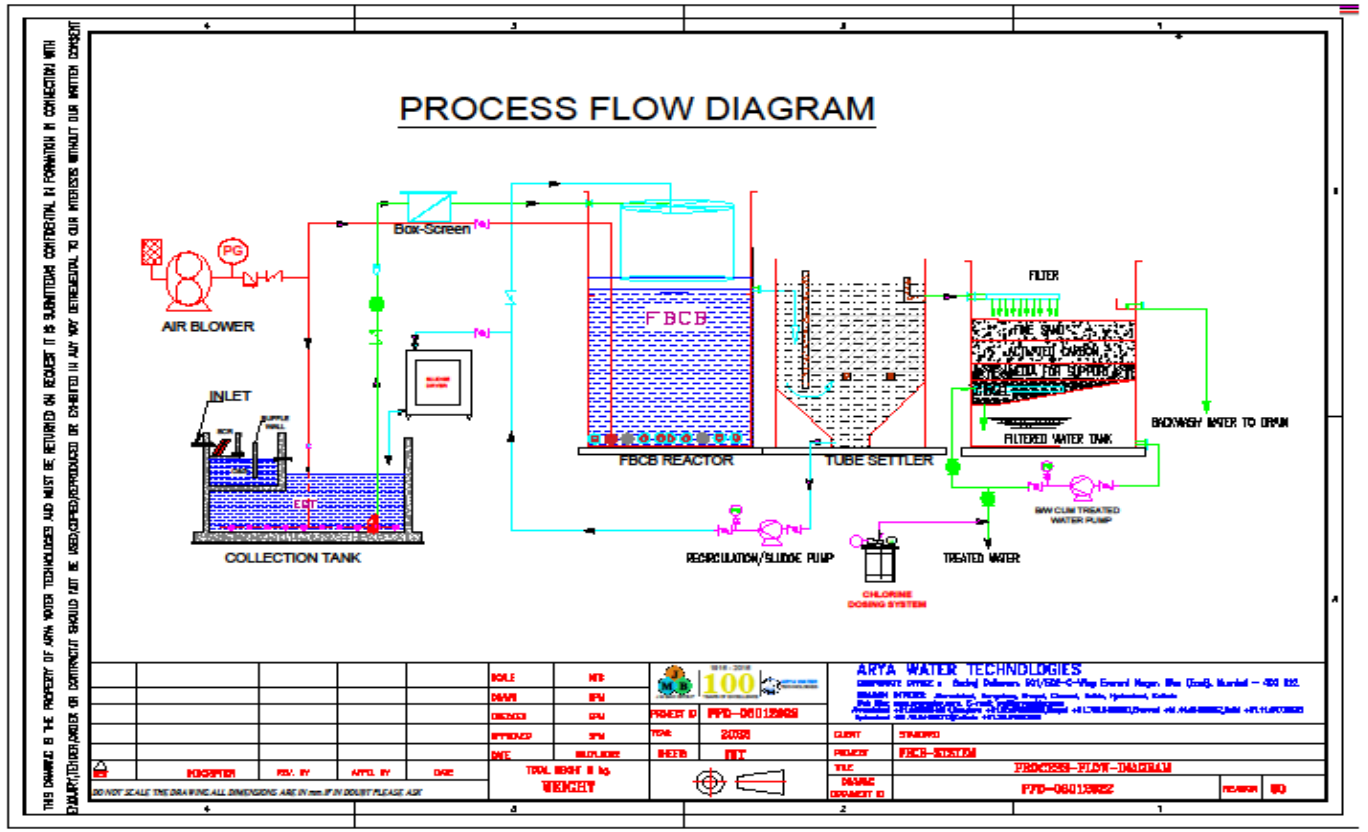
SYSTEM EXAMPLE 15KLD BIOSENTINEL INCLUDING AERATION, SEDIMENTATION PROCESS, FILTER MEDIA AND CHLORINE DOSING



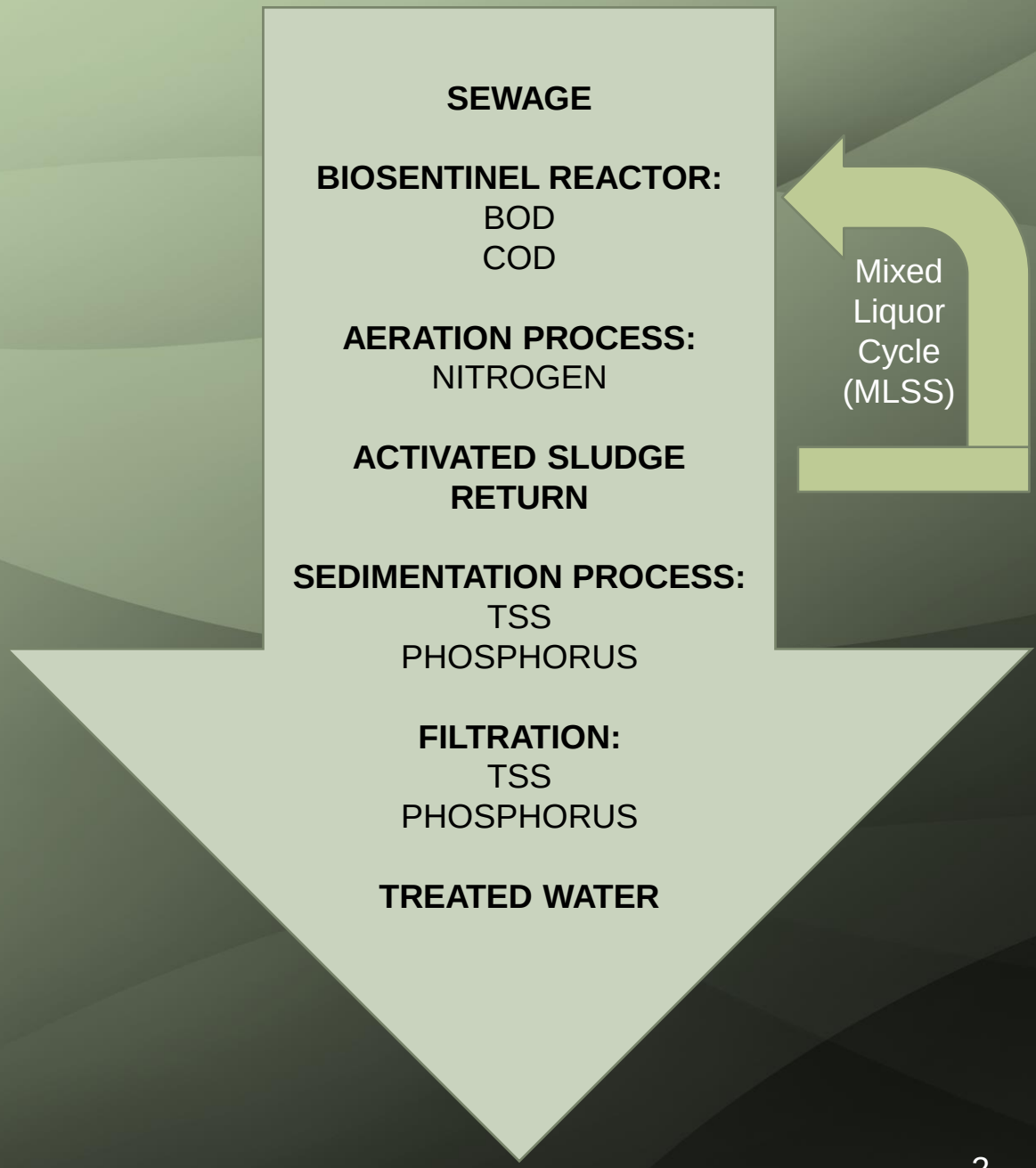
REMOVAL PERFORMANCE PERCENTAGES

TYPICAL INFLUENT 30-350 BOD

BOD, COD, NITROGEN REMOVAL	
Ensep BioSentinel Reactor Biological Process	30%
Aeration Process	65%
Media Filter	5%

TSS AND PHOSPHORUS REMOVAL	
Sedimentation Process	80-90%
Media Filter	5%

FECAL COLIFORM REMOVAL	
Chlorine Dosing	



REMOVAL PERFORMANCE WITH AERATION, SEDIMENTATION PROCESS AND OPTIONAL MEDIA FILTER

INLET WATER QUALITY		
PARAMETERS	RANGE	UOM
pH	5.5-9.0	-
BOD	30-350	mg/l
TSS	350	mg/l
COD	50-650	mg/l
Total Nitrogen	85	mg/l
Total Phosphorous	15	mg/l

DISCHARGE WATER QUALITY		
PARAMETERS	RANGE	UOM
pH	5.5-9.0	-
BOD	<10	mg/l
TSS	<20	mg/l
COD	<50	mg/l
Total Nitrogen	<10	mg/l
Total Phosphorous	<1	mg/l
Fecal Coliform	100/100ml	MPN

POWER USAGE		
Typical power usage for Biosentinel reactor recirculation process	0.261	KWH/KLD
WAS Pump	See 15KLD system example on slide 12	
RAS Pump		
Aeration Pump		
Transfer Pump		

TECHNICAL SPECIFICATION 15KLD SYSTEM

PARAMETER	VALUE
Design flow capacity	15 KLD
Diameter of BioSentinel (FBCB) Reactor Media	1600 mm
Height of BioSentinel (FBCB) Reactor Media	900 mm
Surface Area	237 m2
Hydraulic Loading Rate	1.2 m2/kg BOD
Bio-Reactor Volume	4.5 m3
Aeration time	24 hours
MLSS	3,000 mg/L
Air flow rate	15 cum/hr.
Clarifier area	2.25 m^2
RAS rate	0.75 m3/hr.
WAS rate	131.25 L/d
Tank Dimension	4.5m x 1.8m x 2.9m +0.3m Free Board

TECHNICAL SPECIFICATION 15KLD SYSTEM CONT'D
ELECTRICAL LOAD LIST

Client:	STANDARD							
Plant	15 KLD STP	ELECTRICAL LOAD LIST						Sheet No. 01 of 01
S.N.	Name of Pumps	Power Rating (K.W.)	Quantity		Total Connected Load (K.W.)	Total Working Load	Scope	Remark
			Working	Standby				
1	Sewage Pump	0.37	1.0	1.0	0.74	0.37	AWT	Single Ph, 230 V AC
2	Sludge Pump/Re-circulation	0.37	1.0	1.0	0.74	0.37	AWT	Single Phase, 230V AC
3	Air Blower	1.1	1.0	1.0	2.20	1.1	AWT	Single Phase, 230V AC
4	Treated Water Pump	0.37	1.0	1.0	0.74	0.37	AWT	Single Phase, 230V AC
5	Chlorine Dosing Pump	0.04	1.0	1.0	0.08	0.04	AWT	
	Total		5.0	5.0	4.5	2.3		