, including final diversion statistics;
  - (b) an updated Operation and Maintenance Manual, if any changes were made in the previous year;
  - (c) an overview of the diversion strategy and innovations;
  - (d) a declaration by the Operator that no violations of any part of this By-Law have occurred;
  - (e) a declaration by the Operator that the Transfer Station, C&D Facility or C&D Disposal Site maintains an Environmental Approval in good standing;
  - (f) copies of any directives, responses and closeout documentation submitted to the Department;
  - (g) a copy of applicable insurance policies maintained by the Operator; and
  - (h) an overview of activities conducted under the litter management plan.
- (4) The Operator shall notify the Administrator in a timely manner of any incidents or complaints relevant to or affecting the operation of the site, including but not limited to fire, water or other damage.
- (5) Upon written request from the Administrator, the Operator shall provide copies of any environmental reports submitted to the Department.

#### RECYCLING TARGETS

- 9. (1) No C&D Materials listed in Administrative Order 27 shall be disposed of in a C&D Disposal Site. The following materials shall not be disposed of in a Construction and Demolition Debris Disposal Site:
  - (a) asphalt paving;

- (b) aggregate and soil;
- (c) brush and leaves;
- (d) concrete;
- (e) milled wood free of adhesives, coatings and preservatives;
- (f) porcelain, ceramic;
- (g) root balls and stumps;
- (h) scrap metal;
- (i) window glass; and
- (j) all materials banned from disposal under the Nova Scotia Solid-Waste Resource Management Regulations and subsequent amendments.
- (2) C&D Materials shall be recycled or otherwise diverted from disposal in accordance with the minimum recycling targets listed in Administrative Order 27. All incoming C&D materials arriving at a C&D Processing Facility or Transfer Station shall be recycled or otherwise diverted from disposal as follows:
  - (a) Where a C&D Processing Facility or Transfer Station has been operating for one year or less, a minimum of fifty per cent (50%) shall be recycled or otherwise diverted;
  - (b) Where a C&D Processing Facility or Transfer Station has been operating for between one and five years, a minimum of sixty per cent (60%) shall be recycled or otherwise diverted;
  - (c) Where a C&D Processing Facility or Transfer Station has been operating for five or more years, a minimum of seventy-five per cent (75%) shall be recycled or otherwise diverted;
  - (d) Where a C&D Processing Facility or Transfer Station commenced operation prior to the calendar year of 2025 a minimum of seventy-five per cent (75%) shall be recycled or otherwise diverted.
- (3) All C&D Materials shall be transported from the place of generation to either a Transfer Station or a C&D Processing Facility, except inert C&D materials approved for site rehabilitation or infilling within gravel pits or quarry operations licensed by the Province of Nova Scotia or as approved for use pursuant to the Lot Grading By-law.

(4) Notwithstanding Section 11(2) of this By-Law, any person who contravenes or fails to comply with any provision of Section 9 of this By-Law shall for each offence be liable to a penalty of not less than \$500.00 and not exceeding \$10,000.00 and in default of payment to imprisonment for a period not exceeding 90 days; and each day that the offence continues shall constitute a new offence.

## OPERATIONAL PROCEDURES SITE REQUIREMENTS

- 10. (1) A Site Plan showing location of all buildings, storage areas, access roads, weigh scales, sorting pads, processing areas, and stockpiles shall be submitted to the Administrator for approval. Such Site Plan shall be amended and submitted for approval before any substantial changes are undertaken and in any event submitted for approval each calendar year upon application for a license renewal. Repeal.
  - (2) An Operational Plan indicating
    - (i) methods of processing;
    - (ii) materials to be recycled;
    - (iii) environment controls, such as, but not limited to, dust and debris control, Berms to protect watercourses, surface and groundwater monitoring, and leachate treatment and control; and
    - (iv) fire safety plan which meets the requirements of the National Fire Code of Canada 1995, Section 3.3 Outdoor Storage as approved by the Chief Director
    - of Halifax Regional Fire and Emergency Service, and safety and environment contingency plans shall be submitted to the Administrator for approval. Such Operational Plan shall be amended and submitted for approval before any substantial changes are undertaken and in any event submitted for approval each
    - calendar year upon application for a license renewal. Repeal.
  - (3) Notwithstanding subsection (2), C&D materials brought to a C&D operation must first be placed upon a pad for sorting prior to the materials being processed, stockpiled, or removed from the site. The pad shall be designed to prohibit materials and liquids from entering the groundwater table or a watercourse. The Operational Plan shall indicate how the operator intends to handle and treat or remove the material/leachate from the site. Repeal.
  - (4) All work or activity associated with a Transfer Station, C&D Processing Facility or C&D Disposal Site shall only be permitted between the hours of 7:00 a.m. to 8:00 p.m. Monday to Friday, inclusive and from 7:00 a.m. to 5:00 p.m. on Saturday and no work or activity shall be conducted on any day of the week outside of the permitted hours or on Sunday and the following holidays: New Years Day, Good Friday, Canada Day, Remembrance Day and Christmas Day. The Site shall be gated to restrict access during non-operational hours.

- (5) Notwithstanding Subsection (4), the Administrator may permit the hours of operation to be expanded if the site:
  - (i) is located within an industrial park owned or managed by Halifax Regional Municipality;
  - (ii) is located within an industrial land designation;
  - (iii) does not abut any residential or community facility zone; or
  - (iv) is not located within 250 metres of a residential or commercial facility use of building.
- (6) Repeal. Materials stockpiled at a C&D facility must meet the following conditions:
  - (i) the maximum height of any stockpile shall be 6 metres;
  - (ii) the maximum base diameter of any stockpile shall be 75 metres; and
  - (iii) the minimum separation distance between the nearest edge or face of stockpiles shall be 5 metres.
- (7) Repeal. Minimum separation distances from the nearest edge or face of stockpile or disposal area as follows:

Issue	Minimum Separation Distance (metres)		
	<del>Transfer</del> <del>Stations</del>	Processing Operations	Disposal Site
nearest residential or institutional use or zone property line	<del>60</del>	60	60
nearest non - residential or non institutional use property line	5	<del>30</del>	<del>30</del>
no residential or institutional use within 250 metres	10	10	30
operation is wholly contained within a building	applicable Land Use By- Law	applicable -Land Use By- Law	N/A
watercourse	30	60	<del>150</del>

(8) No C&D Materials shall remain on site of a C&D Processing Facility longer than one year.

- (9) Where there is less material removed from the site of a C&D Processing Facility than was received in any one calendar year, the operation shall be deemed to be in violation of this By-Law.
- (10) Notwithstanding Subsections (8) and (9), in the first year of operation, there may be a maximum of ten percent of the total weight of incoming material arriving during that year left on site of a C&D Processing Facility as inventory, but shall be removed from the site before the end of the next calendar year.
- (11) Notwithstanding subsection (8) and (9), C&D Material on the Site of a C&D Processing Facility prior to the coming into effect of this By-Law or arriving on the site on or before April 1, 2002, shall be removed from the site before September 30, 2004. Repeal.
- (12) No C&D Material shall remain on the site of a Transfer Station longer than 15 days.
- (13) No Hazardous Substances shall be delivered to a Transfer Station, C&D Processing Facility or C&D Disposal Site other than those which are incidental to, and inadvertently delivered with, C&D Materials.
- (14) No Solid Waste other than C&D Materials shall be delivered to a Transfer Station, C&D Processing Facility or C&D Disposal Site other than those which are incidental to, and inadvertently delivered with, C&D Materials.
- (15) The Operator of a Transfer Station or C&D Processing Facility shall be responsible for removal of all materials accumulated under this Section to a C&D Processing Facility or C&D Disposal Site.
- (16) All C&D materials acceptable for disposal at a C&D Disposal Site shall be disposed at the C&D Disposal Site within 48 hours of receipt of same. C&D materials arriving at a C&D Disposal Site that can not be disposed at a C&D Disposal Site are to be removed within 30 days of receipt of same. Hazardous Substances and Solid Waste which are incidental to, and inadvertently delivered with C&D Materials to a C&D Disposal Site are to be removed from the C&D Disposal Site within a reasonable amount of time.

#### **OFFENSE AND PENALTY**

11. (1) Any person who contravenes or fails to comply with any other provision of this By-Law shall for each offence be liable to a penalty of not less than \$500.00 and not exceeding \$10,000.00 and in default of payment to imprisonment for a period not exceeding 90 days; and each day that the offence continues shall constitute a new offence.

- (2) A person who is alleged to have violated this By-Law and is given notice of the alleged violation may pay a penalty in the amount of \$500.00 to the Halifax Regional Municipality provided that said payment is made within a period of fourteen (14) days following the day on which the notice was served and where the said notice so provides for payment in this manner, and such payment shall be in full satisfaction, releasing and discharging all penalties and imprisonments incurred by the person for said violation.
- (3) In addition to any fine or imprisonment imposed pursuant to Subsection (1), the Court or judge may order the person convicted to pay all expenses incurred in correcting the contravention of the By-Law or any damages associated with such contravention.
- (4) Where any person is in contravention of any provision of this By-Law, the Administrator may direct in writing that the contravention be remedied by that person in the manner and within the time specified in the written direction.

## REPEAL

12.	Administrative Order 27, Respecting Disposal Site, is repealed and replace	0	t Shall Not Be Disposed Of In A C&D-Law L-202.
Done	and passed in Council this day of	f, 20	-
			MAYOR
			MUNICIPAL CLERK
I, Vi Carmichael, Municipal Clerk for the Halifax Regional Municipality, hereby certify that the above-noted by-law was passed at a meeting of the Halifax Regional Council held on, July 3, 2001.			
			Vi Carmichael, Municipal Clerk

#### **ATTACHMENT C**

(Amending By-law)

## HALIFAX REGIONAL MUNICIPALITY BY-LAW L-202 RESPECTING AMENDMENTS TO BY-LAW L-200 C&D Materials Recycling and Disposal License By-law

**BE IT ENACTED** by the Council of the Halifax Regional Municipality that By-law L-200, the *C&D Materials Recycling and Disposal License By-law*, is amended, as follows:

- 1. Clause (b) of the preamble is amended by adding a hyphen between the words "value" and "added".
- 2. Clause 2(a) is amended by striking out the word "his" and adding the word "their" after the word "or" and before the word "designate".
- 3. The following new clause is added after clause 2(a) and before clause 2(b):
  - aa) **Appeals Committee** means the Appeals Committee established pursuant to Halifax Regional Municipality By-law A-100, the Appeals Committee By-law;
- 4. Clause 2(b) is amended by:
  - (a) striking out the word "features" after the word "landscaping" and before the comma and word ", and";
  - (b) adding the word "other" after the word "and" and before the word "landscaping";
  - (c) adding the word "material" after the word "landscaping" and before the comma and word ", and".
- 5. The following new clause is added after clause 2(b) and before clause 2(c):
  - ba) Construction and Demolition Materials Disposal Site, hereinafter referred to as a C&D Disposal Site, means land and /or buildings or part of a building where C&D Materials, or Residue remaining from C&D Processing Facilities, are disposed of by land application or burying, and shall not include the use of inert C&D Materials, approved by the Department, for site rehabilitation within gravel pits and quarry operations licensed by the Province of Nova Scotia.
- 6. Clause 2(c) is amended by adding the words and comma "or sorted for subsequent transport for disposal," after the word and comma "products," and before the word "and".
- 7. Clause 2(d) is repealed.
- 8. Clause 2(e) is amended by striking out all words and punctuation in clause 2(e) and adding the words and punctuation "Construction and Demolition Materials Transfer Station, hereinafter referred to as a Transfer Station, means land and/or buildings or part of a building at which C&D Materials are received and sorted for subsequent transport for disposal or to a C&D Processing Facility."
- 9. Clause 2(f) is amended by striking out all words and punctuation in clause 2(f) and adding the words and punctuation "Construction and Demolition Residue, hereinafter referred to as Residue, means material remaining from the processing and/or sorting of C&D Materials for which there is no reasonable use or potential use or market."

- 10. The following new clause is added after clause 2(f) and before clause 2(g):
  - fa) **Department** means the Nova Scotia Department of Environment and Climate Change, or such other department listed under the *Public Service Act* whose Minister is responsible for the administration of Acts, orders and regulations relating to the environment.
- 11. The following new clauses are added after clause 2(g) and before clause 2(h):
  - ga) **Operator** includes the owner of the property where any portion of a C&D Processing Facility, a Transfer Station or a C&D Disposal Site is located.
  - gb) **Solid Waste** means garbage, refuse, sludge, rubbish, tailings, debris, litter and other discarded materials resulting from residential, commercial, institutional and industrial activities.
- 12. Clause 2(h) is repealed.
- 13. Clause 2(j) is repealed.
- 14. Clause 2(k) is repealed.
- 15. Clause 2(I) is repealed.
- 16. Section 3 is amended by:
  - (a) adding the words "granted by Halifax Regional Municipality" after the word "license" and before the word "therefore" in subsection 3(1);
  - (b) adding a new subsection after subsection 3(1) and before subsection 3(2) as follows:
    - (1A) No Person shall operate a C&D Processing Facility, Transfer Station or a C&D Disposal Site in Halifax Regional Municipality without having first obtained and maintained in effect an Environmental Approval granted by the Department.
  - (c) adding the word "Operator" after each instance of the word "applicant" and striking out each instance of the word "applicant" in clause 3(3)(a);
  - (d) striking out all words and punctuation in clause 3(3)(b) and adding the words and punctuation as follows:

A comprehensive diversion strategy or plan which demonstrates the ability to achieve targets outlined in Section 9 of this By-law which shall include, but is not limited to:

- (i) forecast of incoming tonnage and type;
- (ii) forecast processing method and output products;
- (iii) forecast of expected diversion rate;
- (iv) processing details, (e.g. sorting, and shredding);
- (v) identification of material end uses and markets; and

- (vi) forecast of Residues to be disposed;
- (e) adding a new clause after clause 3(3)(b) and before clause 3(3)(c) as follows:
  - ba) A Litter Management Plan outlining measures to be taken to limit the impact of litter related to the site on the local community, which shall include but is not limited to:
    - (i) physical controls (e.g. fencing);
    - (ii) site and vicinity inspection and cleanup frequency;
    - (iii) incoming load inspection and education related to secured loads; and
    - (iv) consideration for mitigating community litter related to operations.
- (f) striking out the words "and bond or letter of credit" in clause 3(3)(c);
- (g) adding the following new clauses after clause 3(3)(c) and before clause 3(3)(d):
  - ca) A declaration informing the Administrator of any environmental convictions or offences related to the site committed by the Operator pursuant to the Nova Scotia Environment Act, S.N.S. 1994-95, c 1 and the regulations made thereunder, or Halifax Regional Municipality By-Laws, or Orders issued by any Court of Law in Canada or regulatory body, if applicable from 5 years prior to the date of application;
  - cb) A declaration confirming with the Administrator that no environmental convictions, offences or Orders related to the site against the Operator have occurred since the time of the issuance of the most recent license;
- (h) adding the word "or" after the word and punctuation "applicable," and before the word "a", and striking out the words and punctuation "and if applicable, " in clause 3(3)(d).
- (i) Amending clause 3(3)(e) as follows:
  - (a) Adding the words "The Environmental Approval issued" after the word "approval" and before the word "under":
  - (b) Adding the words "Environment Act" after the word "Labour" and before the word "Solid";
  - (c) Striking out the words "If the application is for a C&D Disposal Site, a C&D Processing Facility or a Transfer Station, the approval" and the words "Department of the Environment and Labour";
- (j) adding the numbers and symbol "\$500" after the number and symbol "\$50" and striking out the number and symbol "\$50" in clause 3(3)(f);
- (k) repealing clauses 3(3)(g) and 3(3)(h);
- (I) clause 3(3)(i) is amended by:
  - (a) Adding the words "which meets the requirements of" after the word "Plan" and before the word "approved" in subclause 3(3)(i)(a);

- (b) Adding the word "and" after the number and punctuation "8; " in subclause 3(3)(i)(a);
- (c) Striking out the words "approved under" in subclause 3(3)(i)(a).
- (d) Repealing subclause 3(3)(i)(b).
- (m) adding a new clause after clause 3(3)(i) as follows:
  - j) A copy of the Operation and Maintenance Manual submitted as part of the Environmental Approval, approved by the Department and which addresses the conditions specified in Section 10.
- (n) striking out the words "31st day of December next following the date of issue" in subsection 3(5) and adding the words and comma "same date as the Environmental Approval issued by the Department, unless the license has otherwise been revoked by the Municipality prior to that date" after the word "the" and before the period.
- (n) adding the new subsection (5A) after subsection 3(5) and before subsection 3(6), as follows:
  - (5A) Where the Department has revoked or suspended a license, the Administrator may suspend or revoke the license.
- (o) adding the word "Operator" after the word "owner" and before the word "of" and striking out the word "owner" in subsection 3(7); and
- (p) de-capitalizing the word "License" in subsection 3(7).
- 17. Section 4 is amended by adding the words and number "and submits proof satisfactory to the Administrator the license holder has complied with the annual reporting requirements contained in Section 8" after the word "By-Law" and before the period, and striking out the words, symbol and number "upon payment of an annual license fee in the amount of \$50".
- 18. Section 5 is amended by:
  - (a) Striking out all words, numbers, symbols and punctuation in subsection 5(1) and replacing with the words, numbers, symbols and punctuation "The Operator of a C&D Processing Facility, Transfer Station or a C&D Disposal Site shall maintain Commercial General Liability insurance with limits of not less than \$5,000,000 per occurrence, in effect at all times. Halifax Regional Municipality shall be included as an Additional Insured.";
  - (b) Striking out all words, numbers, symbols and punctuation in subsection 5(2) and replacing with the words, numbers, symbols and punctuation "The Operator shall maintain an Environmental Impairment Liability insurance with limits of not less than \$5,000,000 per occurrence, in effect at all times. The policy is to cover any environmental liabilities for incidents, including damage and clean up, that arises out of the work being performed at a Transfer Station, C&D Processing Facility, or C&D Disposal Site, and any associated thirdparty claims. Halifax Regional Municipality shall be included as an Additional Insured."; and
  - (c) Repealing subsections 5(3) and 5(4).
- 19. Section 6 is amended by:
  - (a) Adding the words "and carry out an inspection of that location" after the word "By-Law" and before the word "to" in subsection 6(1);

- (b) Adding the following subsections after subsection 6(2) as follows:
  - (3) Based on the findings of an inspection carried out under any part of this By-Law, the Administrator may require, by notice in writing, a plan to identify actions that will be taken to align the operation with license and regulatory requirements within a specified timeframe.
  - (4) The Administrator may, at their discretion and based upon the findings of an inspection carried out under any part of this By-Law, require by notice in writing a plan regarding diversion or compliance with any provision of this By-Law within the time specified in the notice or such additional time to be granted by the Administrator.
  - (5) A failure to comply with a notice given pursuant to this Section is an offence.

#### 20. Section 8 is amended as follows:

- (a) Capitalizing the word "residue" in subsection 8(1);
- (b) Adding the word "at" after the words "removed from" and before the word "the" in subsection 8(2);
- (c) Adding the words "facility for" after the words "destination of" and before the words "all materials" in subsection 8(2);
- (d) Adding the words "for beneficial reuse or disposal in accordance with municipal and provincial regulations" after the word "Site" and before the period in subsection 8(2);
- (e) Striking out the words "and removed from" after the word "received" in subsection 8(2);
- (f) Striking out the word "of" after the word "destination" in subsection 8(2);
- (g) Adding the following subsections after subsection 8(2) as follows:
  - (3) The Operator of a Transfer Station, C&D Processing Facility or C&D Disposal Site shall report to the Administrator on an annual basis and no later than January 31 of each year:
    - (a) the end of year tonnage report, including final diversion statistics;
    - (b) an updated Operation and Maintenance Manual, if any changes were made in the previous year;
    - (c) an overview of the diversion strategy and innovations;
    - (d) a declaration by the Operator that no violations of any part of this By-Law have occurred:
    - (e) a declaration by the Operator that the Transfer Station, C&D Facility or C&D Disposal Site maintains an Environmental Approval in good standing;
    - (f) copies of any directives, responses and closeout documentation submitted to the Department;
    - (g) a copy of applicable insurance policies maintained by the Operator; and

- (h) an overview of activities conducted under the litter management plan.
- (4) The Operator shall notify the Administrator in a timely manner of any incidents or complaints relevant to or affecting the operation of the site, including but not limited to fire, water or other damage.
- (5) Upon written request from the Administrator, the Operator shall provide copies of any environmental reports submitted to the Department.

## 21. Section 9 is amended by:

(a) Striking out all words, numbers, punctuation and symbols in subsection 9(1) and adding the words, letters, punctuation and symbols as follows:

The following materials shall not be disposed of in a Construction and Demolition Debris Disposal Site:

- (a) asphalt paving;
- (b) aggregate and soil;
- (c) brush and leaves;
- (d) concrete;
- (e) milled wood free of adhesives, coatings and preservatives;
- (f) porcelain, ceramic;
- (g) root balls and stumps;
- (h) scrap metal;
- (i) window glass; and
- (j) all materials banned from disposal under the Nova Scotia Solid-Waste Resource Management Regulations and subsequent amendments.
- (b) Striking out all words, numbers, punctuation and symbols in subsection 9(2) and adding the words, letters, punctuation and symbols as follows:

All incoming C&D materials arriving at a C&D Processing Facility or Transfer Station shall be recycled or otherwise diverted from disposal as follows:

- (a) Where a C&D Processing Facility or Transfer Station has been operating for one year or less, a minimum of fifty per cent (50%) shall be recycled or otherwise diverted;
- (b) Where a C&D Processing Facility or Transfer Station has been operating for between one and five years, a minimum of sixty per cent (60%) shall be recycled or otherwise diverted;
- (c) Where a C&D Processing Facility or Transfer Station has been operating for five or more years, a minimum of seventy-five per cent (75%) shall be recycled or otherwise diverted;

- (d) Where a C&D Processing Facility or Transfer Station commenced operation prior to the calendar year of 2025 a minimum of seventy-five per cent (75%) shall be recycled or otherwise diverted.
- (c) Adding a new subsection after subsection 9(3) as follows:
  - (4) Notwithstanding Section 11(2) of this By-Law, any person who contravenes or fails to comply with any provision of Section 9 of this By-Law shall for each offence be liable to a penalty of not less than \$500.00 and not exceeding \$10,000.00 and in default of payment to imprisonment for a period not exceeding 90 days; and each day that the offence continues shall constitute a new offence.
- The section title immediately preceding section 10 is amended by striking out the bolded words "OPERATIONAL PROCEDURES" and adding the bolded words "SITE REQUIREMENTS".
- 23. Subsections 10(1), 10(2), 10(3), 10(6), 10(7) and 10(11) are repealed.
- 24. Subsection 10(4) is amended by striking out the semi-colon after the word "holidays" and before the words "New Years" and adding a colon after the word "holidays".
- 25. Subsection 10(16) is amended by adding the word "be" after the word "to" and before the word "removed".
- 26. The following new title and section are added after section 11:

#### **REPEAL**

12. Administrative Order 27, Respecting Materials That Shall Not Be Disposed Of In A C&D Disposal Site, is repealed and replaced with this By-Law L-202.

Done and passed in Council this day of	202
	MAYOR
	MUNICIPAL CLERK

Policy: Otter Lake Construction and Demolition Debris Policy (DRAFT)

Version: 1

Date: March 21, 2024

Issued by: Andrew Philopoulos P.Eng. M.Sc., Director of Solid Waste Resources, Halifax Regional

Municipality

Construction and Demolition (C&D) debris refers to material such as drywall, plaster, cellulose, fibreglass fibres, gyproc, lumber, wood and asphalt shingles.

HRM established By-Law L-200 Respecting Licensing of C&D Recycling and Disposal Operations in 2001 with the overarching goals of maximizing diversion of C&D debris from landfill disposal, as well as to increase value-added processing through recovery of materials. By-Law L-200 requires C&D Processing Facilities, Transfer Stations, and Disposal Sites within HRM to obtain a license from the municipality and includes provisions that operators achieve an annual diversion rate of 75% in order to maintain their license in good standing.

Most recently, in July 2023, NS Environment and Climate Change (NSECC) confirmed that the Otter Lake Waste Management Facility (Otter Lake) is permitted to accept C&D debris for disposal as part of the current Environmental Approval. Given the goals of By-Law L-200, HRM generally does not permit the disposal of C&D debris at Otter Lake, with the exception of small amounts collected as part of the residential collection program or incidental amounts commingled in Institutional Commercial & Industrial (ICI) loads<sup>1</sup>.

Given the increase in extreme weather events and with consideration for emergency management, moving forward HRM will consider accepting dedicated loads of C&D debris at Otter Lake under emergency management situations. This includes in response to major emergency management situations such as hurricanes, floods, and wildfires that cause catastrophic damage to public or private property, resulting in existing licensed C&D Processing Facilities, Transfer Stations and Disposal Sites located within HRM not being able to accommodate the resulting volumes of C&D debris.

The Director of Solid Waste Resources has the authority to designate the conditions and guidelines relating to the acceptance of waste materials at waste management facilities per By-Law S-600 Solid Waste Resource Collection and Disposal By-Law. If the decision is made to allow C&D debris to be landfilled at Otter Lake, the Director will notify the Otter Lake Community Monitoring Committee (CMC) within 48 hours. The CMC is entitled to gain access to information or access and inspect Otter Lake per the latest version of the HRM – Halifax Waste Society Agreement.

<sup>&</sup>lt;sup>1</sup> Warnings are issued when inspections reveal small amounts of C&D in ICI loads. Any loads full loads of C&D are rejected.