

# **APPROVAL OF THE PERUVIAN ENVIRONMENTAL QUALITY STANDARDS FOR NON-IONIZING RADIATIONS**

**(Unofficial translation by Eng. Victor Cruz and Miss Ursula Cangahuala)**

## **SUPREME DECREE Nº 010-2005-PCM**

### **THE PRESIDENT OF THE REPUBLIC**

#### **WHEREAS:**

That, article 2º, section 22 of the Political Constitution of Peru establishes that the main State's obligation is to guarantee every person's right to enjoy a balanced and appropriated environment for developing his life and its article 67º that the State's function is to stipulate the Environmental National Policy;

That, the Code of Environment and National Resources, Legislative Decree Nº 613, in article I of its preliminary Title, establishes that preservation of environment is an obligation of every person and states the State's obligation to prevent and control any damage or depredation process of natural resources that may interfere with normal development of any form of life and society;

That, the Environmental Quality Standards for Non-Ionizing Radiations are priority instruments for environmental management to prevent and to plan the contamination control by non-ionizing radiations based on an strategy addressing to protect health, to improve the country's competitiveness and to promote the sustainable development;

That, according with section e) from article 4 of the Law Nº 26410-National Council of Environment, modified by the Law Nº 28245- Frame Law for the National System of Environmental Management; it is function of the National Council of Environment – (CONAM) to lead the elaboration process for the Environmental Quality Standards (ECAs) which will be sent to the Ministry Council Presidency to get approval through Supreme Decree;

That, in consequence, it corresponds to approve the Environmental Quality Standards (ECAs) for non-ionizing radiations;

That, according with section k) from article 4 of the Law Nº 26410 modified by the article of the Law Nº 28245, establishes that CONAM's function is to dictate the required normative for an adequate functioning of the instruments of environmental management;

That, as well, the numeral 10.1 from the article 10º of the Law Nº 28245 establishes that CONAM has the faculty to dictate within its competence field, the required norms to carry out the instruments of planning and environmental management by the side of Central, Regional and Locals governments like the private sector and the civil society;

That, according with the pre-quoted norms it corresponds to the CONAM dictates dispositions that will regulate the adequate functioning and execution of the Environmental Quality Standards (ECAs) for Non-Ionizing Radiations as instruments for environmental management by the sectors and levels of government involved in its fulfillment;

In accordance with that stipulated in the section 24) from article 118° of the Political Constitution of Peru, the Legislative Decree N° 560, Law from the Executive Power, the Law N° 26410 and the Law N° 28245;

**Decrees:**

**Article 1°.-**To approve the Environmental Quality Standards (ECAs) for Non Ionizing Radiations which are presented in the attached annex that forms part of the present supreme decree, that establishes the maximum levels of strength from non ionizing radiations which presence in the environment in the quality of receptor section it is recommended no to exceed to avoid risks to human health and the environment. These standards are considered primary because of being addressed to the protection of human health.

**Article 2°.-** The National Council of Environment –CONAM will dictate the norms that will regulate the adequate functioning and execution of the Environmental Quality Standards (ECAs) for Non-Ionizing Radiations as instruments of environmental, management by the sectors and levels of the government involved in its fulfillment;

**Article 3°.-** The present Supreme decree will be endorsed by the President of the Ministry Council.

Issued in the Government House, Lima, February 2<sup>nd</sup> 2005.

**ALEJANDRO TOLEDO**

Constitutional Republic's President

**CARLOS FERRERO**

President of the Ministry Council

## Annex –Supreme Decree Nº 010-2005-PCM

### Standards for Environmental Quality for Non-ionizing Radiations

Frequency range (f)	Electric field strength (E) (V/m)	Magnetic field strength (H) (A/m)	Magnetic Flow density (B) (μT)	Power density (S <sub>eq</sub> ) (W/m <sup>2</sup> )	Main applications (non-restrictive)
Up to 1 Hz	-	3,2x10 <sup>4</sup>	4x10 <sup>4</sup>	-	Power lines for electric trains, magnetic resonance
1-8 Hz	10 000	3,2x10 <sup>4</sup> /f <sup>2</sup>	4x10 <sup>4</sup> /f <sup>2</sup>	--	
8-25 Hz	10 000	4 000/f	5 000/f	-	Power lines for electric trains
0,025-0,8 kHz	250/f	4/f	5/f	-	Electric power networks , power lines for trains, VDU
0,8-3 kHz	250/f	5	6,25	-	VDU
3-150 kHz	87	5	6,25	-	VDU
0,15-1 MHz	87	0,73/f	0,92/f	-	AM Radio
1-10 MHz	87/f <sup>0,5</sup>	0,73/f	0,92/f	-	AM Radio, diathermia
10-400 MHz	28	0,073	0,092	2	FM Radio, VHFTV, aeronautical mobile and radio navigation systems, "cordless telephone", magnetic resonance, diathermia
400-2000MHz	1,375/f <sup>0,5</sup>	0,0037/f <sup>0,5</sup>	0,0046/f <sup>0,5</sup>	f/200	UHF TV, cellular mobile telephony; trunking service , mobile satellite service, cordless telephone, personal communication systems
2-300 GHz	61	0,16	0.20	10	Wireless telephony networks, microwave and satellite communications, microwave ovens, radars

1.  $f$  is in the frequency that is indicated in the column frequency ranges
2. For frequencies between 100 kHz and 10 GHz,  $S_{eq}$ ,  $E^2$ ,  $H^2$ , and  $B^2$ , should be averaged over any period of 6 minutes.
3. For frequencies over 10 GHz,  $S_{eq}$ ,  $E^2$ ,  $H^2$ , and  $B^2$ , should be averaged over any period of  $68/f^{1.05}$  minutes ( $f$  en GHz)