ANNEX 8.7

Green Choice Philippines

GUIDELINES FOR APPLICATION FOR GREEN CHOICE CERTIFICATION

Section 1. The Green Choice Programme

I. BACKGROUND

The continuous development of policies and systems that aim to care for the environment and the creation of effective instruments for their implementation is a major responsibility of our government. While the world does not necessarily demand compliance to environmental standards related primarily to testing and measuring pollution through ISO (International Standards Organization) 14000 series, the Philippines has already adopted these systems to provide an option for concerned agencies to abide to sound environmental practices and procedures.

Standards of the ISO 14000 series are concerned with complex environmentally - oriented management, which includes Environmental Labelling, often called as Ecolabelling. A voluntary application with a third party certification body, the program usually identifies products that have less environmental impact, sets up environmental requirements and awards a special label to products that meet these standards. It is seen as an important market instrument used to complement mandatory laws and regulations for environmental protection set by the government.

The Green Choice Programme is the government's response on our need to change consumer preferences and practices, initiating a demand for environmental responsibility from all sectors of society.

When Republic Act No. 9003, also known as the "Ecological Solid Waste Management Act of 2000," was approved on 26 January 2001, the Ecolabelling Program (ELP) of the Philippines was given a legal basis. Article 4 of Section 27 states that "DTI shall formulate and implement a coding system for packaging materials and products to facilitate waste recycling and reuse." The Department of Trade and Industry (DTI), through its Bureau of Product Standards (BPS) and the Private Sector Participation in Managing the Environment – Environmental Management System Module (PRIME Module 3), adopted a plan for the development of the National Product Ecolabelling Program.

Clean & Green Foundation, Inc. (C&GFI) was designated Administrator of the ELP through a Memorandum of Agreement signed by the members of the ELP Board, headed by BPS-DTI and Environmental Management Bureau of the Department of Environment and Natural Resources, last 07 March 2001 at the CEO Suites, Makati City.

The Green Choice Programme intends to guide consumers to choose products that are environmentally sound; to encourage manufacturers to adopt processes and supply products that have less adverse environmental impacts; and to use the label as a "market-based instrument" to complement the government's environmental policy.

II. THE GREEN CHOICE LOGO

The ELP logo is a sphere divided into two parts. The dark blue left side represents the Earth, symbolizing the global nature of the movement. The green right side features a dark green leaf that embodies nature. At the center is a drop of clean water and a bloom that also symbolizes nature. A green band encircles the sphere where the name "Green Choice Philippines" appears.

The environmental consideration that the product category hopes to effect will appear below the Green Choice logo.

The GCP logo was designed pro bono by Perceptions, Inc.

Section 2. General Procedures of the Green Choice Programme

I. PURPOSE

In general, Green Choice endeavors to uplift consumers' consciousness on the environmental features of products. The logo is awarded to products that are certified to be less harmful to the environment, attesting environmental leadership. Hence, if consumers purchase environmentally preferable products due to label information, it is hoped that market forces will encourage producers and manufacturers to change their production processes to reduce environmental harm.

II. SCOPE

Products that are sold in the Philippines, regardless of their country of manufacture, can apply for a Green Choice License for the product category whose certification criteria has already been developed.

The application, and the eventual License, shall be product- and facility-specific. Separate applications shall be made for products covered by separate criteria. Likewise, separate applications shall be filed for same products but manufactured at different plant sites.

III. TIME FRAME

The Certification Process will take approximately 1 to 2 months, from the processing, site visits and product testing, evaluation and validation, to the approval of the ELP Board and awarding of the Green Choice License.

IV. REQUIREMENTS FOR CERTIFICATION OF GREEN CHOICE PRODUCTS

a. The applicant must be a manufacturer, importer or distributor of the product in good standing. For non-manufacturer applicants, the manufacturer's written consent must be presented.
b. The applicant must submit a Letter of Intent and fill up the Application for License to use the Green Choice logo and pay the corresponding processing fee.
c. Products applying for Green Choice License must meet the requirements and criteria set forth in the *Criteria for Certification*.
d. Applicant shall be able to confirm its capability to manufacture products consistently conforming to the criteria of a specific product category.
e. Applicant and product manufacturer (in case the manufacturer is not the applicant, a written consent of the manufacturer must be presented) shall comply with existing environmental laws, regulations and other related legislations.
f. Laws on quality, health, and safety must also be met. However, the ELP Program has the right not to issue Green Choice License despite quality, health, and safety compliance if the product causes environmental problems.
g. The Program Administrator has the right to request for supporting documents i.e. test results to verify applicant's claims.

V. DOCUMENTS REQUIRED FOR APPLICATION

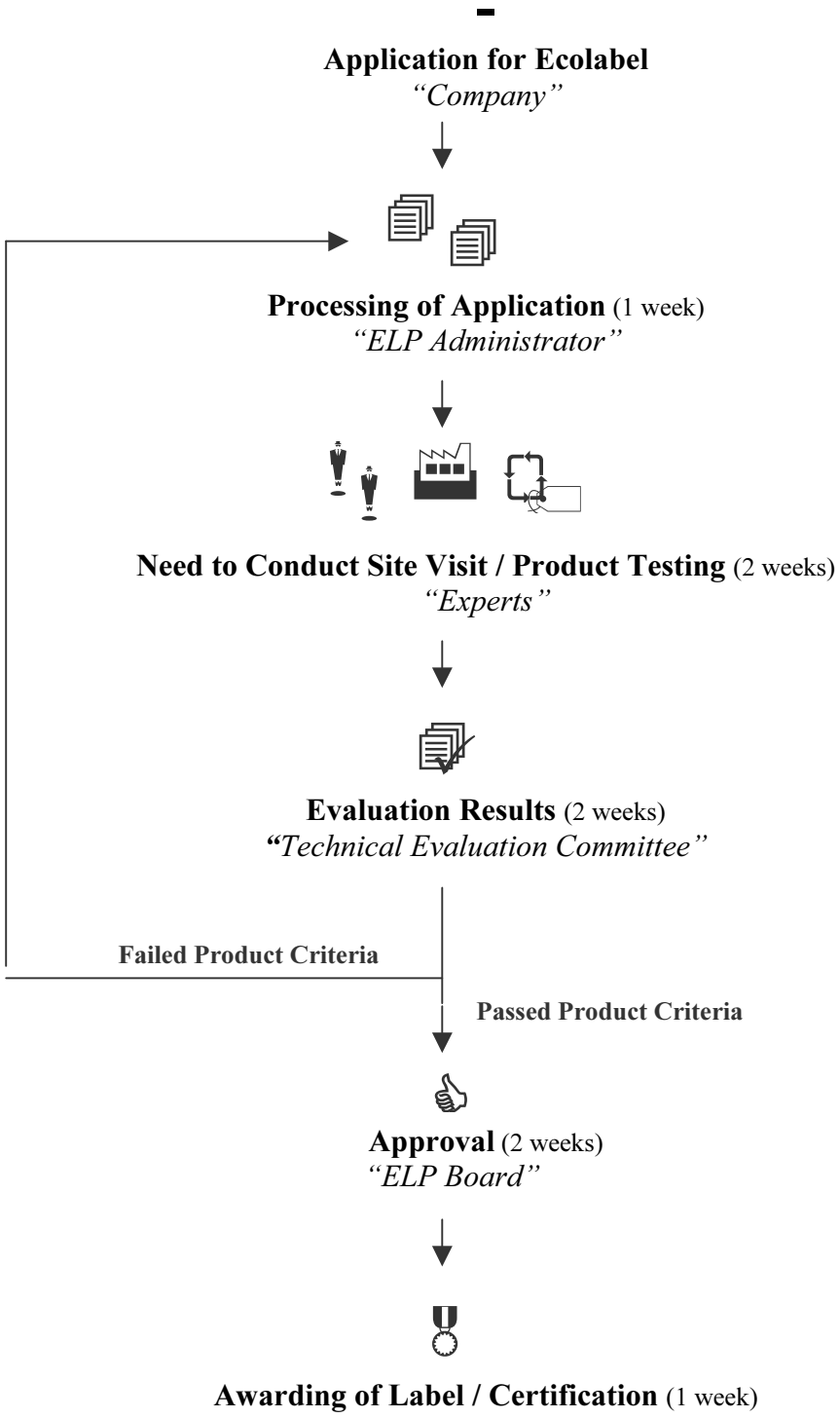
a. Letter of Intent
b. Filled out application form (one form for each product applied)
c. Articles of Incorporation or Business Name and Sub-Contracting Agreement
d. Company Profile and/or Annual Report
e. Verified true copy of the Official Receipt of payment of processing fee
f. Verified true copy of the various test results that may be required as part of the specified product criteria.
g. A sample product with the product catalog indicating its technical specifications. A color photograph of the product shall also be included.
h. Any other document or material that may be required to supplement the information regarding the product or for the periodic audit of its compliance to the criteria set forth.

The application should mailed or delivered directly to the following address:

The ELP Administrator
Clean and Green Foundation, Inc.
2F, Benlife Building, BPI Complex
Muralla Street, Intramuros, Manila

VI. GREEN CHOICE CERTIFICATION PROCEDURES

Figure 1



Evaluation of the application will be done according to the guidelines of the Green Choice Program. The product evaluation shall be based on the data contained in the documents submitted. The Program Administrator may require the applicant to present additional documents or materials if deemed necessary to facilitate better evaluation.

The application for the license to use the Green Choice Logo shall be made in triplicate on GCP Form 1, obtainable from the Program Administrator. It shall include an undertaking by the Applicant to abide by the Terms and Conditions of the License. The application shall be duly subscribed and sworn to by the applicant, or his duly authorized management representative, and shall be filed only with the Program Administrator.

The Program Administrator shall conduct an evaluation based on the requirements outlined in the Criteria for Certification. The Program Administrator may request for a third party expert examination, costs of which shall be borne by the applicant. The Program authorities will conduct site visits or product testing to validate claims of the applicant.

In case the product testing, evaluation and validation results fail to meet the criteria set for the product category, the applicant is given 90 days to resolve the results and thereafter submit the product for a re-evaluation.

It is expected and required of the applicant, in all stages of the evaluation, to cooperate with any activity pertaining to determining conformance to the product criteria. The applicant shall make available to the Program Administrator and/or designated representatives and auditors, such information and product samples as may be required for the evaluation of its application, or for the periodic audit of its environmental performance.

After evaluation, the Program Administrator shall then make a recommendation to the ELP Board.

VII. NOTIFICATION

The ELP Board, after the recommendation from the Program Administrator, shall notify the applicant of the results with a formal correspondence. The ELP Board shall issue the License or other notification deemed appropriate.

VIII. USE OF GREEN CHOICE LOGO

A “Use of the Green Choice Logo” contract shall be signed between the Applicant and the ELP Board. The right to use the logo shall be for a period of 3 years from date of issuance of the Green Choice License and shall be subjected to annual re-audits and when a formal complaint against the use of the Green Choice Logo arises.

An applicant awarded with the Green Choice License qualifies to use the Green Choice Logo. Successful applicants will receive a Green Choice Contract for the Use of the Green Choice Logo together with the notification of the result of the examination, and will be required to enter into this agreement with Green Choice Philippines within one (1) month of receipt of notice. This License signed by the ELP Board recognizes the product’s compliance to the Green Choice product requirements.

Terms for Use of the Green Choice Logo shall be complied with, including all relevant laws and regulations, as well as specifications provided in the guidelines for usage of the Green Choice Logo.

IX. SUSPENSION, WITHDRAWAL OR CANCELLATION OF LICENSE

The ELP Program has the right to suspend, withdraw or cancel the Applicant’s Contract to Use the Logo on any or all of the following grounds:

a. That the product bearing the Green Choice Logo fails to conform to the requirements of a specific criteria through surveillance audit and market monitoring among others.
b. That the licensee fails to comply with the Terms and Conditions of the license.

c. That the licensee fails to enter into the Contract for the Use of Green Choice Logo within one (1) month of receipt of the notification
d. That the licensee made false statements in connection with its application for or maintenance of the license.
e. That the licensee violates any relevant environmental, quality, health and safety laws.
f. That the ELP Board reasonably determines that suspension, withdrawal or cancellation of license is necessary for the appropriate implementation of the Green Choice Program.

The license shall be suspended, withdrawn or cancelled after the ELP Board has served the licensee a notification, stating therein the grounds for the contemplated action, granting the licensee the opportunity to be heard within fifteen (15) days from the date of receipt of notice.

In case when cancellation of license occurs, the applicant is compelled to remove all products bearing the Green Choice Logo from all distribution and commercial outlets within 15 days of receipt of notice.

X. FEES AND CHARGES

Fees and charges are to be paid by the local and foreign companies to Green Choice Philippines, unless otherwise stated, shall be in accordance with the Schedule of Fees. The fees and charges are subject to changes as may be necessary.

In the event of any untoward incident, the company shall be legally liable and responsible for the auditor during the entire duration of the audit.

XI. CONFIDENTIALITY

All information, either documented or verbal, disclosed to Green Choice Philippines shall be regarded as confidential and shall not be made available to a third party other than the members of the Green Choice Program personnel without the prior written consent of the applicant. Where information is required by law to be disclosed to a third party, the company shall be promptly informed in writing of the information provided and the details of the legal situation that may be disclosed.

The ELP Body and the authorized auditors shall be compelled by confidentiality agreements.

XII. IMPARTIALITY

The Program Administrator and its duly authorized auditors are to be free from any interest that might cause them to act in an impartial or non-discriminatory manner. If an individual or their employing company has provided consulting services to the Green Choice Program, their services shall be documented and approved to ensure that the impartiality of the process is not compromised.

The applicant and the Program Administrator's authorized auditors shall disclose to the Program Administrator, prior to the evaluation, any existing, former, or envisaged link between themselves. Auditors shall sign a Work Order to signify their impartiality and agreement of confidentiality.

Annex 1

Schedule of Fees (Local)

Item	Amount (PhP)	Payable to	Remarks
Application / Filing Fee	free		
Processing Fee	10,000.00	C&GFI	To cover processing, desk review of

			application papers, and two pre-certification audits
Audit / Assessment Fee*	Micro/Cottage – Small – Medium – Large –	C&GFI	Standardized fees will be pre-contracted to registered local auditors.
Laboratory Testing			As billed by Testing Laboratory
Transportation	As per arrangement	Transport company	Only if necessary
Food and lodging	As per arrangement	Hotel	Only if necessary
License Fee	Minimum – 20,000.00 Maximum – 200,000.00	C&GFI	To be paid prior to awarding of contract to the use of the logo. See formula used.
Annual Fee**	Micro/Cottage – Small – Medium – Large –		To cover the annual surveillance audit and continued use of the logo

Notes:

1) Formula for the computation of the license fee

   P = 20,000 + .018(N), with P not exceeding 200,000.00.

Where P is the license fee in Pesos and N is the amount of annual sales in pesos of the product.

2) Reference value to be used for N is the latest reported annual sales report.
3) C&GFI stands for Clean and Green Foundation, Inc.

* If company is ISO 14001 certified, auditing or surveillance may not be necessary.
** To include Audit/Assessment Fees

Annex 2

Size of Business Establishments (in terms of assets)

Establishment	**Assets**
1. Micro	up to PhP 100,000
2. Cottage	over PhP 100,000 up to PhP 1 Million
3. Small	over PhP 1 Million up to PhP 15 Million
4. Medium	over PhP 15 Million up to PhP 100 Million
5. Large	over PhP 100 Million

ANNEX 8.8

■ The Green Choice Logo: Sample of its Application Form, Contract and License

• Sample of the Form to apply for the Green Choice Logo

(To be filled up by the GCP Secretariat)

Project No.:	Receipt No.:	
Product Category No.:	Date Received:	Received by:

APPLICATION FOR LICENSE TO USE THE GREEN CHOICE LOGO

(Please read the attached Terms and Conditions before accomplishing this form. This form and all supporting documents must be submitted in TRIPLICATE to the Green Choice Secretariat.)

Confidential when completed

Date: _____

APPLICANT'S PROFILE			
Applicant (Company name)			
Address of Head Office			
Telephone No.		Fax No.	
Representative	Name: Position / Designation: E-mail Address:		
Type of Company	❑ Manufacturer ❑ Importer ❑ Distributor ❑ Trader	Industry Classification: ❑ PhP 15M & below ❑ PhP 15M to 100M ❑ PhP 100M & above	Number of Employees:
Address of Manufacturing Plant			
Contact Person	Name: Position / Designation: Telephone No.: Fax No.: E-mail Address:		
PRODUCT INFORMATION			
Applicable Green Choice Product Category No.			
Brand Name			
Type / Use		Model No. (if applicable)	

Brief description of the product	
Expected Annual Sales	
Date of Commencement of Sales (month/year)	

ADDITIONAL INFORMATION	
Type of Application ❑ New Application ❑ Renewal Date of Issuance of Previous Certification _____ ❑ Re-Application Date of Submission of Previous Application _____	Please indicate if your product is certified with any other kind of seal of recognition (e.g., PS Mark, Blue Angel, etc.) 1. _____ 2. _____ 3. _____ Please attach a copy of Certification or License of the abovementioned Seals.
Do you have an environment management system? ❑ Yes Type: _____ (Please attach a copy of Certification) ❑ None	Is there any material that has been provided or will be provided that is classified as commercially restricted? ❑ Yes Identified as Supplement Sheet No. _____ ❑ None
Number of Employees	Volume of Production during the previous year

ATTACHMENTS
The following are the documents submitted verifying the product's compliance with applicable laws or regulations stipulated in the certification criteria.

In the event the license is granted, we hereby agree to abide by all Terms and Conditions thereof and all the rules and regulations, including amendments thereto, prescribed for its use.

_____
Print Name and Signature

Subscribed and sworn to before me this _____ day of _____ 20___, affiant exhibiting to me his/her Community Tax Certificate No. _____ issued at _____ on _____.

_____
Notary Public

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

- **Sample of The Contract for Green Choice Logo**

(To be filled up by the GCP Secretariat)

Project No.:	Product Category No.:

CONTRACT FOR THE USE OF GREEN CHOICE LOGO

The **CLEAN & GREEN FOUNDATION,INC**., in its capacity as Program Administrator with registered official address at 2/F Benlife Building, BPI Complex, Muralla Street, Intramuros, Manila, represented by its Executive Director, IMELDA P. SARMIENTO, hereafter called the **"Administrator",**

and

_____ (name of company), in its capacity as manufacturer/importer/distributor/trader with registered business address at _____, represented by _____ (name of representative), hereafter called the **"Licensee"**,

have agreed to enter into this **Contract for the Use of the Green Choice Logo**, subject to the Conditions specified below:

1. The Licensee shall ensure that its production arrangements for the certified product and associated environmental performance standards detailed in the attached Product Criteria for _____ are maintained in accordance with the requirements of Green Choice Philippines.

2. The Licensee shall keep the Administrator informed of any significant changes to its certified product, in particular of any changes in design or composition which would affect its environmental performance characteristics.

3. The Licensee shall give the Administrator and its authorized auditors admittance and assistance in the verification and surveillance of the Green Choice Logo.

4. In order to maintain certification, the following conditions must be fulfilled:

   The Administrator must:

   - Arrange periodical verification of the product and/or at the product manufacturing facility; and
   - Periodically confirm that certification should be continued.

   Licensee must:

   - Make available product and production records for review;
   - Use logos and marks in accordance with the documented requirements;
   - Comply with the Certification Program requirements as advised from time to time by the Administrator;

- Have periodical verifications as agreed with the Administrator at product and project facilities;
- Implement all corrective action as agreed with the Administrator;
- Pay all license fees;
- Advise the Administrator promptly (within 30 days) of any changes to the Licensee's product, associated manufacturing techniques or activities that may affect certification; and
- Maintain a record, accessible to the Administrator, of all customer complaints, environmental monitoring records and corrective action relating to the certified product.

5. The Administrator may conduct additional verification activities in accordance with the certification contract to maintain the certification if the Licensee changes its products, or if the Administrator is advised of significant problems with the Licensee's production system.

6. The Licensee shall be entitled to use the Green Choice Logo in accordance with the "Guidelines for the Use of the Green Choice Logo". The Logo should not be used in an unauthorized manner.

7. The Licensee shall ensure to:
   - use the Green Choice Logo in a way that could imply that the product or the company itself has achieved certification under the requirements of Green Choice Philippines; or
   - use the Green Choice Logo in a way that could be interpreted by any ordinary customer as indicating that the certified product or service conforms to a product standard, or that it is inherently better or of higher quality.

9. If the Licensee fails to meet any of the conditions of certification listed in the License, the Administrator shall be entitled to suspend or withdraw the License

Signed this _____ day of _____, 200_ at the _____.

_____	_____
(Name of Licensee Representative)	**IMELDA P. SARMIENTO**
(Position, Licensee)	Executive Director, C&GFI

NOTARIAL ACKNOWLEDGMENT

BEFORE ME, a notary public, this _____ day of _____, _____ personally appeared:

Name	Comm. Tax No.	Date/Place

Imelda P. Sarmiento
known to me and to me known to be one and the same persons who executed the foregoing contract, and each acknowledged that the same is their respective free and voluntary act and deed.

WITNESS MY HAND AND SEAL on the date and place abovewritten. Doc. No. _____
Page No. _____
Book No. _____
Series of _____

- **Sample of The Green Choice Logo License**

LICENSE TO USE GREEN CHOICE LOGO

LICENSE NUMBER: xxxxxxxxxxxxx

PRODUCT CATEGORY

Issued to:

Scope: **xxxxxxxxx**

Standard:

Site Address: **xxxxxxxxxxxxxx**

Initial Certification. Date:

Term of Licence:

Re-certification Date:

JESUS L. MOTOOMULL
Chairman
Green Choice Philippines

IMELDA P. SARMIENTO
Executive Director
Clean & Green Foundation, Inc.

ANNEX 8.9

■ Establishment of Criteria for products

• Tissue paper Criteria

Tissue Paper (PC-0002)

Technical Working Group 0002 meetings were held on August 2 and Sep 5, 2002 to have brought about the tissue paper criteria. Dr. Erlinda L. Mari from the Department of Science and Technology (DOST) of the Forest Products Research and Development Institute led the TWG. TWG 0002 members are followings:

TWG member

Mr. Patrick Wee:	Asia Paper Industrial Corporation
Ms. Jenny Perez:	Environmental Science Program, Ateneo de Manila University
Ms. Elenida Basug:	DENR-EMB Environmental Education & Information
Mr. Harry Quiaoit:	DENR-EMB Environmental Education & Information
Ms. Cora Castro:	Bureau of Product Standards, DTI
Mr. Isabelito Antonio:	Kimberly Clark Philippines
Mr. Roger Guzman	Philippine Association of Tertiary Level Education/ Institution in Environmental Protection & Management
Ms. Ma. Pilar Carmona:	Quezon City Science Multi-Purpose Cooperative
Ms. Juanita Abaquin:	Zero Waste Recycling Movement of the Philippines
Mr. Dominic Romero:	SCA Hygiene Products Corporation
Ms. Editha Cagaoan:	3rd Wind Paper Mills, Inc.

- **Details of Tissue Paper Criteria**

Environmental Scenario

In 2001, paper industry profile recorded paper production at 1,137,000 metric tons, about seven percent (7%) of which is attributed to tissue paper products. The apparent consumption per capita of paper in the Philippines is 16 kilograms.

The significant environmental impact of tissue paper products can be credited to the extraction of virgin pulp as the prime material that, in effect, could contribute to the continuous degradation of the forest ecosystem. Likewise, in most paper mills, the processing phase consumes no less than 60 cubic meters of fresh water per ton of tissue paper, which could pose a serious threat to the dwindling water resource supply. Considering further the equivalent energy usage, effluents and sludge discharges, as well as the possible health risk in the production, efforts have to be drawn to improve the impact of tissue paper products to the environment.

Definition of terms:

1. Tissue paper – a thin, soft absorbent paper, made from cellulose fibrous material with close and even formation, and intended for sanitary purposes.
2. Toilet/Bathroom Tissue – a tissue paper intended for sanitary use in toilets/ bathrooms.
3. Facial Tissue – a tissue paper used especially as a disposable handkerchief, such as for removing cosmetics and dirt from the face.
4. Table Napkin – a tissue paper used at tables during meals to wipe fingers and protect clothes.
5. Percent recycled pulp – the percentage ratio of recycled fiber to total pulp material (virgin plus recycled pulp)
6. Virgin pulp – fibrous material separated from wood or other plant material by chemical or mechanical means for the manufacture of paper and paperboard.
7. Recycled fiber (Otherwise termed as secondary fiber) – any fibrous material that has already undergone a manufacturing process and is being recycled as the raw material for another manufactured product.
8. Wet strength – ability of paper to retain its strength when wet.
9. Fluorescent whitening agent – a chemical additive that fluoresces in sunlight and visually enhances the whiteness of paper.
10. Suitable packaging material – material that can maintain the homogeneity of the packaged product. It shall be hygienic and can be recycled.

11. Industrial tree plantation – any forest land exclusively planted to tree crops primarily to supply the raw material requirements of existing or proposed wood processing plants and related industries.
12. Sustainable forest management – the system of managing forest land and resources to secure productivity for the present without undue undesirable effects on the physical and social environment that would jeopardize tomorrow's resources.
13. PNS 72 – Philippine National Standards for Paper, Board and Pulps – Facial Tissue Paper
14. PNS 73 – Philippine National Standards for Paper, Board and Pulps – Toilet Tissue Paper

Scope

These Criteria apply to tissue paper products such as toilet tissue, table napkin, and facial tissue.

Green Choice Requirements

To carry the *Green Choice Philippines* seal, a product must meet the following requirements.

I. Bathroom/Toilet Tissue

A. Quality Criteria

1. The product shall be made of not less than 60 % recycled fiber.
2. The product shall be produced without toxic fluorescent whitening agents.
3. The product shall have the physical properties as determined by the Philippine National Standard for toilet Paper (PNS 73).

B. Environmental Criteria

1. The production process, transport and disposal features of the product shall meet the requirements of all applicable environmental laws and regulations.
2. Volume of fresh water used in the production must not exceed 60 cu. m. /ton of tissue paper products.
3. The product shall not be manufactured using dyes and pigments containing heavy metals.

II. Table Napkins

A. Quality Criteria

1. The product shall be made of not less than 60 % recycled fiber.
2. The product shall be produced without toxic fluorescent whitening agents.
3. The product shall have the following physical properties:

   PH Level: 4.5, min.

   Wet tensile strength: 0.04 kN/m, min.

   Grammage: for single ply – 20 g/m^2

   For two & three ply – 14 g/m^2 per ply

B. Environmental Criteria

1. The production process, transport and disposal features of the product shall meet the requirements of all applicable environmental laws and regulations.
2. Volume of fresh water used in the production must not exceed 60 cu. m. /ton of tissue paper products.
3. The product shall not be manufactured using dyes and pigments containing heavy metals.

III. Facial Tissue

A. Quality Criteria

1. The virgin pulp material shall come from industrial tree plantations and/or sustainably managed forest.
2. The product shall be produced without toxic fluorescent whitening agents.
3. The product shall have the physical properties as determined by the Philippine National Standard for Facial Tissue (PNS 72)

B. Environmental Criteria

1. The production process, transport and disposal features of the product shall meet the requirements of all applicable environmental laws and regulations.
2. Volume of fresh water used in the production must not exceed 60 cu. m./ton of tissue paper products.
3. The product shall not be manufactured using dyes and pigments containing heavy metals.

Other Requirements

1. **Packaging**
   1.1. Each roll or packing unit shall be fully wrapped with paper or other suitable packaging materials in the same type/class and size.
   1.2. Each roll or packing unit shall contain the total number of sheets or total length of roll not less than the defined number on the label.

2. **Marking and labeling**
   2.1. On the packaging shall appear *"Made from __ % ___. Please dispose of your waste properly."*
   2.2. Each roll or packing unit shall inform the consumers in letters, numbers or symbols about the following:
      2.2.1. Intended use (e.g. toilet/bathroom tissue, table napkin or facial tissue)
      2.2.2. Type/class
      2.2.3. Sheet size (width x length) in millimeters
      2.2.4. Total number of sheets per roll or pack
      2.2.5. Manufacturer's name or plant name or trademark including company address, phone number and/or e-mail address
      2.2.6. Manufacturing country

Effectivity:

These 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 – ELP Board,* if necessary at any period of time.

EVALUATION & VALIDATION METHOD:

(1) Regarding quality criteria I.A.1 and II.A.2, data issued by the paper producer certifying the percentage of recycled paper in the pulp mixture shall be submitted.

(2) Regarding quality criteria I.A.2, II.A.2, and III.A.2, in case fluorescent whitening agent is used, a certificate by the paper producer showing the non-toxicity of the fluorescent whitening agent and/or a certificate from the chemical supplier showing the safety of the material shall be submitted.

(3) Regarding quality criterion I.A.3, II.A.3, and III.A.3, data from recognized testing laboratories showing conformity of the products with the specified property standards or the corresponding standards (Philippine National Standards) shall be submitted.

(4) Regarding quality criterion III.A.1, a certificate/document issued by the pulp supplier/paper producer showing the source of the raw material for the virgin pulp used shall be submitted.

(5) Regarding environmental criteria I.B.1, II.B.1, and III.B.1, applicable licenses and permits to operate indicating the manufacturer's compliance with agreements on environmental regulations applicable to the area in which the plant is located shall be submitted.

(6) Regarding environmental criteria I.B.2, II.B.2, and III.B.2, data issued by the paper producer certifying the volume of fresh water usage shall be submitted.

(7) Regarding environmental criteria I.B.3, II.B.3, and III.B.3, a certificate from the chemical supplier showing the safety of the dyes and pigments used shall be submitted.

REFERENCES

Pulp and Paper Chemistry and Technology and Chemical Technology. James P. Casey. Ed., John Wiley & Sons, Inc. ©1981, USA.

Handbook for Pulp and Paper Technologists, Gary A. Smook, Angus Wilde Publications ©1992, 2nd Edition. Canada.

Guidebook on Sustainable Forest Land Use Planning and Management. Vol. III, DENR-IEMSD-SDMS ©1997. Phils.

Philippine National Standard 72:1997, Paper, board and pulps – Facial tissue paper – Specifications.

Philippine National Standard 73:1997, Paper, board and pulps – Toilet tissue paper – Specifications.

Certification Criteria of eco Mark (Japan) Product Category No. 108 "Sanitary Paper", April 2000.

Product Requirements of German Blue Angel of Sanitary Paper products made of Recycled Paper RAL-UZ 5, May 1998.

- **Detergent Criteria**

Detergent (PC-0001)

Technical Working Group 0001 meetings were held on August 13 and Sep 13, 2002. The criteria for detergent were established. Dr. Anamy Paano from the faculty of chemical science of the De La Salle university led the TWG. The member of TWG0001 are followings:

TWG member

Mr. Jesus Valencia:	Adamson University Technology Research & Development Center
Ms. Leonita Baetiong:	Environmental Management Bureau, DENR
Mr. Emil Ricaforte:	Industrial Technology Development Institute, DOST
Ms. Lourdes Navia:	Bureau of Product Standards, DTI
Ms. Jocelyn Feliciano:	Bureau of Product Standards, DTI
Engr. Francisco Arellano:	Philippine Association of Environmental Assessment Professionals
Ms. Crescencia Joaquin:	Philippine Association of Tertiary Level Education /Institution in Environmental Protection & Management
Ms. Angelica Maglaya:	Philippine Institute of Pure & Applied Chemistry
Ms. Leonor Abella:	PhilExport
Mr. Alberto Abaquin:	Zero Waste Recycling Movement of the Philippines
Mr. Gil Perez:	Soap & Detergent Association of the Philippines /Procter & Gamble Distributing (Phils.) Inc.
Ms. Eeme Datu:	Soap & Detergent Association of the Philippines
Mr. Chito S. Macapagal:	Unilever Philippines, Inc.
Mr. Christophe Joyeux:	Unilever Philippines, Inc.

- **Details of Detergent Criteria**

Environmental Scenario

Synthetic laundry detergent is a complex mixture of various chemicals including surfactant, builders, ion exchangers, alkalies, foam stabilizers, soil suspenders, anticorrosives, bleaching agents, colors, preservatives, fragrances, diluent, enzymes and optical brighteners, among others. The key environmental impact in the life cycle of detergent is in the use and discharge of product causing pollution of soil and water. Reduction of this environmental impact calls for the reduction of harmful chemicals used.

Definition of terms:

Synthetic laundry detergent – a product containing a surfactant and other ingredients, formulated to clean and care for the many different fabrics in the family wash
Hand wash detergent – laundry product used for hand-scrubbing wash
Machine wash detergent – laundry product used with a washing machine
Soakers – detergent used to loosen the dirt in the wash load before hand wash and/or machine wash
Laundry soap – a product used for cleaning the family wash. It is formed through the saponification process, instead of the sulfonation process followed by synthetic laundry detergents
Hard surfactants – surfactants with low biodegradability rate such as branched alkyl benzene sulfonates surfactants, and their salts and other technical names referring to the same chemical compound
Biodegradability – the ability of a product to undergo living organism-mediated chemical transformation that results in the conversion of an organic chemical into organic and/or inorganic end product that are chemically distinct from the parent material eventually leading to CO_2 and H_2O
HABS – hard alkyl benzene sulfonates
PNS 23 – Philippine National Standards for Surface Active Agents – Synthetic Laundry Detergents for Laundry Use
RA 6969 – Toxic Substances, Hazardous and Nuclear Wastes Control Act (Philippines, 1990)
RA 8970 – Ban HABS Law (Philippines, 2000)
Suitable packaging material – material that can maintain the homogeneity of the packaged product. It shall be hygienic and can be recycled.

Scope

These criteria shall apply to synthetic laundry detergents for hand wash, machine wash and soaking laundry purposes, in powder, bar or liquid form.

Green Choice Requirements

To carry the *Green Choice Philippines* seal, a product must meet the following requirements.

Product Requirements:

1. The product shall not contain hard surfactants as prescribed by PNS 23 and RA 8970.
2. With the exemption of HABS, the surfactant of the product shall have the primary biodegradability of 80% as defined by PNS 23.
3. The pH of the product must not exceed pH 11.5 as prescribed in PNS 23.
4. Matter insoluble in alcohol and matter insoluble in water must comply with PNS 23.
5. Detergent ingredients, including perfumes, must comply with RA 6969.

Other Requirements:

1. Packaging: Each packing unit shall be fully wrapped with paper or other suitable packaging materials in the same type/class and size.

2. Marking and labeling: Marking and labeling must conform with the Marking and Labeling requirements of PNS 23.

Effectivity:

These 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 – ELP Board*, if necessary at any period of time. Furthermore, the criteria shall conform to any changes and/or revisions that PNS 23 and RA 6969 may undertake during this period.

EVALUATION AND VALIDATION METHOD:

1. Regarding quality criteria 1 & 2, the applicant must submit the certified true copy of compliance certificate from Bureau of Product Standards (BPS) and/or a self-certification from the company CEO and certification from the supplier. If further validation is required, one of BPS' accredited laboratories will test the product from the market or production line.

2. Regarding quality criteria 3 and 4, the applicant must submit the certified true copy of the compliance certificate from BPS. If further validation is required, one of the BPS' accredited

laboratories will test the product from the market or production line.

3. Regarding quality criteria 5, the applicant must submit a certification from Environmental Management Bureau (EMB) that every chemical ingredient used in the production is listed in the public Philippine Inventory of Chemicals and Chemical Substances (PICCS). If not, several scenarios may occur.

    3.1. If listed in the confidential PICCS, the applicant must get EMB certification and submit this to Green Choice Philippines.
    3.2. If covered by a Low Volume Exemption (LVE) or Special Import License (SIL) the applicant must secure from EMB the appropriate documents and submit the same to the Green Choice Philippines.
    3.3. If exempted from PICCS notification, the applicant must secure from EMB the appropriate documents and submit the same to Green Choice Philippines.
    3.4. The applicant must also secure a certification from EMB that the chemical ingredient is NOT in the Priority Chemical List. For perfume mixtures, submit the notarized certification from chemical supplier.

4. Regarding Packaging, the applicant must provide a sample of their packaging to Green Choice Philippines.

5. Regarding Marking and Labeling, the applicant must submit a certification from BPS.

REFERENCES

Baird, Colin, Environmental Chemistry ©1995, W.H. Freeman and Co. New York, USA.

Manahan, Stanley E., Environmental Chemistry, 6th Edition, ©1994, CRC Press, Florida, USA.

Philippine National Standard 23:2002 Surface active agents – Synthetic detergents for laundry use – Specifications

Product Requirements of German Blue Angel of Detergents RAL-UZ 70, May 1998.

Green Label Requirements (Thailand) for Detergents TGL-10.

ANNEX 8.10

On 19 November 2002, at the 8th meeting the Technical Committee made a decision to establish product criteria for household batteries and plastic packaging.
To do this Technical Working Groups were held: TWG-0003 and TWG-0004, the former for household batteries, the latter for plastic packaging.

Members of Technical Working Groups for Household Batteries and Plastic Packaging are shown below.

Members for TWG for Household Batteries (TWG-0003)	
Dr.Anamy C. Paano	Chemistry Department, De La Salle University
Dr. Lynn Panganian	National Poison Control & Information Services-PGH
Ms.Angelica S. Maglaya	Philippine Institute of Pure and Applied Chemistry
Engr. Rey Esguerra	Industrial Technology Development Institute-DOST
Ms.Myra F. Magabilin	Bureau of Product Standards(BPS)-DTI
Mr.Francis dela Cruz	Green Peace
Mr. Ted Garcia	Mother Earth Unlimited
Dir.Jesus L. Motoomull	Chairman, ELP Board/Director, BPS-DTI
Members for TWG for Plastic Packaging (TWG-0004)	
Dir.Albert Magalang	National Solid Waste Management Commission
Mr.Benjamin A. Alianza	Packaging Institute of the Philippines
Mr.Mark de Lumen	Philippine Plastic Industry Association of the Philippine
Mr.Cirspian Lao	Philippines Plastic Industry Association of the Philippine
Dr.Nestor Valera	Chemistry Department, Ateneo de Manila University
Mr.Patricio C. Nocon	SGS Philippines, Inc
Mr.Lino Wong	UnilonSeal
Ms.Norma C. Hernandez	BPS-DTI
Ms.Nilda B. Adao	BPS-DTI
Mr.Jong Sereno	Association of Petrochemical Manufactures
Ms.Liza Bernardo	Packaging Research & Development-DOST
Mr.Tony Chiong	National Solid Waste management Commission

1st TECHNICAL WORKING GROUP MEETING
TWG 0003 (HOUSEHOLD BATTERIES)&TWG 0004 (PASTIC PACKAGING)
11 February 2003

MINUTES OF THE MEETING

Present:

1.	Dir .Jesus L. Motoomull	Chairman, ELP Board/ Director, BPS- DTI
2.	Dir. Albert Magalang	National Solid Waste Management Commission (NSWMC)
3.	Dr. Christopher M. Silverio	Chairman, ELP Technical Committee/ITDI- DOST
4.	Ms. Norma C. Hernandez	BPS- DTI
5.	Ms. Nilda B. Adao	BPS- DTI
6.	Ms. Myra F. Magabilin	BPS- DTI
7.	Ms. Anne Daisy Omila	BPS- DTI
8.	Ms. Angelica S. Maglaya	Philippine Institute of Pure and Applied Chemistry (PIPAC)
9.	Mr. Jess Mallonga	Matsushita Electric Philippines Corporation (MEPCO)
10.	Mr. Noel I. Mendoza	MEPCO
11.	Ms. Remma B. Teñoso	MEPCO
12.	Dr. Nestor Valera	Chemistry Department, Atenteo de Manila University
13.	Mr. David W. Robinson	SGS Philippines, Inc.
14.	Ms. Erlinda Villaseñor	SGS Philippines, Inc.
15.	Mr. Benjamin A. Alianza	Packaging Institute of the Philippine (PIP)
16.	Ms. Mary Go Ng	PIP
17.	Dr. Anamy C. Paano	Chemistry Department, De La Salle University
18.	Ms. Rochelle Retamar	ITDI-DOST
19.	Mr. Ted Garcia Mother	Earth Unlimited
20.	Ms. Estelita S. Reyes	Mother Earth Unlimited
21.	Mr. Noel Catipon	Energizer Philippines
22.	Ms. Janet Yanto	NSWMC

Also present for the C&GFI- GCP Secretariat

1. Ms. Imeda P. Sarmiento
2. Mr. Joy Chaneco
3. Mr. June Avarez
4. Ms. Ave Carlos
5. Ms. Sol Rejano

A INTRODUCTION

Dir. Motoomull gave a backgrounder on the Ecolabelling Programme of the Philippines (ELP), citing its importance and history. Dr. Siverio welcomed the members of the created Technical Working Groups and also explained briefly how the development of the product criteria would proceed.

Ms. Sarmiento, on the other hand, gave a presentation on the status of Green Choice Philippines, and

expounded on the reasons of the programme's existence. Furthermore, Mr. Chaneco informed the body on the Guiding Principles and Procedures of Type I Environmental Labelling, providing the TWG members the parameters of criteria development.

As the product categories were selected as recommended by the National Solid Waste Management Commission, Dir. Magalang gave a presentation on what the Commission is all about- its mandate and undertakings. He emphasized that ecolabelling of products is one of the provisions of RA 9003.

OPEN FORUM

Mr. Alianza inquired on the position of the body regarding the institution of the National Ecology Center (NEC). Dir. Magalang explained that the NEC is still being developed, as even its own office is still to be assigned. But the NEC is on- line, the "virtual NEC", so to speak. The Director further explained that even though the NEC is not fully established yet, this would not mean that the programmes that it is supposed to handle or perform would not be implemented. Eventually, when NEC has been established, it will still be under the jurisdiction of the EMB, which is the Co-Chairman of the ELP, hence, no conflict of interest is seen.

Moreover, Mr. Alianza asked how the product category of household batteries was selected while it is not considered as the most critical waste in the country. Dir. Magalang replied that household batteries were selected to address the misconception that they contain toxic components and that they are considered as "special wastes". Mr. Alianza added that the more popular product categories of other ecoabelling programs abroad are likewise generated in our country. The ELP could already adopt these as models. Dir. Magalang said that we could develop the criteria for those product categories, but we should tackle them one at a time. Mr. Alvarez also explained that the selection of the product categories would greatly depend on our own local environmental condition. Ms. Hernandez added that the ELP could have simultaneous TWGs working on different product categories as may be necessary.

Mr. Chaneco clarified that the body would be divided into two later on and only the concerned agencies will deal on household batteries and the others will be for the development of criteria for plastic packaging. Besides, the TWGs will be given copies of existing standards for a product category set by the ecolabelling programs abroad from which the group could base their criteria. And if there is an existing BPS quality standard, the group could also use this as a guide.

Mr. Alianza told the body that any standard developed by the TWGs should first be evaluated by the National Ecology Center before the approval of the ELP Board. Dir. Magalang, however, explained that since the NEC and ELP have common membership, this would not pose as a problem.

Mr. Alianza further asked how the consumers would know where the seal is for when packaging is also targeted for ecolabelling. Mr. Chaneco replied that under the seal, which the ELP would award, is the product category number and/or the environmental consideration that it addresses. And if the TWG would want t incorporate a criterion for the product's packaging, then it becomes more complicated. But, Dr. Valera said that the product and its packaging is an integrated matter, which could not be isolated from one another. Also, Mr. Alianza added that if packaging is not addressed with the product, then ELP does not adhere to its objective of minimizing wastes. However, Mr. Chaneco clarified that ELP's objective is to identify products which demonstrates environmental leadership. Ms. Hernadez added that for the time being, we could just concentrate on the product first and eventually, the body could convene again and have more stringent standards that would include the product's packaging. Meanwhile, the packaging requirement for each product would be based on the PNS Standards.

B TWG FOR HOUSEHOLD BATTERIES

The body resolved the following:

1. That among the varieties of household batteries, they will develop the criteria for carbonzinc cells.
2. Dr. Anamy Pasno was designated as Chairman of TWG 0003.
3. The Secretariat should try its best to get Energizer to be a member of the TWG.
4. Mr. Medoza was assigned to submit a research on the components of carbon-zinc cell.
5. The group is set to meet again on 04 March 2003, 9:00 am at the BPS Conference Rooms, Department of Trade and Industry.

D TWG FOR PLASTIC PACKAGING

The body resolved the following:

1. That among the many varieties of plastic packaging, the group will develop the criteria for plastic packaging made of polyethylene.
2. Dir. Albert Magalang was named Chairman of TWG 0004 with Mr. Benjie Alianza as his official alternate.
3. Ms. Ng suggested the inclusion of PetroChem, and the PPIA to the TWG.
4. The Secretariat would research for existing regulations and product standards (either ISO or PNS) on polyethylene packaging materials.
5. Next meeting is scheduled on 05 March 2003, 9:00 am at the BPS Conference Rooms, Department of Trade and Industry.

E SUBMISSION OF ENERGIZER PHILS. OF RESEARCH ON HOUSEHOLD BATTERIES

Mr. Catipon arrived a few minutes after the meeting has adjourned and gave copies of a research on various kind of household batteries, including their components, manufacturing process and a study on their "supposed" toxicity. This research was presented in an international convention, specifically to address the misconception that batteries contain toxic materials and that it emits poisonous chemicals when already discarded.

2nd TECHNICAL WORKING GROUP MEETING
TWG 0003 (HOUSEHOLD BATTERIES)&TWG 0004 (PASTIC PACKAGING)
04 March 2003

MINUTES OF THE MEETING

Present:

1.	Dr. Anamy Paano (Facilitator)	De La Salle University, Chemistry Department
2.	Dr. Lynn Panganiban	National Poison Control& Information Service- PGH
3.	Ms. Angelica Maglaya	Philippine Institute of Pure& Applied Chemistry (PIPAC)
4.	Enger. Rey Esguerra	Industrial Technology Development Institute- DOST
5.	Ms. Myra Magabilin	Bureau of Product Standards- DTI
6.	Mr. Francis dela Cruz	Green Peace

Also present for the C&GFI- ELP Secretariat

1. Mr. June Alvarez
2. Ms. Sol Rejano

A Restatement of Reason Why Battery Was Chosen as Product Category

The Body raised their concern on the development of product criteria for batteries when there are only two major players in the industry, which would be affected, and thereby limiting the number of potential clients on the Ecolabelling Programme. Mr. Alvarez replied that the National Solid Waste Management Commission wishes to address the misconception of batteries containing toxic substances which may endanger human health. He added that the programme is voluntary in nature, reminding the members that if a stringent standard is developed, the industry may not be able to meet them, which may result to an unresponsive industry. He reiterated that the grop could set minimum requirements wherein compliance to environmental laws could be incorporated.

Dr. Panganiban inquired whether the group would use the whole life cycle assessment. Mr. Alvarez answered that life cycle considerations will be applied, wherein the group will identify the stage in the

battery's life cycle which is most damaging to the environment and focus on this stage in the development of the criteria.

B Review and Approval of Minutes of Previous Meeting

Dr. Paano informed the body that Item #4 of Section C should read "Mr. Mendoza was assigned to submit a synopsis of their position paper on batteries and the threshold limit of metals"

With no further amendment to the minutes of the previous meeting, the body moved for its approval.

C Business Arising from the Minutes

Mr. Dela Cruz requested for a document on how the product criteria for a specific category would be developed. Mr. Alvarez provided him with the Guiding Principles for Environmental Label and Declarations for the ISO 14020 Series.

D Development of the Product Criteria

Dr. Paano showed the group the copy of the international presentation of the Battery Producers, entitles "Battery Stewardship". She presented the components of a carbon zinc cell differentiating it from the other kinds of batteries and emphasized that mercury is no longer present in it.

On the other hand, Engr. Esguerra suggested looking into the production process of these batteries, as this stage may be substantial in the determining the environmental standard that the group is setting forth.

Dr. Paan then presented her first draft of the product criteria for batteries.

1. Introduction

The group agreed to delete sentences 3 to 5 as waste segregation should be promoted.

Dr. Paanp also requested for a copy of the PNS for batteries. Ms. Magablin reiterated that the available standard focuses only on the batteries' performance. Nevertheless. The group will be provided their copies later.

2. Definition of Terms

The group resolved to use international definitions applicable to the product criteria being developed. Those included in the PNS should also be considered.

Dr. Panagniban suggested the inclusion of "toxic" and "hazardous" to the Definition of Terms.

3. Green Choice Requirements

Engr. Esguerra suggested that item #1 should read, "The product must not contain any toxic and hazardous substances…"

4. Environmental Requirements

The group decided to adopt Item #1 of the Tissue Paper Criteria's Environmental Requirements- "the production process, transport and disposal features of the product shall meet the requirements of all applicable environmental laws and regulations."

5. Other Requirements

On Packaging- While the standard of Packaging is still being developed, the requirement for packaging will read as "each packing unit shall be fully wrapped with paper or other suitable packaging materials in the same type/class and size."

E Adjournment

As there are no further items to be discussed, the meeting was adjourned at 12:00 noon.

Prepared by:
C&GFI- ELP Secretariat

Certified true and correct:
Dr. ANAMY PAANO
Chairperson, TWG 0003
Ecolabeing Programme of the Philippines
21 March 2003

3rd TECHNICAL WORKING GROUP MEETING TWG 0003 (HOUSEHOLD BATTERIES)&TWG 0004 (PASTIC PACKAGING) 25 March 2003

MINUTES OF THE MEETING

Present

1. Dr. Anamy Paano (Facilitator) De La Salle University, Chemistry Department
2. Dr. Lynn Panganiban National Poison Control& Information Service- PGH
3. Ms. Angelica Maglaya Philippine Institute of Pure& Applied Chemistry (PIPAC)
4. Ms. Carmel Gacho Industrial Technology Development Institute- DOST
5. Ms. Christine Olairez Industrial Technology Development Institute- DOST
6. Mr. Jose Carlos Reyes Bureau of Product Standards- DTI
7. Mr. Ted Garcia Green Peace

Also present for the C&GFI- ELP Secretariat

1. Mr. June Alvarez
2. Ms. Ave Carlos
3. Ms. Sol Rejano

A Introduction and Overview

In view of the presence of new representatives, Dr. Paano requested Mr. Alvarez to give a short background on Green Choice- the Ecolabelling Body, history and how the programme works.

He explained that batteries were chosen as a product category upon the recommendation of the National Solid Waste Management Commission in the implementation of RA 9003. He also emphasized that even without the active participation of the battery industry, the TWG can still develop the standard because the program is voluntary. Moreover, when RA 9003 is implemented, the industry would have no choice but to apply for the label, as this would be one of the law's provisions.

B Review and Approval of Minutes of Previous Meeting

Dr. Paano informed the body that the SCOPE was also discussed during the meeting. This item should be #3 and will include Zinc- Alkaline Manganese Batteries.

On Green Choice Requirements, Dr. Paano said that there should be a mention of the need to verify the threshold limit of heavy metals and also, the compliance to PNS 8:1995 requirements.

Furthermore, a mention on the research on the batteries' production process should be undertaken by Engr.

Esguerra should be included.

C Discussion on Draft Criteria

Dr. Panganiban reminded the group that Mr. Dela Cruz of Green Peace was supposed to present some studies made by their group on the production process. Unfortunately, no representative from Green Peace could attend.

Dr. Paano informed the body that the official name of he product category would be Zinc Carbon and Zinc-Alkaline Manganese Dioxide Batteries.

1. Introduction

The group accepted the environmental scenario as it is.

2. Definition of Terms

There was a discussion on whether to use battery or dry cell, which was then resolved that the criteria should define both.

Mr. Reyes then presented the American National Standard for Batteries and the body resolved to use the definitions given in the said standard for dry; cell; battery; and alkaline manganese dioxide ce as these were not included in the PNS definition of terms. Mr. Reyes added that to have the terms included to the PNS, the TWG could make a petition for the amendment of the said Philippine standard.
Dr. Panganiban also presented the definitions for toxic and hazardous.

The group also included suitable packaging material to this item.

3. Green Choice Requirements

Mr. Alvares suggested that the criteria should all be under “Product Requirements”, thereby deleting “Environmental Requirements”.

In determining the thredhold limits of heavy metal impurities, the group resolved not to put any figure for mercury, cadmium and lead as data on these are not available and also to avoid any confusion in the future.

Ms. Olairez suggested the inclusion of “The production process should practice source reduction and recycling to minimize waste” in consonance with RA 9003. This was adopted as Product Requirement #5.

4. Other Requirements

On Packaging, BPS shall research if there are any existing Philippine standards on this subject. ITDI-DOST will also check who is responsible in the control in the additive used in plastics.

SITE VISIT
TWG 0003 (HOUSEHOLD BATTERIES)
07 May 2003

SITE VISIT REPORT

Present:

1.	Dr. Anamy Paano	De La Salle University, Chemistry Department
2.	Ms. Angelica Maglaya	Philippine Institute of Pure & Applied Chemistry (PIPAC)
3.	Ms. Rochelle Retamar	Industrial Technology Development Institute-DOST
4.	Ms. Myra Magabilin	Bureau of Product Standards-DTI
5.	Mr. Ted Garcia	Mother Earth Unlimited
6.	Ms. Leni Abella	PhilExport
7.	Ms. Imleda Sarmiento	C&GFI – GCP Secretariat
8.	Mr. June Alvarez	C&GFI – GCP Secretariat
9.	Ms. Ave Carlos	C&GFI – GCP Secretariat
10.	Ms. Sol Rejano	C&GFI – GCP Secretariat

Also present for MEPCO

23. Mr. Alfonso Gallora, NBP
24. Ms. Jane Catapia, NBP
25. Mr. Noel Mendoza, DQC
26. Mr. Frank Encarnado, EPPC
27. Mr. Jess Mallonga, Corporate Planning

I. Presentation by MEPCO

Mr. Mendoza gave an overview of the operations of Matsushita Electric Philippines Corporation, the location of their plants and the different products they manufacture, specifically the National Panasonic Batteries. He presented the different stages of the manufacture of the batteries, along with the attributes of their batteries which protects and makes them safe.

Mr. Encarnado added that MEPCO has already incorporated the following environmental considerations in their operations:

- ISO 14001 certified
- ISO 9001 certified
- Reduction of energy consumption
- Green Procurement Policy (suppliers should have EMS installed)
- Practice of 7S (includes Safety and Save Earth)
- Reduction of Wastes Generated
- Waste Segregation

Mr. Mendoza emphasized that the batteries that they manufacture do not contain hazardous chemicals such as mercury. However, Dr. Paano asked the representatives of MEPCO-NBP if they could confirm that their batteries would not contain impurities of lead, cadmium and mercury. In case they do, she asked whether MEPCO-NBP could identify the threshold limits for these chemicals to be able to finalize the product criteria that TWG 0003 is developing. Ms. Catapia replied that as of the moment the batteries are undergoing tests, which could answer that query. The results would be available in 3 weeks soonest.

II. Plant Visit

The group then proceeded to the plant where the batteries are manufactured and witnessed the process of its production.

III. Resolution

TWG 0003 will meet as soon as the results of the test from Japan arrives.

ANNEX 8.11

GREEN CHOICE PHILIPPINES

GCP-2003003
ZINC-CARBON & ZINC-ALKALINE MANGANESE DIOXIDE BATTERIES

Environmental Scenario

The production of heavy metal-free batteries paved the way to the classification of used primary batteries as non-hazardous waste. This is supported by studies[1,2,3] that identified negligible amount of heavy metals from dry cell batteries. Furthermore, there were no evidences to support that disposal of used batteries by landfill is unsafe. Segregation, transportation and storage of used batteries are said to pose more risks and entail more expenses[3,4].

Definition of Terms

1. Cell – an electrochemical device that generates electric current by converting chemical energy to electrical energy
2. Dry – a term used to describe the electrolyte as being immobilized or rendered unspillable
3. Electrolyte – a substance that will provide ionic conductivity between positive and negative electrodes of a cell
4. Battery – one or more electrically connected cells assembled in a single container having terminals
5. Primary Battery – batteries in which electric current is derived from irreversible reactions rendering these batteries non-rechargeable
6. Zinc-Carbon Battery – a cell system comprised of a manganese dioxide positive electrode, a zinc negative electrode, and an electrolyte of zinc chloride alone or in combination with ammonium chloride. It is also known as LeClanche' Cell[5]
7. Zinc-Alkaline Manganese Dioxide Battery – a cell system comprised of a manganese dioxide positive electrode, a zinc negative electrode, and an alkaline electrolyte
8. Toxic – a property of a substance which is poisonous and has carcinogenic, mutagenic or teratogenic effects on human or other life forms
9. Hazardous substances – substances which present either:
    - 9.1. short term acute hazards such as acute toxicity by ingestion, inhalation or skin absorption, corrosivity or other skin or eye contact hazard or the risk of fire or explosion; or
    - 9.2. long term environmental hazards, including chronic toxicity upon repeated exposure, carcinogenicity (which may in some cases result from acute exposure but with a long latent period, resistance to detoxification process such as biodegradation, the potential to pollute such as offensive odors
10. PNS 08-1995 – Zinc-Carbon cylindrical dry cell – Specifications
11. RA 6969 – Toxic Substances, Hazardous and Nuclear Waste Control Act (Philippines 1990)
12. Suitable packaging material – material that can maintain the homogeneity of the packaged product. It shall be hygienic and can be recycled

Scope

These basic criteria shall apply to primary batteries: Zinc-Carbon and Zinc-Alkaline MnO_2 batteries.

Green Choice Criteria

To carry the Green Choice Philippines seal, the product must meet the following requirements:

Product Requirements

1. No mercury shall be intentionally added to the product and traces of mercury and cadmium coming from impurities should not exceed 5 ppm for mercury and10 ppm for cadmium.
2. The product shall not contain any other toxic and hazardous substances as prescribed in RA 6969.
3. The Zinc-Carbon / Zinc-Alkaline MnO_2 batteries must comply with the requirements of PNS 08-1995.
4. The production process, transport and disposal feature of the product must meet the requirements of all applicable environmental or other related legislations.

Other Requirements

1. Packaging – the product shall be packed in suitable packaging materials such that the battery is protected from damage, as stated in PNS 08:1995.

2. Marking and Labeling
    2.1. The product must conform to the marking and labeling requirements of PNS 08:1995.
    2.2 The product shall carry instructions for proper disposal.

Effectivity:

These 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 – ELP Board*, if necessary at any period of time. Furthermore, the criteria shall conform to any changes and/or revisions that PNS 08-1995 and RA 6969 may undertake during this period.

EVALUATION AND VALIDATION METHOD:

Product Requirements:

1. Regarding product requirement 1, the applicant shall submit test results from BPS and EMB accredited testing laboratories to support the claim that no mercury was intentionally added to the product and that traces of mercury and cadmium are within the specified limits. Test results shall also be evaluated by BPS or EMB.

2. Regarding product requirement 2, the applicant shall submit a certification from Environmental Management Bureau (EMB) that every chemical ingredient used in the production is listed in the public Philippine Inventory of Chemicals and Chemical Substances (PICCS). If not, several scenarios may occur.

    2.1 If listed in the confidential PICCS, the applicant shall get EMB certification and submit this to Green Choice Philippines.
    2.2 If covered by a Low Volume Exemption (LVE) or Special Import License (SIL) the applicant shall secure from EMB the appropriate documents and submit the same to the Green Choice Philippines.

2.3 If exempted from PICCS notification, the applicant shall secure from EMB the appropriate documents and submit the same to Green Choice Philippines.

3. Regarding product requirement 3, the applicant shall submit the certified true copy of compliance certificate from Bureau of Product Standards (BPS) and/or a self-certification from the company CEO and certification from the supplier. If further validation is required, one of BPS' accredited laboratories will test the product from the market or production line.

4. Regarding product requirement 4, applicable licenses and permits indicating the manufacturer's compliance with environmental regulations applicable to the area in which the plant is located shall be submitted. A copy of the company's Occupational Health and Safety Program Certificate shall also be submitted.

Other Requirements:

1. Regarding Packaging, the applicant must submit a certification from BPS.

2. Regarding Marking and Labeling
   2.1. The applicant must submit a certification from BPS.
   2.2. The applicant shall submit a sample of the product.

REFERENCES

1. 1992, Institute for Risk Research at the University of Waterloo

2. 1995, Fukuoka University Landfill Studies, Fukuoka University, Japan

3. 1994, Disposal Research, University of Liege, Faculty of Medicine, Belgium

4. 2000, Evaluation of Relative Environmental Impacts of three types of Collection Schemes, Department of Trade, UK

5. PNS 08-1995 (Zinc-Carbon Cylindrical Dry Cell – Specifications)

6. American National Standard for Dry Cells and Batteries – Specifications ANSI® C18.1M-1992

7. RA 6969 (An Act to Control Toxic Substances and Hazardous and Nuclear Wastes)

8. Orientation Manual Implementing Rules and Regulations for Title III: The Management of Hazardous Waste, DENR Administrative Order No. 29, RA 6969, EMB, DENR, 1995

ANNEX 8.12

2nd TECHNICAL WORKING GROUP MEETING TWG O004 (Plastic Packaging - Polyethylene)
05 March 2003

Minutes of the Meeting

Present:

1.	Commissioner Tonv. Chiong	National Solid Waste Management Commission
2.	Commissioner Alfredo Chan	National Solid Waste Management Commission
3.	Ms. Rachel F. Caligos	National Solid Waste Management Commission
4.	Mr. Benjamin A. Alianza. Co-Chair	Packaging Institute of the Philippines
5.	Ms. Mary Go Ng	Packaging Institute of the Philippines
6.	Ms. Ana Ma. Veronica A. Solano	Packaging Institute of the Philippines
7.	Ms. Daisy E. Tanafranca .	Packaging. Research and Development - DOST
8.	Mr. Lino Wong	UnilonSeal
9.	Ms. Sonia S. Mendoza	Mother Earth. Unlimited
10.	.Mr. Crispian Lao	Philippine Plastic Industry. Association
11.	.Mr. Mark Anthonv Delumen	Philippine Plastic Industry. Association
12.	Ms. Nonna C. Hernandez	Association Bureau of Product Standards-Department of Trade & Industry
13.	.Ms. Nilda B. Adao	Association Bureau of Product Standards-Department of Trade & Industry
14.	Ms. Rubylene T. Lasmarias	SGS Philippines. Inc.
15.	Dr. Araceli Monsada	Resource Person-DOST

Also present were : ELP-CGFI Secretariat

1.	Ms. Imelda P, Sarmiento	ELP-CGFI Secretariat
2.	Mr. June Alvarez	ELP-CGFI Secretariat
3.	Ms. Ave Carlos	ELP-CGFI Secretariat

INTRODUCTION:

The meeting was called to order and was presided by Mr. Alianza as co-chair of TWG 0004

A Business Arising from the Minutes (11 February 2003)

Mr. Alianza reiterated the concerns of the body about the National Ecology Center that has yet to be established under the National Solid Waste Management Commission. The NEC is supposedly be the one doing what the National Ecolabelling Programme / Green Choice Philippines is doing.
Mr. Alvarez, Green Choice Philippines Programme Manager, shared with the group a brief backgrounder of the National Ecolabelling Programme now called Green Choice Philippines

a	1997	Initiative on Ecolabelling Programme started. Research, networking series of meetings with agencies and individuals were done for the formation of the Ecolabelling Body of the National Ecolabelling Programme.

b	20 February 2001	ELP Board was formed
c	07 March 2001	MOA signed by DTI-BPS, EMB-DENR, CACP, C&GFI, NCAC, EUMB -DOE, PBE, PDC-DAP designating C&GFI as the Administrator/Secretariat of the national ecolabelling programme
c	17 May 2001	Technical Committee was formed. They drafted the ELP Guidelines Part 2, 3 and 4.
d	07 November 2001	ELP Guidelines Part 2, 3 and 4 were finalized by the Technical Committee.
e	10 July 2002	Technical Working Groups (Synthetic Laundry Detergents & Tissue Paper Products) for the first two product categories were formed.
f	05 December 2002	Four product criteria were developed. (Synthetic Laundry Detergent. Bathroom/Toilet Tissue, Facial Tissue, Table Napkin). Industry may now apply.
g	10 March 2003	Formal Launching of the Green Choice Philippines as the national ecolabelling body in the Philippines and awarding ACS Manufacturing Corp. as the first licensee to use the Green Choice Seal of Approval for their Pride Detergent Powder and Bar.

At present, TWGS 0003 & 0004 were formed to establish the product criteria for household batteries and packaging materials as recommended by the National Solid Waste Management Commission, Green Choice Philippines and NSWMC forged a partnership for the implementation of the provision of RA 9003 on the ecolabelling of products.

B Understanding the Process of Manufacturing Plastic

The overview of the process of manufacturing plastic packaging was presented by Dr. Araceli Monsada of the Department of Science and Technology. She discussed the process and chemical components in manufacture of plastics.

C Workshop on the Development of Product Criteria for Plastic Packaging

The group resolved that the development of the product criteria for polyethylene packaging would commence on the next meeting. Mr. Alianza volunteered to prepare a draft criteria, which will be circulated

among the members before the next meeting for their comments. The 3rd meeting was set on 27 March 2003 at Conference A & B, 3rd Floor, BPS-DTI.

D Adjournment

As there are no further items to be discussed, the meeting was adjourned at 12:00 noon. prepared by: C&GFI-ELP Secretariat

Certified true and correct:

Mr. BENJAMIN A. ALIANZA
Co- Chair, TWG 0004 Ecolabelling Programme of the Philippines
05 March 2003

GREEN CHOICE PHILIPPINES

TECHNICAL WORKING GROUP- 0004 (POLYETHYLENE PACKAGING)

EDUCATIONAL TRIP

23 MAY 2003 Friday

FACILITATOR(S): Director Crispian Lao and Mr. Mark Anthony Delumen

Philippine Plastic Industry Association, Inc.

ITINERARY

7:45 AM	**ASSEMBLY** Conference Rm A, 3rd Floor BPS-DTI Bldg, 361 Sen. Gil Puyat Ave, Makati City
8:OO AM	**DEPARTURE** from Manila to Laguna
9 15AM - 10:15 AM	**Walkthrough on blown film molding process** Venue: THE UNITED POLYRESINS, INC. No. 680 Magsaysay Road, Barrio San Agustin San Pedro, Laguna
10:45 AM - 11:45 NOON	**Walkthrough on injection molding process** Venue: PLASTMANN INDUSTRIAL CORP. No.105 Industry Drive, Carmelray Industrial Park 2 Canlubang, Laguna
12:15 NOON	**LUNCH** Venue: H & E - Alabang Plant Bldg. C, Philcrest Compound, Km. 23 South Superhighway, West Service Road Muntinlupa City
1:15 PM - 2:15 PM	**Walkthrough on blow molding process** Venue: H & E - Alabang Plant
2:20 PM	**HOMEWARD BOUND**
3:30 PM	**Back to Manila**

3rd TECHNICAL WORKING GROUP MEETING
TWG 0004 (PLASTIC PACKAGING)
03 April 2003

Minutes of the Meeting

Present:

1.	Dir. Albcrt A. Magalang (Pacilitator)	National Solid Waste Management Commission
2.	Mr. Benjamin A. Alianza	Packaging Institute of the Philippines
3.	Mr. Mark de Lumen	Philippine Plastic Industry Association of the Philippines
4.	Ms. Liza Bernardo	Packaging Research & Development-DOST
5.	Dr. Nestor Valera	Chemistry Department, Ateneo de Manila University
6.	Mr. Patricio C. Nocon	SCS Philippines
7.	Mr.LinoWong	UhilonSeal
8.	Ms. Nilda B. Adao	Bureau of Product Standards-DTI
9.	Mr. Tony Chiong	National Solid Waste Management Commission

Also present for the C&GFI-ELP Secretariat

1. Ms. Imelda P. Sarrniento
2. Mr. June M. Alvarez
3. Ms. Ave E. Carlos
4. Ms. Sol F. Rejano

A Call to Order and Introduction of Members

Dir. Magalang, as Chairperson of TWG 0004, called the meeting into order and presided over the same. As new representatives were present, the group was requested to introduce themselves.

B Review and Approval of Minutes of Previous Meeting

Upon motion duly made and seconded, Ms. Adao moved for the approval of the minutes of the previous meeting and was seconded by Mr. Alianza.

C Business Arising from the Minutes

On the issue of the supposed task of the National Ecology Center on ecolabelling, Dir. Magalang clarified that there is no conflict in discharging the mandates of the commission to different institutions who have the capability to undertake such responsibilities, such as the DTI. Mr.. Alianza explained that his reactions on this during the previous meeting was just to recommend that the NEC should use the

established criteria of the ELP so that the efforts will not be wasted and also, the representatives of the TWGS for the ELP should become eventual members of the TWGs of the NEC.

Furthermore, to achieve continuity on the discussions, the body resolved to ask each of the official members of TWG 0004 one official alternate to the meetings if he/she could not attend.

D Development of the Product Criteria

Mr. Alianza provided the group a draft product criteria for polyethylene. He explained that polyethylene alone has a very wide scope. With this. Dr. Valera suggested that the molecular structure should be a basis to simplify the criteria Mr. Alianza, however, clarified that even with the same molecular structure, additives, such as colorants, are being added, hence making a new product for a specific use. Ms. Sarmiento further explained that ecolabelling is product specific. It cannot cover a whole range of products with just a single product criteria. The group should develop the criteria for a specific pro duct category and not just be a generic criteria.

Mr. Alvarez then suggested that the group could define the scope further, upholding the thrust of collecting these packaging materials that could be easily and readily recovered. Mr. Wong proposed to label these materials according to their use. Dr. Valera then advised the body to instead base our scope with the existing standards of other countries. Mr. Alvarez reminded the body that the purpose of developing 'the criteria for polyethylene is ready to be able to collect these kinds of packaging materials and to be able to identify them among other plastics so that they could be easily recycled. Mr. Wong suggested using, initially, the existing 6 classifications of plastics as a basis.
Mr. Alvarez then showed the criteria from Environmental Choice of Canada and informed the body that it only requires the plastic to be made from at least 20% post consumer material. Mr. Alianza said that the figure is actually low as Canada already practices 100% recycled elements. This is just a benchmark for them. In fact, the Philippine plastic industry is already using 100% recycled materials since this is mandatory.

The body resolved that SCOPE should include:

1. Primary Packaging - has direct contact with the product itself
2. Secondary - group of primary packages (second packaging to the primary packaging) / bulk packaging
3. Tertiary - used for transport or shipping / display (i.e., corrugated boxes, etc.)
4. Transport Packaging - pallets for storage

The group will use existing UNDP definitions on these terms and resolved to focus on recovery and

recyclability. The criteria being developed will also use the International Coding for Plastics as a basis.

The body also categorized products which belong to the kinds of polyethylene being produced:

- PE Plastic Film

1. Grocery bags / sacks
2. Wraps
3. Retail bags

- Rigid Packaging

1. Bottles
2. Jars
3. Drums
4. Caps

- Semi-Rigid Packaging (squeezable)

1. Bottles
2. Jars
3. Drums
4. Caps

Generic criteria will include:

1. Latest International Coding for Plastic
2. Universal symbol for proper disposal, % of recycled component
3. Production process should comply with existing environmental laws and regulations.

E Assignments

1. Sample products for each polyethylene category coming from the local market (to include the manufacturers ' names) - Mr. Alianza & Mr. De Lumen
2. Definition of Terms- Mr. Alianza ***(April 23- date of submission to the Secretariat)***
3. Environmental scenario- Dir. Magalang ***(April 23)***
4. Sample Coding Procedures; On- going standards of PE; International Results- Ms. Adao ***(April 22)***

F Schedule of Next Meeting

4th meeting is scheduled on 30 April 2003, Wednesday, Conference Room C, Bureau of Product Standards - Department of Trade and Industry at 9:00 AM.

G Adjournment

As there are no further business to transact, the meeting was adjourned at 12:00 noon.

Prepared by:

C&GFI - ELP Secretariat

Certified true and correct:

Dir. ALBERT A. MAGALANG
Chairperson TWG0004 Ecolabelling Programme of the Philippines
11 April 2003

4th TECHNICAL WORKING GROUP MEETING
TWG 0004 (PLASTIC PAKAGING)
30 April 2003

Minutes of the Meeting

Present:

1.	Dir. Albert A. Magalang (Facilitator)	National Solid Waste Management Commission
2.	Mr. Benjamin A. Alianza	Packaging Institute of the Philippines
3.	Mr. Mark de Lumen	Philippine Plastic Industry Association of the Philippines
4.	Mr. Crispian Lao	Philippine Plastic Industry Association of the Philippines
5.	Dr. Nestor Valera	Chemistry Department, Ateneo de Manila University
6.	Mr. Patricio C. Nocon	SGS Philippines
7.	Mr. Lino Wong	UnilonSeal
8.	Ms. Norma C. Hemandez	Bureau of Product Standards-DTI
9.	Ms. Nilda B. Adao	Bureau of Product Standards-DTI
10.	Mr. Jong Sereno	Association of Petrochemical Manufacturers

Also present for the C&GFI-ELP Secretariat

1. Mr. June M. Alvarez
2. Ms. Ave E. Carlos
3. Ms. Sol F. Rejano
4. Mr. Joseph S. Filamor

A Call to Order

Dir. Magalang, as Chairperson of TWG 0004, called the meeting into order and presided over the same.

B Review and Approval of Minutes of Previous Meeting

Mr. Wong moved for the approval of the minutes of the previous meeting and was seconded by Dr. Valera

C Business Arising from the Minutes

Referring to the assignments made during the previous meeting,

- Sample Products - Mr. Alianza and Mr. Lao provided various kinds of plastic films.
- Definition of Terms- the Secretariat reported that Mr. Alianza submitted a glossary of terms related to plastic packaging. Mr. Alvarez explained that the terms to be defined would be identified as we go along the development of the criteria.
- Environmental Scenario- the Secretariat provided the draft. The data on volume of PE produced will be supplied by PPIA.
- Sample Coding Procedures - As the research is still pending, Ms. Hernandez volunteered to personally study the coding system and will initiate talks on making this system mandatory- Mr. Lao, however, countered that the printing of the code on each PB product shall increase the product's cost and the value of its recyclability goes down. Nevertheless, ecolabelling can make it mandatory in its standards while maintaining it to be voluntary for the industry.

D Development of the Product Criteria

1. After much deliberation on the achievable percentage of recycled component in polyethylene packaging products, the group resolved that 25%-recycled plastic is feasible.
2. The group also suggested the inclusion of a criterion requiring conformity to HACCP standards for polyethylene used. in. the packaging. of food products.
3. Mr. Alianza asked whether foreign manufacturers could apply for Green Choice certification. Mr. Alvarez replied that according to the provisions of the Global Ecolabelling Network, ecolabelling should not be a trade barrier; hence, foreign producers could apply. Besides, mutual recognition agreements could be worked out. If this is the case, Mr. Alianza asked how would the system be for these foreign manufacturers. Ms. Hernandez replied that importers are required to have certification from BPS for PS Marks (product certification). While MRAs on ecolabelling will still take a long time to be arranged, international standards and regulations could be applied.
4. Mr. Wong suggested the inclusion for a criterion regarding the disposal of the product. Mr. Alvarez replied that this would be addressed by the coding ad symbol that will be required of the product.
5. Mr. Alvarez inquired whether it is appropriate to add a criterion regarding the use of heavy metals in the production of plastics. Mr. Lao answered that plastic production does not use heavy metals, it is only during printing that the possibility of the use of heavy metals arises. Mr. Alianza added that this could be added- with the list of hazardous materials could be downloaded from CODEX.
6. Ms. Hernandez suggested the inclusion of "The recycled plastic product must not be impregnated, labeled, coated or otherwise treated in a manner which would prevent post consumer recycling,"
7. Ms. Hernandez asked if there is already a law mandating a buy-back mechanism in our country. Dir. Magalang replied that at present, the government encourages the businesses to have that system but no law mandates it yet.

E Others

Mr. Alvarez emphasized the need for the TWG to be acquainted in the production of polyethylene packaging, especially the Secretariat. He requested then the PPIA if they would be able to sponsor a site visit to facilities. Mr. Lao agreed to arrange such trip and will coordinate with the Secretariat. Tentative date would be 09 May, Friday.

F Schedule of Next Meeting

5th meeting is scheduled on 04 June 2003, Wednesday. Members will be informed of the venue as soon as it is confirmed.

G Adjournment

As there is no further business to transact, the meeting was adjourned at 12:00 noon.

Prepared by:

C&CFI - ELP Secretariat

Certified true and correct:

Dir. ALBERT A. MAGALANG

Chairperson, TWG0004 Ecolabelling Prograrnme of the Philippines
12 May 2003

SITE VISITS
TWG 0004 (POLYETHYLENE PACKAGING MATERIALS)
23 May 2003

SITE VISIT REPORT

Present:

1.	Mr. Benjamin Alianza	Packaging Institute of the Philippines
2.	Engr. Daisy Tañafranca	Packaging R & D Center - DOST
3.	Ms. Nilda Adao	Bureau of Product Standards-DTI
4.	Dr. Nestor Valera	Chemistry Dept. – Ateneo de Manila University
5.	Dir. Crispian Lao	Philippine Plastics Industry Association
6.	Mr. Mark Delumen	Philippine Plastics Industry Association
7.	Ms. Misako Takagi	Member, JICA Study Team
8.	Mr. June Alvarez	C&GFI – GCP Secretariat
9.	Ms. Ave Carlos	C&GFI – GCP Secretariat
10.	Ms. Sol Rejano	C&GFI – GCP Secretariat

Also present:

for United Polyresins, Inc.

1. Mr. Tom Soon
2. Ms. Eulalia Bajacan
3. Mr. Raul Clave

for Plastmann Industrial Corporation

1. Mr. Mariano Go Relucio
2. Mr. Henry Lee
3. Mr. Albert Fernandes

for H&E Manufacturing Corporation

1. Ms. Mary G. Ng
2. Mr. David G. Ng
3. Ms. Lynette M. Ng
4. Mr. Eddie D. Ng
5. Ms. Chay Mallillin
6. Ms. Yeye Santos
7. Mr. Ritchie Nicomedes
8. Ms. Rebecca Ramos

I. United Polyresins, Inc.

United Polyresins, Inc. and its subsidiaries are engaged in the manufacture of 100% recyclable polyethylene and polypropylene plastic film bags, sheets for commercial and industrial use, shopping bags for groceries and department stores, garbage bags and plastic products for advertising and promotional purposes. Its main factory is 7,600 sq.m. located at 680 Magsaysay Road, Bo. San Antonio, San Pedro, Laguna, and their head office is situated at 10 Eisenhower St., Goldland Tower, Greenhills, San Juan.

Established since 1971, Polyresins has been serving prominent companies such as Jollibee Food Corporation, Uniden Philippines, National Bookstore, Nestle Philippines, Rustan's, etc.

It utilizes the blown film process and uses about 10 to 20% recycled in-house industrial wastes. Moreover, Polyresins is scheduled to launch their newest product – a 100% biodegradable plastic bag – this July 2003.

II. Plastmann Industrial Corporation

Situated at 105 Industry Drive, Carmelray Industrial Park 2, Canlubang, Laguna, Plastmann Industrial Corporation manufactures rigid polyethylene products such as plastic crates, floorings for poultry and piggeries, air-conditioning plastic components, plastic blades, etc. They apply the injection moulding process.

Plastmann also uses about 10 to 20% recycled in-house industrial wastes in their production.

III. H & E Manufacturing Corporation

The company manufactures rigid polyethylene and polypropylene products such as bottles and caps of shampoos, cleaning agents (i.e., Axion, Lysol, etc.), deodorants, facial cleansers, etc. They use the injection moulding, extrusion and injection & stretch blow moulding processes. They cater to various multinationals like Colgate-Palmolive, Unilever, Avon, etc.

Same with the two companies above, H & E uses only 10 to 20% recycled in-house industrial wastes in their production.

IV. Conclusion

With the visit to the 3 plant sites, TWG-0004 witnessed that both polyethylene and polypropylene products undergoes the same process. Both also use the same percentage and kind of recycled materials, which is only about 10% of in-house industrial waste. The only difference was the materials being used. It was suggested that the polyethylene and polypropylene groups be made into one.

Hence, the Secretariat shall take into consideration the recommendations of those present that the incorporation of the percentage of recycled materials to the composition of polyethylene will not significantly affect the volume of generated waste of the industry. Besides, all scraps are being sold out to converters. The problem lies greatly on the disposal of the consumers. The manufacturers strongly suggest that an extensive awareness program on the proper disposal of these plastic films, containers, etc. be conducted for the consumers.

ANNEX 8.13

GREEN CHOICE PHILIPPINES

GCP-2003004
POLYETHYLENE & POLYPROPYLENE PACKAGING MATERIALS

Environmental Scenario

Polyethylene (PE) and Polypropylene (PP) plastics are two among the most versatile and economical materials that cover a wide range of application. It is noticeable that these plastics are replacing many traditional materials, especially in packaging applications.

In 2002, as per National Statistics Office data, total annual consumption of polyethylene was 279,602 metric tons, of which 86,899 metric tons came from domestic production and 192,703 metric tons were imported. Whereas in 1992, the total consumption was 135,983 metric tons.

In the case of polypropylene and using the same data source, the annual consumption of PP in 2002 totaled 267,651 metric tons, of which 150,825 metric tons were locally produced and 116,826 metric tons were imported. In 1992, total consumption of PP was 140,685 metric tons.

Last year, the local plastic industry estimated that resin consumption of the PE/PP packaging sector was approximately 259,945 metric tons. However, actual PE/PP consumption cannot be disaggregated.

While the use of plastics is increasing in almost all sectors of the economy, the most rapid growth is in packaging. As a result, there is an increasing pressure to minimize material requirement for packaging and to make them reusable, or at least recyclable to recover materials.

The Philippine Ecological Solid Waste Management Act of 2000 (R.A. 9003) mandates that the "DTI shall formulate and implement a coding system for packaging materials and products to facilitate waste recycling and reuse", as stated in Article 4 of Section 27.

Hence, the labelling scheme becomes imperative for a successful plastic recovery and recycling, ensuring that plastic containers and packaging materials can be identified so that they can be properly collected, sorted and recycled.

Definition of Terms

1. Plastic – a material which contains as an essential ingredient a high polymer and which at some stage in its processing into finished products can be shaped by flow.
2. Polyethylene – plastic based on polymers of ethylene or copolymers of ethylene with other monomers, the ethylene being in the greatest amount by mass.
3. Polypropylene – plastic based on polymers of propylene or copolymers of propylene with other monomers, the propylene being in the greatest amount by mass.
4. PE-HD – High Density Polyethylene is a PE produced with small amounts of short chain branching of ethylene molecules with a density greater than 0.941 grams per cubic centimeter.
5. PE-LD – Low Density Polyethylene is a PE produced with branches of long chain ethylene molecules with a density between 0.090 and 0.925 grams per cubic centimeter.

6. PE-LLD – Linear Low Density Polyethylene is a PE containing sufficient short-chain branching as a result of co-polymerization of ethylene or butane or octane.
7. R. A. 9003 – Ecological Solid Waste Management Act of 2000
8. Non-rigid packaging – plastic that has a modulus of elasticity in flexure or, if that is not applicable, then in tension, not greater than 70 MPa under stated conditions.
9. Rigid Packaging – plastic that has a modulus of elasticity in flexure or, if that is not applicable, then in tension, greater than 700 MPa under stated conditions.
10. Semi-rigid Packaging – plastic that has a modulus of elasticity in flexure or, if that is not applicable, then in tension, between 70 MPa and 700 MPa under stated conditions.
11. Primary Packaging – packaging which has direct contact with the product
12. Secondary Packaging – packaging used to contain several individually-wrapped products
13. Tertiary Packaging – packaging used to transport, store and display several bundles of individually-wrapped products
14. Post-consumer Plastic Waste - any plastic that has entered the stream of commerce, served its intended purpose, and can be diverted for recycling. This includes residential, commercial and institutional plastic.
15. Industrial Plastic Wastes – include industrial scrap material like factory regrind and plant scrap
16. HACCP – Hazard Analysis and Critical Control Point, a pro-active process control system by which food quality is ensured.

Scope

These criteria shall apply to polyethylene and polypropylene packaging such as non-rigid, rigid and semi-rigid; with the application for primary, secondary, and tertiary packaging.

Green Choice Criteria

To carry the Green Choice Philippines seal, the product must meet the following requirements:

Product Requirements

1. The product shall be 100% recyclable.

2. When used as food primary packaging, the product shall conform to HACCP or any equivalent standards.

3. The product shall carry the following latest international Plastic Coding System for Resin Identification, appropriate for polyethylene and polypropylene packaging products:

4. The product shall carry instructions for proper disposal.

5. The production process, transport and disposal feature of the product shall meet the requirements of all applicable environmental laws and regulations.

Effectivity:

These 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 – ELP Board*, if necessary at any period of time.

Evaluation and Validation Method:

1. Regarding criterion 1, the applicant must submit a self-certification from the company CEO and certification from the supplier of raw materials pertaining to its recyclability. If further validation is required, DOST-ITDI will test the product from the market or production line.

   The applicant must identify the recyclers of the product/s.

2. Regarding criterion 2, the applicant must submit a certification from a HACCP certifying body or BFAD.

3. Regarding criterion 3, the applicant must submit a sample of their product.

4. Regarding criterion 4, the applicant must submit a sample of their product carrying any of the following statements or symbols:

   4.1. Please recycle
   4.2. Recycle
   4.3. Please reuse
   4.4. Do not litter
   4.5. Please dispose of properly
   4.6. Dispose of properly
   4.7. Trash disposal symbol

5. Regarding criterion 5, the applicant must submit applicable licenses, permits and certificates indicating the manufacturer's compliance with environmental regulations applicable to the area in which the plant is located.

References

ISO 472: 1999- 11-01 (Third Edition) – Plastics Vocabulary

ISO 1043-1:2001-12-15 (Third Edition) – Plastics Symbols

National Statistics Office Data

Philippine Plastics Industry Association Data

Association of Petrochemical Manufacturers of the Philippines

Codex Alimentarius, 2nd Edition (revised 1995), Food and Agriculture Organization of the United Nations, World Health Organization, Rome 1995

Plastic Packaging/polyethylene4 criteria