

Annex E5.3.1 List of Required Laboratory and Monitoring Equipment

No.	Item	Number	Cost (Rp. Million)
<b>C. Common Analytical Equipment</b>			<b>1,965.8</b>
C-1	A.A.S (Flame Type)	1	792.3
C-2	UV/VIS Spectrophotometer (Single Beam)	1	95.1
C-3	Gas Chromatography	1	396.2
C-4	Microscope	2	79.2
C-5	Handy Type pH Meter	3	16.6
C-6	Laboratory pH Meter	2	31.7
C-7	High Precision pH meter	1	31.7
C-8	Mercury Analyzer	1	126.8
C-9	Glassware Set	1	237.7
C-10	Reagents (with Standard Samples)	1	158.5
<b>G. General Laboratory Equipment</b>			<b>2,481.4</b>
G-1	Semi-Micro Analysis Balance	1	19.8
G-2	Micro Analysis Balance	1	31.7
G-3	Tabletop Type Centrifuge	1	35.7
G-4	Muffle Furnace (for Organic)	1	27.7
G-5	Constant Temperature Oven	1	19.8
G-6	Middle Temperature Oven	1	19.8
G-7	High Temperature Oven	1	23.8
G-8	Oven for Glassware	1	27.7
G-9	Autoclave (Vertical Type)	2	118.9
G-10	Incubator	1	19.8
G-11	Low Temperature Incubator	1	35.7
G-12	Shaker (Middle)	1	23.8
G-13	Shaker (Large)	1	31.7
G-14	Reciprocation Shaker	1	67.3
G-15	Mixer	1	11.9
G-16	Hot Plate (Small)	2	15.8
G-17	Magnetic Stirrer (with Hot Plate)	2	15.8
G-18	Multi Magnetic Stirrer	2	26.9
G-19	Constant Temperature Water Bath	2	55.5
G-20	Rotary Vacuum Pump	2	31.7
G-21	Mini Pump	2	23.8
G-22	Roller Pump	2	39.6
G-23	Water Bath	2	23.8
G-24	Ultrasonic Cleaner	1	19.8
G-25	Separate Type Ultrasonic Cleaner	1	23.8
G-26	Small Power Ultrasonic Cleaner	1	11.9
G-27	Ultrasonic Pipette Cleaner	1	23.8
G-28	Ion Exchanger	2	15.8
G-29	Water Distillation Unit	1	118.9
G-30	Draft Chamber with Gas Cleaning Device	1	288.8

No.	Item	Number	Cost (Rp. Million)
G-31	AC Stabilizer	1	23.7
G-32	Cold Storage Chamber	1	103.7
G-33	Freesed Storage Chamber	1	185.1
G-34	Refrigerator	3	33.3
G-35	Freezer	1	19.3
G-36	Ice Maker (Cube Ice)	1	50.4
G-37	Monitoring Car	3	555.4
G-38	Tool Set	3	11.1
G-39	Locker for Reagents	3	53.3
G-40	Balance (6 kg)	1	5.9
G-41	Colony Counter	2	19.3
G-42	Personal Computer (Arabic/English)	3	88.9
G-43	Video Camera (with Video Monitor Unit)	1	29.6
G-44	Camera	1	14.8
G-45	Over Head Projector (with Screen)	1	37.0
<b>W. Water Quality Monitoring Equipment</b>			<b>1,636.5</b>
W-1	Handy Type DO Meter	3	33.3
W-2	Laboratory Type DO Meter	2	66.6
W-3	Total Nitrogen Analyzer	1	44.4
W-4	Total Phosphate Analyzer]	1	44.4
W-5	Tint Meter/Turbidity Meter	1	81.5
W-6	Turbidity Meter	1	14.8
W-7	Handy Type Conductivity/Temperature Meter	3	26.7
W-8	Conductivity Meter	1	11.1
W-9	Salt Meter (Na Ion Meter)	1	3.7
W-10	Water Sampler (Hydro Type)	3	13.3
W-11	Ekman Barge Grab Sampler	3	57.8
W-12	Plankton Net	3	17.8
W-13	Distillation Apparatus (for CN, NH4, F)	2	128.8
W-14	Oil Content Meter	1	74.1
W-15	BOD Analyzing Apparatus	1	66.6
W-16	BOD Analyzer	1	37.0
W-17	COD Analyzer (Cr)	2	37.0
W-18	COD Analyzer (Mn)	2	37.0
W-19	Water Quality Analysis	1	22.2
W-20	Boat for Monitoring (Inland Type)	3	66.6
W-21	Water Proof Camera	1	26.7
W-22	Ion Analyzer	1	74.1
W-23	Portable Water Quality Test Kit	1	66.6
W-24	Vacuum Filter (Membrane)	1	22.2
W-25	Multi-parameters probe	10	6.7
W-26	Vehicle	3	555.4
<b>Total</b>			<b>6,083.7</b>