Water Quality Standards

Industrial Effluent Standards

Parameters	Standard Values	Method for Examination
1. pH value	5.5-9.0	pH Meter
2. Total Dissolved Solids (TDS)	□ not more than 3,000 mg/l depending on receiving water or type of industry under consideration of PCC but not exceed 5,000 mg/l □ not more than 5,000 mg/l exceed TDS of receiving water having salinity of more than 2,000 mg/l or TDS of sea if discharge to sea	Dry Evaporation 103-105 ℃, 1 hour
3. Suspended solids (SS)	not more than 50 mg/l depending on receiving water or type of industry or wastewater treatment system under consideration of PCC but not exceed 150 mg/l	Glass Fiber Filter Disc
4. Temperature	not more than 40℃	Termometer during the sampling
5. Color and Odor	not objectionable	Not specified
6. Sulphide as H_2S	not more than 1.0 mg/l	Titrate
7. Cyanide as HCN	not more than 0.2 mg/l	Distillation and Pyridine Barbituric Acid Method
8. Fat, Oil & Grease (FOG)	not more than 5.0 mg/l depending of receiving water or type of industry under consideration of PCC but not exceed 15.0 mg/l	Sovent Extraction by Weight
9. Formaldehyde	not more than 1.0 mg/l	Spectrophotometry
10.Phenols	not more than 1.0 mg/l	Distillation and 4-Aminoantipyrine Method
11.Free Chlorine	not more than 1.0 mg/l	Iodometric Method
12.Pesticides	not detectable	Gas-Chromatography
13.Biochemical Oxygen Demand (BOD)	not more than 20 mg/l depending on receiving water or type of industry under consideration of PCC but not exceed 60 mg/l	-Azide Modification at 20 ℃ , 5 days
14.Total Kjedahl Nitrogen (TKN)	not more than 100 mg/l depending on receiving water or type of industry under consideration of PCC but not exceed 200 mg/l	Kjeldahl
15.Chemical Oxygen Demand (COD)	not more than 120 mg/l depending on receiving water of type of industry under consideration of PCC but not exceed 400 mg/l	Potassium Dichromate Digestion
16.Heavy metals		
1. Zinc (Zn)	not more than 5.0 mg/l	Atomic Absorption Spectro Photometry; Direct Aspiration or Plasma Emission Spectroscopy ; Inductively Coupled Plama : ICP
2. Chromium (Hexavalent)	not more than 0.25 mg/l	
3. Chromium (Trivalent)	not more than 0.75 mg/l	

4. Copper (Cu)	not more than 2.0 mg/l	
5. Cadmium (Cd)	not more than 0.03 mg/l	
6. Barium (Ba)	not more than 1.0 mg/l	
7. Lead (Pb)	not more than 0.2 mg/l	
8. Nickel (Ni)	not more than 1.0 mg/l	
9. Manganese (Mn)	not more than 5.0 mg/l	
10. Arsenic (As)	not more than 0.25 mg/l	Atomic Absorption Spectrophotometry; Hydride Generation, or Plasma Emission Spectroscopy; Inductively Coupled Plasma : ICP
11. Selenium (Se)	not more than 0.02 mg/l	
12. Mercury (Hg)	not more than 0.005 mg/l	Atomic Absorption Cold Vapour Techique

Remarks : 1) PCC Pollution Control Committee

2) The standards were summerized from the Notification of the Ministry of Science, Technology and Environment, No. 3, B.E. 2539 (1996) and it specifies that pollution sources that the above standards are to be applied are factories group II and III issues under the Factory Act B.E.2535 (1992) and every kind of industrial estates.

3) Notification of the Pollution Control Committee, No. 3, B.E. 2539 (1996) dated August 20, B.E. 2539 (1996) has issued types of factories (category of factories issued under the Factory Act B.E.2535 (1992) that are allowed to discharge effluent having different standards from the Ministerial Notification No. 3 above as follows :

1. BOD up to 60 mg/l
   - animal furnishing factories (category 4 (1))
   - starch factories (category 9 (2))
   - food from starch factories (category 10)
   - textile factories (category 15)
   - tanning factories (category 22)
   - pulp and paper factories (category 29)
   - chemical factories (category 42)
   - pharmaceutical factories(category 46)
   - frozen food factories (category 92)
2. COD up to 400 mg/l
   - food furnishing factories (category 13 (2))
   - animal food factories (category 15 (1))
   - textile factories (category 22)
   - pulp and paper factories (category 38)
3. TKN
   - 100 mg/l - effective after 1 year from the date published in the Royal Government Gazette of the Ministerial Notification No. 4
   - 200 mg/l - effective after 2 year from the date published in the Royal Government Gazette of the Ministerial Notification No. 4 for the following factories:
     1. food furnishing factories (category 13 (2))
     2. animal food factories (category 15 (1))

Sources : 1. Notification the Ministry of Science, Technology and Environment, No. 3, B.E.2539 (1996) issued under the Enhancement and Conservation of the National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette, Vol. 113 Part 13 D, dated February 13, B.E.2539 (1996)

Water Characteristics Discharged into Deep Wells		
Parameters	Units	Standard Values (maximum allowance)
1. Color	Platinum Cobalt	50
2. Turbidity	JTU	50
3. pH	-	5.0-9.2
4. Total Solids	mg/l	2,000
5. BOD	mg/l	40
6. Fat , Oil and Grease	mg/l	5.0
7. Free Chlorine	mg/l	5.0
8. Copper (Cu)	mg/l	1.5
9. Zinc (Zn)	mg/l	15.0
10. Chromium (Cr)	mg/l	2.0
11. Arsenic (As)	mg/l	0.05
12. Cyanide (CN)	mg/l	0.2
13. Mercury (Hg)	mg/l	0.002
14. Lead (Pb)	mg/l	0.1
15. Cadmium (Cd)	mg/l	0.1
16. Barium (Ba)	mg/l	1.0

Sources : Notification of the Ministry of Industry, No. 5 B.E. 2521 (1978), issued under the Ground Water Act B.E. 2520 (1977), published in the Royal Gazette, Vol. 95, Part 66, dated June 27, B.E. 2521 (1978).

Building Effluents Standards							
Parameter	Unit	Range or Maximum Permitted Values for these Categories					Method for Examination
		A	B	C	D	E	
1. pH	-	5-9	5-9	5-9	5-9	5-9	pH Meter
2. BOD	mg/l	20	30	40	50	200	Azide Modification at 20 ℃ , 5 days
3. Soilds - Suspended Soilds	mg/l	30	40	50	50	60	Glass Fibre Filter Disc
- Settleable Solids	ml/l	0.5	0.5	0.5	0.5	-	Imhoff Cone 1,000 cm^3 1hour
- Total Dissolved Solid (TDS)*	mg/l	500*	500*	500*	500*	-	Dry Evaporation 103-105 ℃, 1 hour
4. Sulfide	mg/l	1.0	1.0	3.0 -	4.0	-	Titration
5. Nitrogen as	mg/l	35	35	40	40	-	Kjeldah

TKN							
6. Fat, oil and grease (FOG)	mg/l	20	20	20	20	100	Sovent Extraction by Weight

Remarks : 1. Base on: Standard Methods for the Examination of Water and Wastewater recommended by APHA : American Public Health Association, AWWA : American Water Works Associaton and WPCF : Water Pollution Control Federation

*= These values are in addition to the TDS of the water used.

2. Notification of the Ministry of Science, Technology and Environment : Building Effluents Standards dated January 10, B.E.2537 was revoked by a)

3. Notification of the Ministry of Science, Technology and Environment issued under the Enhancement and Conservation of the National Enviromental Quality Act, B.E.2535 (1992) and Notification of the Ministry of Science, Technology and Environment issued under the Enhancement and Conservation of the National Enviromental Quality Act, No. 2 B.E.2538 (1995) dated January 10, B.E.2537 was revoked by b)

Sources : a) Notification of the Ministry of Natural Resources and Environment : Building Effluents Standards dated November 7, B.E. 2548 (2005) published in the Royal Government Gazette, Vol. 122 Part 125 D, dated December 29, B.E. 2548 (2005)
b) Notification of the Ministry of Natural Resources and Environment issued under the Enhancement and Conservation of the National Enviromental Quality Act.dated November 7, B.E. 2548 (2005) published in the Royal Government Gazette, Vol. 122 Part 125 D, dated December 29, B.E. 2548 (2005)

Summary of Type and Sizes of Buildings Subject to Effluent Control					
Building Type	Size				
	A	B	C	D	E
1. Condominium	500 units or more	From 100 to not greater than 500 units	Less than 100 units	-	-
2. Hotels	200 rooms or more	From 60 to not greater than 200 rooms	Less than 60 rooms	-	-
3. Dormitories	-	250 rooms or more	From 50 to not greater than 250 rooms	From 10 to not greater than 50 rooms	-
4. Massage parlors (or equivalent)	-	5,000 m^2 or more	From 1,000 to not greater than 5,000 m^2	-	-
5. Hospitals	30 beds or more	From 10 to not greater than 30 beds	-	-	-
6. Schools, Colleges, Universities, or	25,000 m^2 or more	From 5,000 to not greater than 25,000 m^2	-	-	-

Institutes					
7. Government offices, State enterprises, International agencies, Banks, and Office Buildings	55,000 m^2 or more	From 10,000 to not greater than 55,000 m^2	From 5,000 to not greater than 10,000 m^2	-	-
8. Department stores	25,000 m^2 or more	From 5,000 to not greater than 25,000 m^2	-	-	-
9. Fresh food markets	2,500 m^2 or more	From 1,500 to not greater than 2,500 m^2	From 1,000 to not greater than 1,500 m^2	From 500 to not greater than 1,000 m^2	-
10. Restaurants and food shops or food centers	2,500 m^2 or more	From 500 to not greater than 2,500 m^2	From 250 to not more than 500 m^2	From 100 to not more than 250 m^2	Less than 100 m^2

Remarks : Level of standard refers to the 6 parameters listed in the Building Effluent: Standard Values table

Source : Notification of the Ministry of Science, Technology and Environment issued under the Enhancement and Conservation of the National Enviromental Quality Act, B.E.2535, published in the Royal Government Gazette,Vol. 111 special part 9, dated February 4, B.E.2537 (1994).

Housing Estate Standards				
Parameter	Unit	Range or Maximum Permitted Values for These Categories		Method for Examination
		(A) 100 units but not more than 500	(B) more than 500 units	
1. pH	-	5.5-9.0	5.5-9.0	- pH Meter
2. BOD	mg/l	30	20	- Azide Modification at 20 oC , 5 days
3. Solids				
□ Suspended Solids	mg/l	40	30	- Glass Fiber Filter Disc
□ Settleable Solids	mg/l	0.5	0.5	- Imhoff Cone 1,000 cm3 1hour
□ Total Dissolved Solids*	mg/l	500	500	- Dry Evaporation 103-105 ℃, 1 hour
4. Sulfide	mg/l	1.0	1.0	- Titration
5. TKN	mg/l	35	35	- Kjeldahl
6. Fat , Oil and Grease	mg/l	20	20	- Sovent Extraction by Weight

Remarks : 1. * These values are in addition to the TDS of the water used.

Base on: Standard Methods for the Examination of Water and Wastewater recommended by APHA : American Public Health Association, AWWA : American Water Works Associaton and WPCF : Water Pollution Control Federation

2. Notification of the Ministry of Science, Technology and Environment No. 5 B.E. 2539(1996) issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535 (1992) and Notification of the Ministry of Science, Technology and Environment No. 6, B.E. 2539(1996) issued under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535 (1992) was revoked by a)

Source : a) Notification of the Ministry of Natural Resources and Environment : Housing Estate Standards dated November 7, B.E. 2548 (2005) published in the Royal Government Gazette, Vol. 122 Part 125 D, dated December 29, B.E. 2548 (2005)
b) Notification of the Ministry of Natural Resources and Environment issued under the Enhancement and Conservation of National Environmental Quality Act. dated November 7, B.E. 2548 (2005) published in the Royal Government Gazette, Vol. 122 Part 125 D, dated December 29, B.E. 2548 (2005)

Water Characteristics Discharged into Irrigation System		
Parameters	Units	Standard Values (Range or Maximum Permitted Values)
1. pH	-	6.5-8.5
2. Conductivity	µMole/cm	2,000
3. Total Dissolved Solids (TDS)	mg/l	1,300
4. Biochemical Oxygen Demand (BOD5)	mg/l	20
5. Suspended solids (SS)	mg/l	30
6. Permanganate (PV)	mg/l	6.0
7. Sulphide (as H2S)	mg/l	1.0
8. Cyanide (as HCN)	mg/l	0.2
9. Fat ,Oil and Grease	mg/l	5.0
10.Formaldehyde	mg/l	1.0
11.Phenol & Cresols	mg/l	1.0
12.Free chlorine	mg/l	1.0
13.Pesticides	mg/l	None
14.Radioactivity	mg/l	None
15.Colour and Odour	-	Not objectionable
16.Tar	-	None
17. Heavy metals - Zinc (Zn) - Chromium (Hexavalent) - Arsenic (As) - Copper (Cu) - Mercury (Hg) - Cadmium (Cd) - Barium (Ba) - Selenium (Se) - Lead (Pb) - Nickel (Ni)	 mg/l	 5.0 0.3 0.25 1.0 0.005 0.03 1.0 0.02 0.1 0.2

- Manganese (Mn)		0.5

Source : Summarized from Royal Irrigation Deparment Order No. 883/2532 (1989) , dated 19 December B. E. 2532 (1989) 2532

Effluent Standard for Pig Farm				
Parameters	Units	Maximum Permitted Values		
		Standard A	Standard B	Method for Examination
1. pH	-	5.5-9	5.5-9	pH meter
2. Biochemical Oxygen Demand (BOD)	mg/l	60	100	Azide Modification, or Membrane Electrode
3. Chemical Oxygen Demand (COD)	mg/l	300	400	Potassium Dichromate Digestion ; Open Reflux or Closed Reflux
4. Suspended solids (SS)	mg/l	150	200	Glass Fiber Filter Disc, Dry Evaporation 103-105 ℃
5. Total Kjedahl Nitrogen (TKN)	mg/l	120	200	Kjeldahl; Colorimetric or Ammonia Selective Electrode

Remarks :

1. For large and medium farm will be effective on February 24, 2002.
2. Large farm is more than 600 Livestock Unit (LU.)
3. Medium farm is 60-600 LU.
4. Small farm is 6 - < 60 LU.
5. 1 LU. = 500 kg.
6. Weight of breeding pig = 170 kg./head
7. Weight of fattened pig = 60 kg./head
8. Weight of nursling pig = 12 kg./head

Notification of the Ministry of Science, Technology and Environment issued under the Enhancement and Conservation of the National Enviromental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 118, Special Part 8, page 11-18, dated February 23, B.E.2544 (2001) effective since February 24, B.E. 2545 (2002) and Notification of the Ministry of Science, Technology and Environment issued under the Enhancement and Conservation of the National Enviromental Quality Act, B.E.2535, published in the Royal Government Gazette, Vol. 118, Special Part 8, page 11-17 dated February 23, B.E.2544 (2001) effective since February 24, 2545 B.E.(2002) was revoked by a) and b)

Source : a)Notification of the Ministry of Natural Resources and Environment ,Effluent Standard for Pig Farm dated November 7, B.E. 2548 (2005) published in the Royal Government Gazette, Vol. 122 Part 125 D, dated December 29, B.E. 2548 (2005)
b) Notification of the Ministry of Natural Resources and Environment issued under the Enhancement and Conservation of the National Enviromental Quality Act. dated November 7, B.E. 2548 (2005) published in the Royal Government Gazette, Vol. 122 Part 125 D, dated December 29, B.E. 2548 (2005)

Gas Station Effluent Standard and Oil Terminal Effluent Standards			
Parameter	Units	Range or Maximum Permitted Values	Method for Examination
1. pH	-	5.5-9.0	pH Meter
2. Chemical Oxygen Demand (COD)	mg/l	200	Potassium Dichromate Digestion
3. Suspended Soilds (SS)	mg/l	60	Glass Fiber Filter Disc
4. Fat Oil and Grease	mg/l	15	Extract with solvent after solvent evaporartion is weighed to determine the oil and grease content.

Remarks : Standard Methods for the Examination of Water and Wastewater recommended by APHA : American Public Health Association, AWWA : American Water Works Associaton and WPCF : Water Pollution Control Federation

Source : Notification of the Ministry of Science, Technology and Environment : Gas Station Effluent Standard and Oil Terminal Effluent Standards, and Notification of the Ministry of Science, Technology and Environment: Designated Gas Stations and Oil Terminals as Pollution Point Sources published in the Royal Government Gazette, Vol. 119, Part 43 D, dated May 28, B.E.2545 (2002)

Regulations of Industrial Pollution Control Facilities

1. The following industrial plants must have supervisors and machine operators take responsibility for the system of prevention of pollution. Qualifications for these individuals are specified in section 2 below.
    1. An industrial plant discharging waste water at a rate of more than 60 cubic meters/hour (with the exception of cooling water) or having a BOD load of influent higher than 100 kilograms/day.
    2. An industrial plant using heavy metals in its production process discharging wastewater at higher than 50 cubic meters/day and having a heavy metal content in the discharged waste water at the following values:
        - Zinc higher than 250,000 milligrams/day
        - Chromium higher than 25,000 milligrams/day
        - Arsenic higher than 12,500 milligrams/day
        - Copper higher than 50,000 milligrams/day
        - Mercury higher than 250 milligrams/day
        - Cadmium higher than 1,500 milligrams/day
        - Barium higher than 50,000 milligrams/day
        - Selenium higher than 1,000 milligrams/day
        - Lead higher than 10,000 milligrams/day
        - Manganese higher than 250,000 milligrams/day
    3. An industrial plant dealing with iron and steel:
        - Using dry furnaces or acids or other substances which may be polluting the environment in the production process with capacity of more than 100 tons/day.
        - Using steel smelters with the total capacity of 5 tons/batch.
    4. An industrial plant producing 100 tons/day petrochemicals from the raw materials obtained as by-products of the oil refinery in the production process.
    5. An industrial plant of any size separating or producing natural gas.

6. An industrial plant producing chloralkali, using sodium chloride (NaCl) as a raw material in the production of soda ash (Na2CO3), caustic soda (NaOH), hydrochloric acid (HCl), chlorine (Cl2),and bleach (NaOCl) with separate or combined production more than 100 tons/day.
7. An industrial plant of any size producing cement.
8. An industrial plant engaged in ore smelting or production of metals with production of more than 50 tons/day.
9. An industrial plant producing paper pulp with production more than 50 tons/day.
10. An industrial plant of any size engaged in crude oil refining.

2. The supervisor and machine operators responsible for pollution control system shall meet the following qualifications:
    1. The supervisors must be holders of a bachelor degree in engineering or chemistry or other branches of study with experience in the the field of environment, and who has been approved by the Department of Industrial Works. In the case of an Engineering Consulting Firm, it must be operated by person(s) having the above qualifications.
    2. Machine operators must have a secondary education but can be lower than those in (a) above.
    3. The persons stated in (a) & (b) above must register themselves with the Department of Industrial Works and comply with all regulations and procedures of the Department of Industrial Works.

3. Factories mentioned in article 1.1 to 1.10 above must arrange to create and submit every three months Poisonous Matter Analysis Reports to the Department of Industrial Works according to its standards. Analysis must be carried out by a government laboratory or in a private laboratory approved by the Department of Industrial Works.

Source : Notification of the Ministry of Industry, No. 13 B.E. 2525 (1982), as amended in No. 22 B.E. 2528 (1985), issued under the Factory Act B.E. 2512 (1969), published in the Royal Gazette, Vol. 99, Part 89, dated June 29, B.E. 2525 (1982).

Effluent Standard for Coastal Aquaculture			
Parameter	Units	Range or Maximum Permitted Values	Method for Examination
1. pH	-	6.5-9.0	pH Meter by Electrometric
2.BOD (Biochemical Oxygen Demand)	mg./l.	20	Azide Modification by Synthetic Seawater
3.SS (Suspended Soilds)	mg./l.	70	Glass Fiber Filter Disc
4.NH_3-N (Ammonia Nitrogen)	mg-N./l.	1.1	Modified Idophenol Blue
5.Total Phosphorus	mg-P./l.	0.4	Ascorbic Acid

6.H_2S (Hydrogen Sulfide)	mg./l.	0.01	Methylene Blue
7.Total Nitrogen -Total Dissolved Nitrogen and Total Particlate Nitrogen	mg-N./l.	4.0	(1) Persulfate Digestion (2) Nitrogen Analyzer

Remarks : 1. Water sampling method for effluent standard examination control must beGrab Sampling from discharge point of the coastal aquaculture area.

2. Base on: Standard Methods for the Examination of Water and Wastewater (APHA, AWwA and WEF), Practical Handbook of Seawater Analysis (Stickland and Parsons), Methods of Seawater Analysis (Koroleff), Determination of Ammonia in Estuary (Sasaki and Sawada) Methods of Seawater Analysis (Grasshoff K.) and /or Manual for Water and Wastewater Examination of Environmental Engineering Association of Thailand and WEF

Source : Notification of the Ministry of Natural Resources and Environment, dated March 19, B.E. 2547 (2004) published in the Royal Government Gazette, Vol. 121, Part 49 D, dated May 1, B.E.2547 (2004).

Notification of the Ministry of Natural Resources and Environment: Designated Coastal Aquaculture as Pollution Point Sources published in the Royal Government Gazette, Vol. 122, Part 129 D, dated November 14, B.E.2548 (2005)

Effluent Standard for Brackish Aquaculture			
Parameter	> 10	< 10	Method for Examination
1. pH	6.5 - 8.5		pH Meter by Electrometric
2.Salinity	> 50%		Electrometric Conductivity or Density
3.BOD (Biochemical Oxygen Demand)	-	20 mg./l.	Azide Modification by Synthetic Seawater
4.SS (Suspended Soilds)	-	70 mg./l.	Glass Fiber Filter Disc
5.NH_3-N (Ammonia Nitrogen)	-	1.1 mg-N./l.	Modified Idophenol Blue
6.Total Phosphorus	-	0.4 mg-P./l.	Ascorbic Acid
7. H_2S (Hydrogen Sulfide)	-	0.01 mg./l.	Methylene Blue
7.Total Nitrogen -Total Dissolved Nitrogen and Total Particlate Nitrogen	-	4.0 mg-N./l.	(1) Persulfate Digestion (2) Nitrogen Analyzer

Remarks : Standard Methods for the Examination of Water and Wastewater (APHA, AWwA and WEF), Practical Handbook of Seawater Analysis (Stickland and Parsons), Methods of Seawater Analysis (Koroleff), Determination of Ammonia in Estuary (Sasaki and Sawada) Methods of Seawater Analysis (Grasshoff K.)

Source : Notification of the Ministry of Natural Resources and Environment ,Effluent Standard for Brackish Aquaculture published in the Royal Government Gazette, Vol. 124 Part 84 D, dated July 13, B.E. 2550 (2007)

Notification of the Ministry of Natural Resources and Environment: Designated Brackish Aquaculture as Pollution Point Sources published in the Royal Government Gazette, Vol. 124 Part 84 D, dated July 13, B.E. 2550 (2007)

Effluent Standard for Inland Aquaculture						
Parameters	Units	Maximum Permitted Values				
		Standard A	Standard B	Standard C		Method for Examination
				> 10	< 10	
1. Biochemical Oxygen Demand (BOD)	mg/l	20	20	-	20	Azide Modification, or Membrane Electrode
2. Suspended solids (SS)	mg/l	80	80	-	20	Glass Fiber Filter Disc, Dry Evaporation 103-105 ℃
3. NH_3-N (Ammonia Nitrogen)	mg-N./l	-	1.1	-	1.1	Modified Idophenol Blue
4. Total Nitrogen -Total Dissolved Nitrogen and Total Particlate Nitrogen	mg-N./l	-	4.0	-	0.5	(1) Persulfate Digestion (2) Nitrogen Analyzer
5. Total Phosphorus	mg-P./l	-	0.5	-	0.5	Ascorbic Acid
6. pH	-	-	6.5-8.5	-	6.5-8.5	pH meter
7. EC at 25 ◦C	dS/m	-	-	-	0.75	Electrical Conductivity

Remarks : Electrical Conductivity Standard Methods for the Examination of Water and Wastewater American Public Health Association, American Water Works Association Water Environment Federation

Source : a)Notification of the Ministry of Natural Resources and Environment ,Effluent Standard for Inland Aquaculture dated November 23, B.E. 2550 (2007) published in the Royal Government Gazette, Vol. 125 Part 21 D, dated January 30, B.E. 2551 (2008)
b) Notification of the Ministry of Natural Resources and Environment: Designated Inland Aquaculture as Pollution Point Sources dated November 23, B.E. 2550 (2007) published in the Royal Government Gazette, Vol. 125 Part 21 D, dated January 30, B.E. 2551 (2008)