

## **GREEN CHOICE PHILIPPINES**

### **NELP-GCP - 2008017 PAPER ENVELOPE**

#### **1. ENVIRONMENTAL SCENARIO**

Each year, the estimated volume of envelopes produced numbers around 45 billion worldwide, mostly are produced by machines. Even with the advent of the electronic mail technology, the use of paper envelopes to hold documents is still prevalent elsewhere.

The environmental impacts associated with envelopes come from producing the paper used as the main raw material in business forms, the printing processes and the chemical components of inks, adhesives (hot melts, latex) and other materials used in the manufacture of envelopes. Other environmental concerns include the effects of some of these components on the down-stream recyclability of envelope, and effluent discharges from the manufacturing processes.

Based on the product life cycle information, product category requirements will produce an environmental benefit through: reduction in harmful emissions to air and water, reduction of waste going for disposal, efficient use of fiber, limiting the use of environmentally harmful chemicals, and reduction in energy use.

#### **2. DEFINITION OF TERMS**

##### **2.1. ADHESIVE**

A substance capable of holding or bonding materials together by surface attachment with sufficient strength for the objects to behave as one object; Adhesives may or may not be soluble in water.

##### **2.2. BLEACHED PULP**

Pulp which has been subjected to bleaching

##### **2.3. CATALOG ENVELOPE**

An envelope that can hold large documents not meant to be folded. These envelopes have an open and center seam construction. These are available in many materials including woven bond, kraft paper, etc. Main sizes are 9" x 12" and 10" x 13".

##### **2.4. CHEMICAL CONTROL ORDER**

Prohibits, limits, and regulates the use, manufacture, import, export, transport, processing, storage, possession and wholesale of priority chemicals.

##### **2.5. COMMERCIAL ENVELOPE**

An envelope with usually gummed flaps and is available with or without windows. Most common size is a No. 10 envelope which is 4 C" x 9 ½" in size.

##### **2.6. CONTINUOUS ENVELOPE**

An envelope available in several types including: conventional carrier mounted envelopes, special carrier mounted, shingle, and cross-web glued.

**2.7. DENR ADMINISTRATIVE ORDER 2005-05 (DENR AO 2005-05)**  
Toxic Chemical Substances for Issuance of Chemical Control Orders

**2.8. DENR ADMINISTRATIVE ORDER 2005-27 (DENR AO 2005-27)**  
Revised Priority Chemical List

**2.9. ENVELOPE**  
A paper product used mainly for filing or mailing purposes. It includes commercial catalog, continuous, expansion, extended flap, and outbound/return envelopes, and envelope/form combinations.

**2.10. EXPANSION ENVELOPE**  
An envelope constructed in various forms: open-sized, open-ended and accordion-pleated. These envelopes can hold items of various sizes for mailing and storing.

**2.11. EXTENDED FLAP ENVELOPE**  
An envelope with perforated flaps used for advertising, facilitating payment from customers and order forms and coupons.

**2.12. POST CONSUMER MATERIALS**  
The term used for finished products, packages or materials that have already served its intended end use and have been recovered or otherwise diverted from the waste stream for the purpose of recycling.

**2.13. PRIORITY CHEMICALS LIST (PCL)**  
A list of existing and new chemicals that the DENR has determined to potentially pose unreasonable risk to public health, workplace, and the environment

**2.14. PROCESS**  
Means the preparation of a chemical substance or mixture after its manufacture for commercial distribution:

1. In the same form or physical state or in a different form or physical state from that which it was received by the person so preparing such substance or mixture; or
2. As part of an article containing a chemical substance or mixture.

**2.15. PULP**  
The fibrous material, generally of natural vegetable origin, made ready for use in further manufacturing processes.

**2.16. RECYCLED FIBER OR SECONDARY FIBER**  
Any fibrous material that have already undergone manufacturing process and is being recycled for use as raw material for another manufactured product.

**2.17. REPUBLIC ACT 8970 (RA 8970)**  
Ban HABS Law

**2.18. SUSTAINABLY MANAGED FOREST**  
A forest managed to meet all existing regulations such that environmental, social and economic factors are balanced to meet the needs of the present without compromising the ability of the future generations to meet their needs.

2.19. **UNBLEACHED PULP**

Pulp which has not been subjected to bleaching

**3. SCOPE**

The criteria are applicable to paper made commercial envelopes, catalog envelopes, continuous envelopes, expansion envelopes, and extended envelopes.

**4. GREEN CHOICE REQUIREMENTS**

**4.1. Product Quality Performance**

The product shall comply with the performance requirements of the relevant Philippine Product Standards for its intended application as indicated in Table 1 or other internationally accepted standard.

**Table 1 – Applicable Philippine Product Standard for Paper Envelope**

Standard No.	Title
PNS/ISO 269:2002	Paper, board and pulps – Correspondence envelopes - Designation and sizes

**4.2. Product Environmental Requirements**

**4.2.1. Compliance to Environmental Regulations**

The applicant is required to comply with relevant environmental legislations. This includes production process, transport and disposal features of the product.

**4.2.2. Virgin Pulp**

When virgin pulp is used, the timber used:

- Shall be legally harvested according to the regulations of the producing country
- Shall be from a sustainably managed forest or waste wood, and/or compliant with the Forestry Stewardship Council standards or its equivalent

**4.2.3. Recycled Content**

The product shall contain at least 50% recycled fiber, including 20% post consumer material.

**4.2.4. Dyes, Pigments and Coatings**

- Product shall not contain phthalates, mercury, lead, copper, chromium, nickel, aluminum or cadmium and other substances listed in DENR AO 2005-05.
- Azo dyes or pigments which may release one of the amines listed in Table 2 below shall not be used.

**Table 2 – Azo Dyes and Pigments**

Name	CAS Number
4-aminodiphenyl	92-67-1
4-aminoazobenzene	60-09-3
Benzidine	92-87-5
4-chloro-o-toluidine	95-69-2

2-naphthylamine	91-59-8
o-aminoazotoluene	97-56-3
2-amino-4-nitrotoluene	99-55-8
p-chloroaniline	106-47-8
2,4-diaminoanisole	615-05-4
4,4'-diaminodiphenylmethane	107-77-9
3,3'-dichlorobenzidine	91-94-1
3,3'-dimethoxybenzidine	119-90-4
3,3'-dimethylbenzidine	119-93-7
3,3'-dimethyl-4,4'- daminodephenylmethane	838-88-0
p-cresidine	120-71-8
4,4'-methylene-bis-(2-chloroaniline)	101-14-4
4,4'-oxydianiline	101-80-4
4,4'-thiodianiline	139-65-1
o-toluidine	95-53-4
2,4-toluidinediamine	95-80-7
2,4,5-trimethylaniline	137-17-7
o-anisidine	90-04-0

- The product to which the label is applied must not be impregnated, coated or otherwise treated in a manner which would prevent recycling.

#### 4.2.5. **Bleaching Agent**

The recycled paper shall not be bleached with chlorine or halogenated bleaching agents.

#### 4.2.6. **Surfactants**

- The product shall not contain any hard surfactants defined in RA 8970
- Alkyl phenol ethoxylates (APEO) and alkyl phenol derivatives (APD) shall not be added to the product.

#### 4.2.7. **Glycol Ethers**

The product shall not contain any of the following glycol ethers listed in Table 1 or as specified in DENR AO 2005-27.

**Table 1: Glycol Ethers**

<b>Abbreviated name</b>	<b>Other names</b>
EGME	Ethylene glycol methyl ether, 2-methoxyethanol monomethylic ether, ethylene-glycol, methyl glycol, MG
EGMEA	Ethylene acetate, AMG, monomethylic ether acetate, ethylene-glycol
EGEE	Ethylene glycol ethyl ether, 2-ethoxyethanol, monoethylic ether ethylene-glycol, ethyl glycol, EG
EGEEA	Ethylene acetate glycol ethyl ether, 2-ethoxyethyl acetate, acetate ethylglycol, AEG
EGDME	Ethylene glycol dimethyl ether, 1,2-dimethoxyethane
DEGDEE	diethylene glycol diethyl ether, bis(2-ethoxyethyl)ether
DEGME	diethylene glycol dimethyl ether, bis(2-methoxyethyl)ether
TEGDME	Triethylene glycol dimethyl ether

#### 4.2.8. **Preservatives**

Preservatives in adhesives shall not be bioaccumulative. The requirement is imposed in order to reduce the environmental impact associated with the use of preservatives since these are often highly toxic to water-borne organisms.

- 1,2-benzisothiazolin-3-one such as proxel
- 2,4-dichlorobenzyl alcohol
- Formaldehyde
- chloracetamide
- 5-chloro-2-methyl-4-isothiazolin-3-one such as kathon CG
- orthophenylphenol
- orthononylphenol
- trichlorohydroxydiphenyl ether such as irgasan, triclosan

**4.2.9. Other Prohibited Substances**

The product shall not contain the following ingredients and its derivatives:

- 2-Butoxyethanol
- Alkylphenol ethoxylates
- Phthalates
- Halogenated solvents
- Substances listed in DENR AO 2005-05
- Substances listed in DENR AO 2005-27

**5. EVALUATION AND VALIDATION**

<b>PRODUCT CRITERIA</b>	<b>EVALUATION AND VALIDATION</b>
<b>4.1 PRODUCT QUALITY PERFORMANCE</b>	
<i>4.1.1 Quality Performance</i>	The applicant shall submit a certification from duly recognized/ accredited laboratories and/or certifying bodies.*
<b>4.2 PRODUCT ENVIRONMENTAL REQUIREMENTS</b>	
<i>4.2.1. Compliance to Environmental Regulations</i>	Submission of applicable licenses and permits to operate indicating the manufacturer's compliance with agreements on environmental regulations, applicable to the area where the plant is located**.
<i>4.2.2. Virgin Pulp</i>	The applicant shall submit a program and statement in writing signed by the Chief Executive Officer or its equivalent position and shall be accompanied with relevant documentations and samples**.
<i>4.2.3. Recycled Content</i>	
<i>4.2.4. Dyes, Pigments and Coatings</i>	
<i>4.2.5. Bleaching Agent</i>	The applicant shall submit a certification from duly recognized/ accredited laboratories and/or certifying bodies.*
<i>4.2.6. Surfactants</i>	
<i>4.2.7. Glycol Ethers</i>	
<i>4.2.8. Preservatives</i>	
<i>4.2.9. Other Prohibited Substances</i>	

\* Laboratories accepted by national or international accreditation bodies such as the Asia Pacific Laboratory Accreditation Cooperation (APLAC) or International Laboratory Accreditation Cooperation (ILAC)

\*\* Notarized documents

**6. PERIOD OF VALIDITY**

The product criteria shall take effect for three (3) years from the date of its approval, and subject to change or withdrawal by the **Green Choice Philippines-NELP Board**, if proven necessary at any period of time.

## **7. REFERENCES**

Blue Angel; Recycled Papers RAL-UZ 14

*DENR Administrative Order 2005-05: Toxic Chemical Substances for Issuance of Chemical Control Orders*

*DENR Administrative Order 2005-27: Revised Priority Chemical List*

*Republic Act 6969: Toxic Substances, Hazardous and Nuclear Waste Control Act*

Environmental Choice Program: Certification Criteria Document CCD-080: Envelopes

Green Seal; GC-08-Paper Products Used in the Preparation of Food.

Hong Kong Green Label Scheme; Product Environmental Criteria for Paper file box with Recycled Content GL-001-005.

Japan Environment Association; Eco Mark Product Category No. 113: Packaging Paper version 2.3 Certification Criteria.

New Zealand Ecolabelling Trust; License Criteria Packaging and Paperboard Products EC-10-07.

Nordic Labelling; Swan Labelling of Paper Envelopes-Supplementary Module version 4.2

PNS 269:2002: Paper, board and pulps – Correspondence envelopes - Designation and sizes

**GREEN CHOICE PHILIPPINES**  
National Ecolabelling Programme

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