

Kingdom of Cambodia  
Nation Religion King

ROYAL GOVERNMENT

No:

Phnom Penh,

SUB-DECREE

on

AIR AND NOISE POLLUTION CONTROL

២១២២២២២២

- Has seen the Constitution of the Kingdom of Cambodia (1993);
- Has seen the Royal Decree No.NS/RKT/1198.72 dated 30 November, 1998 on the formation of the Royal Government of the Kingdom of Cambodia;
- Has seen Preah Reach Kram No.02/NS/94 dated 20 July 1994, announcing to allow using the Law on the Establishment and Implementation of the Council of Ministers;
- Has seen Preah Reach Kram No. NS/RKM/0194/21 dated 24 January 1996, announcing to use the Law on the Establishment of the Ministry of The Environment;
- Has seen Preah Reach Kram No. NS/RKM 1296/36 dated 24 December 1996, announcing to use Law on the Environmental Protection and Natural Resources Management;
- Has received an approval from meeting of the Council of Ministers on .

## CHAPTER I

### General Provisions

- Article 1:** This sub-decree has a purpose to protect the environmental quality and public health from air pollutants and noise pollution through monitoring, curb and mitigation activities.
- Article 2:** This sub-decree applies to all movable sources and immovable sources of air and noise pollution.
- Article 3:** Technical terms use in this sub-decree shall have the meaning ascribed there to:
- A- "Source of pollution" is divided into two terms:
    - Movable source refers to emission source without permanent location such as aircraft, ship, vehicle port transportation services...etc
    - Immovable sources refers to emission sources with permanent location such as factory, enterprise, warehouse, construction site and incinerator...etc.
  - B- "Pollutant" refers to smoke, dust, ash particle substance, gas, vapor, fog, odor and radioactive substances...etc.
  - C- "Flammable substance" refers to fuel oil, coal and natural gas that might be caught flammable reaction.

## CHAPTER 2

### Provisions on emission of air and noise pollution

- Article 4:** Air quality standard shall be specified in the Annex-1 of this sub-decree.  
The standard of maximum quantity of hazardous substances allowing in the atmosphere shall be specified in the Annex-2 of this sub-decree.
- Article 5:** The standard of maximum pollutants emitted into the atmosphere shall be specified in the Annex-3 of this sub-decree.  
This standard of smoke emission from movable source shall be specified in the Annex-4 of the sub-decree.

- Article 6: In the necessary cases, the standards were stipulated in the Article 4 and Article 5 of this sub-decree shall be recognized and changed every 5 years, based on the proposal of the Ministry of Environment.
- Article 7: The standard for noise emission from various sources like vehicles, manufacturing places and the standard for maximum noise emission for public places and residential areas shall be specified in the Annex 5, Annex 6 and Annex 7 of this sub-decree.
- Article 8: The emission of pollutants into the atmosphere exceeds the standard which stipulated in the Annex 3 and Annex 4 of this sub-decree be strictly prohibited.
- Article 9: Noise emission exceeds the standard which stipulated in the Annex 5, Annex 6 and Annex 7 of this sub-decree shall be strictly prohibited.
- Article 10: The importation and production of flammable substances containing S, Pb, C<sub>6</sub>H<sub>6</sub> and Hydrocarbon shall be complied with the standard which stipulated in the Annex 8 of this sub-decree.
- Article 11: The importation, utilization, vehicle and its spare-part production in Cambodia which emitted pollutants and noise exceeding the standard as stipulated in the Annex 4 and Annex 5 of this sub-decree shall be strictly prohibited.
- Article 12: The discharge or leakage of various flammable substances, fuel oil, radio-active or chemical substance into the atmosphere, water and soil shall be strictly prohibited.

### CHAPTER 3

#### Asking for permission

- Article 13: The emission of pollutants and noise from immovable source into the atmosphere shall be asked for permission from the Ministry of Environment and shall be sent the copy of application form to concerned ministries and agencies.

- Article 14:** The asking of an import permission of flammable substances shall be attached the analytical result which emphasized the quantity of pollutant: S, Pb, C<sub>6</sub>H<sub>6</sub> and Hydrocarbon from original source of importation or production.
- Article 15:** The asking for discharge permission as stipulated in the Article 13 of the sub-decree shall be carried out for new project and ongoing activities, except projects that have the Environment Impact Assessment's report
- Article 16:** The master or person who responsible for pollution source as stipulate in the Article 13 and Article 14 of this sub-decree shall be applied for permission from the Ministry of Environment:
- 40 days before the project commencement in Phnom Penh
  - 60 days before the project commencement in town or province.

#### CHAPTER 4 Pollution Source Monitoring

- Article 17:** The monitoring of flammable substances' quantities, air pollutant emission and noise causing from immovable sources is the responsibility of the Ministry of Environment.
- Article 18:** The monitoring of smoke and noise emission from movable source is the responsibility of the Ministry of Environment in collaboration with line ministries and institution. The monitoring procedure shall be determined by join declaration among line ministries.
- Article 19:** Ministry of Environment shall be prepared technical guidelines on pollution source monitoring, sampling point, and air and noise analysis.
- Article 20:** Ministry of Environment shall be taken sample at all emission points of pollution source. The master of person who responsible for pollution source shall collaborate the staff of environment who conduct a sampling to fulfill their technical duty.

**Article 21:** During conducting Environment inspection or controlling in the sources of pollution the Ministry of Environment inspectors can analyses the sources in place or can take them to the environmental laboratory for annualizing.

**Article 22:** The owner or responsible person of pollution sources shall bear the cost of the cost of the analyses of his/her own sample following the tariff determined by the Ministry of Environment and the Ministry of Economic and finance. This income shall be included into the National budget in order to allocate to the Environmental Endowment Fund Account.

**Article 23:** The owner or responsible person of the pollution sources may ask to have his/her pollution sample tested in other public or private laboratories which are recognized formally and such laboratories carry out of the same analytical method those used in the Ministry of Environment laboratory.

**Article 24:** The owner or responsible person of pollution source shall:

- Responsible for installing or equipping any equipment to purify toxic substances and to reduce noise and vibration in order to respond to Air pollution standard as stipulated in the Annexes:
- Responsible for installing the equipment for measurement of amount of pollutant contained in his/her pollution sources and keeps the result for record keeping. The result must send to the Ministry of Environment every 3 months.
- Have at least an environmental compromising and prepare environmental protection plan in their institution. Environmentalist shall list and recognize from the Ministry of Environment and have the capability as required by the Ministry of Environment.

**Article 25:** Even if it is found out that the discharge of toxic substances and noise from any pollution source do not respond to the standard as stipulated in the Article 5 and 7 of this sub-decree, the Ministry of Environment shall:

- a- Issue a written order requiring the owner or responsible person of such pollution source to correct the violation activities immediately within a specific time period.

- b- Issues are written order requiring the owner of responsible person of such pollution source to stop his/her activities temporarily until the violation is corrected if the violation activities cause an adverse impact to human health and air quality.

## CHATER 5

### Air Pollution Monitoring

Article 26: The Ministry of Environment shall regularly control and monitor the situation of the air quality through out the Kingdom of Cambodia in order to take measure to prevent and reduce the pollution.

Article 27: The Ministry of Environment shall manage data relating result of the air quality testing and to assess the status of the air quality and shall disseminate publicly the status of air quality and the situation of the pollution of the Kingdom of Cambodia.

Article 28: Even if it is found that any area is suffering of pollution which could threaten human life or environmental quality. The Ministry of Environment shall immediately notify the public about the danger and investigate to find out the sources of pollution and shall take measure to prevent air pollution and to restore the air quality.

## CHATER 6

### Inspection Procedure

Article 29: The Ministry of Environment's inspectors, while conducting environmental inspection, shall complied with the following procedures:

- a- To present his/her identity card and mission letter while entering into the premise or any site of pollution for conducting inspection or taking sample or for checking record;

- b- Primary record and report of the inspection or sample taking shall be done at the site of inspection with participating from any witness if necessary;
- c- The inspectors may ask question and require the owner or responsible person of the source of pollution to provide the information and other relevant documents which are used for report making and for evidence;
- d- One copy of record or report shall be given to the owner or the responsible person of the source of pollution and one copy to the representatives of concerned ministries (who collaborate with) and other one copy shall be kept at the Ministry of Environment.

**Article 30:** Where if there is complaint or report that any source of pollution discharges contaminant into human health or public property. The Ministry of Environment in collaboration with concerned ministries may enter the site of this source of pollution and conduct inspection and take sample for testing.

**Article 31:** In the case of serious accident or imminent danger resulting from air pollution at public water area, the Ministry of Environment shall make urgent inspection on the above problem and shall inform the concerned ministries and local authority.

**Article 32:** In the case of clear offense that cause air pollution, the inspector of the Ministry of Environment shall:

- a- Take statement, collect and detain evidence of such offense and make an administrative fine, if the offense has not contaminated seriously or effect human health, public properties and environmental quality.
- b- Collect and detain evidence of such offense for making statement and forward the case file to the competent agency, if this offense causes serious pollution or affect to human health or public properties and environmental quality.

## CHAPTER 7

### Penalty

Article 33: Violations of this Sub-decree shall be fined and punished according to the articles 20, 21, 22, 23 and the article 25 of the chapter 9 of the Law on Environmental Protection and Natural Resource Management.

Article 34: The Ministry of Environment's official is responsible for making a report of prosecution for any person who violates any article of this sub-decree. The Ministry of Environment shall take legal action against any offense of this sub-decree.

Article 35: Any environmental inspection official or agent who is negligent, fails to pay attention to, fails to comply with the Ministry's regulations, or conspires with a violator or facilitates the commission of a violation, shall be subject to administrative sanction or face prosecution before the court.

## CHAPTER 8

### Final provisions

Article 36: Any provision contrary to this sub-decree shall be annulled.

Article 37: The minister in charge of the cabinet of the council of Ministers, Ministries and concerned institutes shall co-operate with Ministry of Environment and to implement this sub-decree according to their duties.

Article 39: This sub-decree shall be in force from the date of its signature.

## ANNEX 1

## Ambient Air Quality Standard

N°	Parameter	1 Hour Average mg/m <sup>3</sup>	8 Hour Average mg/m <sup>3</sup>	8 Hour Average mg/m <sup>3</sup>	1 Year Average mg/m <sup>3</sup>
1	Carbon monoxide (CO)	40	20	-	-
2	Nitrogen dioxide (NO <sub>2</sub> )	0.3	-	0.1	-
3	Sulfur dioxide (SO <sub>2</sub> )	0.5	-	0.3	0.1
4	O zone (O <sub>2</sub> )	0.2	-	-	-
5	Lead (Pb)	-	-	0.005	-
6	Total Suspended Particulate (TSP)	-	-	0.33	0.1

Remark: This standard applied to evaluation of ambient air quality and to monitoring of air pollution status.

Standard method of analysis of ambient air quality are specified in guideline of ministry of environment.

## ANNEX 2

## Maximum allowable concentration of hazardous substances in ambient air

N°	Name of Chemical Substances	Formula	Maximum level
1	Aniline	$C_6H_5NH_2$	0.03
2	Ammonia	$NH_3$	0.2
3	Acetic Acid	$CH_3COOH$	0.2
4	Sulfuric Acid	$H_2SO_4$	0.3
5	Nitric Acid	$HNO_3$	0.4
6	Benzene	$C_6H_6$	1
7	Ben Zidine	$NH_2C_6H_4C_6H_4NH_2$	Non
8	Carbon-disulfide	$CS_2$	0.02
9	Chloroform	$CHCl_3$	0.01
10	Carbon-tetrachloride	$CCl_4$	3
11	Particle containing Asbestos		Non
12	DDT	$C_{14}H_9Cl_5$	0.5
13	Formaldehyde	$HCHO$	0.012
14	Hydrogen Arsenic	$AsH_3$	0.002
15	Hydrogen Cyanide	$HCN$	0.01
16	Hydrogen Fluoride	$HF$	0.002
17	Hydrogen Sulfide	$H_2S$	0.001
18	Phenol	$C_6H_5OH$	0.01
19	Styrene	$C_6H_5CH=CH_2$	0.003
20	Tetra Chloroethylene	$C_2Cl_4$	0.1
21	Tetraethyle Lead	$Pb(C_2H_5)_4$	0.005
22	Tri Chloroethylene	$ClCH=CCL_2$	0.2
23	Toluene	$C_6H_5CH_3$	0.4
24	Vinyl Chloride	$ClCH=CH_2$	0.05
25	Arsenic (Compound organic)	$As$	0.00001
26	Cadmium (Metal Compound and oxide)	$Cd$	0.003
27	Chromium (Compound & Metal)	$Cr$	0.0015
28	Nickel (Compound & Metal)	$Ni$	0.0002
29	Mercury (Compound & Metal)	$Hg$	0.0001
30	Petrol		5

Remark: This standard applied to control of hazardous substance that permitted in ambient air.

**ANNEX 3**

Maximum allowable standard of pollution substance  
for immobile sources in ambient air

N <sub>o</sub>	Parameters	Maximum level of discharge
1	Particulate in smoke of:	
	Incinerator	0.4g/m <sup>3</sup>
	Heating metal	400mg/m <sup>3</sup>
	Bad stone, Lime, cement manufacturing	400mg/m <sup>3</sup>
	Asphalt concrete plant	500mg/m <sup>3</sup>
	Other sources	
2	Dust:	
	Containing silica (SiO <sub>2</sub> )	100mg/m <sup>3</sup>
	Containing asbestos	27ug/m <sup>3</sup>
	Chemical inorganic substance	
3	Aluminum Al	(dust)300mg/m <sup>3</sup> ; ;(Al)50mg/m <sup>3</sup>
4	Ammonia NH <sub>3</sub>	100mg/m <sup>3</sup>
5	Antimony Sb	25mg/m <sup>3</sup>
6	Arsenic As	20ug/m <sup>3</sup>
7	Beryllium Be	10mg/m <sup>3</sup>
8	Chloride Cl	20mg/m <sup>3</sup>
9	Hydrogen chloride HCl	200mg/m <sup>3</sup>
11	Hydrogen sulfide H <sub>2</sub> S	2mg/m <sup>3</sup>
12	Cadmium Cd	1mg/m <sup>3</sup>
13	Copper Cu	(dust) 300mg/m <sup>3</sup> ; (Cu) 20mg/m <sup>3</sup>
14	Lead Pb	(dust) 100mg/m <sup>3</sup> ; (Cu) 20mg/m <sup>3</sup>
15	Zinc Zn	30mg/m <sup>3</sup>
16	Mercury Hg	0.1mg/m <sup>3</sup>
17	Carbon monoxide CO	1000mg/m <sup>3</sup>
18	Sulfur dioxide SO <sub>2</sub>	500mg/m <sup>3</sup>
19	Nitrogen oxide NO <sub>x</sub> (all categories)	1000mg/m <sup>3</sup>
20	Nitrogen oxide NO <sub>x</sub> (emitted HNO <sub>3</sub> product)	2000mg/m <sup>3</sup>
21	Sulfuric Acid H <sub>2</sub> SO <sub>4</sub>	35mg/m <sup>3</sup>
22	Acetic Acid HNO <sub>3</sub>	70mg/m <sup>3</sup>

23	Sulfur trioxide	SO <sub>3</sub>	35mg/m <sup>3</sup>
24	Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	3mg/m <sup>3</sup>
	Chemical organic substance		
25	Acetylene tetra bromide	CHBr <sub>2</sub> CHBr <sub>2</sub>	14mg/m <sup>3</sup>
26	Acrolein	CH <sub>2</sub> =CHCHO	1.2mg/m <sup>3</sup>
27	Aniline	C <sub>6</sub> H <sub>5</sub> NH <sub>2</sub>	19mg/m <sup>3</sup>
28	Benzidine	NH <sub>2</sub> C <sub>6</sub> H <sub>4</sub> C <sub>6</sub> H <sub>4</sub> NH <sub>2</sub>	None
29	Benzene	C <sub>6</sub> H <sub>6</sub>	80mg/m <sup>3</sup>
30	Chloro benzyl	C <sub>6</sub> H <sub>5</sub> CH <sub>2</sub> Cl	5mg/m <sup>3</sup>
31	Butyl amine	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub>	15mg/m <sup>3</sup>
32	Cresol (o-,m-,p-)	CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> OH	22mg/m <sup>3</sup>
33	Chloro benzene	C <sub>6</sub> H <sub>5</sub> Cl	350mg/m <sup>3</sup>
34	Chloroform	CHCl <sub>3</sub>	240mg/m <sup>3</sup>
35	Chloropicrin	CCl <sub>3</sub> NO <sub>2</sub>	0.7mg/m <sup>3</sup>
36	0-dichlorobenzene	C <sub>6</sub> H <sub>4</sub> Cl <sub>2</sub>	300mg/m <sup>3</sup>
37	1,1-dichloro ethane	CHCl <sub>2</sub> CH <sub>3</sub>	400mg/m <sup>3</sup>
38	Di methyl sulfate	(CH <sub>3</sub> ) <sub>2</sub> SO <sub>4</sub>	0.5mg/m <sup>3</sup>
39	Di methyl hydrazine	(NH <sub>3</sub> )NNH <sub>2</sub>	1mg/m <sup>3</sup>
40	Di nitro benzene	(o-,m-,p-)C <sub>6</sub> H <sub>4</sub> (NO <sub>2</sub> ) <sub>2</sub>	1mg/m <sup>3</sup>
41	Ethylene di amine	NH <sub>2</sub> CH <sub>2</sub> -CH <sub>2</sub> NH <sub>2</sub>	30mg/m <sup>3</sup>
42	Ethylene Chlorohydrin	CH <sub>2</sub> ClCH <sub>2</sub> OH	16mg/m <sup>3</sup>
43	Ethylene oxide	CH <sub>2</sub> OCH <sub>2</sub>	20mg/m <sup>3</sup>
44	Formaldehyde	HCHO	6mg/m <sup>3</sup>
45	Methyl Acrylate	CH <sub>2</sub> =CHCOOCH <sub>3</sub>	35mg/m <sup>3</sup>
46	Methanol	CH <sub>3</sub> OH	260mg/m <sup>3</sup>
47	Methyl Bromide	CH <sub>3</sub> Br	80mg/m <sup>3</sup>
48	Monomethylaniline	C <sub>6</sub> H <sub>5</sub> NHCH <sub>3</sub>	9mg/m <sup>3</sup>
49	Nitro Benzene	C <sub>6</sub> H <sub>5</sub> NO <sub>2</sub>	5mg/m <sup>3</sup>
50	Nitroglycerine	C <sub>3</sub> H <sub>5</sub> (NO <sub>2</sub> ) <sub>3</sub>	5mg/m <sup>3</sup>
51	Nitrotoluene	NO <sub>2</sub> C <sub>6</sub> H <sub>4</sub> CH <sub>3</sub>	30mg/m <sup>3</sup>
52	Phenol	C <sub>6</sub> H <sub>5</sub> OH	19mg/m <sup>3</sup>
53	Phenyl hydrazine	C <sub>6</sub> H <sub>5</sub> NHNH <sub>2</sub>	22mg/m <sup>3</sup>
54	Pyridine	C <sub>5</sub> H <sub>5</sub> N	30mg/m <sup>3</sup>
55	Pyrene	C <sub>16</sub> H <sub>10</sub>	15mg/m <sup>3</sup>
56	Quinone	C <sub>6</sub> H <sub>4</sub> O <sub>2</sub>	0.4mg/m <sup>3</sup>
57	Styrene	C <sub>6</sub> H <sub>5</sub> CH=CH <sub>2</sub>	420mg/m <sup>3</sup>
58	1,1,2,2-tetrachloroethane	Cl <sub>2</sub> HCCHCl <sub>2</sub>	35mg/m <sup>3</sup>
59	Tetra chloromethane	CCl <sub>4</sub>	65mg/m <sup>3</sup>
60	Toluene	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	750mg/m <sup>3</sup>

61	Tetra nitromethane $C(NO_2)_4$	$8mg/m^3$
62	Toluidine $CH_3C_6H_4NH_2$	$22mg/m^3$
63	Toluidine-2,4-D-isocyanate $CH_3C_6H_3(NCO)_2$	$0.7mg/m^3$
64	Trichloro ethylene $ClCH=CCl_2$	$110mg/m^3$
65	Xylidine $(CH_3)_2C_6H_3NH_2$	$50mg/m^3$
66	Vinylchloride $CH_2=CHCl$	$150mg/m^3$

Remark: This standard is applied to control of pollution substance for immobile sources to atmosphere.

**ANNEX 4**

## Gas emission standard of mobile sources

N°	Kind of Vehicle	Kind of fuel	Level of emission				
			CO(%)		HC(ppm)		Dark fume %
			A	B	A	B	
1	Motorcycle contain 2chapter combustion	Petrol	4.5	4	10000	3000	-
2	Motorcycle contain 4 chapter combustion	Petrol	4.5	4	10000	2400	-
3	All kind of vehicles	Petrol	4.5	4	10000	800	-
4	All kind of vehicles	Diesel	-	-	-	-	50

**Remark:** This Standard applied to control of noise emission of mobile sources into atmosphere.

A: Refer to all kind of vehicles used over 5 years as from year produce.

B: Refer to all kinds of vehicles are new importation in first 5 years as from year produced.

ANNEX 5

Vehicle of noise in public and residential  
area maximum permitted noise level

N°	Category of vehicle	Maximum noise level permitted (dB(A))
1	Motorcycles, cylinder capacity (CC) of the engine does not exceed 125cm <sup>3</sup>	85
2	Motorcycles, CC of the engine exceeds 125cm	90
3	Motorize tricycles	90
4	Cars, taxi, passenger vehicle for the carriage of not more than 12 passengers	80
5	Passenger vehicle constructed for carriage of more than 12 passengers	85
6	Truck permitted maximum weight does not exceed 3.5 tones	85
7	Truck permitted maximum weight does not exceed 3.5 tones	88
8	Truck engine is more than 150 KW	89
9	Tractor or any other truck not elsewhere classified of described in this column of the table	91

Remark: This standard is applied to control of noise emission standard for all kinds of vehicles when operating on the public road.

ANNEX 6

Maximum permitted noise level in public  
and residential areas (dB(A))

N°	Area	Period of time		
		From 6h AM to 18h	From 18h to 22h	From 22h to 6hAM
1	Quiet areas - Hospitals - Libraries - School - Kindergarten	45	40	35
2	Residential area: - Hotels - Administration offices - House	60	50	45
3	Commercial and service areas and mix	70	65	50
4	Small industrial factories intermingling in residential areas	75	70	50

Remark: This standard is applied to control of noise level of any source of activity that emitted noise into the public and residential areas.

**ANNEX 7**

Noise control standard at workshop,  
factories and industries sites

Noise Level (dB(A))	Maximum period of time (Hour)	Level
75	32	Support ear prevention equipment to worker in place has 80 (dB(A)) over noise
80	16	
85	8	
90	4	
95	2	
100	1	
105	0.5	
110	0.25	
115	0.125	

Remark: This standard applied to control of noise level in location of  
workshop, industries and factories

**ANNEX 8**

Sulfur and lead standard permitted to fuel  
and other combustion substances

N°	Combustion Substance	Sulfur (S)	Lead (Pb)
1	Dark fuel	1.0%	
2	Diesel	0.2%	
3	Petrol	-	0.15g/l
4	Coal	1.5%	

Remark: This standard applied to control concentrations of sulfur, lead, Benzene and hydrocarbons contains in fuel and coals.