

## **GREEN CHOICE PHILIPPINES**

### **NELP-GCP - 2008016 PENCIL**

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

Pencils in all its types and kinds are present in all households, offices and schools on a global scale. More than 14 billion pencils are produced in the world every year - enough to circle the globe 62 times (Musgrave Pencil Company, 2008).

The graphite of a pencil is not poisonous and graphite itself is harmless if consumed, however, black lead pencils, and colored lead pencils may be coated or formulated with paints that may consist of heavy metals, which can reach the user during use and affect health. Also, natural forests may also be exploited with the manufacture of wooden pencils.

The focus of the following criteria is on the health impacts due to hazardous components and the use of recycled materials for the product to minimize the natural resources consumed and the solid waste coming out into the waste stream without sacrificing the quality of the product.

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

##### **2.1. CHEMICAL CONTROL ORDER**

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

##### **2.2. DENR ADMINISTRATIVE ORDER 2005-05 (DENR AO 2005-05)**

Toxic Chemical Substances for Issuance of Chemical Control Orders

##### **2.3. DENR ADMINISTRATIVE ORDER 2005-27 (DENR AO 2005-27)**

Revised Priority Chemical List

##### **2.4. EXPENDABLE PART**

The term refers to pencil leads, colored pencil leads and mechanical pencil leads.

##### **2.5. IMPORTATION**

Means the entry of a product or substance into the Philippines (through the seaports or airports of entry) after having been properly cleared through or still remaining under customs control, the product or substance of which is intended for direct consumption, merchandising, warehousing, or for further processing.

##### **2.6. PENCIL**

A writing or drawing instrument consisting of a thin stick of pigment (usually graphite, but can also be colored pigment or charcoal) and clay, usually encased in a thin wood cylinder, though paper and plastic sheaths are also used, ferrules and end-plugs.

##### **2.7. PENCIL LEAD**

Pencil "lead" is graphite and not the chemical element lead.

**2.8. PRIORITY CHEMICALS LIST (PCL)**

A list of existing and new chemicals that the DENR has determined to potentially pose unreasonable risk to public health, workplace, and the environment

**2.9. PROCESS**

Preparation of a chemical substance or mixture after its manufacture for commercial distribution:

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

**2.10. REPUBLIC ACT 9003 (RA 9003)**

Ecological Solid Waste Management Act

**2.11. SUSTAINABLY MANAGED FOREST**

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

**2.12. TOXIC WASTE**

Toxic wastes are poisonous and have carcinogenic, mutagenic, or teratogenic effects on human or other life forms.

**2.13. TRANSPORT**

Includes conveyance by air, water and land

**2.14. UNREASONABLE RISK**

Means expected high frequency of undesirable effects or adverse responses arising from a given exposure to a substance.

**2.15. WASTE WOOD**

The by-products derived from the process of thinning out timbers, cutting out branches and manufacturing timbers, and to the timbers collected after use, excluding dead trees.

**3. SCOPE**

These criteria apply to the following writing instruments: wooden pencils, colored pencils and mechanical or automatic pencils. The criteria cover the product, refills for mechanical pencils and packaging materials.

**4. GREEN CHOICE REQUIREMENTS**

**4.1. PRODUCT QUALITY PERFORMANCE**

**4.1.1. Product Quality Standard**

The product shall comply with the performance requirements of the relevant Philippine Product Standards for its intended application.

**Table 1 – Applicable Philippine Product Standards for Pencil**

Standard No.	Title
PNS 1413:1996*	Wood-cased black lead pencils – Specification

PNS 1470:1996*	Wood-cased colored pencils – specification
PNS 1471-1:1996**	Mechanical pencils - Part 1: Classification, dimensions, performance requirements and testing
PNS 1471-2:1996**	Mechanical pencils - Part 2: Black leads - Classification and dimensions
PNS 1471-3:1996**	Mechanical pencils - Part 3: Black leads - Bending strengths of HB leads

\* For revision

\*\*Under Revision

#### **4.2. PRODUCT ENVIRONMENTAL REQUIREMENTS**

##### **4.2.1. Compliance to Environmental Regulations**

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

##### **4.2.2. Heavy Metals**

The product shall not contain antimony, arsenic, barium, cadmium, mercury, selenium, lead and hexavalent chromium or as listed in DENR AO 2005-05.

##### **4.2.3 Body of the writing instruments**

The body of the writing instruments, excluding the expendable parts, shall use the materials complied with the following requirements with 70% by weight or more of the body weight.

**Table 2 – Pencil body material**

<b>MATERIAL</b>	<b>REQUIREMENT</b>
Wood	Shall be waste wood or wood from sustainably managed forest
Plastic	Shall be made of 40% by weight recycled plastic
Paper	Shall be made of 40% by weight recycled paper

**5. EVALUATION AND VALIDATION**

PRODUCT CRITERIA	EVALUATION AND VALIDATION
<b>4.1 PRODUCT QUALITY PERFORMANCE</b>	
4.1.1 Product Quality Standard	The applicant shall submit a certification or testing results from duly recognized/accredited laboratories and/or certifying bodies.*
<b>4.2 PRODUCT ENVIRONMENTAL REQUIREMENTS</b>	
4.2.1 Compliance to Environmental Regulations	The applicant shall submit applicable licenses and permits indicating the manufacturer's compliance with agreements on environmental regulations, applicable to the area where the plant is located.
4.2.2 Heavy Metals	The applicant shall submit a certification or test result from duly recognized/ accredited laboratories.*
4.2.3 Body of the writing instruments	The applicant shall submit a portfolio and statement in writing signed by the Chief Executive Officer or counterpart of the company complete with relevant documentations, including samples.**

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

\*\* Notarized documents

**6. PERIOD OF VALIDITY**

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

## **7. REFERENCES**

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

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

Green Council: Hong Kong Green Label Scheme: Product Environmental Criteria for Pencil (GL-004-002)

Korea Eco-Label: EL105. Product Criteria for Writing Instruments [EL105-2005/1/2005-107]

Marketing Guide for ASEAN Exporters to Japan: B-9: Writing Instruments; 2004

Musgrave Pencil Company. 2008. Musgrave Pencil Company – Pencil Facts. Retrieved from <http://www.pencils.net/facts.cfm>. Accessed 11 March 2008.

Nordic Ecolabeling; Swan Labeling of Writing Instruments.

PNS 1413:1996 - Wood-cased black lead pencils – Specification

PNS 1470:1996 - Wood-cased colored pencils – Specification

PNS 1471-1:1996 - Mechanical pencils - Part 1: Classification, dimensions, performance requirements and testing

PNS 1471-2:1996 - Mechanical pencils - Part 2: Black leads - Classification and dimensions

PNS 1471-3:1996 - Mechanical pencils - Part 3: Black leads - Bending strengths of HB leads

Thai Green Label Scheme: Thai Green Label Products: TGL-24-00: Writing Instruments

**GREEN CHOICE PHILIPPINES**  
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