[DENR ADMINISTRATIVE ORDER NO. 34, March 20, 1990]

REVISED WATER USAGE AND CLASSIFICATION/WATER QUALITY CRITERIA AMENDING SECTION NOS. 68 AND 69, CHAPTER III OF THE 1978 NPCC RULES AND REGULATIONS

SECTION 68. Water Usage and Classification. — The quality of Philippine waters shall be maintained in a safe and satisfactory condition according to their best usages. For this purpose, all waters shall be classified according to the following beneficial usages:

(a) Fresh Surface Waters (rivers, lakes, reservoirs, etc.)

Classification Beneficial Use 1

Class AA Public Water Supply Class I. This class is intended primarily for waters having watersheds which are uninhabited and otherwise protected and which require only approved disinfection in order to meet the National Standards for Drinking Water (NSDW) of the Philippines.

Class A Public Water Supply Class II. For sources of water supply that will require complete treatment (coagulation, sedimentation, filtration and disinfection) in order to meet the NSDW.

Class B Recreational Water Class I. For primary contact recreation such as. bathing, swimming, skin diving, etc. (particularly those designated for tourism purposes).

Class C 1) Fishery Water for the propagation and growth of fish and other aquatic resources;

2) Recreational Water Class II (Boatings, etc.)

3) Industrial Water Supply Class I (For manufacturing processes after treatment)

Class D 1) For agriculture, irrigation, livestock watering, etc.

2) Industrial Water Supply Class II (e.g. cooling, etc.);

3) Other inland waters, by their quality, belong to this classification.

(b) Coastal and Marine Waters

Classification Beneficial Use

Class SA 1) Waters suitable for the propagation, survival and harvesting of shellfish for commercial purposes;

2) Tourist zones and national marine parks and reserves established under Presidential Proclamation No. 1801; existing laws and/or declared as such by appropriate government agency.

3) Coral reef parks and reserves designated by law and concerned authorities.

Class SB 1) Recreational Water Class I (Areas regularly used by the public for bathing, swimming, skin diving, etc.);

2) Fishery Water Class I (Spawning areas for Chanos or chanos "Bangus" and similar species).

Class SC 1) Recreational Water Class II (e.g. boating, etc.);

2) Fishery Water Class II (Commercial and sustenance fishing);

3) Marshy and/or mangrove areas declared as fish and wildlife sanctuaries;

Class SD 1) Industrial Water Supply Class II (e.g. cooling, etc.);

2) Other coastal and marine waters, by their quality, belong to this classification.

(c) General Provisions on Water Classification

1. Classification of a water body according to a particular designated use or uses does not preclude use of the water for other purposes that are lower in classification provided that such use does not prejudice the quality required for such waters.

2. Water classifications are arranged in the order of the degree of protection required, with Class AA and SA having generally the most stringent water quality, respectively, for fresh surface waters and marine/coastal waters; and Class D and SD waters have the least stringent water quality for fresh surface waters and marine waters, respectively.

3. The main objective of the water quality criteria is to maintain the minimum conditions necessary to assure the suitability of water for its designated use or classification.

4. Any person regulated under these rules or having a substantial interest in this chapter may seek reclassification of

waters by filing a petition with the DENR giving all necessary information to support the petition.

5. All reclassifications of water shall be adopted, only after public notice and hearing and upon affirmative findings by the DENR Regional Office concerned that:

i) The proposed reclassification will establish the present and future most beneficial use of the waters;

ii) Such a reclassification is clearly in the public interest, and

iii) The proposed designated use is attainable, upon consideration of environmental, technological, social, economic and institutional factors.

6. For purposes of classification or reclassification the following minimum water quality parameters are to be considered:

i) Dissolved oxygen (DO)

ii) pH

iii) Biochemical Oxygen Demand (BOD)

iv) Total Coliform Organisms

SECTION 69. Water Quality Criteria.

(a) Minimum Criteria for Surface Waters. All surface waters of the country shall be free from:

1. Domestic, industrial, agricultural, or other man-induced non-thermal components of discharges which, alone or in combination with other substances or in combination with other components of discharges (whether thermal or non-thermal)

i) That settle to form putrescent deposits or otherwise create a nuisance; or

ii) That float as debris, scum, oil, or other matter in such amounts as to form nuisances; or

iii) That produce color, odor, taste, turbidity, or other conditions in such degree as to create a nuisance; or

iv) That are acutely toxic; or

v) That are present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant, locally occurring wildlife or aquatic species; or

vi) That pose a serious danger to the public health, safety or welfare.

2. Thermal components of discharges which alone, or in combination with other discharges or components of discharges (whether thermal or nonthermal):

i) That produce conditions so as to create nuisance; or

ii) That increase the temperature of the receiving body of water (RBW) so as to cause substantial damage or harm to the aquatic life or vegetation therein or interfere with the beneficial uses assigned to the RBW.

(b) Water Quality Criteria for Fresh Waters.

1. Conventional and Other Pollutants Affecting Aesthetics and Oxygen Demand. — Please refer to Table 1 for the parameters and limits or specifications according to classification and use of the receiving body of water (RBW).

TABLE 1 — WATER QUALITY CRITERIA FOR CONVENTIONAL AND OTHER POLLUTANTS CONTRIBUTING TO AESTHETICS AND OXYGEN DEMAND FOR FRESH WATERS[a]

PARAMETER	UNIT	CLASS AA	CLASS A	CLASS B	CLASS C	CLASS D[b]
Color	PCU	15	50	(c)	(c)	(c)
Temperature[d] (max. rise in deg. Celsius)	ºC rise	-	3	3	3	3
pH (range)		6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	6.0-9.0
Dissolved Oxygen [e] (Minimum)	% satn	70	70	70	60	40
	mg/L	5.0	5.0	5.0	5.0	3.0
5-Day 20ºC BOD	mg/L	1	5	5	7 (10)	10 (15)
Total Suspended Solids	mg/L	25	50	(f)	(g)	(h)
Total Dissolved Solids	mg/L	500(i)	1,000(i)	-	-	1,000[i]
Surfactants (MBAS)	mg/L	(nil)	0.2(0.5)	0.3(0.5)	0.5	-
Oil/Grease (Petroleum Ether Extracts)	mg/L	(nil)	1	1	2	5
Nitrate as Nitrogen	mg/L	1.0	10	(nr)	10[i]	-
Phosphate as Phosphorus	mg/L	(nil)	0.1[k]	0.2[k]	0.4[k]	-
Phenolic	mg/L	(nil)	0.002	0.005[l]	0.02[l]	

Substances as Phenols						
Total Coliforms	MPN/ 100 mL	50(m)	1,000(m)	1,000(m)	5,000(m)	-
or Fecal Coliforms	MPN/ 100mL	20(m)	100 (m)	200 (m)	-	-
Chloride as Cl	mg/L	250	250	-	350	-
Copper	mg/L	1.0	1.0	-	0.05 (o)	-

2. Toxic and other Deleterious Substances. — The maximum limits for these types of pollutants according to classifications or use of the receiving body of water are found in Table 2.

TABLE 2 WATER QUALITY CRITERIA FOR TOXIC AND OTHER DELETERIOUS SUBSTANCES FOR FRESH WATERS (For the Protection of Public Health)

PARAMETER	UNIT	CLASS AA	CLASS A	CLASS B	CLASS C	CLASS D
Arsenic (i)	mg/L	0.05	0.05	0.05	0.05	0.01
Cadmium (i)	mg/L	0.01	0.01	0.01	0.01	0.05
Chromium (i)						
(hexavalent)	mg/L	0.05	0.05	0.05	0.05	(---)
Cyanide	mg/L	0.05	0.05	0.05	0.05	(---)
Lead (i)	mg/L	0.05	0.05	0.05	0.05	(---)
Total Mercury (i)	mg/L	0.002	0.002	0.002	0.002	0.002
Organophosphate	mg/L	(nil)	(nil)	(nil)	(nil)	(nil)
Aldrin	mg/L	0.001	0.001	-	-	-
DDT	mg/L	0.05	0.05	-	-	-
Dieldrin	mg/L	0.001	0.001	-	-	-
Heptachlor	mg/L	(nil)	(nil)	-	-	-
Lindane	mg/L	0.004	0.004	-	-	-
Toxaphane	mg/L	0.005	0.005	-	-	-
Methoxychlor	mg/L	0.10	0.10	-	-	-
Chlordane	mg/L	0.003	0.003	-	-	-
Endrin	mg/L	(nil)	(nil)	-	-	-
PCB	mg/L	0.001	0.001	-	-	-

Note: 1. Limiting values of organophosphates and organochlorines may in the meantime serve as guidelines in the interim period pending the procurement and availability of necessary laboratory equipment. For Barium, Cobalt, Fluoride, Iron, Lithium, Manganese, Nickel, Selenium, Silver and Vanadium, the 1978 NPCC Rules and Regulations, Section 69 may be considered.

2. For footnotes please refer to Table 1.

(c) Coastal and Marine Waters Criteria.