### REGULATION OF THE MINISTER OF HEALTH OF THE REPUBLIC OF INDONESIA NUMBER 492/MENKES/PER/IV /2010

#### **About**

# DRINKING WATER QUALITY REQUIREMENTS BY THE GRACE OF GOD ALMIGHTY MINISTER OF HEALTH OF THE REPUBLIC OF INDONESIA,

#### Considering:

- a. that in order that drinking water in public consumption does not cause health problems, it is necessary to set health requirements for drinking water quality;
- that the Decree of the Minister of Health No. 907 /Menkes/SK/VII/2002 concerning The Terms and Supervision of Drinking Water is considered inadequate in the framework of the implementation of drinking water supervision that meets health requirements;
- that based on the consideration as referred to in a) and b), it is necessary
  to stipulate the Drinking Water Quality Requirements with a Regulation by
  the Minister of Health;

#### Remember:

- 1 Law No. 4 of 1984 on Plague Infectious Diseases (State Gazette of the Republic of Indonesia Year 1984 Number 20, Supplement to the Statute Book Republic of Indonesia Number 3273);
- 2 Law No. 8 of 1999 concerning Consumer Protection (State Gazette of the Republic Indonesia Year 1999 Number 42, Supplement to the Republic of Indonesia Number 3821);
- 3 Law No. 7/2004 on Sources of Water Power (State Gazette of the Republic of Indonesia Year 2004, Number 32, Supplement to the State Gazette of the Republic of Indonesia Number 4377);
- 4 Law No. 32 of 2004 concerning
  Local Government (State Gazette of the Republic
  Indonesia Year 2004 Number 125, Supplement to The
  Republic of Indonesia Number 4437), as
  has been amended several times in the last few times with the
  Number 12 of 2008 concerning the second amendment
  law No. 32 of 2004 concerning
  Local Government (State Gazette of the Republic
  Indonesia Year 2008 Number 59, Supplement to the
  State of the Republic of Indonesia Number 4844);



5. Law No. 36 of 2009 concerning Health (State Gazette of the Republic of Indonesia Year 2009 No. 144, Supplement to the Republic of Indonesia Number 5063);

6. Government Regulation Number 82 of 2001 concerning Water Quality Management and Pollution Control Water (State Gazette of the Republic of Indonesia year 2001 Number 153, Supplement to the Republic of Indonesia's Statute Book Indonesia Number 4161);

7. Government Regulation No. 16/2005 concerning Development of Drinking Water Supply System (Sheet Republic of Indonesia Year 2005 Number 33, Supplement to the State Gazette of the Republic of Indonesia Number 4161);

8. Government Regulation No. 38/2007 concerning Division of Affairs between the Government, Government Provincial and Local Government of Kabupaten/Kota (State Gazette of the Republic of Indonesia year 2007 Number 82, Supplement to the Republic of Indonesia's Statute Book Indonesia Number 4737);

9. Government Regulation No. 42/2008 concerning Water Resources Management (State Gazette of the Republic Indonesia Year 2008 Number 82, Supplement to The State of the Republic of Indonesia Number 4858); 10. Presidential Regulation No. 47 of 2009 concerning Establishment and Organization of the Ministry of State;

11. Decree of the Minister of Industry and Trade Number 705/MPP/Kep/II/2003 on Requirements Technical Industry of Bottled Drinking Water and The trade:

12. Decree of the Minister of Industry and Number 651/MPP/Kep/10/2004 about Technical Drinking Water Depot; Trade

Requirements

13. Regulation of the Minister of Health No. 1575/Menkes/Per /XI/2005 on Organization Structure and Work Procedures of the Ministry of Health as amended several times last with the Ministerial Regulation Health Number 439/ Menkes/ Per /VI/ 2009;

14. Regulation of the Minister of Public Works No.

18/PRT /M/2007 on Organizing

Development of Drinking Water Supply System;

15. Regulation of the Minister of Health No. 922/Menkes/SK/VIII/2008 on Division of Affairs Provincial Government and Municipal Government

health sector;

16. Decree of the Minister of Health 852/Menkes/SK/IX/2008 on Strategy Community-Based Total Sanitation;



17. Regulation of the Minister of Public Works No. 01/PRT/M/2009 concerning the Development of Non-Piping Network Drinking Water Supply System;

#### **DECIDED:**

**Establishing:** 

REGULATION OF THE MINISTER OF HEALTH CONCERNING DRINKING WATER QUALITY REQUIREMENTS.

#### Article 1

In this Regulation referred to as:

- 1. Drinking water is water that goes through the process of processing or without processing that meets health requirements and can be directly drunk.
- 2. Drinking water organizers are state-owned enterprises, cooperatives, private business entities, individual businesses, community groups or individuals who conduct the provision of drinking water.
- 3. The local government is the governor, regent, or mayor and the regional device as an element of local government organizers.
- 4. Port Health Office hereinafter abbreviated as KKP is a technical implementation unit of the Ministry of Health in the port area, airport and land cross-border post.
- 5. Minister is a minister whose duties and responsibilities are in the field of health.
- 6. Food and Drug Control Agency hereinafter abbreviated as BPOM is an agency in charge of drug and food supervision.

In accordance with the laws and regulations.

#### Article 2

Every organizer of drinking water must ensure the drinking water produced is safe for health.

#### Article 3

- (1) Drinking water is safe for health if it meets the physical, microbiological, chemical and radioactive requirements contained in mandatory parameters and additional parameters.
- (2) The mandatory parameters as referred to in paragraph (1) shall be the requirements of drinking water quality that must be followed and obeyed by all drinking water providers.
- (3) Local governments may set additional parameters in accordance with the quality conditions of their respective regions by referring to additional parameters as stipulated in this Regulation.



(4) Mandatory parameters and additional parameters as referred to in the paragraph (2) as set forth in the Appendix to this Regulation.

#### Article4

- (1) To maintain the quality of drinking water consumed by the community shall be supervised the quality of drinking water externally and internally.
- (2) External supervision of drinking water quality shall be supervised by the District Health Office or by the MPA specifically for the working area of the MPA.
- (3) Internal supervision of drinking water quality shall be supervised by the drinking water operator to ensure the quality of drinking water produced meets the requirements as stipulated in the

This rule.

- (4) Activities to control the quality of drinking water as referred to in paragraph
- (1) includes sanitation inspection, water up to 1 pick up, water quality testing, analysis of laboratory inspection results, recommendations and follow-up.
- (5) Further provisions on the management of drinking water quality control shall be stipulated by the Minister.

#### Article 5

Minister, Head of BPOM, Head of Provincial Health Office and Head of District Health Office of Kota conduct coaching and supervision on the implementation of this Regulation in accordance with their respective duties and functions.

#### Article 6

In order to foster and supervise, the Minister and Head of BPOM may order producers to withdraw drinking water products from circulation or prohibit the distribution of drinking water in certain areas that do not meet the requirements as stipulated in this Regulation.

#### Article 7

The government or local government in accordance with its authority provides administrative sanctions to drinking water providers who do not meet the requirements of drinking water quality as stipulated in this Regulation.

#### Article 8

At the time of the enactment of this Regulation, the Decree of the Minister of Health No. 907 /Menkes/SK/VII/2002 concerning the Terms and Supervision of Drinking Water Quality (remains in force until) the drinking water quality requirements are revoked and declared invalid.



#### Article 9

This regulation takes effect on the date specified. In order for everyone to know, order the enactment of this regulation by its placement in the State Gazette of the Republic of Indonesia.

Signed in Jakarta on April 19th, 2010



MINISTER OF HEALTH, Ttd dr. Endang Rahayu Sedyaningsih,MPH, Dr. PH



Attachment Regulation of the Minister of Health Number:

492/Menkes/Per/IV/2010 Date: April 19, 2010

### **DRINKING WATER QUALITY REQUIREMENTS**

### **I. MANDATORY PARAMETERS**

No	Type of Unit	Parameters	Maximum rate allowed
1	Related parameters directly with health		
	a. Microbiology Parameters		
	1) E. coli	Total per 100 ml sample	0 (zero)
	2) Total Coliform Bacteria	Total per 100 ml sample	0 (zero)
	b. Inorganic chemistry		
	1) Arsenic	mg/l	0.01
	2) Fluoride	mg/l	1.5
	3) Total Chromium	mg/l	0.05
	4) Cadmium	mg/l	0.003
	5) Nitrite, (As NO <sub>2</sub> -)	mg/l	3
	6) Nitrate, (As NO <sub>3</sub> -)	mg/l	50
	7) Cyanide	mg/l	0.07
	8) Selenium	mg/l	0.01
2	Parameters which are not directly related to health	Jincertified Translation	>
	directly related to ficultif	cortivatio	
	a. Physical Parameters	Un ansi	
	1) Odor / Smell	410	Odorless
	2) Color	TCU	15
	3) Total dissolved solids (TDS)	mg/l	500
	4) Turbidity	NTU	5
	5) Taste		Tasteless
	6) Temperature	°C	Air temp' ± 3
	b. Chemical Parameters		
	1) Aluminium	mg/l	0.2
	2) Iron	mg/l	0.3
	3) Hardness	mg/l	500
	4) Chloride	mg/l	250
	5) Manganese	mg/l	0.4
	6) pH	J.	6.5 - 8.5

No	Type of Unit	Parameters	Maximum rate allowed
	7) Zinc	mg/l	3
	8) Sulfate	mg/l	250
	9) Copper	mg/l	2
	10) Ammonia	mg/l	1.5

### **II. ADDITIONAL PARAMETERS**

No	Type of Unit  Chemical  Uncertified  Translation	Parameters	Maximum rate allowed
1	Chemical Arcel Glatte		rate anowed
	Un ansi		
a.	Inorganic Materials		
a.	Mercury	mg/l	0.001
	Antimony	mg/l	0.02
	Barium	mg/l	0.7
	Boron	mg/l	0.5
	Molybdenum	mg/l	0.07
	Nickel	mg/l	0.07
	Sodium	mg/l	200
	Lead	mg/l	0.01
	Uranium	mg/l	0.015
	Gramam	1118/1	0.013
b.	Organic Materials		
<del>.</del>	Organic Substances (KMnO <sub>4</sub> )	mg/l	10
	Detergent Determined (NIVIII04)	mg/l	0.05
	Chlorinated alkanes	1116/1	0.03
	Carbon tetrachloride	mg/l	0.004
	Dichloromethane	mg/l	0.02
	1,2 -Dichloroethane	mg/l	0.02
	Chlorinated ethenes	1118/1	0.05
	1,2 -Dichloroethene	ma/l	0.05
	Trichloroethene	mg/l	0.03
artified artification ranging artification		mg/l	+
	Tetrachloroethene	mg/l	0.04
	Aromatic hydrocarbons		0.01
	Benzene	mg/l	0.01
	Toluene	mg/l	0.7
	Xylenes	mg/l	0.5
	Ethylbenzene	mg/l	0.3
	Styrene	mg/l	0.02
	Chlorinated benzenes	/1	
	1.2-Dichlorobenzene (1,2-DCB)	mg/l	1
	1.4-Dichlorobenzene (1,4-DCB)	mg/l	0.3
1 Jakil	Other	,	0.555
ansi	Di(2-ethylhexyl) phthalate	mg/l	0.008
	Acrylamide	mg/l	0.0005
	,	mg/l	0.0004
	Hexachlorobutadiene	mg/l	0.0006

No	Type of Unit	Parameters	Maximum rate allowed
	Ethylenediaminetetraacetic acid (EDTA)	mg/l	0.6
	Nitrilotriacetic acid (NTA)	mg/l	0.2
C.	Pesticides  Alachlor  Aldicarb  Aldrin and dieldrin  Atrazine  Carbofuran		
<del></del>	Alachlor	mg/l	0.02
	Aldicarb	mg/l	0.01
	Aldrin and dieldrin	mg/l	0.000 03
	Atrazine	mg/l	0.002
	Carbofuran	mg/l	0.007
	Chlordane	mg/l	0.0002
	Chlorotoluron	mg/l	0.03
	DDT	mg/l	0.001
	1.2- Dibromo-3-chloropropane (DBCP)	mg/l	0.001
	2.4 Dichlorophenoxyacetic acid (2,4-D)	mg/l	0.03
	1,2 -Dichloropropane	mg/l	0.04
	Isoproturon	mg/l	0.009
	Lindane	mg/l	0.002
	MCPA	mg/l	0.002
	Methoxychlor	mg/l	0.02
	Metolachlor	mg/l	0.01
	Molinate	mg/l	0.006
	Pendimethalin	mg/l	0.02
	Pentachlorophenol (PCP)	mg/l	0.009
	Permethrin	mg/l	0.3
	Simazine	mg/l	0.002
	Trifluralin	mg/l	0.02
	Chlorophenoxy herbicides other than 2.4-D and MCPA		
	2.4-DB	mg/l	0.090
	Dichlorprop	mg/l	0.10
	Phenoprop	mg/l	0.009
	Mecoprop	mg/l	0.001
	2,4,5-Trichlorophenoxyacetic acid	mg/l	0.009
d	Disinfectants and Their Byproducts		
	Disinfectant		
	Chlorine  Byproducts  Bromate  Chlorate  Chlorite  Chlorophenols	mg/l	5
	Byproducts		
	Bromate artif xion	mg/l	0.01
	Chlorate Asia	mg/l	0.7
	Chlorite	mg/l	0.7
	Chlorophenols		
	2,4,6 -Trichlorophenol (2,4,6-TCP)	mg/l	0.2
	Bromoform	mg/l	0.1
	Dibromochloromethane (DBCM)	mg/l	0.1
	Bromodichloromethane (BDCM)	mg/l	0.06
	Chloroform	mg/l	0.3

No	Type of Unit	Parameters	Maximum rate allowed
	Chlorinated acetic acids		
	Dichloroacetic acid	mg/l	0.05
	Trichloroacetic acid	mg/l	0.02
	Chloral hydrate		
	Halogenated acetonitrilies		
	Dichloroacetonitrile	mg/l	0.02
	Dibromoacetonitrile	mg/l	0.07
	Cyanogen chloride (as CN)	mg/l	0.07
	RADIO ACTIVITY		
	Gross alpha activity	Bq/I	0.1
	Gross beta activity	Bq/l	1



MINISTER OF HEALTH,

ttd

dr. Endang Rahayu Sedyaningsih, MPH, Dr. PH