

The New Zealand Ecolabelling Trust

Proposed revised Licence criteria for

Concrete: Ready Mixed Concrete, Pre-cast Concrete, Concrete Products, Dry Bagged Mortars and Dry Bagged Plasters

Open for comment until July 4 2025

EC-43-25

The New Zealand Ecolabelling Trust
Office 503
48 Greys Ave
Auckland, 1010
New Zealand

Ph: +64 9 845 3330
Email: info@ecochoice.org.nz
Website: www.ecochoiceaotearoa.org.nz

Specification change history

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

DRAFT

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1 INTRODUCTION

Eco Choice Aotearoa (ECA) 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).

ECA operates to the ISO 14024:2018 standard "Environmental labels and declarations – Type 1 Environmental labelling - Principles and procedures" 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, reasonable 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 lifecycle, to differentiate product and services on the basis of preferable environmental performance.

The lifecycle 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 ECA licence applicants and is able to be measured and verified. As a result of this approach, criteria may not be included in an ECA specification on all aspects of the lifecycle of a product or service. If stages of a product or service lifecycle 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, (such as energy and waste) criteria may be set to require monitoring and reporting. These criteria are designed to generate information for future reviews of specifications.

The Trust is pleased to publish this ECA specification for Concrete: Ready Mixed Concrete, Pre-cast Concrete, Concrete Products, Dry Bagged Mortars and Dry Bagged Plaster. The specification has been published to take account of substances harmful to the environment, energy management and consumption of resources.

This proposed revised specification sets out the requirements that concrete and concrete products must meet in order to be licensed to use the ECA Label. The requirements include some environmental criteria and product characteristics that are generally applicable to a wide range of products.

Once finalised, 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 further review process for the specification.

Notes:

The Trust published its first ECA specification for Concrete in 2010. The specification was reviewed and revised in 2018 (the current version, with minor amendments in 2019, 2021 and 2023).

The Trust is now proposing another a review of EC-43 or Concrete. This review includes the following proposed changes:

- 1 Addition of Environmental Management Systems Criteria
- 2 Addition of Modern slavery and social accountability Criteria (including Appendix A)
- 3 Update to Hazardous Substances (Section5.5)
- 4 Update to Waste Management Criteria
- 5 Update to Energy Management and greenhouse gas emissions Criteria

The proposed revisions are to bring this specification in line with other, recently revised, ECA specifications. Where changes to the current requirements are proposed in this specification, they are shown as either red ~~strikeout~~ (for text proposed to be deleted) or red underlined (for new text).

The Trust invites comments from interested parties.

2 BACKGROUND

This specification covers ready mixed concrete, precast concrete such as tilt slab panels, premixed products (dry bagged mortar and dry bagged plaster), and concrete products such as concrete roof tiles and blocks.

While there may be differences in the products and manufacturing processes, the raw materials and potential environmental burden are similar.

In general terms, all of the products comprise the mixing of cement, aggregate, water and additives, and then curing of the concrete at ambient or low temperatures. The most important adverse impacts on the environment are related to the quarrying of raw materials, potential nuisance and health impacts from dust discharges, and discharges of high pH water to waterways. Manufacture of the cement and steel (where used) within concrete products have significant energy requirements and emit large amounts of carbon dioxide.

The products can be divided into five categories based on the extent of manufacturer control and final form of the product:

- Dry bagged mortar: a pre-mixed concrete-like product supplied to the end user in a dry bagged form (the end-user adds the water). Typically used for patching work and in bedding masonry units, tiles and other components.
- Dry bagged plaster: a pre-mixed surface coating material composed of mainly cementing material and fine sand (the end-user adds the water). For use over general masonry or concrete substrates.
- Ready mixed concrete: where the raw materials are mixed by the manufacturer and delivered to the end-user as a wet product.
- Precast concrete (such as precast concrete panels) which are supplied as a finished product to the end user or retailer.
- Concrete products: which include concrete tiles, masonry blocks and paving stones.

Dry bagged mortar and dry bagged plaster

Dry bagged mortar and dry bagged plaster involve the processing and blending of raw materials which are then bagged for supply to end users and retail outlets. The bagged pre-mixed products are commonly sold in hardware stores and are also used by commercial contractors and builders. Dry bagged mortar is the most common concrete product used at domestic properties for smaller jobs. There are two general types of dry bagged mortar products available. One is a general-purpose concrete product where water is added to the dry concrete and the material is mixed in a mixing bag, or concrete mixer. The second, a quick-set concrete-like product is used predominantly for fence posts and foundations, where the dry product is poured into the desired location which is then filled with water.

Dry bagged plaster products include pottery plaster which is a fine specialist plaster designed for use in the casting of moulds for ceramic products and plaster-craft replications and also a general purpose product to provide a finish over masonry, brick, concrete or rendered surfaces. To reduce the amount of raw materials required to be quarried and volume of cement used in dry bagged mortar, manufacturers are starting to use recycled concrete as an alternative to natural aggregate and fly ash is being used to replace cement.

The main impacts from dry bagged mortar and dry bagged plaster during manufacture and use include dust during manufacture, and high pH runoff during use. Due to the separation between the manufacturer and the user, consumer information is important to ensure end users are aware of potential impacts on the environment during use, and through disposal of unused or unwanted surplus product and packaging.

Ready mixed concrete

The biggest impacts from ready mixed concrete manufacture are the potential impacts from high pH runoff and dust at the ready mixed manufacturing site, which can cause environmental, nuisance, and health effects to adjacent properties. There is also potential for high pH runoff during pouring and curing of the concrete at the delivery site.

Ready mixed concrete is manufactured at plants, and delivered in concrete trucks. Due to the nature of the material, the manufacture of ready mixed concrete is undertaken at plants close to the delivery site. There are many companies manufacturing ready mixed concrete in New Zealand, from small companies to large construction product companies.

To reduce the amount of raw materials required to be quarried, ready mixed concrete plants are starting to use alternatives to natural aggregate with recycled concrete and glass either being used or proposed.

As the ready mixed concrete supplier only delivers the plastic concrete, they do not have any direct control over the use of the concrete. In addition, other materials may be used within the end use such as reinforcing steel bar or mesh.

The concrete supplier does control the additives to the ready mixed concrete. These may include admixtures (such as set-retardants, water reducers, shrinkage reducers), pigments and reinforcing fibres. The admixtures, pigments and fibres contribute less than 5 % by weight to the end product, and therefore specific criteria have not been developed in this specification. Admixtures, pigments and fibres are still required to meet the hazardous substance criteria in Clause 5.3.

Precast concrete

The manufacture of precast concrete such as tilt-slab concrete walls is undertaken within a specific manufacturing site, with the plastic concrete being either manufactured on-site or delivered from an adjacent ready mixed plant. The cast products are then cured on-site before delivery to the end-user. As the products are delivered finished, any reinforcing steel is included during the manufacturing process and is under the direct control of the precast concrete manufacturer.

As the products are delivered to the end-user in finished form, the environmental impacts are predominantly limited to the supply of raw materials and the manufacturing site. The biggest potential impacts at the manufacturing site are high pH runoff and dust which can cause both nuisance and health effects to adjacent properties.

Concrete products

As the products are delivered to the retailer or end-user in finished form, the environmental impacts are predominantly limited to the supply of raw materials and the manufacturing site. The biggest potential impacts at the manufacturing are high pH runoff and site dust which can cause both nuisance and health effects to adjacent properties. The manufacture of concrete products such as roof tiles and masonry blocks involves the blending of raw materials, with the products cast into moulds. The products are then cured within low temperature kilns (typically less than 100 °C or 190 °C for autoclaved concrete products).

Based on a review of currently available information, the following product category requirements will produce environmental benefits by encouraging more sustainable sourcing of raw materials, reducing the use of hazardous substances and their associated discharges and ensuring discharges to the environment are appropriately managed to minimise potential adverse effects. As information and technology change, product category requirements will be reviewed, updated and possibly amended.

3 INTERPRETATION

AS/NZS means Australian/New Zealand Standard.

ASTM means American Society for Testing and Materials.

ECA means Eco Choice Aotearoa.

Energy Management Programme means a program to achieve and sustain efficient and effective use of energy including policies, practices, planning activities, responsibilities and resources that affect the organisation's performance for achieving the objectives and targets of the Energy Policy.

GEN means Global Ecolabelling Network.

ISO means International Organisation for Standardisation.

Label means the Eco Choice Aotearoa Label.

Mortar means a pre-mixed concrete-like product supplied to the end user in a dry bagged form. It is a mixture of cement, aggregate and additives.

pH is a scale of numbers indicating how acidic or alkaline a water is. A pH of 7 is neutral, higher pH values are progressively more alkaline and lower pH values are progressively more acidic.

Plaster means a pre-mixed surface coating material composed of mainly cementing material and fine sand. In this specification, plaster is a general term used to refer to both internal and external (render) products.

Raw material means a material used in the manufacture of concrete.

4 CATEGORY DEFINITION

This category includes

- Ready mixed concrete, including:
 - ready mixed concrete delivered from a ready mixed concrete plant; and
 - ready mixed concrete manufactured in a temporary ready mixed concrete plant on the site at which the ready mixed concrete is intended to be used.
- Dry bagged mortar, which comprises a mixed product including cement, aggregate and additives, with only water required to be added by the end user.
- Dry bagged plaster, a pre-mixed surface coating material composed of mainly cementing material and fine sand, with only water required to be added by the end user.
- Precast concrete products comprising ready mixed concrete and reinforcing steel manufactured and cured at ambient temperature at a single site.
- Masonry blocks or pavers where the kiln temperature for curing of the blocks or pavers does not exceed 100 °C.
- Autoclaved Aerated Concrete products including both blocks and panels.

To be licensed to use the Label, the products must meet all of the environmental criteria set out in clause 5 and product characteristics set out in clause 6.

5 ENVIRONMENTAL CRITERIA

5.1 Legal requirements

Criteria

The product must comply with the provisions of all relevant environmental laws and regulations that are applicable during the product's life cycle.

Verification required

Conformance with this requirement shall be demonstrated by providing a written statement on regulatory compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by documentation identifying the applicable regulatory requirements and demonstrating how compliance is monitored and maintained.

Explanatory notes

Relevant laws and regulations could, for example, include those that relate to:

- Producing, sourcing, transporting, handling and storing raw materials and components for manufacture;
- Manufacturing processes;
- Handling, transporting and disposing of waste products arising from manufacturing;
- Transporting product within and between countries; and
- Using and disposing of the product.

The documentation required may include, as appropriate:

- Procedures for approving and monitoring suppliers and supplies; and
- Information provided to customers and contractors regarding regulatory requirements.

It is not intended to require licence holders to accept increased legal responsibility or liability for actions that are outside their control. The Trust's intention is to ensure any potential for environmental regulatory non-compliance associated with an ECA labelled product is managed to a level that minimises risk of reputation damage to the ECA label and programme.

5.2 Environmental management system or processes

The applicant / licence holder or manufacturer must have (or establish, if necessary) appropriate environmental management processes or an environmental management system (EMS), to manage the environmental impacts from the manufacturing of the product.

Verification required

Conformance with this requirement shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant / licence holder or manufacturer. The statement shall be supported by an EMS based on ISO 14001, or details of the processes for controlling hazardous substances, discharges to air, land and water or other relevant environmental impacts.

Notes:

The Trust has introduced this clause to bring this specification in line with other, recently revised, ECA specifications.

5.3 Modern slavery and social accountability

Criteria

- a The applicant / licence holder and manufacturer must have a publicly available policy / policies on human rights, diversity & inclusion, and anti-bullying. At a minimum, it should comprise:
- An explicit, commitment to respect all internationally recognized human rights standards – understood, at a minimum, as the International Bill of Rights and the International Labour Organization (ILO) Declaration on the Fundamental Principles (see below) and Rights at Work;
 - Stipulations concerning the company’s expectations of personnel, business partners and other relevant parties e.g. a code of conduct; and
 - Information on how the company will implement its commitment and monitor compliance with it.

Note: The Trust expects the applicant / licence holder and manufacturer to show that it is undertaking activities to create more equitable conditions for those affected by, or involved in, the sourcing and manufacturing of products and materials, supported by a publicly available document.

- b Where an applicant / licence holder and manufacturer has found instances of modern slavery in their business operations and or supply chains* in the past two years, there shall be evidence of corrective action.

- c In addition to the above, the applicant / licence holder and manufacturer shall consider:

- Providing information to confirm whether the requirements of Social Accountability International Standard, SA8000 have been considered;
- Being a Living Wage employer (or equivalent); and
- Having a senior member of its organisation responsible for social and environmental sustainability.

Note: From ILO Declaration on the Fundamental Principles and Rights at Work, there are the following core labour standards:

- Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87);
- Right to Organise and Collective Bargaining Convention, 1949 (No. 98);
- Forced Labour Convention, 1930 (No. 29);
- Abolition of Forced Labour Convention, 1957 (No. 105);
- Minimum Age Convention, 1973 (No. 138);
- Worst Forms of Child Labour Convention, 1999 (No. 182);
- Equal Remuneration Convention, 1951 (No. 100); and
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111).

*Supply chains refer to the products and services (including labour) that contribute to the ECA-licensed products and services. This includes products and services sourced in NZ or overseas and extends beyond direct suppliers.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant/licence holder. This statement shall be accompanied by documentation that:

- Copies of the relevant policies, procedures and plans; and
- Records demonstrating the plans are being effectively implemented (including monitoring results).

Explanatory notes

Information on the United Nations International Bill of Human Rights and the ILO Declaration on the Fundamental Principles and Rights at Work is provided in Appendix C.

Notes:

The Trust has introduced this clause to bring this specification in line with other, recently revised, ECA specifications.

5.4 Raw materials

5.4.1 Cement

Criteria

- d The cement used in the product shall meet the requirements of the ECA specification EC-42 for Portland Cement and Portland Cement Blends;
- e The cement used in the product shall consist of a minimum of 15% non-kiln material (excluding gypsum);
- f Licence holders must have and implement a formal process to increase the use of non-kiln material in the cement component. The process must consider to environmental benefits relevant to each product/batch or contract; and
- g Licence holders must report annually to the Trust on the volume of non-kiln material used in the cement component of the product, including:
 - Percentage and type of non-kiln material used in specific product/batches or contracts;
 - Results of any chemical analysis for contaminants undertaken on any non-kiln material used, or determined to be inappropriate.

Note 1: the specification does not require the testing of non-kiln materials for contaminants. However, if any testing is undertaken either voluntarily or as a requirement of a resource consent or permit, then the results are to be reported to the Trust.

Note 2: Non-kiln material (including fly ash) can be added at the cement manufacturing or blending facility to satisfy this criterion.

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 following:

- evidence to demonstrate the cement component of the product is licensed by ECA or an independent assessment report completed by a competent assessor to show the cement meets all the requirements of EC-42; and
- documentation on the composition of the cement component of the product and the type and quantity of non-kiln materials and records of any testing completed.

5.4.2 Virgin aggregate

Criteria

Quarries from which virgin aggregate materials are obtained for an Eco Choice Aotearoa licensed product must have and implement:

- Management plans including any policies and management procedures to minimise adverse effects from the following potential impacts:
 - noise;
 - vibration;
 - dust; and
 - discharges to surface water, groundwater, oceans or land.
- A quarry restoration plan (excluding authorised extraction of alluvial gravel from the active river bed where restoration on the completion of mining activities is not required).

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive or authorised representative of the aggregate supplier and countersigned by the Chief Executive or authorised representative of the applicant company on application and annually. This statement shall be supported by documentation, including:

- Copies of the relevant management plans; and
- Records demonstrating the management plans are being effectively implemented (including monitoring results).

5.4.3 Recycled aggregate alternatives

Criteria

- h Licence holders must have and implement a formal process to consider the use of recycled aggregate in products. The process must include a review of all possible recycled aggregate sources including any sources within a similar distance of the normal virgin aggregate sources.
- i Where recycled aggregate is available in the surrounding area, ready mixed concrete and precast concrete products shall use a minimum of:
 - 25 % recycled aggregate for concrete strengths up to and including 35 MPa; and
 - 10 % recycled aggregate for concrete strengths greater than 35 MPa.
- j Licence holders must report annually to the Trust on the volume of recycled aggregate used, including:
 - percentage of recycled aggregate used in specific product/ batches or contracts;
 - source of any recycled aggregate used; and
 - results of any chemical analysis for contaminants undertaken on any recycled aggregate used, or determined to be inappropriate.
- k Sources from which materials are obtained for an ECA licensed concrete product that undertake aggregate crushing on-site must have and implement management plans including any policies and management procedures to minimise adverse effects from the following potential impacts:
 - noise;
 - vibration;
 - dust; and
 - discharges to surface water, groundwater, oceans or land.

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 on application and annually. This statement shall be supported by documentation including annual reports on recycled aggregate use and records of the formal evaluation process.

5.4.4 Reinforcing steel in precast concrete products

Criteria

All steel rod or mesh used in reinforcing within precast concrete products must meet the ECA requirements for Steel Products in EC-41 Flat and Long Steel Products.

Note: This criterion only applies to steel used in precast items which have been assessed under this licence. The criterion does not apply to reinforcing steel used within in-situ concrete elements such as in-situ floor slabs.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. The statement shall be supported by a copy of the ECA certificate or an independent assessment report completed by a competent assessor demonstrating compliance with all criteria of EC-41 for the steel used.

5.4.5 Painted precast concrete products

Criteria

All paint used to coat concrete products must meet the ECA requirements for Paint EC-07.

Note: This criterion only applies to paint used in products such as concrete roof tiles which have been assessed under this licence. The criterion does not apply to paint applied by external parties not directly associated with the licence holder.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. The statement shall be supported by a copy of the ECA certificate or an independent assessment report completed by a competent assessor demonstrating compliance with all criteria of EC-07 for the paint used.

5.4.6 Fibres

Criteria

Licence holders must report to the Trust annually on the use of fibres in concrete products, including:

- Type of fibres used;
- Source of fibres; and
- The composition of the final concrete product, including proportion of fibres.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. The requirement for reporting is only required for concrete manufactured and sold under the licence. Reporting on the use of fibres in all concrete is not required under this requirement.

5.5 Hazardous substances

Criteria

- a The following substances or their compounds shall not be added to the product during the production process:
- Mercury;
 - Arsenic;

- Selenium;
 - Lead;
 - Cadmium;
 - Chromium IV and VI; or
 - Antimony.
- b No substance shall be used in the production processes that are classified as toxic, carcinogenic, harmful to the reproductive system or genetically harmful (excluding cement).
- c A publicly available document (example: safety data sheet or technical data sheet) which discloses all hazardous substances and chemicals of concern in accordance with the Globally Harmonized System(GHS).

Exempted from these requirements are impurities of the elements listed above which are contained in raw materials or components in trace levels (< 0.1 %) for each element.

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 documentation that:

- Lists all hazardous substances and products included in the concrete (including CAS No. where available);
- Identifies the classifications that apply to each substance.
- Includes a publicly available Safety Data Sheet (SDS) or Technical Data Sheet (TDS) may meet the requirements, provided it lists all hazardous substances in the product and other information to confirm that the requirements in a)-c) are met.. Hazardous substances should be identified in accordance with the New Zealand Health & Safety at Work Act and Hazardous Substances and New Organisms Act, or local equivalent legislation in the country where the product is manufactured. SDS for products sold in New Zealand must meet New Zealand legislative requirements. Hazardous substance classifications should be in accordance with the Globally Harmonised System (GHS).

Compliance with these requirements may be demonstrated by providing data on classifications under hazardous substances regulations in New Zealand as set out below:

- 6.1A, 6.1B or 6.1C (acutely toxic);
- 6.6A or 6.6B (toxic – mutagenic);
- 6.7A or 6.7B (toxic - carcinogen); and
- 6.8A or 6.8B (toxic - reproductive/developmental).

5.6 Water and water re-use

Criteria

- a The concrete product manufacturer must have and implement effective water management policies and procedures and/or a water management programme.
- b Licence holders must report annually to the Trust on water management, including:
- total water use;
 - breakdown of water sources including water sourced from the local water supply, on-site bores or recycled;
 - water use related to production; and
 - initiatives taken to reduce water use.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company on application and annually. This statement shall be accompanied by documentation that includes:

- Copies of the water management policies, procedures and programmes;
- Records demonstrating the policies or procedures are being effectively implemented (including monitoring results); and
- Annual reports on water use and management.

5.7 Discharge to water from manufacturing

Criteria

- a Discharges to the natural environment after reasonable mixing (natural water bodies, groundwater or ocean) shall not exceed the following criteria:

Pollutant	Allowable Range
pH	6 - 9

- b Discharges of contaminants to the natural environment (natural water bodies, groundwater, ocean or land) excluding those pollutants in the above table shall be demonstrated to result in acceptable and environmentally sustainable level of impact on the quality of the receiving environment.
- c The concrete product manufacturer must have and implement a management plan for discharges to surface water, groundwater, oceans or land.

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company on application and annually. The statement shall be supported by the following:

- Test results demonstrating that the above pH limit is being met;
- An independent assessment of quality of discharges and impacts on the receiving environment completed by a person or agency competent to complete such an assessment. The assessment may be based on the quality of discharges from the point at which the discharges from the site or any relevant combined or municipal waste collection and treatment system discharges to the natural environment; or from the plant in situations where the plant discharge is mixed with other organisations' waste streams and the combined waste stream and its treatment before it is discharged to the natural environment is outside the control of the plant or licence applicant and suitable information is not available on the quality of the combined discharge; and
- Copies of the relevant management plan and records demonstrating the management plan is being effectively implemented (including monitoring results).

5.8 Cement silos

Criteria

- a All cement silos shall be fitted with the following:
- Fabric filters to capture cement emissions during loading of the cement silos; and
 - Overfill sensors to detect overfilling.
- b All cement transfer shall be undertaken pneumatically and shall be fully enclosed.
- c There should be no visible emissions from the filters during loading.

Verification required

Conformance with this requirement 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:

- Information from the supplier of control equipment confirming that the equipment meets the criteria or evidence that the equipment required to meet the criteria is installed and operational (e.g.: photographs); and
- A copy of the plant's preventive maintenance plan for all the equipment required to meet the criteria.

5.9 Discharges to air

Criteria

Air emissions from point sources or air filters (excluding fabric filters on cement silos) shall not exceed the following limit:

Pollutant	Units	Maximum Allowable Concentration
Particulate Matter	mg/Nm ³	50

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company on application and annually. This statement shall be supported by the following information:

- Stack emissions testing results undertaken in accordance with the relevant ISO, USEPA or ASTM test methods to demonstrate compliance or information from the supplier of the control equipment confirming that the equipment meets the criterion; and
- A copy of the plant's preventive maintenance plan for all air emission control equipment.

5.10 Dust Management Plan

Criteria

The concrete product manufacturer must have and implement a dust management plan covering all areas of the operation including accessways, concrete plant and associated activities.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive or authorised representative of the applicant company on application and annually. This statement shall be supported by documentation, including a copy of the plant's dust management plan and records to show it is being effectively implemented.

5.11 For ready mixed concrete ONLY

5.11.1 Truck washing

Criteria

All ready mixed concrete trucks shall be washed out at a location where all wash water and wash solids are collected and re-used or disposed of to a licensed facility.

Verification Required

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

- A copy of the site layout plan showing designated truck wash areas,
- Delivery procedures stating that no truck washing is to be undertaken off the concrete manufacturing site; and
- Records of material disposed.

5.11.2 Truck driver training

Criteria

The ready mixed concrete manufacturer must ensure a training programme is in place to ensure all drivers are knowledgeable of procedures to minimise impacts on the environment in the event of a spill or potential discharge.

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive or other authorised representative of the applicant company on application and annually. This statement shall be supported by documentation, including a copy of the companies training programme for truck drivers and records of training.

5.12 Product information

5.12.1 Dry bagged mortar and dry bagged plaster

Criteria

The dry bagged mortar or dry bagged plaster manufacturer shall have consumer information available for users at point of sale, on packaging and by other means (e.g. on a website) on the potential impacts on the environment from the use of dry bagged mortar or dry bagged plaster. This must include instructions on appropriate use and actions to be taken to minimise the impact on the environment, describing actions to avoid contaminated water entering stormwater or surface water including:

- a The potential effects on the environment from the use and disposal of the product;
- b Methods for controlling runoff from washing and wetting of fresh product;
- c Procedures for washing equipment including advising that all washing should be undertaken over grass or bare land areas and that no washing should be undertaken where the washwater may flow to streams, the coast or stormwater;
- d Disposal of wash water from cleaning up containers and mixers;
- e Disposal of surplus or waste material;
- f Disposal of packaging; and
- g Environmental situations where the product may not appropriate.

The applicant must have, implement and periodically review a strategy for providing consumer product information. The strategy must include a sound rationale for determining which information should be provided by each means (e.g. point of sale, website, labelling).

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive or other authorised representative of the applicant company on application and annually. This statement shall be supported by documentation, including a copy of the manufacturer's consumer information and procedures to provide this to customers.

5.12.2 Ready mixed concrete

Criteria

The ready mixed concrete manufacturer shall have consumer information available on the potential impacts on the environment from the use of ready mixed concrete and instructions on appropriate use and actions to be taken to minimise the impact on the environment including actions to avoid contaminated water entering stormwater or surface water.

Verification Required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive or other authorised representative of the applicant company on application and annually. This statement shall be supported by documentation, including a copy of the manufacturer's consumer information and procedures to provide this to customers.

5.13 Waste management

Criteria

- a The concrete product manufacturer must have effective waste management policies and procedures and/or a waste management programme covering manufacturing operations. and
- b Licence holders must report annually to Eco Choice Aotearoa on waste management, including:
 - Quantities and types of waste recovered for reuse internally and externally;
 - Quantities and types of waste recycled internally and externally;
 - Quantities and types of waste disposed of to landfill;
 - Information on disposal locations for all wastes; and
 - Initiatives taken to reduce waste generation and improve recovery/recycling of waste.
- c Licence holders must have continuous improvement objectives and targets relating to the reduction of waste generation, and the increase of reuse and recycling rates over time, year on year (averaged over 5 years) . Any divergence from objectives or targets should be explained in the annual report.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by documentation that:

- Describes the waste management policies, procedures and programmes; and
- Includes annual reports to The Trust on waste generation and management.
- details the improvement objectives and targets relating to the reduction of waste generation and the increase of reuse and recycling rates (any divergence from objectives or targets should be explained in the annual report).

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by documentation that describes the waste management policies, procedures and programmes.

5.14 Energy management and greenhouse gas emissions

Criteria

The concrete product manufacturer must have effective energy management policies and procedures and/or an energy management programme covering the manufacturing plant.

- b. The concrete manufacturer must have effective energy management policies and procedures and/or an energy management programme.
- c. The concrete manufacturer and applicant / licence holder must have improvement objectives and targets to reduce energy use related to production (of ECA-licensed products), and associated greenhouse gas emissions on a year-by-year basis. Furthermore, ECA licence holders must publicly disclose a commitment to decarbonise between now and 2050 on a 1.5°C trajectory, with a significant reduction prior to 2030. Any divergence from objectives or targets should be explained in the annual report.
- d. Licence holders must report annually to Eco Choice Aotearoa on energy management, including:
 - Total energy use including fuel used for delivery vehicles;
 - energy use during transport* of raw materials (if the licence holder is the manufacturer), or transport of concrete that are imported from overseas manufacturers (if the licence holder is an importer/supplier).;
 - Breakdown of total energy use to types of energy used including energy from renewable sources;
 - Energy use related to production (i.e the embodied energy of a product);
 - Initiatives taken to reduce energy use and improve energy efficiency; and
 - Initiatives taken to calculate and reduce CO₂ emissions and greenhouse gas associated with energy use;
 - initiatives or requirements for suppliers or contract manufacturers.

* The Climate Action Toolbox (Business.govt.nz | Tools and resources) is a free tool that can be used to calculate transportation emissions. Information required for the inputs include weight of the raw materials / products (in tonne), the estimated distance of freight and the mode of transportation (rail freight, air freight, ocean freight).

Please note – an Environmental Product Declaration is **not** required to satisfy this clause.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by documentation that:

- Describes the energy management policies, procedures and programmes; and improvement objectives and targets for reduction of energy use related to production of ECA-licensed products and associated greenhouse gas emissions;
- confirms the licence holder has publicly committed to decarbonise between now and 2050 on a 1.5°C trajectory, with incremental reduction up to 2030 (any divergence from objectives or targets should be explained in the annual report); and
- Includes annual reports on energy use and management.

Where the licence holder cannot meet the criterion in (a) due to the use of alternative fuels, the licence holder must demonstrate that the criterion would be able to be met if standard fuels (e.g. coal) were used for the fuel component above the minimum requirements in 5.2.2 a) for use of alternative fuels.

Notes:

The Trust has updated the wording in this specification to bring it in line with other, recently revised, ECA specifications.

Verification Required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by documentation that describes the energy management policies, procedures and programmes.

6 PRODUCT CHARACTERISTICS

Criteria

The product shall be fit for its intended use and conform, as appropriate, to relevant product performance standards.

Ready mixed and precast concrete should comply with Table 2.5 of NZS 3104: Specification for Concrete Production.

Verification Required

Conformance with this requirement shall be demonstrated by providing a written statement of compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company on application and annually. This statement shall be supported by documentation:

- Identifying the applicable standards, specifications and or consumer/customer requirements;
- Demonstrating how compliance is monitored and maintained (including quality control and assurance procedures); and
- Records of customer feedback and complaints.

7 REQUIREMENTS AND NOTES FOR LICENCE HOLDERS

Monitoring compliance

Prior to granting a licence, The Trust will prepare a supervision plan for monitoring ongoing compliance with these requirements. This plan will reflect the number and type of products 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 production records and the right of access to production facilities. Relevant records may include formal quality management or environmental management system documentation (for example, ISO 9001 or ISO 14001 or similar).

Licence holders are required 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.

Use of Eco Choice Aotearoa Label

The Licence holder shall supply information on the proposed use of the label on products or promotional materials.

The Label may appear on the wholesale and retail packaging for the product, provided that the product meets the requirements in this specification and in the Licence Conditions.

Wherever it appears, the Label must be accompanied by the Licence Number e.g. 'licence No1234'. It is optional to include the spec name.

The Label must be reproduced in accordance with;

- The Licence conditions; and
- The Eco Choice Aotearoa programme's brand kit which includes examples of keyline art for reproduction of the Label.

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

Failure to meet these requirements for using the Eco Choice Aotearoa Label and advertising could result in the Licence being withdrawn

A1 International Bill of Human Rights

In December 1948, the United Nations General Assembly adopted the Universal Declaration of Human Rights (UDHR). In December 1966, the UN General Assembly adopted two international treaties that would further shape international human rights: the International Covenant on Economic Social and Cultural Rights (ICESCR), and the International Covenant on Civil and Political Rights (ICCPR). These are often referred to as “the International Covenants.” Together, the UDHR and these two Covenants are known as the International Bill of Human Rights.

The ICESCR and the ICCPR set out the civil, political, economic, social and cultural rights that everyone is entitled to:

ICESCR	ICCPR
<ul style="list-style-type: none"> • <u>Freedom from discrimination</u> • <u>Right to equality between men and women</u> • <u>Right to life</u> • <u>Freedom from torture</u> • <u>Freedom from slavery</u> • <u>Right to liberty and security of person</u> • <u>Right to be treated with humanity in detention</u> • <u>Freedom of movement</u> • <u>Freedom of non-citizens from arbitrary expulsion</u> • <u>Right to fair trial</u> • <u>Right to recognition before the law</u> • <u>Right to privacy</u> • <u>Freedom of religion and belief</u> • <u>Freedom of expression</u> • <u>Right of peaceful assembly</u> • <u>Freedom of association</u> • <u>Right to marry and found a family</u> • <u>Right of children to birth registration and a nationality</u> • <u>Right to participate in public affairs</u> • <u>Right to equality before the law</u> • <u>Minority rights</u> 	<ul style="list-style-type: none"> • <u>Freedom from discrimination</u> • <u>Right to equality between men and women</u> • <u>Right to work</u> • <u>Freedom to choose and accept work</u> • <u>Right to just and favourable conditions at work</u> • <u>Right to form trade unions</u> • <u>Right to strike</u> • <u>Right to social security</u> • <u>Right of mothers to special protection before and after birth</u> • <u>Freedom of children from social and economic exploitation</u> • <u>Right to an adequate standard of living</u> • <u>Freedom from hunger</u> • <u>Right to health</u> • <u>Right to education</u> • <u>Freedom of parents to choose schooling for their children</u> • <u>Right to take part in cultural life</u> • <u>Right to enjoy benefits of science</u> • <u>Right of authors to moral and material interests from works</u> • <u>Freedom to undertake scientific research and creative activity</u>

B2 ILO Declaration

From the ILO Declaration on the Fundamental Principles and Rights at Work, there are the following core labour standards:

- Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)
- Right to Organise and Collective Bargaining Convention, 1949 (No. 98)
- Forced Labour Convention, 1930 (No. 29)
- Abolition of Forced Labour Convention, 1957 (No. 105)
- Minimum Age Convention, 1973 (No. 138)
- Worst Forms of Child Labour Convention, 1999 (No. 182)
- Equal Remuneration Convention, 1951 (No. 100)
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111)