The New Zealand Ecolabelling Trust

Licence Criteria for

Paints

EC-07-18

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Specification change history

Minor clarifications, corrections or technical changes made since the specification was last reviewed and issued in September 2018.

Date	Version	Change
27/08/20	1	**Background:** clarify only some of the substances listed have the stated effects; and update discussion on titanium dioxide **Interpretation:** amend the definitions of conventional emulsion polymer binder and manufactured nanomaterial. **5.1 Legal requirements:** update to reflect new requirements in ISO14024. **5.2.1 Hazardous substances (including toxic VOC):** • Subheadings for human health and environmental effects moved to notes section. • Typical density of paints referenced in "note" revised based on licence holder feedback that was not received during the notification period. • Note added to highlight that these criteria restrict common aliphatic solvents and methylpyrrolidone. **5.2.2 Metals and their compounds:** exemption text updated to clarify the basis for the exemptions. **5.2.4 Crystalline silica**: the criteria have reverted to the criteria in EC-07-13 based on licence holder feedback about the effectiveness of the original criteria that was not received during the notification period. ***(Former)*5.2.5 Titanium dioxide:** criteria deleted as they no longer differentiate environmental preference. **5.2.5 Nanotechnology:** clarifications to definitions referred to in 5.2.5 and addition of carbon black and iron oxides to the list of exclusions to clarify that the criteria at 5.2.5 are not intended to apply to those substances. **5.3.1 Volatile organic compounds:** The VOC limits for exterior and roof primers have been reverted to the previous limits, based on feedback that the new lower limits would severely compromise product performance (film formation) in New Zealand's high salt environment.

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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 and maximising the beneficial 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 14024:2018 standard "Environmental labels and declarations – Type I 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, 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, (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 revised specification for Paints. The specification has been published to take account of substances and processes harmful to the environment, energy management, waste management, and end of life disposal of products and packaging.

This revised specification sets out the requirements that Paint products will be required to meet in order to be licensed to use the ECNZ Label. The requirements include environmental criteria and product characteristics. The specification also defines the testing and other means to be used to demonstrate and verify conformance with the environmental criteria and product characteristics.

This revised specification has been prepared based on an overview level life cycle assessment, information from specifications for similar products from other GEN-member labelling programmes, relevant information from other ECNZ specifications, publicly available information, and information provided by current licensees.

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.

2 Background

Some 22 million litres of decorative paint is sold each year in New Zealand[1]. The majority of this paint sold is manufactured in New Zealand.

Paints provide protective and decorative coatings for a wide range of surfaces. As protective coatings, paints can significantly prolong the useful life of structures and claddings. This generates environmental benefits by reducing resource use for repair and replacement.

Paint products can also have significant impacts on the environment throughout their lifecycle, including the release of environmentally harmful substances:

- during production of raw materials;
- during manufacture of the paint product itself;
- when paints are being applied;
- from painted surfaces; and
- when unused paint is disposed or paint is removed.

A range of harmful substances are used in paint products. Many of these present specific concerns for human health or the environment, for example:

- pigments containing metals that are toxic to humans or have ecotoxic effects in the environment;
- solvents, such as hydrocarbons, aromatic hydrocarbons, halogenated solvents, ethylene glycols and glycol ethers, some of which can have toxicity effects on human reproduction and development and can affect air quality (including ozone depletion or ozone formation);
- additives (e.g., biocides, surfactants, defoamers) that bring specific properties to the paint may include substances that are human carcinogens or mutagens or have other significant toxic hazards for humans or ecotoxic effects in aquatic environments;
- volatile organic compounds, some of which can react with nitrogen oxides in the air to form low level ozone, which is an oxidiser that irritates the human respiratory system and can affect sensitive vegetation and ecosystems; and
- nanomaterials have potential to provide improvements in product performance, however, there are significant uncertainties about the behaviour of manufactured nanoparticles in organisms and in the environment.
- raw materials that have particularly high environmental burden in terms of energy for manufacture or discharges to the environment (e.g., titanium dioxide).

Although use of some hazardous substances is necessary for efficacy of a paint product, restricting and minimising the content of the harmful substances in paint products (where possible), reduces the potential risks to human health and the environment during manufacturing, use and disposal of the paints.

[1] http://www.coating.co.nz/nz-coating-companies/

To reduce environmental and health impacts, chemicals should be non-toxic or environmentally innocuous / readily biodegradable, and the degradation products should not pose an unacceptable risk to human health or the environment. The principle of substituting hazardous substances with less hazardous ones is widely used in ecolabelling specification criteria, which restrict the use of chemicals according to their hazard classifications. It is an approach set out in the European discussion paper "The Path to Sustainable Use of Chemicals in Products: The European Ecolabel as a Signpost" (December 2008). The Trust has adopted this approach widely in other ECNZ specifications. Controlled hazard classifications include carcinogens, mutagens, chemicals toxic to reproduction, ecotoxic and bioaccumulative substances.

Manufacturing processes, including those for raw materials used in paints, can involve significant use of energy (with associated discharge of carbon dioxide contributing to global warming) and may produce significant volumes of hazardous wastes and discharges[2].

Titanium dioxide (TiO_2) is important for the performance of paints as it enhances opacity and may lead to an overall reduction of resource use as fewer coats of paint are needed to provide the required finish. There are environmental impacts associated with energy used during production of TiO_2 and emissions to air and water from the production processes. Research indicates that the energy used during production at newer TiO_2 plants (and associated CO_2 produced) may be offset by energy savings during use of the paint due to reduced demand for lighting. Painting roofs white can also reduce the urban heat island effect and demands for air conditioning. Life cycle work to support the European Ecolabel[3] identified production processes for TiO_2as one of the main impacts of paint products across their life cycle, where paint contains more than 10 % TiO_2. However, the emissions limits included in the EU Ecolabel, Nordic Ecolabel and Blue Angel specifications for paints are based on information gathered in 2006/2007 that is specific to production facilities in Europe. The impacts of those emissions are not as relevant in the NZ supply chain where the majority of TiO_2 comes from newer production plants in Australia. The Trust has therefore removed the emissions limits for TiO_2 that were included in the September 2018 version of EC-07-18, as communications with suppliers indicated that the limits did not differentiate environmentally preferable paint in the New Zealand supply chain. The Trust has decided not to revert to the previous criteria for TiO_2 (requiring reporting on emissions to air and water) as these also relate to emissions which do not differentiate environmental preferability in New Zealand. Therefore, this August 2020 version of EC-07-18 does not contain a set of criteria specifically for TiO_2, but criteria may be added at a later date when information to differentiate environmentally preferable TiO_2 used in the New Zealand paint market becomes available.

Packaging also has environmental impacts, depending upon the type of packaging used and disposal options. Reducing, reusing and/or recycling packaging will conserve valuable resources and reduce the volume of packaging entering the waste stream. In addition, measures to encourage reuse, recycling and correct disposal of unwanted paint will help to divert waste from landfills and reduce the adverse effects at the disposal stage of the product's life cycle.

Consumer behaviour is an important aspect that can affect the environmental impacts of paint products. Helping consumers to select the correct products and apply these correctly helps to

[2] National Center for Manufacturing Sciences (NCMS). 2011. Life Cycle Assessment of Volatile Organic Compounds (LCA-VOC) in Paints & Coatings Final Report. November. (Supported by USEPA Cooperative Agreement EM-83325701-1).
[3] European Commission Joint Research Centre. 2012. Revision of EU European Ecolabel and Development of EU Green Public Procurement Criteria for Indoor and Outdoor Paints and Varnishes, Ecolabel Background Report. June 2012.

ensure efficient use of resources. Advising on appropriate processes to clean equipment will reduce the impacts of discharges during paint application stages of the life cycle.

Based on a review of currently available information, this specification sets requirements that will provide an environmental benefit by:

- reducing the use and subsequent release of environmentally harmful substances to the environment at different stages of the paint product's life cycle;
- encouraging more efficient and effective use of products by consumers; and
- encouraging recovery, reuse, recycling and responsible disposal of unwanted paint and packaging.

3 Interpretation

APAS means the Australian Paints Approval Scheme

Aromatic hydrocarbon solvent means any organic solvent that has a benzene ring in its molecular structure.

ASTM means American Society for Testing and Materials.

Component means an intermediate product used in the manufacture of paint.

Conventional film forming emulsion polymer binder means an emulsion polymer binder that is not specifically manufactured to be a nanomaterial. Nano-sized particles within the binder are part of a continuous size distribution, and not manufactured to be discrete or distinct from the bulk polymer.

Energy Management Programme means a programme 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.

EPA means the New Zealand Environmental Protection Agency

Formulated or manufactured with refers to the preparation of the paint and not to the preparation of the components of the paint unless the components are specifically mentioned in the product specific requirements.

GEN means the Global Ecolabelling Network.

Halogenated solvent means any volatile organic compound incorporating halogens including fluorine, chorine, bromine and iodine.

HSNO means the New Zealand Hazardous Substances and New Organisms Act 1996.

Integral part means a necessary component which is intentionally included in the paint formulation.

ISO means International Organisation for Standardisation.

Label means the Environmental Choice New Zealand Label.

Manufactured nanomaterial is a material manufactured to have at least one dimension between 1 and 100 nm which exhibits functionality different from the bulk form of the material, is a new form of an existing material, has an abrupt change in properties due to the particle size, and is specifically manufactured to impart particular properties to the material. It does not apply to the small particle size fraction within a continuum of particle sizes, such as in conventional emulsion polymer binders, pigments such as carbon black, or iron oxides.

Paint means a liquid (generally pigmented) that is designed for application in single or multiple layers and forms a continuous film after application to decorate or protect surfaces, as well as to conceal surface irregularities. It also includes varnishes and stains, where:

- **varnish** means a liquid composition that is converted to a transparent or translucent, continuous film after application; and
- **stain** means a transparent, semi-transparent or opaque mixture of colouring matter (dyes and/or pigments) in a vehicle designed to colour and/or protect a surface by penetration, leaving practically no surface film.

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

Recycled or Recovered Content includes:

- **Post-consumer**: Material generated by households, or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
- **Pre-consumer**: Material diverted from the waste stream during a manufacturing process. Excluded is re-utilisation of materials such as rework, generated in a process and capable of being reclaimed within the same process that generated it.

Safety Data Sheet (SDS) means a document that describes the properties and uses of a substance, that is, identity, chemical and physical properties, health hazard information, precautions for use and safe handling information. These may also be called Material Safety Data Sheets (MSDS).

Solvent means the liquid portion of paint that dissolves the functional components and evaporates as the coating dries.

Volatile organic compound (VOC) means any organic compound which has a vapour pressure more than 0.1 mm Hg at 25 ^{o}C. Organic compounds with a boiling point greater than 250 ^{o}C, measured at a standard pressure of 101.3 kPa, will not be considered to be a VOC.

Waste Management Programme means a programme to achieve and sustain efficient and effective minimisation and disposal of waste including policies, practices, planning activities, responsibilities and resources that affect the organisation's performance for achieving the objectives and targets of the Waste Policy.

Where references are made in this document to published lists, standards, or documents, the reference should be read as referring to the most recent edition of these lists, standards or documents.

4 Category definition

This category includes:

- Water-based coatings – paints which have water as the primary solvent/diluent component;
- Recycled paint – paints where the recycled or recovered content constitutes more than 20% by weight of the final product.

It excludes wood preservatives or antifouling paints.

To be licensed to use the Label, the paint 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

a The licence applicant/holder must demonstrate how applicable legal requirements are met, including that all necessary consents and permits are in place.

b Where the licence holder is not the manufacturer of the paint product(s), the licence holder must have a documented requirement for the manufacturer to manage its compliance with applicable environmental regulatory requirements (for example supply contract conditions).

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 licence applicant/holder. This statement shall be supported by current documentation:

- Identifying the applicable regulatory requirements including specific obligations arising from permits, regulations, and plan rules;
- Demonstrating how compliance is monitored and maintained; and
- Copies of wording from supply contract conditions or other documented requirements for contract manufacturers (if applicable).

Verification of continued compliance with legal requirements will form part of the Licence Supervision Plan. This will include requirements, if any, for ongoing supervision assessment of downstream warehousing or other distribution activities.

Explanatory notes

Relevant laws and regulations applicable to the facilities that are manufacturing the ECNZ-licensed product and the licence holder's distribution and sales operations 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 or raw materials 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
- Information provided to customers and contractors regarding regulatory requirements.
- Evidence of a formal certified environmental management system (for example an ISO 14001 certificate) and supporting records on regulatory compliance (for example, copies of regulatory requirements registers, procedures to manage regulatory compliance, monitoring

and evaluation reports on regulatory compliance, internal or external audits covering regulatory compliance and management review records covering regulatory compliance)

- Copies of published environmental, sustainability and/or annual reports expressly addressing environmental regulatory compliance (for example verified environmental statements prepared under the European EMAS regulations)
- Audit reports completed by independent and competent auditors addressing regulatory compliance (for example, reports for other eco-label licences or reports from regulator audits)
- Participation by the supplier in the licence applicant's/holder's own supplier audit programme.

It is not intended to require licence holders to accept 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 ECNZ labelled product is managed to a level that minimises risk of reputation damage to the ECNZ label and programme.

5.2 Raw materials

5.2.1 Hazardous substances (including toxic VOCs)

Criteria

The paint or any tinter to be added to the paint (including at the point of sale) shall not be formulated or manufactured with:

a substances that are classified as carcinogenic, mutagenic or toxic to reproduction/development;

b formaldehyde and substances that have the potential to release formaldehyde during use;

c more than 0.1% by weight of the formulated paint, of any single substance classified as acutely toxic or toxic/very toxic;

d more than a total of 1% by weight of the formulated paint, of substances restricted by a)-c) which are also VOCs.

Note: based on the typical density of paints of 1.1-1.5 kg/L, the limit of 1 % highly toxic VOCs in sub-clause (d) is equivalent to 11-15 g/L highly toxic VOCs in the formulated paint.

e more than 2.5% by weight of the formulated paint, of any single substance classified as ecotoxic;

f more than a total of 5% by weight of the formulated paint, of substances classified as ecotoxic.

Notes:

- A list of the applicable prohibited or restricted classes of hazardous substances is provided in Table 1 (Appendix A).
- The requirements in (a) and (b) do not apply to trace levels (<0.1 % by weight) of substances reported in SDS to potentially be present as contaminants or impurities in raw materials or component substances.
- The use of raw materials containing crystalline silica is exempt from the requirements in (a). Crystalline silica is addressed in clause 5.2.4.

- Limits for control of ozone formation by VOCs are in Clause 5.3.1.
- Criteria (a), (b), (c) are intended to address effects on human health. Criteria (d) and (e) address effects on the environment.
- These criteria restrict common solvents in paints including methylpyrrolidone (which is toxic to reproduction/development), and hexane and heptane (which are ecotoxic). Ethylene glycol is restricted in 5.2.3.

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 licence applicant/holder. The statement shall be supported by documentation that:

- identifies all hazardous substances used in formulations (including CAS numbers and SDS);
- identifies the classifications that apply to these substances; and
- includes sufficient formulation information to confirm the limits set in the criteria are met for each paint product.

5.2.2 Metals and metal compounds

Criteria

The paint or any tinter to be added to the paint (including at the point of sale) shall not be formulated or manufactured with the following metals or their compounds: antimony, arsenic, barium, cadmium, cobalt, chromium VI, lead, mercury, or selenium.

Exempted from this requirement are:

- impurities of the elements listed above which are contained in raw materials or components in trace levels (0.1%) for each element.
- barium, antimony and cobalt in pigments, provided laboratory testing shows that the metal chromaphore is bonded within a crystal lattice and is insoluble. The following metal-containing pigments can be used without the need for testing:
  - barium sulphate
  - antimony nickel within an insoluble TiO_2 lattice
  - cobalt aluminate blue spinel
  - cobalt chromite blue-green spinel
- up to 0.05 % cobalt in driers in alkyd paints.

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 licence applicant/holder. This statement shall be supported by either:

- Documentation on raw materials (including Safety Data Sheets), formulation documentation, and documentation of procedures and standards for selecting pre- and post-consumer

recovered paints that are to be incorporated in a recycled paint that will effectively exclude paints suspected of having more than trace levels of the banned heavy metals; or

- Test reports from laboratories competent to carry out the relevant tests on components and/or finished products. Testing methods: ASTM D2348 (or equivalent) for arsenic. Atomic absorption spectroscopy procedures ASTM D3717, D3718, D3335, and D3624 (or equivalents) for other elements. If an equivalent test is used, the Trust may require details of the test method and its validation.

5.2.3 Solvents

Criteria

The paint or any tinter to be added to the paint (including at the point of sale) shall not be formulated or manufactured with:

a more than 20% by weight of hydrocarbon solvents;

b aromatic hydrocarbon solvents;

c halogenated solvents; or

d ethylene glycol.

Exempt from these requirements are trace amounts (<0.1%) that may be present in raw materials or components.

Verification required

Conformance with these requirements shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the licence applicant/holder. This statement shall be supported by formulation documentation, including SDS for raw materials.

5.2.4 Crystalline silica

Criteria

a The licence applicant/holder must have and effectively implement a purchasing policy to minimise content of crystalline silica in raw materials. The policy must include actions to:
   - obtain and maintain information from suppliers about the levels of crystalline silica present in raw materials being used in Environmental Choice labelled paint products;
   - to preferentially source and use raw materials with lower levels of crystalline silica for Environmental Choice labelled products.

b The licence holder must report annually to the Trust on the implementation of their purchasing policy on raw materials containing crystalline silica. These reports must include:
   - tabulated information recording all raw materials being used that contain crystalline silica, the level of crystalline silica in each material, the supplier of the raw material and reference to the supporting data source (SDS or other technical information provided by the supplier);

- records of research and correspondence carried out during the previous 12 months with suppliers regarding sourcing and purchasing raw materials with the lower crystalline silica levels.

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Offer or other authorised representative of the licence applicant/holder. The statement shall be supported by documentation that:

- describes or contains the purchasing policy;
- details raw materials containing crystalline silica and the level of crystalline silica present in each (e.g. SDS); and
- includes annual reports to the Trust on implementation of the purchasing policy.

5.2.5 Nanotechnology

Criteria

If the paint product is formulated with manufactured nanomaterials to impart particular properties to the product, the licence applicant/holder must:

a Clearly identify the presence of manufactured nanomaterials on the product Safety Data Sheet.

b Report annually to the Trust on the use of manufactured nanomaterials. The report must include:
  - A list of licensed products formulated with manufactured nanomaterials.
  - The specific property imparted to the product by the manufactured nanomaterial.
  - An update on any relevant research on the toxicology or environmental behaviour of the particular manufactured nanomaterial used.

The requirements in (a) and (b) do not apply to zinc oxide, titanium dioxide, carbon black, iron oxides or conventional film forming emulsion polymer binders (refer definition of manufactured nanomaterials, Section 3).

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Offer or other authorised representative of the licence applicant/holder. The statement shall be supported by documentation that:

- details products containing manufactured nanomaterials with examples of product Safety Data Sheets identifying the presence of manufactured nanoparticles; and
- includes annual reports to the Trust on use of nanotechnology.

5.3 Formulated paint

5.3.1 Volatile organic compounds

These VOC criteria address ozone formation only. VOCs that are harmful to human health are restricted by Clause 5.2.1 to 11-15 g/L.

Criteria

a Paint products shall not exceed the following Volatile Organic Compound (VOC) levels, expressed as g/litre wet paint.

Paint type	VOC limit (g/L wet paint)
Low sheen (interior; exterior)	50
Flat (washable interior; exterior)	50
Flat (ceiling)	50
Semi-gloss (interior; exterior)	60
Gloss (interior; exterior)	65
Stains and varnishes	85
Exterior timber primer	50
Interior sealer	50
Latex primer for galvanised iron and zincalume	45
Latex undercoat (interior; exterior)	50

b The VOC level in tinters shall not exceed 5 g/L.

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 licence applicant/holder. The statement shall be supported by calculations determining the VOC content as outlined below.

Calculate the total VOC content based on the formula and information provided by the suppliers of raw materials that meet the VOC definition.

Constituents added in quantities less than 0.5 % (by volume) of the total volume of the batch need not be taken into account in calculating the VOC content of the paint unless they are known to be essentially volatile materials.

Note

Products with a VOC content that is in accordance with the limits in 5.3.1 may display the text ‘reduced VOC content’ and the VOC content in g/L next to the ECNZ label.

5.3.2 Hazard classification

Criteria

a School paint (art supplies) must be classified as non-hazardous;

b All other paint must be non-hazardous or approved under the Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2017 issued by EPA under HSNO (or equivalent standard in force at the time of assessment).

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 licence applicant/holder. The statement shall be supported by documentation that demonstrates the paint hazard has been assessed and has been shown to be non-hazardous or within the scope of the Subsidiary Hazard Group Standard.

5.4 Waste management

Criteria

a The licence applicant/holder and/or paint manufacturer or supplier must have effective waste management policies and procedures and/or a waste management programme covering manufacturing operations.

b Licence holders must report annually to the Trust on waste management this may include:

- 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;
- quantities and types of waste burned internally for energy recovery;
- waste generation related to production;
- initiatives taken to reduce waste generation and improve recovery/recycling of waste; and
- initiatives or requirements for suppliers or contract manufacturers.

Verification required

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

- describes the waste management policies, procedures and programmes; and
- includes annual reports to the Trust on waste generation and management. The Trust will accept waste management reports prepared for other purposes (e.g. as part of internal, external or corporate reporting requirements).

5.5 Energy management

Criteria

a The licence applicant/holder and paint manufacturer must have effective energy management policies and procedures and/or an energy management programme.

b Licence holders must report annually to the Trust on energy management, this may include:

- total energy use;
- breakdown of total energy use to types of energy used;
- energy use related to production;
- initiatives taken to reduce energy use and improve energy efficiency;
- initiatives taken to calculate and reduce CO_2 emissions associated with energy use; and
- initiatives or requirements for suppliers or contract manufacturers.

Verification required

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

- describes the energy management policies, procedures and programmes; and
- includes annual reports on energy use and management. The Trust will accept energy management reports prepared for other purposes (e.g. as part of internal, external or corporate reporting requirements).

5.6 Packaging requirements

Criteria

a All paint containers must be made of materials that are able to be recycled in New Zealand (or the country to which the product is exported and sold).

b Primary and secondary packaging must not be impregnated, labelled, coated or otherwise treated in a manner, which would prevent recycling (i.e. PVC sleeves, metallic labels on plastic containers).

c All plastic packaging containers must be marked with the appropriate plastics resin identification code promulgated by Plastics New Zealand, or be marked in accordance with ISO 11496:2000(E) "Plastics – General identification and marking of plastic products" and ISO 1043-1 "Symbols and abbreviated terms: Basic polymers and their special characteristics".

d Licence holders must:

- be actively pursuing initiatives to include recycled content in packaging materials; and
- report annually to the Trust on the recycled content of packaging used and initiatives to increase the percentage of recycled content in packaging.

Verification required

Conformance with these criteria shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the licence applicant/holder. This statement shall be supported with the following documentation and evidence.

- Conformance with criteria (a) and (b) shall be supported by documentation from the packaging producer/supplier verifying the packaging is recyclable.
- Conformance with criterion (c) shall be demonstrated by providing samples or photographs of all plastic containers and components.
- The licence holder shall provide an annual report on recycled content, as required by (d).

5.7 User information

Criteria

a An up-to-date SDS must be readily available to consumers for each paint product.

b Information on environmentally sound use of paints (including cleaning methods for equipment and empty containers) and disposal of paints and containers (including information on paint recovery/product stewardship schemes) must be readily available to all consumers. This must include summary information on paint labels.

c Information must be readily available to assist consumers to select the most appropriate product type for their needs and to advise consumers on appropriate surface preparation and application methods.

d Product labels must comply with the requirements of the Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2017 issued by EPA under HSNO (or equivalent standard in force at the time of assessment) or the appropriate hazardous substance legislation for the country where the product is sold.

Verification required

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

- Copies of SDS for each paint product issued within the last 5 years
- Copies of labels and other consumer information
- Information on how consumer information is maintained and made available to consumers (for example on websites, point of sale and/or query “free phone” numbers).

5.8 Product stewardship

Criteria

a The licence applicant/holder and/or the manufacturer or supplier of paints must be actively participating in a product stewardship scheme that involves:

  – recovery of unwanted or unused paints from pre- and post-consumer sources;

  – reuse and/or recycling of recovered paint and paint containers; and

- promotion of the product stewardship scheme to customers.

b Licence holders must report annually to ECNZ on the performance of the product stewardship scheme, including:

- volume of pre-consumer and volume of post-consumer paint recovered;
- the % of recovered paint that was re-used and the means by which it was reused;
- the % of recovered paint that was recycled (either the paint and its pigments or by solvent recovery);
- the % of paint disposed to landfill;
- the percentages (by weight) of recovered paint containers that were reused, recycled or sent to landfill; and
- initiatives taken as part of the programme to increase the volume of recovered paint and reduce the % of paint and containers that are unable to be reused or recycled and that are therefore sent to landfill.

Verification required

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

- documentation that describes the product stewardship scheme; and
- annual reports on the performance of the product stewardship scheme.

6 Product characteristics

Criteria

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

b If the product is a roof paint that contains a dry film biocide, water collected from painted roofs must meet the New Zealand Drinking Water Standards (NZDWS) for the biocide used.

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 licence applicant/holder. This statement shall be supported by:

- Documentation identifying the applicable standards and or consumer/customer requirements;
- For part b), laboratory report showing that water from painted roofs will meet relevant NZDWS;
- Documentation demonstrating how compliance is monitored and maintained;
- Records of customer feedback and complaints.

Note: published international and national standards are available from:

- Standards New Zealand www.standards.co.nz
- Standards Association of Australia www.standards.com.au
- Australian Paint Approvals Scheme (APAS) www.apas.govt.au

7 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 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).

The monitoring plan will require the licence holder to advise The Trust immediately of any noncompliance with any requirements of this specification which may occur during the term of the licence. If 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

The Label may appear on marketing materials for the paint, provided that the paint meets the requirements in this specification and in the Licence Conditions.

Wherever it appears, the Label must be accompanied by the word “Paints” and by the Licence Number e.g. ‘licence No1234’.

The Label must be reproduced in accordance with the ECNZ programme’s keyline 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 keyline art.

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

Appendix A Hazardous Substances Classifications

Table 1 – Hazardous Substance Classifications

New Zealand HSNO Classes	Globally Harmonised System
Toxins	
6.1B or 6.1C	Acute Tox. 2 and 3, H330, H331
6.1B	Acute Tox. 3, H311
6.1B	Acute Tox. 3, H301
6.1A	Acute Tox. 2 and 3, H330
6.1A	Acute Tox. 1, H310
6.1A	Acute Tox. 2, H300
Ecotoxins	
9.1A	Aquatic Acute 1, H400
9.1D or 9.1B	
9.1D or 9.1C	
9.1D	Aquatic Acute 4, H413
9.1A	H410
9.1B	H411
9.1C	H412
Carcinogens, Mutagens and Reproductive Toxins	
6.6A	Muta. 1B, H340
6.7A	Carc. 1A and 1B, H350
6.8A	Repr. 1A and 1B, H360

NOTE: The United Nations' Globally Harmonised System of Classification and Labelling of Chemicals (GHS) aims to provide a single, international hazardous property classification system. The table above shows the (broadly) equivalent New Zealand HSNO Classifications and the United Nations' Globally Harmonised System (GHS) classification.

It is important to note that the HSNO Classifications and GHS are classification frameworks and the particular classifications applied to a substance may vary between jurisdictions (for example Europe, the United States and New Zealand each have their own agency with responsibility for assessing and classifying hazardous substances). Differences between classifications can be due to the weight placed on particular toxicity studies (i.e. a jurisdiction may consider that a study is flawed) or in the event that new information becomes available (i.e. differences in the timing of the classification or re-classification of a substance). Where there is a discrepancy between the classifications applied to specific substances in the different schemes, The Trust's appointed technical advisors will review supporting information regarding the classifications on a case-by-case basis to determine and recommend to The Trust how these discrepancies should be managed within the life cycle context of the relevant product category. Where appropriate, technical clarifications and changes, with accompanying explanation, will be included in the relevant specification.