



The New Zealand Ecolabelling Trust

Licence Criteria for Construction & Demolition Waste Services

EC-59-19

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Specification change history

Minor clarifications, corrections or technical changes made since the specification was last reviewed and issued in September 2019.

Date	Version	Change
24/02/2020	February 2020	In section 8.1(a), amended “50% of C&D waste” to “50% of demolition waste” and added “or recycling” to clearly reflect the original intention of the target for demolition waste.
18/03/2020	March 2020	Addition of explanatory terms for “reprocessing facility” and “waste processing facility”. Addition to section 5.3 for further reports required to satisfy Green Star requirements. Addition of Appendix A to demonstrate how this specification meets the Green Star C&D waste criteria.
5/05/2021	May 2021	Addition to clause 6.3 regarding Green Star and Homestar
2/12/2021	Dec 2021	Amendment to term ‘waste priority hierarchy’ by removing ‘priority’ and amendment to the definition of ‘recovery’.

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Appendix A: Comparison of Green Star C&D Waste Criteria with EC-59-19 C&D Waste Services

1 Introduction

Environmental Choice New Zealand (ECNZ) is an environmental labelling programme which has been created to help businesses and consumers find products and services that ease the burden on the environment. The programme results from a New Zealand Government initiative and has been established to improve the quality of the environment by minimising the adverse environmental impacts generated by the production, distribution, use and disposal of products, and the delivery of services. The programme is managed by the New Zealand Ecolabelling Trust (the Trust).

ECNZ operates to the ISO 14024 standard "Environmental labels and declarations - Guiding principles" and the Trust is a member of the Global Ecolabelling Network (GEN) an international network of national programmes also operating to the ISO 14024 standard.

ISO 14024 requires environmental labelling specifications to include criteria that are objective, attainable and verifiable. It requires that interested parties have an opportunity to participate and have their comments considered. It also requires that environmental criteria be set, based on an evaluation of the environmental impacts during the actual product or service life cycle, to differentiate product and services on the basis of preferable environmental performance.

The life cycle approach is used to identify and understand environmental issues (adverse or beneficial impacts) across the whole life of a product or service (within a defined product or service category). This information is evaluated to identify the most significant issues and from those to identify the issues on which it is possible to differentiate environmentally preferable products or services from others available in the New Zealand market. Criteria are then set on these significant and differentiating issues. These must be set in a form and at a level that does differentiate environmentally preferable products or services, is attainable by potential ECNZ licence applicants and is able to be measured and verified. As a result of this approach, criteria may not be included in an ECNZ specification on all aspects of the life cycle of a product or service. If stages of a product or service life cycle are found not to differentiate environmentally preferable products or services, or to have insufficient data available to allow objective benchmarking in New Zealand, those stages will not generally be included in criteria in the specification. For some issues however, criteria may be set to require monitoring and reporting, to inform future reviews of specifications.

The Trust is pleased to publish this specification for Construction & Demolition Waste Services. This specification is intended to recognise waste service providers who reliably demonstrate great practices in construction and demolition (C&D) waste minimisation and management, and therefore deliver substantial environmental benefits. It has been developed in part due to the current absence of strong regulatory controls requiring C&D waste minimisation.

This specification sets out the requirements that C&D Waste Services will be required to meet in order to be licensed to use the ECNZ Label. The specification is split into modules of criteria that differentiate environmentally preferable waste services. There are common criteria applicable for all waste services, then specific criteria for three distinct service types in the C&D waste industry; waste recovery service providers, construction waste generators, and demolition waste generators. The specification also defines the means to be used to demonstrate and verify conformance with each of the criteria.

This specification has been prepared based on: an overview level life cycle assessment, relevant information from other ECNZ specifications, publicly available information, industry guidelines, and feedback from the market and service providers.

This specification is valid for a period of five years. Twelve months before the expiry date (or at an earlier date if required), the Trust will initiate a review process for the specification.

2 Background

The Construction & Demolition (C&D) industry is one of the largest waste producing industries in the country, however there is limited official national level information on the C&D waste generated in New Zealand. In 2014, the Building Research Association of New Zealand (BRANZ) estimated that C&D waste may represent up to 50% of all waste generated in New Zealand¹.

The 2016 Joint Waste Assessment for Tauranga City Council and Western Bay of Plenty District Council stated that C&D waste was the third largest contributor to the waste stream in the region, and that it was increasing in volume, with little being recovered or recycled². In 2018, Auckland Council released the region's Waste Management and Minimisation Plan (WMMP) in which it defined C&D waste as the largest single waste stream, at around 40% of total weight going to landfill, not including rubble and concrete going to cleanfill and managed fill sites³. Within the WMMP, Auckland Council outlined C&D waste as a priority commercial waste stream. Auckland Council's 'Low Carbon Auckland' plan presents total landfill waste reduction targets of 30% by 2020, 60% by 2030, and 'zero waste' by 2040⁴. To achieve these targets Auckland Council has recognised the need to address C&D waste.

In a whole-of-life context, one of the most significant environmental issues associated with C&D waste is simply the amount of waste that is disposed, rather than put to a beneficial use/reuse. This represents an inefficient use of resources as well as filling up valuable landfill space. This ECNZ specification includes criteria that promote relocation/reduction, reuse, recycling, and recovery over treatment and disposal to landfill. It also requires reuse of those materials that can be readily reused as a priority over recycling. The concept of C&D waste minimisation aligns with tikanga Maori, and the tradition of kaitiakitanga to sustain and restore our collective resources to enhance the mauri of taonga tuku iho.

Good waste management practices and procedures can, in some (but not all) instances, incur additional cost or time. In order to justify any additional time or cost of (if any), for good waste management practices, procurers and service users need confidence that good practices are indeed being followed. This specification includes criteria for transparent waste inventories and tracking, which are intended to provide that confidence.

C&D waste can contain components that can have adverse effects on the environment and people. Discharges that contain toxic or ecotoxic substances may occur throughout the life cycle of the waste materials during handling, storage, and processing and at final disposal location. This specification includes criteria for safer disposal of any residual C&D waste that cannot be diverted.

Good C&D waste management presents many opportunities for waste minimisation. Diverting C&D waste from landfill has environmental, financial, and social benefits^{5 6}, and means that valuable space in landfills is not taken up by inert materials that could be used beneficially elsewhere. Therefore waste minimisation, including the continuum of avoiding waste creation to maximising waste diversion, is perhaps the most important area of potential for environmental benefit. This

¹ BRANZ, 2014, REBRI guides introduction - https://www.branz.co.nz/cms_display.php?st=1&sn=113

² Eunomia research & consulting, 2016, Joint Waste Assessment for TCC and WBOP - https://www.tauranga.govt.nz/Portals/0/data/council/plans/reserve_management/files/joint_waste_assessment.pdf

³ Auckland Council, 2018, Waste Management and Minimisation Plan - <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/environmental-plans-strategies/Pages/waste-management-minimisation-plan.aspx>

⁴ Auckland Council, 2014, Low Carbon Auckland - <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/environmental-plans-strategies/docslowcarboncopy/low-carbon-strategic-action-plan-full.pdf>

⁵ BRANZ, 2014, Benefits of Reducing Waste - https://www.branz.co.nz/cms_display.php?sn=113&st=1&pg=12516

⁶ Auckland Council, 2019, Cost Benefit Analysis of Construction and Demolition Waste Diversion from Landfill – A Case Study Based on HLC Ltd Development in Auckland, July. <http://www.knowledgeauckland.org.nz/assets/publications/TR2019-009-CBA-on-waste-diversion-from-landfill-homes-land-community-Auckland.pdf>

specification includes criteria that require demonstration of good waste minimisation practices, including implementing the waste hierarchy.

The effectiveness of good C&D waste management practices is dependent on coordination and good communication between waste generators and waste recovery service providers. Good intentions can be undermined by inadequate training and communication about waste management. Therefore, this specification includes criteria that require training and communication on site and between waste service providers.

The Trust's feasibility study for this specification found an appetite for independent verification of C&D waste services, to both raise the profile of good C&D waste services and recognise what good performance looks like. There are a range of non-statutory standards, codes, and programmes relevant to C&D waste-related services, and therefore potential for collaboration and alignment with industry leaders like the BRANZ and the New Zealand Green Building Council (NZGBC). BRANZ's Resource Efficiency in the Building and Related Industries guides (REBRI Guides) have great guidance for collection, transport, sorting, storage, processing, and recovery of C&D waste⁷; good practice examples described in the REBRI Guides are referenced throughout this specification. The NZGBC provides Green Star and Home Star, which are internationally-recognised rating systems for the design, construction and operation of buildings, fitouts, and communities⁸. This ECNZ specification includes criteria that require measurement and demonstrated waste diversion, thereby providing a pathway for third party verification of C&D Waste Services, and a means of demonstrating credits in the waste category of the Green Star tools.

C&D waste is often generated and managed in project work carried out under commercial contracts, often awarded on the basis of competitive tendering processes. There is an opportunity to provide guidance to assist decision makers procuring these services. This ECNZ specification, and having ECNZ-licensed service providers in the market, is expected to assist tender assessors to make demonstrably environmentally preferable contracting and procurement decisions.

The purpose of this specification is to recognise service providers who reliably demonstrate great practices in C&D waste management. An understanding of what great practice looks like in the industry has been developed through research, feasibility studies, and conversations with industry.

The following service category criteria will produce environmental benefits through C&D waste services by encouraging differentiators such as clear planning for waste minimisation, a management hierarchy including segregation and protection of materials to preserve the value of waste, ongoing measurement and transparent reporting on C&D waste, and generating awareness around waste minimisation and management through good communication, training, and education.

⁷ BRANZ, 2019, REBRI homepage - <https://www.branz.co.nz/REBRI>

⁸ NZGBC, 2019, Green Star - <https://www.nzgbc.org.nz/GreenStar>

3 Interpretation

BRANZ means Building Research Association of New Zealand.

C&D means construction and demolition. It includes residential and commercial building fitouts.

C&D waste, as used in this specification, means the non-hazardous material generated by construction or demolition activities, including site preparation. It includes the following types of waste:

- ceiling tiles, carpet, carpet tiles, and floor coverings
- cabling, electrical and plumbing fixtures and fittings
- concrete, bricks, tiles, and ceramics
- wood, glass and plastic
- bituminous mixtures
- metals and alloys
- insulation materials
- gypsum-based construction material
- cardboard and packaging waste
- soil and stones.

This specification does not cover:

- asbestos-containing materials.
- wastes containing other hazardous materials such as polychlorinated biphenyls (PCBs) and mercury.
- excavated soil from contaminated sites.
- wastes requiring disposal under the Hazardous Substances (Disposal) Notice 2017, such as containers that held hazardous substances.

Note: soil and stones are included in the scope of the specification because topsoil is routinely stripped from construction sites prior to works starting, and there are resource recovery opportunities if works are planned to avoid disposal of topsoil. Soil contaminated with hazardous substances is not included in the scope of this specification.

Clean fill means a Class 5 landfill as defined in the Ministry for the Environment's Technical Guidelines for Disposal to Land (August 2018).

Construction waste generators means entities that generate construction waste, for example, construction contractors.

Deconstruction means the process in which the material of a building or structure is extracted so that it remains intact and can be reused. This includes soft strip.

Demolition waste generators means entities that generate demolition waste, for example, entities contracted to carry out demolition, deconstruction, or removal works.

Disposed / disposal means the material is sent to a landfill or cleanfill.

Diversion rate means the amount of waste that is diverted from disposal to landfill or cleanfill, usually calculated by:
$$\textit{Diversion rate} = \frac{\textit{Amount of C\&D waste diverted}}{\textit{Total amount of C\&D waste including any diverted}}$$

Diverted material means C&D waste that is not disposed.

ECNZ means Environmental Choice New Zealand.

GEN means Global Ecolabelling Network.

ISO means International Organisation for Standardisation.

Label means the Environmental Choice New Zealand Label.

Landfill means Class 1, 2, 3, or 4 landfills as defined in the Ministry for the Environment's Technical Guidelines for Disposal to Land (August 2018).

People means the relevant people to the task at hand, this could include employees, sub contractors, or volunteers, whoever the licence holder relies upon to ensure the task is done correctly.

Project means the specific piece of C&D work, contract, or site at which the licensed service is applied.

Project-specific collection plan means an approach or strategy to collect all divertable waste materials on a site, including who is responsible for what.

Plan means an approach or strategy that has been agreed upon by all relevant service providers involved (unless specified as a formal written document).

REBRI means Resource Efficiency in the Building and Related Industries, which is operated by BRANZ.

Recovery means extraction of materials or energy from waste or diverted material for further use or processing⁹

Recycle means converting a waste material into a different form for further use or into an object with value.

Relocate / relocation means the material, or building, is kept intact and moved to a new location for further use.

Reprocessing facility means businesses that trade in specific waste material types for the purpose of transforming (recycling) it into new products. Examples include metal, concrete, paper and plastic recyclers.

Residual waste materials means the waste materials that are not able to be relocated / reduced, reused, recycled, or recovered, and therefore are destined for disposal.

Reuse means the further use of diverted material in its existing form for the original purpose of the material, or for a similar purpose.

Salvaged means a waste material that has been removed from a building before demolition, e.g., during soft strip.

Soft strip means removing non-structural elements of buildings prior to demolition.

Segregation means the waste materials are organised in distinct material types and kept apart from other material types.

Waste Management Plan (WMP) means a written programme to achieve and sustain efficient and effective minimisation and management of waste including policies, practices, planning activities, responsibilities and resources that affect the waste management performance of the organisation and any that specifically apply to the project.

Waste material inventory means a list of all C&D waste materials for the project (identity and amount), and their final destination.

⁹ [Waste Minimisation Act 2008](#)

Waste hierarchy means the management of waste in the following order of priority (highest to lowest priority): *relocation / reduction → reuse → recycling → recovery → treatment → dispose*¹⁰.

Waste processing facility (WPF) means a facility that receives C&D waste for processing, including resource recovery facilities, transfer stations, reprocessing facilities, and waste-to-energy facilities where waste is sorted.

Waste recovery services include collecting waste from sites where construction and/or demolition activities are occurring (often also providing skip bins or other containers that are left on site), and/or processing waste from construction and demolition activities, and/or disposing waste from construction and demolition activities.

¹⁰ Based on the Local Government Amendment Act 1996

4 Category definition

4.1 Services covered

This specification covers:

- 1 C&D waste recovery services
- 2 C&D waste management by construction waste generators
- 3 C&D waste management by demolition waste generators

For clarity, the licence will not apply to a company, rather to the particular type of service offered, which could be contract-specific.

4.2 Structure of specification

This specification contains common criteria that all C&D waste services seeking a licence under this specification must meet, and three licence-type specific modules, one for each of the service-types defined above.

To be licensed to use the Label, the C&D waste service must meet all of the common criteria set out in section 5, and the criteria of the module under which it is seeking a licence (sections 6, 7, 8).

5 Common criteria for all C&D Waste Services

5.1 Planning

Criteria

- a The licence holder must have a policy that includes commitments to:
 - i. minimise the amount of C&D waste generated for the project.
 - ii. implement the *waste hierarchy: relocation / reduction → reuse → recycling → recovery → treatment → dispose*.
 - iii. have early engagement and proactive and responsive communication and collaboration with other waste service providers and waste generators on the project, and where possible, the project designers.
- b The licence holder must develop a waste management plan (WMP) for each project that uses the ECNZ-licensed service, which must clearly set out:
 - i. how C&D waste will be minimised for the project;
 - ii. how the *waste hierarchy* is to be implemented;
 - iii. where each waste stream will go and who is collecting what, in the format of a waste material inventory; and
 - iv. how waste will be segregated and stored to preserve value, including at what location this occurs.

Explanation

The requirements in 5.1(b) are for all licence holders. There are also additional WMP requirements for waste recovery services under 6.1, construction waste generators under 7.1, and demolition waste generators under 8.1. If more than one service provider on a project has ECNZ-licensed C&D waste services, then it is intended that the WMPs for each should align.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- a copy of the policy that includes the requirements in 5.1(a)
- a copy of the WMP template and example WMPs for projects using the ECNZ-licensed service. The BRANZ REBRI online guidelines provide advice on how to assess different waste streams and the possibilities for material reuse and recycling, which may be helpful during C&D waste planning. The REBRI guidelines also provide clear directions on how to develop a WMP, and a demolition waste plan. Guides are available at <https://www.branz.co.nz>. A marked-up site layout sketch is one way to show the proposed locations for material segregation and storage.

Explanatory notes

For 5.1(a)(iii), 'early' engagement means engagement during the planning or design phases of the project, before the construction, deconstruction, or demolition works commence.

5.2 Practice: measurement, transparency, and waste hierarchy

Criteria

- a The licence holder must measure the quantity (volume), and report the destination, of all C&D waste in the waste material inventory for every project completed as part of the ECNZ-licensed service. This includes all waste diverted (relocated, reused, recycled, or recovered) and all waste disposed. For C&D waste that is reused, the inventory must clearly identify “within project” or “off site”, and if off-site, the location must be reported.
- b The licence holder must demonstrate:
 - i. reuse of waste materials where this is claimed, both for “within project” and “off site”;
 - ii. sale of waste materials where this is claimed;
 - iii. a pathway to market for off-site diversion, e.g. a recycled building components retailer.
- c The licence holder must demonstrate that any residual waste material has been disposed of at an appropriately consented facility.
- d The licence holder must demonstrate that opportunities for continuous improvement (for example, increasing recovery of C&D waste from each project) are reviewed after each project completed as part of the ECNZ-licensed service, and implemented, where appropriate.

Explanation

At the initial verification audit, applicants must demonstrate how they will comply with these criteria. At each supervision verification audit, licence holders must provide evidence of how they have complied.

For (a), the volume may be measured, or estimated by applying a conversion factor to a measured weight of waste. If conversion factors are used, the basis for the conversion factor must be documented (for example, the weight of a full skip of a particular waste type).

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- a copy of the waste material inventory for each project completed as part of the ECNZ-licensed service. BRANZ’s REBRI online guidelines provide advice on how to effectively track resources in an effort to reduce the amount of waste material produced.
- evidence of material recovery, reuse, or sale, and documentation outlining the pathway to market for example:
 - before and after photos of where the material came from, and where it has been reused or recycled.
 - evidence of sale (e.g. to retail or wholesaler) if materials are not used on site.
 - contracts, receipts, logs, or dockets demonstrating the chain of waste management
 - online marketplace tools may be used to make materials available to the market, and past listings can be used as evidence of advertisement.
- documentation that confirms any residual waste material disposal facility used was appropriately consented.
- demonstration of how the process for continuous improvement review occurs and evidence of implementation of continuous improvement learnings.

5.3 Communication and reporting

Criteria

- a The licence holder must:
 - i. train its people, and all relevant contractors/volunteers involved on the project, about where waste material goes, and document the training and awareness-raising (e.g., induction, tool box talks); and
 - ii. have a community engagement plan that includes, at a minimum, information on where waste from the project will go (e.g. signs).
- b Annually, the licence holder shall provide a report to the Trust, which includes:
 - i. types of services carried out under the licence;
 - ii. number of projects completed using the ECNZ-licensed services;
 - iii. landfill diversion rate achieved for each project;
 - iv. comparison of (i) to (iii) to previous year; and
 - v. changes in the service offered in the previous 12 months that were driven by continuous improvement.
- c The licence holder must provide to the Trust reports that:
 - i. detail the total weight of waste removed from the site that the licence holder is operating on; and
 - ii. detail the waste from the site the licence holder is operating on that is received by each Waste Processing Facility (WPF) and disposed of by each WPF.
- d The licence holder must provide the completed waste material inventory to its customers.

Explanation

5.3(b) and (c) set out the common elements for the annual reports required from all licence holders. Each licence holder will have additional requirements under Modules 1, 2, and/or 3. Only a single, combined annual report is required from each licence holder.

The two reports in 5.3(c) are required so that the verifier can check that the amounts disposed from the site that the licence holder is operating on corresponds with the amounts received by, and managed by each WPF used by the licence holder.

At the initial verification audit, applicants must demonstrate how they will comply with these criteria. At each supervision verification audit, licence holders must provide evidence of how they have complied.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- evidence of waste management training, e.g., photos of the training happening, training documents or hand outs, programme documentation
- evidence of a community engagement plan, e.g., photos of publicly visible signage, feedback from the community or people involved in the project
- a copy of the annual report that includes criteria listed in 5.3(b), (c) and (d).

6 Module 1: Waste recovery services

For a waste recovery service provider to hold an ECNZ licence for service, all criteria in Section 5 and Section 6 must be met.

6.1 Planning

Criteria

- a The licence holder must provide the waste generator(s) with a project-specific collection plan for segregation and collection of C&D waste. This will form part of the WMP required under 5.1(b).
- b The licence holder must either provide systems to protect the quality and integrity of materials on project sites, or use such systems provided by the waste generator, if such systems are part of the project-specific collection plan under 6.1(a).
- c The WMP required under 5.1(b) must support the diversion of at least 70% of C&D waste from landfill, and 50% salvage for any demolition waste materials, for the wastes managed by the licence holder for every project completed as part of its ECNZ-licensed service.

Explanation

For 6.1(b), systems may include, for example, covered bins or segregation areas, training of relevant people, regular visual inspections, containers and sheltered areas provided for materials.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- evidence of the plan agreed upon with the waste generator, e.g., requirements included in contract documents, a copy of agreed responsibilities, a service schedule. Segregation may include, for example, covered bins at pre-agreed locations, with appropriate signage.
- evidence of the system used on site to protect material, e.g., photos of the systems in use onsite, and/or documentation of the measures in place to protect materials. The BRANZ REBRI online guidelines provide good-practice advice on waste separation and storage onsite (refer <https://www.branz.co.nz>).
- A copy of the WMP that states the required 70% diversion rate from landfill and 50% salvage of any demolition waste.

6.2 Practice

Criteria

- a The licence holder must ensure there is effective signage communicating all C&D waste segregation systems, bins, or designated collection areas on project sites.
- b If the licence holder provides multiple bins to promote onsite sorting, all bins must be clearly labelled.
- c The licence holder must provide training and/or effective information to the waste generator(s) on each project to encourage higher levels of waste diversion.

Explanation

At the initial verification audit, applicants must demonstrate how they will comply with these criteria. At each supervision verification audit, licence holders must provide evidence of how they have complied.

For 6.2(a), the signage may be provided by the waste generator, however it is the waste recovery service provider's responsibility to ensure it is effective and to agree to using it.

For 6.2(c), training may include, for example, explanations of why sorting and segregation matters, why bins must be kept closed, and project-specific features of the waste management plan.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- evidence of the segregation system signage onsite, for example: photos of segregation system signage (e.g. bin labelling) during use. The BRANZ REBRI online guidelines provide good-practice advice on waste collection labelling (refer <https://www.branz.co.nz>). WasteMINZ provides guidance on waste sorting and New Zealand's agreed waste stream colours, signage, and te reo Māori translations (refer <https://www.wasteminz.org.nz/projects/standardising-the-colours-of-mobile-waste-and-recycling-container>).
- evidence of the training and/or effective information provided to the waste generator, for example: photos of the training happening, tool box talk agenda or minutes showing that C&D waste minimisation is discussed, records of discussion with the waste generator representative(s), training documents or hand outs, programme documentation, and/or feedback from the people involved.

6.3 Demonstrated waste diversion

Criteria

- a The licence holder must measure, document, and report all C&D waste managed for every project completed as part of the ECNZ-licensed service.
- b The licence holder must demonstrate diversion of at least 70% of C&D waste from landfill, and 50% salvage for any demolition waste materials, for every project completed as part of the ECNZ-licensed service.
- c If the project is applying for Green Star or Homestar certification, an ECNZ supervision verification audit of the project must be completed within two months after Practical Completion.

Explanation

Reporting the rate of waste diversion from landfill for each project completed as part of the ECNZ-licensed service should be included in the annual report required under common criterion 5.3(b).

Reporting should be aligned with the proposed National Waste Data framework linked to Solid Waste Protocol materials categories. Reporting must be in cubic metres. Tonnes may be converted to cubic metres using the Ministry for the Environment's Waste Levy conversion factors.

At the initial verification audit, applicants must demonstrate how they will comply with these criteria. At each supervision verification audit, licence holders must provide evidence of how they have complied.

Practical Completion is the point at which a building project is complete, except for minor defects that can be put right without undue interference or disturbance to an occupier.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- the final measurements and record of all C&D waste managed on every project completed as part of the ECNZ-licensed service, including: the waste recovered, the waste sent to landfill, and the corresponding diversion rate. These measurements and records shall be supported by relevant evidence and documentation, for example, weighbridge dockets to demonstrate landfill disposal.
- confirmation of Practical Completion date, for Green Star or Homestar projects.

7 Module 2: Construction waste generators

For a construction waste generator to hold an ECNZ licence for its waste management services on a project, all criteria in Section 5 and Section 7 must be met. Some requirements of Section 7 may be met by engaging an ECNZ-licensed waste recovery service provider.

7.1 Planning

Criteria

- a The WMP prepared under 5.1(b) must support diversion of at least 70% of construction waste from landfill, for every project completed under the ECNZ-licence.
- b The licence holder must ensure there are systems in place to maintain the quality and protect the value of diverted construction waste until collection.
- c The licence holder must agree to a project-specific collection plan for the segregation and collection of construction waste in collaboration with its waste recovery service provider(s).

Explanation

7.1(a) has been included to align with the NZGBC's Green Star rating tool, which awards 1 point for 70% diversion from landfill.

For 7.1(b), systems may include, for example, covered bins or segregation areas, training of relevant people, regular visual inspections, containers and sheltered areas provided for materials.

Use of an ECNZ-licensed waste recovery service provider will demonstrate conformance with 7.1(c).

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- a copy of the WMP, that states the required 70% diversion rate from landfill.
- evidence of systems in place to protect the quality of construction waste materials, for example: marked-up site plans, or procurement receipts of bins or containers. The BRANZ REBRI online guidelines provide good-practice advice on waste separation and storage onsite (refer <https://www.branz.co.nz>).
- evidence of the plan agreed upon with the waste recovery service provider, for example; requirements included in contract documents, and/or a copy of the agreed responsibilities and the service schedule.

7.2 Practice

Criteria

- a The licence holder must ensure construction waste bins and segregation areas on the project site have clear, effective signage.
- b The licence holder must ensure recovered construction waste materials are protected on site to preserve integrity and quality for reuse or recycling.

Explanation

These criteria are intended to maximise waste reuse and recycling.

At the initial verification audit, applicants must demonstrate how they will comply with these criteria. At each supervision verification audit, licence holders must provide evidence of how they have complied.

7.2(a) can be demonstrated by engaging an ECNZ-licensed waste recovery service provider, provided the waste recovery service provider's signage and segregation plan is followed.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- evidence that an ECNZ-licensed waste recovery service has been used or evidence of the segregation system signage in action onsite, e.g., photos of segregation system signage (e.g. bin labelling) during use. The BRANZ REBRI online guidelines provide good-practice advice on waste collection labelling (refer <https://www.branz.co.nz>). WasteMINZ provides guidance on waste sorting and New Zealand's agreed waste stream colours, signage, and te reo Māori translations (refer <https://www.wasteminz.org.nz/projects/standardising-the-colours-of-mobile-waste-and-recycling-container>).
- evidence of the system used on site to protect material, e.g., photos of the systems in use onsite, and/or documentation of the measures in place to protect materials. The BRANZ REBRI online guidelines provide good-practice advice on waste separation and storage onsite.

7.3 Demonstrated waste diversion

Criteria

- a The licence holder must demonstrate it has achieved the diversion rate target set in the WMP required in 7.1(a).
- b The licence holder must measure and document all construction waste generated on every project completed as part of the ECNZ-licensed service.
- c The licence holder must document and report the diversion rate achieved for projects completed under its ECNZ-licence.

Explanation

At the initial verification audit, applicants must demonstrate how they will comply with these criteria. At each supervision verification audit, licence holders must provide evidence of how they have complied.

The criteria in 7.3(b) and 7.3(c) could be met by using ECNZ-licensed C&D waste recovery service(s) that meet all requirements of Module 1. The Construction Waste Generator licence holder must

demonstrate that all waste is accounted for, which may require information from more than one waste recovery service provider.

Annual reporting for 7.3(c) is required by 5.3(b). Only one combined annual report is required.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- the final measurements and record of all construction waste generated and recovered on the licensed-service project, including: the waste reused, recycled, material recovered, material used for energy recovery, waste treated and the waste sent to landfill, and the corresponding diversion rate (as evidence that the 70% diversion rate was achieved).

8 Module 3: Demolition waste generators

For a demolition waste generator to hold an ECNZ licence for its waste management services on a project, all criteria in Section 5 and Section 8 must be met. Some requirements of Section 8 may be met by engaging ECNZ-licensed waste recovery service providers.

8.1 Planning

Criteria

- a The WMP prepared under 5.1(b) must include a target of more than 50% of demolition waste materials to be salvaged for reuse or recycling and more than 70% of C&D waste to be diverted from disposal.
- b The WMP prepared under 5.1(b) must have a documented procedure for how the *waste hierarchy* will be implemented.
- c The licence holder must plan to maintain the quality and protect the value of salvaged materials stored for collection.
- d The licence holder must agree to a project-specific collection plan for the segregation and collection of demolition waste in collaboration with the waste recovery service provider.

Explanation

For 8.1(b), the *waste hierarchy* means the preference for maintaining the value of demolition waste, by prioritising as follows (highest to lowest priority): *relocate for reuse* → *salvage for reuse* → *salvage for recycling* → *salvage for material / energy recovery* → *dispose*. “Salvage for reuse” includes, for example, doors, windows, weatherboards, flooring. “Salvage for recycle” includes, for example, framing for re-processing, concrete for aggregate.

For 8.1(c), systems may include, for example, covered bins or segregation areas, training of relevant people, regular visual inspections, containers and sheltered areas provided for materials.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- a copy of the WMP, that states the required target of 50% salvage rate from demolition waste materials and 70% diversion from disposal. The BRANZ REBRI online guidelines provide good-practice advice on planning for deconstruction, including developing a deconstruction plan that aims to maximise resource (material) recovery (refer <https://www.branz.co.nz>).
- a copy of the documented procedure that prioritises the relocation of demolition waste.
- evidence of systems in place to protect the quality of demolition waste materials, for example: marked-up site plans, or procurement receipts of bins or containers. The BRANZ REBRI online guidelines provide good-practice advice on waste separation and storage onsite (refer <https://www.branz.co.nz>).
- evidence of the plan agreed upon with the waste recovery service provider, for example; requirements included in contract documents, and/or a copy of the agreed responsibilities and the service schedule.

8.2 Practice

Criteria

- a The licence holder must ensure that bins and segregation areas on the project site have clear, effective signage.
- b The licence holder must ensure salvaged demolition waste materials are protected on site to preserve integrity and quality for reuse or recycling.

Explanation

At the initial verification audit, applicants must demonstrate how they will comply with these criteria. At each supervision verification audit, licence holders must provide evidence of how they have complied.

8.2(a) could be met by using ECNZ-licensed C&D waste recovery services.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- evidence of the segregation system signage in action onsite, for example: photos of segregation system signage (e.g. bin labelling) during use. The BRANZ REBRI online guidelines provide good-practice advice on waste collection labelling (refer <https://www.branz.co.nz>). WasteMINZ provides guidance on waste sorting and New Zealand's agreed waste stream colours, signage, and te reo Māori translations.

8.3 Demonstrated waste diversion

Criteria

For every project completed as part of the ECNZ-licensed service, the licence holder must:

- a demonstrate it has achieved the salvage rate target and diversion rate target set in the WMP required by 8.1(a).
- b measure and document all demolition waste generated.
- c document and report the salvage rate achieved.
- d ensure that all concrete demolition waste is reused.

Explanation

At the initial verification audit, applicants must demonstrate how they will comply with these criteria. At each supervision verification audit, licence holders must provide evidence of how they have complied.

The criteria in 8.3(b) and 8.3(c) could be met by using ECNZ-licensed C&D waste recovery services that meet all requirements of Module 1.

The Demolition Waste Generator licence holder must demonstrate that all waste is accounted for, which may require information from more than one waste recovery service provider.

Annual reporting for these criteria is required by 5.3(b). Only one, combined annual report is required.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by:

- evidence that the salvage rate was met for all projects completed under the licence
- the final measurements and record of all demolition waste generated by the licensed-service, including: the waste material salvaged, the waste sent to landfill, and the corresponding actual diversion rates
- evidence showing that all concrete waste generated was reused, including: the concrete accounted for in the WMP waste material inventory, the documented amount of concrete sold on for reuse, and evidence of the sale of concrete for reuse.

9 Requirements and notes for licence holders

Monitoring Compliance

Prior to granting a licence, the Trust will prepare a plan for monitoring ongoing compliance with these requirements. This plan will reflect the number and type of services covered by the licence and the level of sampling appropriate to provide confidence in ongoing compliance with criteria. This plan will be discussed with the licence applicant and when agreed will be a condition of the licence.

As part of the plan, the Trust will require access to relevant quality control and service delivery records and the right of access to service facilities. Relevant records may include formal quality management or environmental management system documentation (for example, ISO 9001 or ISO 14001 or similar).

The monitoring plan will require the licence holder to advise the Trust immediately of any non-compliance with any requirements of this specification which may occur during the term of the licence. If a non-compliance occurs, the licence may be suspended or terminated as stipulated in the Licence Conditions. The licensee may appeal any such suspension.

The Trust will maintain the confidentiality of identified confidential information provided and accessed during verification and monitoring of licences.

Using the ECNZ Label

Wherever it appears, the Label must be accompanied by the words 'C&D Waste Services' or 'Construction & Demolition Waste Services' and by the licence number eg 'licence No1234'.

The Label must be reproduced in accordance with the ECNZ programme's key line art for reproduction of the Label and the Licence Conditions.

Any advertising must conform to the relevant requirements in this specification, in the Licence Conditions and in the key line art.

Failure to meet these requirements for using the ECNZ Label and advertising could result in the Licence being withdrawn.

Appendix A: Comparison of Green Star C&D Waste Criteria with EC-59-19 C&D Waste Services

	Green Star requirements	EC-59 criteria that satisfy the Green Star criteria
Waste contractor	<p>The waste contractor must provide accurate monthly and cumulative waste reports that detail both the total weight of waste removed from their customers' construction sites, as well as the waste processing facilities where all loads are disposed.</p> <ol style="list-style-type: none"> 1 Customer reports = waste contractor disposal dockets (+/- 5%) 2 Waste contractor disposal dockets = waste processing facility records (+ - 5%) 	<p>Measurement: 5.1b, 5.2a Reporting: 5.2a, 5.3b, 5.3c, 5.3d</p>
WPF #1	<p>The WPF must hold current licenses or development consent for the activities it undertakes (for example storage, handling, transfer or processing of construction and demolition waste) by the appropriate regulatory authorities.</p>	<p>Licensed facility: 5.1 and 5.2c</p>
WPF #2	<p>The following requirements to support auditable and accurate reporting systems must be met to comply with this criterion:</p> <ol style="list-style-type: none"> 1 Clear separation of waste processing facility from landfill 2 Clear tracking system to separate residual waste from recyclables (weighbridge) 3 Certified weighbridge and operational procedures 4 Source and fate of inbound and outbound waste 	<p>Separation: 5.1b(iii) Tracking: 5.2(a) Licensed facility: 5.1, 5.2c Source, destination and reporting of waste: 6.1a, 6.3a</p>
WPF #3	<p>The WPF must undergo an independent annual facility-wide audit to establish and verify its</p> <ol style="list-style-type: none"> 1 Gross diversion rates of input waste from landfill; and 2 Percentage of residual waste output that is committed to landfill 	<p>Diversion rates: 6.3b Percentage: 6.3a</p>
WPF #4	<p>The WPF must make these performance figures publicly available or, at a minimum, make them easily available upon request from Green Star customers or waste contractors acting on behalf of Green Star projects.</p>	<p>Reporting: 6.3a Made available: 5.3b</p>