

ENVIRONMENT COMMITTEE

TO: MAYOR AND COUNCILLORS

SUBJECT: CONSTRUCTION AND DEMOLITION (C&D) WASTE DIVERSION BYLAW

IMPLEMENTATION UPDATE

RECOMMENDATION:

THAT the report titled "Construction and Demolition (C&D) Waste Diversion Bylaw Implementation Update" dated June 19, 2024 be received for information.

REPORT

The Environment Committee, at its meeting held on June 19, 2024 received and adopted the <u>attached</u> report providing an update on the City's C&D Bylaw post implementation.

On behalf of the Environment Committee,

Councillor J. Keithley Chair

Councillor M. Santiago Vice Chair





File: 33000-01

COMMITTEE REPORT

TO: ENVIRONMENT COMMITTEE (EC)

FROM: GENERAL MANAGER PLANNING AND DEVELOPMENT

SUBJECT: CONSTRUCTION AND DEMOLITION (C&D) WASTE DIVERSION

BYLAW IMPLEMENTATION UPDATE

PURPOSE: To provide an update on the City's C&D Bylaw post implementation.

RECOMMENDATION

THAT the report titled "Construction and Demolition (C&D) Waste Diversion Bylaw Implementation Update" dated June 19, 2024 be received for information.

1.0 POLICY SECTION

The C&D Waste Diversion Bylaw aligns with the following Council adopted plans, reports and policies:

- Environmental Sustainability Strategy (2016)
- Climate Action Framework (2020)
- Corporate Strategic Plan (2022)

2.0 BACKGROUND

On June 22, 2022, Council adopted the City's Construction and Demolition Waste Diversion Bylaw No. 14461 that requires all building demolition permits issued by the City to divert C&D materials from the landfill through reuse or recycling. A Waste Diversion Plan and payment of a refundable Waste Diversion Deposit (based on the square footage of the building up to a maximum of \$50,000) is required for each application and a minimum diversion rate of 70% is required to be eligible to apply for a full deposit refund. To provide the development community time to adjust to the new requirements, the bylaw was implemented in two phases:

- October 1, 2022 for demolition of multi-family dwellings and non-residential buildings (i.e. commercial, industrial, institutional, etc.), including related accessory buildings.
- March 1, 2023 for demolition of single-family and two-family buildings, including related accessory buildings.

Staff have been tracking and evaluating bylaw performance (i.e. number of demolitions completed, material diversion, diversion compliance etc.). The following sections provide a review of bylaw performance between October 1, 2022 and March 1, 2024.

3.0 GENERAL INFORMATION

Construction and demolition waste, such as drywall, wood and concrete account for a third of all waste generated in the Metro Vancouver region¹. When not reused or properly recycled, construction waste harms the environment, contributes to increased energy consumption and greenhouse gas emissions, and reduces landfill capacity. The diversion of these materials contributes to decarbonizing the lifecycle of buildings.

3.1 C&D Waste Diversion Bylaw ComplianceBetween October 1, 2022, and March 1, 2024, 192 Waste Diversion Permits were issued. Table 1 provides a breakdown of waste diversion permits issued, demolitions completed, and waste compliance reports completed.

Single-family buildings represented the highest number of waste diversion permits issued, followed by non-residential buildings (i.e. commercial, industrial, institutional), multi-family buildings, auxiliary buildings and two-family buildings. Overall, the relatively low number of waste diversion compliance reports received during the first year of implementation was expected as there is a known time lag between issuance of permits and completion of demolitions.

Building Type	Waste Diversion Permits Issued	Demolitions Completed	Waste Diversion Compliance Reports Received
Auxiliary (e.g. garages,	11	4	3
sheds etc.)			
Single-family	145	21	21
Two-family	8	2	2
Multi-family	12	0	0
Non-residential	16	2	2
Total	192	29	28

Table 1: Breakdown of waste diversion permits issued, demolitions completed, and waste diversion compliance reports received between October 1, 2022, to March 1, 2024.

3.2 Material Composition and Diversion Rate

A total of 28 compliance reports were received across all building types resulting in a total weight of 10,870 tonnes of C&D materials. Of this, 9,448 tonnes were diverted from landfill through reuse and recycling, resulting in a total program diversion rate of 86.8%.

Material composition varies by building type. Figure 1 illustrates C&D material composition and bylaw compliance rate achieved for each building type.

¹ Metro Vancouver Construction and Demolition Waste Composition Study (2022)

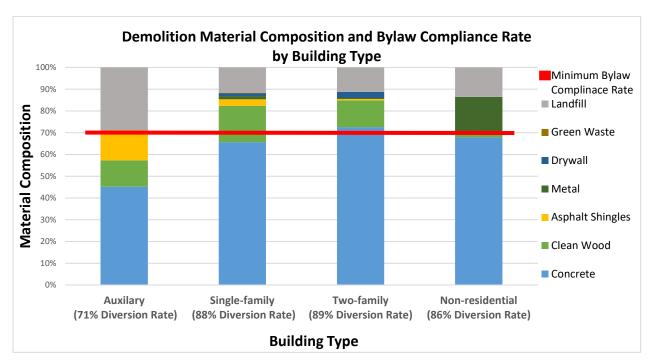


Figure 1: Composition of C&D materials and bylaw compliance rate achieved by building type from October 1, 2022, to March 1, 2024.

Concrete was the largest proportion of C&D materials for each building type, except for auxiliary buildings, where asphalt shingles were the predominant material. For residential buildings, clean wood was the second highest component followed by metal, drywall, and asphalt shingles. For non-residential buildings, metal was the second highest component, followed by clean wood. For auxiliary buildings, demolitions were predominately residential sheds and detached garages, constructed mainly of unrecyclable wood (i.e. plywood), concrete and asphalt shingles.

Each building type achieved above the bylaw compliance rate of 70 per cent, ranging from 71% to 89% material diversion. Overall, the City's C&D Waste Diversion Bylaw is achieving the desired goals. Staff will continue to monitor and evaluate bylaw performance.

4.0 COMMUNICATION AND COMMUNITY ENGAGEMENT

Not applicable.

5.0 FINANCIAL CONSIDERATIONS

Not applicable.

Respectfully submitted,

E. W. Kozak General Manager Planning and Development

REPORT CONTRIBUTORS

This report was prepared by Tracey Tobin, Climate Action and Energy Officer and reviewed by Erica Lay, Manager Action and Energy; Johannes Schumann, Director Community Planning; and Lee-Ann Garnett, Deputy General Manager Planning and Development.