

QCVN 44: 2012/BTNMT

NATIONAL TECHNICAL REGULATION ON OFFSHORE SALTWATER QUALITY

Preamble

QCVN 44:2012/BTNMT compiled by the compilation committee of national technical regulations on water quality, the General Department of Environment, Department of Science and Technology, Department of Legal Affairs submitted for approval and issued together the Circular No.10/2012/TT-BTNMT dated October 12, 2012 of the Minister of Natural resources and Environment

NATIONAL TECHNICAL REGULATION

ON OFFSHORE SALTWATER

1. GENERAL PROVISIONS

1.1. Scope of governing

1.1.1. This Regulation specifies the limit value of offshore saltwater quality parameters.

1.1.2. This Regulation is applies to evaluate and control the quality of the offshore saltwater, for the purpose of protecting the marine environment.

1.1.3. Not to apply to the islands offshore locations, the exploitation and exploration of oil and gas within a radius of less than or equal to 1 km.

1.2. Application subjects

This Regulation is applied to all organizations and individuals that have activities related to offshore water quality.

1.3. Interpretation of terms

In this Regulation, the following terms shall be construed as follows:

Offshore saltwater is saltwater in the offshore sea area. Offshore sea area is calculated from the line of 44.25 km away from coast (equivalent to 24 nautical miles) to the outer limit of the waters of Vietnam.

2. TECHNICAL REGULATIONS

Limit value of the offshore water quality parameters is specified in Table 1 below.

Table 1: Limit value of the parameters in offshore sea water

No.	Parameters	Unit	Limit values
1	Total radioactivity pH		7.5 – 8.5
2	Zinc (Zn)	µg/l	20
3	Arsenic (As)	µg/l	5
4	Mercury (Hg)	µg/l	0.16
5	Cadmium (Cd)	µg/l	1
6	Total Chromium (Cr)	µg/l	50
7	Copper (Cu)	µg/l	10
8	Lead (Pb)	µg/l	5

9	Tributyl tin (TBT)	µg/l	0.01
10	Cyanide (CN)	µg/l	5
11	Total compounds of multi-ring aromatic hydrocarbons (PAH) (*)	µg/l	0.3
12	Total Phenols	µg/l	120
13	Total mineral oil, grease	µg/l	300
14	The organic chlorinated pesticides, polychlorinated biphenyl (PCB) and chlorobenzene (**)	µg/l	Undetectable
15	Total radioactivity α	Becquerel/l	0.1
16	Total radioactivity β	Becquerel/l	1.0

Note:

(*): The analysis of PAH: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoroanthene, pyrenes, benzo [a] anthracene, chryrene, benzo [e] pyrene, dibenzo [a, h] anthracene.

(**); Substances and detection limit of the analytical method according to the TCVN 9241: 2012 (ISO 6468: 1996) Water quality - Determination of organic chlorine pesticides, polychlorinated biphenyls and chlorobenzene - gas chromatographic method after extracting liquid - liquid.

3. METHOD FOR DETERMINATION

3.1. Sampling to determine the offshore seawater quality is applied under the guidance of the National Standards:

- TCVN 5998:1995 (ISO 5667-9:1987) Water quality - Sampling. Guidance on sampling saltwater.
- TCVN 6663-3:2008 (ISO 5667-3:2003) Water quality - Sampling. Part 3: Guidance on storage and handling of samples.

3.2. Analytical method to determine the offshore seawater quality parameters is conducted under the guidance of the national standards:

- TCVN 6492:2011 Water quality - Determination of pH.
- TCVN 6626:2000 Water quality - Determination of arsenic - spectrometric measuring method of Atomic absorption (hydride technique);
- TCVN 7877:2008 (ISO 5666 -1999) Water quality - Determination of mercury;
- TCVN 6193:1996 Water quality - Determination of cobalt, nickel, copper, zinc, cadmium and lead. Method of flame atomic absorption spectrometry;
- TCVN 6222:2008 Water quality - Determination of chromium - Atomic absorption spectrometric measuring method;
- TCVN 6665:2011 (ISO 11885:2007) Water quality - Determination of selected elements by induction couple plasma - optical emission spectrum (ICP-OES);
- TCVN 7723: 2007 (ISO 14403: 2003) Water quality - Determination of total cyanide and free cyanide by continuous flow analysis;
- TCVN 6199-1:1995 (ISO 8165/1: 1992) Water quality - Determination of optional chemotherapy single phenols. Part 1: Gas chromatographic method after enrichment by extraction;
- TCVN 7875:2008 Water - Determination of oil and grease - infrared projection method;
- TCVN 9241: 2012 (ISO 6468: 1996) Water quality - Determination of organic chlorine pesticides, polychlorinated biphenyls and chlorobenzene - gas chromatographic method after liquid extraction.

3.3. Accepted the methods of analysis guided in the international standards with an accuracy equal to or higher than the standards cited in section 3.2 and in the absence of national standards for the analysis of parameters specified in this Regulation.

4. IMPLEMENTATION ORGANIZATION

4.1. The State management agencies are responsible for dissemination, guidance, inspection, and monitoring of the implementation of this Regulation.

4.2. Where the national standards on the method for determination referred in this Regulation are amended, supplemented or replaced, apply the new standards.

Note:

(*): The PAHs need to be analyzed: naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, athracene, fluoroanthene, pyrenees, benzo [a] anthracene, chryrene, benzo [e] pyrene, dibenzo [a, h] anthracene.

(**): The substances and the detection limit of the analytical methods according to the TCVN 9241: 2012 (ISO 6468: 1996) Water quality - Determination of organic chlorine pesticides, polychlorinated biphenyls and clorobenzene - gas chromatographic method after liquid extraction –liquid.