APPENDIX

1. Classification and Objectives of Surface Water Quality

Classification	Objectives/Condition and Beneficial Usage
Class 1	Extra clean fresh surface water resources used for : 1. Conservation not necessary pass through water treatment process require only ordinary process for pathogenic destruction 2. Ecosystem conservation where basic organisms can breed naturally
Class 2	Very clean fresh surface water resources used for : 1. Consumption which requires ordinary water treatment process before use 2. aquatic organism of conservation 3. fisheries 4. recreation
Class 3	Medium clean fresh surface water resources used for : 1. consumption, but passing through an ordinary treatment process before using 2. agriculture
Class 4	Fairly clean fresh surface water resources used for : 1. consumption, but requires special water treatment process before using 2. industry
Class 5	The sources which are not classification in class 1-4 and used for navigation

Source: Notification of the National Environmental Board, No. 8, B.E. 2537 (1994), issued under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette, Vol. 111, Part 16, dated February 24, B.E.2537 (1994).

2. Numerical Values of Sediment Quality Criteria and Contamination Factor of Sediments from Pattani Dam Reservoir (May 2000 - May 2001)

Site	Criteria	
	SQG	C_f
Pattani Dam Reservoir		
1	439	6
2	171	2
3	222	3
4	333	5
5	403	6
6	338	5
7	380	5
8	320	5
9	360	5
10	225	3
PRV	70	
SQG		
Non-polluted	<40	
Moderately polluted	40-60	
Heavily polluted	>60	
	70	

Notes: C_f <1 low contamination; 1≤ C_f <3 moderate contamination; 3≤ C_f <6 considerable contamination; C_f >6 very high contamination

3. Physico-chemical data of Pattani Dam Reservoir

Site	DO (mg/L)	BOD_5 (mg/L)	NO_2 (mg/L)	NO_3 (mg/L)	NH_3 (mg/L)	TP (mg/L)	pH	COND (µS/cm)	SD (cm)	Depth (m)	Chl (µg/L)
1 May	5.6	2.6	.003	.059	.035	.018	6.81	63.7	50	5	8.92
2 May	5.8	1.5	.004	.024	.390	.012	6.88	64.2	100	1	8.96
3 May	5.7	2.9	.004	.015	.039	.031	6.79	63.2	25	1	26.01
4 May	5.7	2.4	.004	.050	.039	.016	6.77	62.8	60	3	8.96
5 May	5.6	3.4	.004	.027	.035	.027	7.57	58.5	20	1	45.39
6 May	5.7	1.2	.004	.071	.041	.013	6.78	61.7	60	3	26.76
7 May	5.7	2.0	.004	.032	.039	.003	6.89	62.1	50	2	59.20
8 May	5.7	1.3	.004	.093	.037	.017	6.80	61.6	30	2	11.88
9 May	5.8	1.5	.004	.037	.024	.013	7.18	60.7	40	1	17.64
1 July	6.5	3.2	.002	.106	.048	.025	6.49	53.8	100	5	3.80
2 July	6.4	2.7	.001	.086	.051	.019	6.57	59.5	80	1	3.14
3 July	7.1	2.6	.002	.084	.054	.015	6.67	53.6	100	1	4.70
4 July	6.2	2.1	.001	.131	.043	.023	6.51	45.9	80	3	4.34
5 July	6.9	2.6	.002	.079	.047	.014	6.82	56.3	100	2	2.11
6 July	6.7	1.8	.001	.071	.054	.022	6.50	44.1	100	2	6.13
7 July	7.8	2.4	.001	.048	.020	.028	6.76	51.3	120	1	2.40
8 July	6.7	2.4	.001	.067	.078	.014	6.14	50.1	150	3	5.82
9 July	7.0	3.0	.001	.038	.042	.013	7.16	50.1	150	4	5.98
10 July	6.9	2.3	.000	.003	.029	.022	8.81	53.2	100	1	1.99
1 Sep	6.8	2.9	.001	.099	.040	.014	7.00	69.0	20	6	1.94
2 Sep	6.6	3.2	.001	.032	.026	.015	6.85	56.0	20	3	2.56
3 Sep	6.7	2.2	.001	.092	.041	.013	7.02	66.0	30	1	6.70
4 Sep	6.5	2.1	.001	.067	.053	.016	7.08	64.0	30	3	5.56
5 Sep	7.2	2.9	.002	.078	.058	.014	6.95	55.0	40	2	3.64
6 Sep	7.1	2.8	.002	.086	.030	.019	7.06	62.0	30	1	5.23
7 Sep	7.0	2.5	.001	.022	.021	.017	6.97	56.0	50	3	2.74
8 Sep	6.7	2.2	.001	.045	.027	.014	7.16	61.0	30	3	4.26
9 Sep	6.6	2.0	.001	.085	.051	.013	6.94	68.0	30	6	0.15
10 Sep	6.9	2.4	.001	.088	.059	.018	7.35	66.0	40	1	3.52
1 May 01	6.5	2.2	.005	.075	.055	.019	6.80	79.6	120	6	4.39
2 May 01	6.0	1.8	.004	.074	.047	.012	6.83	80.8	130	2	4.09
3 May 01	6.0	2.7	.006	.057	.058	.023	6.70	81.9	40	0	13.00
4 May 01	6.3	1.2	.003	.040	.032	.013	6.90	90.8	80	2	4.73
5 May 01	7.5	2.4	.006	.031	.037	.008	7.03	87.0	30	1	43.00
6 May 01	6.2	3.0	.006	.098	.038	.019	6.47	92.2	50	1	39.00
7 May 01	6.0	1.2	.005	.072	.031	.014	6.70	86.5	120	2	50.70
8 May 01	7.5	2.1	.005	.038	.058	.017	6.80	74.5	100	5	18.40
9 May 01	6.0	2.2	.004	.056	.041	.022	7.15	69.6	120	3	24.30
10 May 01	7.0	2.0	.004	.070	.046	.016	7.10	62.2	50	1	9.40