



SOCIALIST REPUBLIC OF VIETNAM

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NATIONAL TECHNICAL REGULATION ON DOMESTIC WATER QUALITY

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Preface:

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NATIONAL TECHNICAL REGULATION ON THE DOMESTIC WATER QUALITY

PART I. GENERAL RULES

I. Applicable scope

This Technical Regulation stipulates limits of quality criteria for water used for domestic use but not for direct drinking or processing food (hereinafter called domestic water)

II. Applicable subject

This Technical Regulation applies to:

1. Institutions, organizations, individuals and households who exploit, trade domestic water, including piped water providers for domestic purposes with capacity of less than 1,000 m³/day (hereafter called water providers)
2. Individuals and households who exploit water for domestic purpose.

III. Explanation of words/phrases

In this Regulation, following words/phrases will be thoroughly understood as:

1. Perceptible criteria are elements on color and taste which are felt by human senses.
2. SMEWW stands for *Standard Methods for the Examination of Water and Waste Water*.
3. US EPA stands for *United States Environmental Protection Agency*.
4. TCU stands for *True Color Unit*.
5. NTU stands for *Nephelometric Turbidity Unit*.

PART II.
STIPULATIONS ON TECHNICAL AREAS

Table on the limits of quality parameters:

Or .	Parameter	Unit	Maximum limit		Testing method	Examination Level
			I	II		
1	Color ^(*)	TCU	15	15	TCVN 6185 - 1996 (ISO 7887 - 1985) or SMEWW 2120	A
2	Taste and odour ^(*)	-	No strange taste & odour	No strange taste & odour	Perceptible, or SMEWW 2150 B and 2160 B	A
3	Turbidity ^(*)	NTU	5	5	TCVN 6184 - 1996 (ISO 7027 - 1990) or SMEWW 2130 B	A
4	Residual Chloride	mg/l	Within 0,3-0,5	-	SMEWW 4500Cl or US EPA 300.1	A
5	pH ^(*)	-	Within 6,0 -8,5	Within 6,0 -8,5	TCVN 6492:1999 or SMEWW 4500 - H ⁺	A
6	Ammonia ^(*)	mg/l	3	3	SMEWW 4500 - NH ₃ C or SMEWW 4500 - NH ₃ D	A
7	Total Iron (Fe ²⁺ + Fe ³⁺) ^(*)	mg/l	0,5	0,5	TCVN 6177 - 1996 (ISO 6332 - 1988) or SMEWW 3500 - Fe	B
8	Permanganate	mg/l	4	4	TCVN 6186:1996 or ISO 8467:1993 (E)	A
9	Hardness, calculated by CaCO ₃ ^(*)	mg/l	350	-	TCVN 6224 - 1996 or SMEWW 2340 C	B
10	Chloride content ^(*)	mg/l	300	-	TCVN6194 - 1996 (ISO 9297 - 1989) or SMEWW 4500 - Cl ⁻ D	A
11	Flouride content	mg/l	1.5	-	TCVN 6195 - 1996 (ISO10359 - 1 - 1992) or SMEWW 4500 - F ⁻	B
12	Total arsenic content	mg/l	0,01	0,05	TCVN 6626:2000 or SMEWW 3500 - As B	B
13	Total Coliform	Bacterial/100ml	50	150	TCVN 6187 - 1,2:1996 (ISO 9308 - 1,2 - 1990) or SMEWW 9222	A
14	E.coli or thermo-tolerant coliform	Bacterial/100ml	0	20	TCVN6187 - 1,2:1996 (ISO 9308 - 1,2 - 1990) or SMEWW 9222	A

Note:

- (*) perceptible parameters.
- Max allowable limit I: applicable to water provision units.
- Max allowable limit II: applicable to water exploitation of individual, household (piped water supply through simple treatment e.g. drilled wells, dug wells, rain-tank, gravity pipeline).

PART III. FREQUENCY OF WATER QUALITY MONITORING/INSPECTION

I. Monitoring/inspection prior to the use of water sources

- Testing of all parameters under A, B levels to be carried out by water providers

II. Regular monitoring

1. For parameters under A level:

- a) Test at least 01 time per 3 months, to be done by water providers;
- b) Test, monitor and experiment at least 01 time per 6 months by functional agencies :

- Take water samples at 100% of water providers in the assigned areas ;
- Take random water samples from individual, households that use for domestic purpose;

2. For parameters under B level:

- a) Test at least 01 time per 6 months, to be done by water providers;
- b) Test, monitor and experiment at least 01 time per year by functional agencies:

- Take water samples at 100% of water providers in the assigned areas;
- Take random water samples from individual, households that use for domestic purpose.

III. Unscheduled monitoring/inspection

1. Following circumstances are required to have urgent monitoring/inspection:

- a) The results of testing of water sources' hygiene or epidemic investigations reveal that water sources have potentially risks to contamination;
- b) Environmental incidents appeared, which might negatively impact to the hygienic quality of water sources;
- c) Other specific requirements.

2. The implementation of unscheduled monitoring/inspection and selected monitoring level will be done by State functional agency.

IV. Parameters could be defined by quick test, using on-site experimental toolkits and these kits must be approved for use by functional agency.

PART IV. IMPLEMENTATION ARRANGEMENTS

I. Responsibilities of water providers

1. Ensure water quality and carry out the testing/monitoring as per stipulations in this Technical Regulation.
2. Subject to the testing, monitoring/inspection of functional agencies.

II. Responsibilities of provincial Department of Health

Provincial DOHs will be responsible to provide guidance, inspection/monitoring on the compliance of this Technical Regulation of relevant organizations, institutions, individuals who involve in the process of exploitation, production and trading water for domestic purposes within the provincity/city.

III. Responsibilities of Ministry of Health

MOH will lead relevant agencies/institutions to provide guidance, inspection/monitoring on the compliance of this Technical Regulation.

IV. In case of possible changes/supplementation or adjustment of stipulations in this Technical Regulation, the new/revised regulatory document issued by MOH's Minister will be followed.