

ANNEXURE-A

Sl.No.	Name	TOTAL NO. OF PUMPS
1	OWS EFFLUENT TRANSFER TO TPI	3
2	EX-TPI TRANSFER PUMP	3
3	DAF FEED PUMP	3
4	DAF RECYCLE PUMP	2
5	SANITARY WASTE TRANSFER PUMPS	2
6	SBR FEED PUMP	3
7	FILTER FEED PUMP	3
8	RECIRCULATION OF ACTIVE SLUDGE	4
9	SURPLUS ACTIVATED SLUDGE PUMPS	4
10	TREATED EFFLUENT PUMP	3
11	FILTER BACKWASH PUMP	2
12	OFF-SPEC EFFLUENT PUMP	3
13	CRW FILTER BACK WASH PUMP	2
14	FLOOR WASH TRANSFER PUMP	2
15	CRW TRANSFER PUMP	10
16	CRW TPI FEED PUMP	3
17	CRW DM/ACF FEED PUMP	3
18	TREATED CRW TRANSFER PUMP	3
19	OILY & CHEM. SLUDGE PUMP	2
20	THICKENED OILY & CHEM. SLUDGE PUMP	2
21	BIO-SLUDGE TRANSFER PUMPS	3
22	CONC. H ₂ SO ₄ TRANSFER PUMP	2
23	CAUSTIC LYE TRANSFER PUMP	2
24	H ₂ SO ₄ SOLN. DOSING PUMP	2
25	CAUSTIC SOLN. DOSING PUMP	2
26	ALUM DOSING PUMPS	2
27	DOPE SOLN. DOSING PUMP	2
28	NUTRIENTS SOLN. DOSING PUMP	2
29	DWPE (OILY) SOLN. DOSING PUMP	2
30	DWPE (BIO) SOLN. DOSING PUMP	2
31	WET SLOP OIL TRANSFER PUMP	2
32	DRY SLOP OIL TRANSFER PUMP	2
33	DEWATERING PUMP FOR CRW SUMP	1
34	DEWATERING PUMP FOR WET SLOP SUMP	1
35	DEWATERING PUMP FOR OFFSPEC EFFLUENT SUMP	1
36	DEWATERING PUMP FOR OWS SUMP	1
37	NEUTRALISED SPENT CAUSTIC TRANSFER PUMP	2
38	OWS OIL ANALYSER PUMP	1
39	OWS TOC ANALYSER PUMP	1
40	CRWS TOC ANALYSER PUMP	1

ANNEXURE-B

EQUIPMENTS IN RWTP

Sr. No.	PARTICULARS		PUMPS		
	EQUIPMENTS	32.	BACK WASH PUMP	58.	FLASH MIXING MIXER
1.	STILLING CHAMBER - I & II	33.	THICKNER FEED PUMPS	59.	FULLERS EARTH MIXING MIXER
2.	PARSHALL FLUME - I & II	34.	BELT FILTER PRESS FEED PUMP	60.	LIME SOLUTION DOSING TANK MIXER RIVER WATER
3.	FLASH MIXING TANK - I & II	35.	EFFLUENT DISPOSAL PUMP	61.	LIME SOLUTION DOSING TANK MIXER BORE WELL WATER
4.	FLASH MIXING TANK - III	36.	DEWATERING PUMP FILTER HOUSE	62.	ALUM SOLUTION DOSING TANK MIXER BORE WELL WATER
5.	RE-ACTIVATOR CLARIFIER	37.	DEWATERING PUMP TREATED WATER PUMPM HOUSE	63.	DWPE SOLUTION DOSING TANK MIXER BORE WELL WATER
6.	RAPID GRAVITY SAND FILTERS	38.	BOOSTER PUMP PRE CHLORINATION	64.	POLYELECTROLYTE DOSING TANK MIXER
7.	CLARIFIER SLUDGE SUMP	39.	BOOSTER PUMP POST CHLORINATION	65.	THICKENED SLUDGE SUMP MIXER I
8.	SLUDGE THICKNER	40.	FULLERS EARTH DOSING PUMP	66.	CAUSTIC SOLUTION TANK FOR LEAK NEUTRALIZATION
9.	THICKENED SLUDGE SUMP	41.	LIME SOLUTION DOSING PUMP RIVER WATER	67.	CAUSTIC ABSORPTION TOWER FOR CHLORINE LEAK NEUTRALIZATION SYSTEM
10.	EFFLUENT COLLECTION SUMP	42.	LIME SOLUTION DOSING PUMP BORE WELL	68.	REACTIVATOR CLARIFIER MECHANISM
11.	DRINKING WATER RESERVOIR COLLECTION I	43.	ALUM SOLUTION DOSING PUMP	69.	SLUDGE THICKENER MECHANISM
12.	FILTERED WATER RESERVOIR	44.	DWPE SOLUTION DOSING PUMP		
13.	FILTERED WATER SUMP	45.	POLYELECTROLYTE SOLUTION DOSING PUMP		
14.	DRINKING WATER SUMP	46.	CAUSTIC PUMP FOR LEAK CHLORINE NEUTRALIZATION		
15.	FULLERS EARTH DOSING TANK	47.	DM PLANT /SERVICE WATER FEED PUMP		
16.	LIME SOLUTION DOSING TANK (RIVER WATER)	48.	COOLING WATER MAKE UP PUMPS		
17.	LIME SOLUTION DOSING TANK (BORE WELL WATER)	49.	DRINKING WATER PUMP FOR CISF BARRACKS		
18.	ALUM SOLUTION DOSING TANK	50.	DRINKING WATER PUMP FOR COMPLEX OVERHEAD TANK		
19.	DE WATERING POLYELECTROLYTE DOSING TANK	51.	RECYCLE PUMP FOR THICKENED SLUDGE SUMP		
20.	POLYELECTROLYTE DOSING TANK	52.	BACK WASH WATER TANK ON TOP OF FILTER HPUSE		
21.	BELT FILTER PRESS	53.	OVER HEAD WATER TANK FOR CHEMICAL SOLUTION PREPERATION (FILTERED WATER TANK)		
22.	FILTERED WATER PUMP HOUSE	54.	DRINKING WATER TANK (LOFT TANK)		
23.	EFFLUENT PUMP HOUSE		BLOWERS		
24.	CHEMICAL HOUSE	55.	RAPID GRAVITY SAND FILTER AIR BLOWER		
25.	FILTER HOUSE	56.	AIR BLOWER FOR CLARIFIER SLUDGE SUMP AND EFFLUENT COLLECTION SUMP I		
26.	CHLORINE DOSING SYSTEEM PRE WITH LEAK & NEUTRILIZATION	57.	AIR BLOWER FOR CHLORINE LEAK NEUTRALIZATION SYSTEM		
27.	CHLORINE DOSING SYSTEEM POST WITH LEAK & NEUTRILIZATION				
28.	DRINKING WATER COOLER				
29.	WEIGHING MACHINE FOR CHEMICAL				
30.	WEIGHING SCALE FOR CHLORINE TONNER				
31.	EOT LIFTING & TRANSFER SPEC				

ANNEXURE-C

EQUIPMENT LIST

SL.NO	NAME OF EQUIPMENT	List of vessels & tanks	
		SI No	Name of vessel/Tank
1	Degasser Air Blower		
2	Degasser Water pump	1	Activated Carbon Filter
3	Degasser Water Pump for SAC	2	Strong Acid Cation Exchanger
4	DM Water Pump for SBA Regeneration	3	Strong Base Anion Exchanger
5	DM Water Transfer Pump	4	Mixed Bed Exchanger
6	DM water pump for MB Regeneration	5	Degasser Tower
7	Mixed Bed Blower	6	Degasser Water Tank
8	HCL unloading / Transfer pumps	7	DM water Storage Tank
9	Caustic unloading / Transfer pumps	8	ACF Backwash tank
10	46 % Caustic Dilution pumps	9	HCL Bulk Storage tank
11	20 % Caustic Solution transfer pump	10	Caustic Bulk Storage Tank
12	Alkali Measuring / Dilution tank Agitator (SBA)	11	20 % Caustic Solution Storage tank
13	Alkali Measuring / Dilution tank Agitator (MB)	12	Acid Measuring Tank (SAC)
14	Acid / Alkali Dilution Tank Agitator (Neutralization)	13	Acid Measuring Tank (MB)
15	Brine Preparation and Dosing Tank Agitator	14	Alkali Measuring / Dilution Tank (SBA)
16	Effluent Transfer Pump	15	Alkali Measuring / Dilution Tank (MB)
17	ACF Backwash Pump	16	Acid / Alkali Dilution Tank for Neutralization
18	Morpholine Dosing Pump	17	Brine Preparation and Dosing Tank
19	DM water pump for Caustic Dilution	18	Neutralization Pit (2 Compartments)
		19	Priming Chamber
		20	Morpholine Dosing Tank
		21	Safety Shower and Eye wash