



The New Zealand Ecolabelling Trust

Recycling for Imaging Consumables

EC-55-12

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Specification change history

Minor clarifications, corrections or technical changes made since the specification was issued in November 2012.

Date	Version	Change

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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 14024:1999 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 New Zealand Ecolabelling Trust Board is pleased to publish this specification for Recycling for Imaging Consumables. The specification has been published to maximise the environmental benefits of diverting consumables from waste streams and achieving consumable reuse and material recycling or beneficial re-use. The criteria in the specification take account of potential environmental impacts of processing activities and use of packaging in collection and distribution aspects of the services.

This specification sets out the requirements that Recycling for Imaging Consumables will be required to meet in order to be licensed to use the ECNZ Label. The requirements include environmental criteria and service characteristics. The specification also defines means to be used to demonstrate and verify conformance with the environmental criteria and service characteristics.

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This specification has been prepared based on an overview level life cycle assessment, information provided by the applicant company for an EC-34-08 licence and information from other independent sources identified by the ECNZ specification writers.

This specification will be 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

Used imaging consumables are a readily identifiable and potentially significant waste stream entering landfills. Industry sources¹ estimate that three tonnes per week or 209 tonnes per year of empty cartridges are sent to landfill in New Zealand; and that around 85% of used cartridges were being sent to landfill in 2006. There are opportunities and options to reuse some consumables, for example to refill or remanufacture printer and copies cartridges and to recover materials for recycling and other beneficial re-uses. Industry sources estimate that between 1 and 1.5 kg of solid waste is diverted from landfill for each cartridge that is reused.

Materials used in imaging consumables include non-renewable resources. Industry sources estimate that between 3-3.5 litres of oil is required to make a single new cartridge. Reuse of consumables and recycling of materials from consumables that are not able to be reused, can reduce demand on virgin resources. In the same way, reuse of packaging and procurement of packaging containing recycled materials and which is also able to be recycled, can help reduce demands on virgin resources and divert waste from landfill.

Collection services and any subsequent distribution (dispatch of consumables for reuse/remanufacture or materials for recycling) can also have impacts on the environment. Ensuring appropriate packaging and containment of consumables and materials is important to protect them from damage as well as to prevent any release or discharge to air, land and water. Appropriate handling and storage during processing of collected used imaging consumables and recovered materials is also important for the same reasons.

Based on a review of currently available information, the following product category requirements will produce environmental benefits by diverting waste from landfill and reducing demand of virgin resources. As information and technology change, product category requirements will be reviewed, updated and possibly amended.

3 Interpretation

ISO means International Organisation for Standardisation.

Label means the ECNZ Label.

OEM means Original Equipment Manufacturer.

Procedures means detailed formal procedures or simple process descriptions, as appropriate to the nature and scale of the operation and process.

¹ Cartridge World website www.cartridgeworld.co.nz accessed 14 March 2012, Inkworks website www.inkworks.co.nz accessed 14 March 2012, TRC company profile information.

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4 Category definition

This category includes services that:

- collect and sort used imaging consumables; and
- process, dismantle and/or dispatch these for reuse or recycling.

Imaging consumables include:

- toner cartridges;
- waste toner cartridges (waste collection units);
- inkjet cartridges;
- copier bottles; and
- imaging units.

To be licensed to use the Label, Recycling for Imaging Consumables must meet all of the environmental criteria set out in clause 5 and service characteristics set out in clause 6.

5 Environmental criteria

5.1 Legal requirements

Criteria

The collection and recycling services must comply with the provisions of all relevant environmental laws and regulations that are applicable to all aspects of the service.

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:

- collecting and transporting used imaging consumables;
- sites and operations used to sort and/or process collected used imaging consumables;
- producing, sourcing, transporting, handling and storing any raw materials and components required for sorting and/or processing used imaging consumables;
- handling, transporting and disposing of waste products arising from collection, transport, sorting or processing used imaging consumables; and
- transporting materials or waste within and between countries.

The documentation required may include, as appropriate:

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- 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.

5.2 Collection of used consumables

Criteria

The collection service must:

- accept all brands of used consumables, regardless of age or value;
- provide for collection from commercial client premises;
- provide either for collection direct from private residential premises or from collection points well distributed and accessible to potential residential service users; and
- be provided free or for minimal charge.

Note: In order to meet all of these requirements, a service provider may limit its service to a specific geographical area. If this is the case, any ECNZ licence granted by The Trust will identify the service's geographical limitations.

Verification Required

Conformance with these criteria 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 with the following documentation and evidence:**

- a description of the collection systems, including any geographical limitations; and
- records to demonstrate that all of the requirements of a-d are being met.

5.3 Customer information

Criteria

- The collection service provider must ensure information about the collection service is readily available for potential customers on the company's website and via customer contact, information services.
- Information about the collection service must include:
 - confirming that all brands and outlining what types of used consumables are accepted;
 - how the collection service can be accessed, including details of how to obtain collection boxes/envelopes and/or the location of collection points;
 - the cost of any collection service and how payment can be made; and

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- details about whether and how collected consumables are reused, remanufactured or recycled, and any residual materials are disposed.

Verification Required

Conformance with these criteria 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 with the following documentation and evidence:**

- copies of and/or links to information that is available on company websites; and
- copies of information that is available and provided through customer contact/service numbers or at point of sale/collection.

5.4 Beneficial re-use

Criteria

The collection and recycling service provider must have beneficial re-use options for all main components (including plastics, metals and toner residues) of consumables that are collected.

Verification Required

Conformance with this criterion 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 with the following documentation and evidence:**

- information on beneficial re-use options available; and
- evidence that main components are being processed and routed to beneficial reuses.

5.5 Processing of collected consumables

Criteria

- a Procedures² for sorting collected materials must ensure the maximum number of appropriate quality cartridges are separated for reuse/refill/remanufacturing, including:
 - measures to protect cartridges from damage that could make them unsuitable for reuse options; and
 - clear specifications on the quality and acceptability of collected cartridges for reuse options.
- b Procedures for dismantling used consumables that are not able to be reused must ensure that the maximum recovery and separation of materials is achieved that are suitable for recycling/reprocessing for other beneficial purposes, including:

² Procedures may include simple process descriptions.

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- mechanical or manual separation and sorting techniques as most appropriate to maximise recovery of usable materials;
 - sorting and storage facilities that provide for efficient and effective sorting and separate storage of component materials; and
 - measures to prevent or minimise the potential for cross contamination of separated materials.
- c Procedures for all stages of processing must ensure materials (including waste materials) are contained, secure and managed so as to avoid or minimise the potential for discharge of contaminants (particularly toner residues) to air, land or water, including:
- appropriate containment of processing area and location/integrity of storage areas/containers (for example impermeable surfaces and weatherproof coverings); and
 - effective spill containment and clean up equipment and procedures.
- d Procedures to manage, handle and store packaging used for collection and/or dispatch of consumables for further processing, must ensure that:
- the maximum reuse of packaging is achieved; and
 - the maximum recycling of packaging that is not able to be reused is achieved.
- e There must be clear procedures and/or training for staff involved in processing to ensure they are competent to complete the task they are responsible for.

Verification Required

Conformance with these criteria 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 with the following documentation and evidence:**

- copies or descriptions of procedures and/or processes;
- copies of specifications and contracts (which may include memoranda of understanding or other written agreements) with companies to whom consumables are being dispatched for reuse or component materials are being dispatched for recycling;
- details and descriptions (including for example photographs) of facilities, equipment and storage containers/areas; and
- information on staff training programmes.

5.6 Packaging requirements

Criteria

- a The collection and recycling service provider must have and effectively implement a packaging procurement programme and use packaging with the following objectives:
- providing the necessary level of protection to collected materials or materials being distributed for refill, reuse or remanufacture, to minimise damage that would prevent such reuse;

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- maximising the reuse of packaging material in the collection and distribution systems;
 - giving preference to ECNZ licensed packaging products and materials, where these are available and fit for purpose;
 - giving preference to purchasing and using packaging materials that have recycled content and maximising the percentage of recycled content; and
 - using packaging materials that are able, after re-use, to be recycled in New Zealand.
- b Licence holders must report annually to The Trust on packaging procurement and use including:
- data, descriptions and analysis demonstrating how the objectives have been achieved; and
 - targets and plans for ongoing delivery of the objectives.

Verification Required

Conformance with these criteria 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 with documentation and evidence that:**

- describes the packaging used and the procurement programme; and
- includes annual reports on packaging use and procurement.

5.7 Management systems

Criteria

The collection and recycling service provider shall have and implement a formal environmental management system, based on ISO 14001³ that covers:

- all of the requirements in this specification; and
- all of its collection and recycling activities.

Verification Required

Conformance with these criteria 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 with the following documentation and evidence:**

- a certificate issued by an independent and competent agency confirming compliance with the requirements of ISO 14001 or an equivalent management system certification (for example in New Zealand, Enviro-Mark diamond level); and
- copies of management system documentation and records that can be directly assessed by ECNZ assessors.

³ ISO 14001:2004 *Environmental management systems – Requirements with guidance for use*

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5.8 Tracking and reporting

Criteria

- a The collection and recycling service provider must implement tracking and reporting systems that are sufficient to ensure that:
 - materials are accounted for throughout the operation; and
 - records are sufficient to complete mass balance of the operation to provide basic reuse, recovery and recycling statistics.
- b The Licence holder must report annually to The Trust on basic materials balance statistics, including percentages of collected materials dispatched for reuse and/or for recycling or other beneficial use.

Verification Required

Conformance with these criteria 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 with documentation and evidence that:**

- describes tracking and records systems; and
- includes annual reports to The Trust on reuse and recovery/recycling statistics.

5.9 Energy management

Criteria

- a The collection and recycling service provider 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, including:
 - 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; and
 - initiatives taken to calculate and reduce CO₂ emissions associated with energy 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. **This statement shall be accompanied by documentation that:**

- describes the energy management policies, procedures and programmes; and
- includes annual reports on energy use and management.

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5.10 Waste management

Criteria

- a The collection and recycling service provider must have effective waste management policies and procedures and/or a waste management programme covering the service delivery operations.
- b Licence holders must report annually to The Trust on waste management, including:
 - quantities and types of waste disposed of to landfill;
 - waste generation related to service delivery; and
 - initiatives taken to reduce waste generation.

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, minimisation and management.

6 Product/Service characteristics

Criteria

The collection and recycling service for used imaging consumables shall be fit for its intended and advertised purpose and conform, as appropriate, to relevant service performance standards, including:

- the specifications (or other written agreements setting our requirements) set by cartridge OEM, refillers or remanufacturers and/or
- the requirements set by organisations accepting recovered materials for recycling or other beneficial uses.

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. **This statement shall be supported by documentation:**

- identifying the applicable standards and or consumer/customer requirements;
- demonstrating how compliance is monitored and maintained; and
- records of customer feedback or complaints.

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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 nature of the services covered by the licence and the level of sampling appropriate to provide confidence in ongoing compliance with criteria. This plan will be discussed with the licence applicant and when agreed will be a condition of the licence.

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

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

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

Using the ECNZ Label

Wherever it appears, the Label must be accompanied by the words “Recycling for Imaging Consumables” and by the Licence Number e.g. “licence No. 1234”.

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.

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