



Clean Water and Sanitation

SDG 6.2.1 - WATER REUSE

POINT -1

REPORT DESCRIBING THE VOLUME (IN m³) OF TREATED WATER (mains water or desalinated water) OR EXTRACTED WATER (from rivers, lakes, aquifers) USED IN THE UNIVERSITY.

There are two sources of water for supply into AUUP Campus, Noida.

They are: -

- a. **Bore wells for extracting hardwater:** - 18 bore wells are being utilized to extract 160 KLD of hardwater daily to maintain the requirement in AUUP.
- b. **Fresh water supply:** - Noida authority in supplying 120 KLD of water daily twice in a day.

This water is stored in underground tanks at various locations near the hostel blocks & academic blocks from where it is pumped to overhead tanks for consumption.

DATA REQUIRED

Point 1 : Water consumption per person (student, faculty and staff) month-wise for year 2023.

[illegible]

POINT -2

WRITE-UP EXPLAINING PROCESS TO TREAT WASTEWATER

There are four STP plants and seven ETP plants at various locations for treating sewage waste and laboratory / laundry waste. The process is attached as evidence. Water after proper filtration is put into use for horticulture, flushing system & cooling system. M/s Green Waste Tech has been outsourced to treat wastewater & bring it to optimum use inside the Campus to the maximum extent possible. Even the dry sludge generated after final treatment is used as manure in plants inside the Campus.

Point -2

Treated water consumption

Cooling tower 3.00 Lacs liter per day (March/April/May/June/August/September and October)
Cooling tower 1.50 Lacs liter per day (July)

Horticulture

Approx. 2.00 to 2.50 Lacs Ltr Per day (February/March/April/May/June/September and October)
Approx. 1.00 to 1.50 Lacs Ltr Per Day (January/July/August/November and December)

Flushing

Approx. 6.00 Lacs Per Day (January/February/March/April/May/June/August/September
/October/November and December)

Ground Water Extraction

Approx. 12.00 to 12.50 Lacs Ltr Per Day (January/February/March/April/May/June/July
/August/September/October/November and December)

In 2023, amount of water reused. Area-wise (used in toilets, landscaping etc)
amount of water to be provided.**Point -3**

Treated water re-used area wise

Flushing Approx. 72.00 Lacs per Year
Cooling Tower Approx. 22.50 Lacs in 8 Months
Horticulture Approx. 22.50 Lacs in 12 Months

EVIDENCE OF POINT 2



**Report on Sewage & Effluent treatment being carried out at
Amity University, Sector 125 Noida**

Amity University is situated in Sector 125 Noida, Uttar Pradesh and consists of classrooms, canteens, a laundry, laboratories and hostels. Being an environment friendly zero discharge University, the wastewater generated from all these sources needs to be and recycled within the premises. For this purpose four STP's and seven ETP's have been installed. All the STPs are interconnected and waste water is treated by these STPs as per the capacity of each.

The total number of users currently are as below:

1) Day scholars including visiting staff & Teachers	-	41,100 nos
2) Hostel residents including on site staff etc.	-	4,000 nos

The Waste water generated per type of user is :

1) Day Scholars etc.	41,100 x 20 ltrs/hd/day	=	8,22,000
2) Hostellers etc.	4,000 x 100 ltrs/hd/day	=	<u>4,00,000</u>
Total domestic sewage generated		=	12,22,000

Apart from domestic sewage the other sources of waste water are:

Laundry	-	40,000 ltr/day
Kitchen waste water	-	1,20,000 ltr/day
Lab effluents	-	2,500 ltr/day
RO Plant waste water	-	<u>70,000</u> ltr/day
Total	-	2,32,500 ltr/day

The total waste water generated by the University is approx. :

$$12,22,000 + 2,32,500 = \mathbf{14,54,500 \text{ ltrs per day}}$$

90% received back as sewage = 13,09,050 ltrs/day

After treatment the waste water is recycled for various purposes detailed as below:

1) Flushing		
a) Hostels 4,000 x 40	-	1,60,000 ltrs/day
b) Day students 41,000 x 12	-	4,92,000 ltrs/day
2) Chiller Plant make up water	-	2,50,000 ltrs/day
3) Gardening	-	<u>1,20,000</u> ltrs/day
Total water recycled	-	10,22,000 ltrs/day

Excess water being discharged into gardens = 2,87,050 ltrs per day

H.O.: 2nd floor, B – 477 Sushant Lok - 1, Gurgaon - 122009, Haryana.

Tel: 0124 4047759, + 91 9818034910, + 91 9535367220; email: getgreentech@gmail.com

STP 1: Maximum capacity of 600 Kld or 25 Kl/hour

Design characteristics:

Parameters	Inlet Value	Unit	Outlet Value
BOD ₃	200	mgs./ltr	< 10
COD	400	mgs./ltr	< 50
Total suspended solids	300	mgs./ltr	< 10
pH	6 - 8		6 - 8
Oil & Grease	5	mgs./ltr	< 3

Design specifications:

Module	Volume	Unit	Retention
Raw water sump	75	cum	3 hour
Aeration tank 1	187	cum	7.5 hours
Primary settling Tank	52	cum	2 hours
Aeration Tank 2	100	cum	4 hours
Secondary Settling Tank	68	cum	2.72 hours
Air Blower 1 & 2	400	cum/hr	
Air Blower 3 & 4	200	cum/hr	
Air Blower 5 & 6	160	cum/hr	
Filter	2	1200 ltrs	$\leq 12 \text{ m}^3/\text{m}^2/\text{hr}$
Treated Water Tank	100	cum	4 hours

STP 3: Maximum capacity of 300 cum/day or 12.5 Kl/hr

Design characteristics:

Parameters	Inlet Value	Unit	Outlet Value
BOD ₃	200	mgs./ltr	< 10
COD	400	mgs./ltr	< 50
Total suspended solids	300	mgs./ltr	< 10
pH	6 - 8		6 - 8
Oil & Grease	6	mgs./ltr	< 3

Design specifications:

Module	Volume	Unit	Retention
Raw water sump	275	cum	22 hour
Aeration tank	160	cum	12.8 hours
Settler	43	cum	3.4 hours
Filter feed tank	48	cum	3.8 hours
Air Blower 1, 2 & 3	300	cum/hr	
Dual Media Filters	2	1.0 mtr dia	$\leq 8 \text{ m}^3/\text{m}^2/\text{hr}$
Treated Water tank	90	cum	7.2 hours

STP 4: Maximum capacity of 600 Kl/day or 25 Kl/hour

Design characteristics:

Parameters	Inlet Value	Unit	Outlet Value
BOD ₅	200	mgs./ltr	< 20
COD	400	mgs./ltr	< 150
Total suspended solids	300	mgs./ltr	< 50
pH	6 - 8		6 - 8
Oil & Grease	6	mgs./ltr	< 2

Design specifications:

Module	Volume	Unit	Retention
Raw water sump	150	cum	5 hour
Aeration tank	247	cum	10 hours
Settler	54	cum	2.16 hours
Filter feed tank	54	cum	2.16 hours
Air Blower 1	500	cum/hr	
Air Blower 2	500	cum/hr	
Filters	2	1.00 dia	$\leq 9 \text{ m}^3/\text{m}^2/\text{hr}$
Filters	1	1.20 dia	$\leq 9 \text{ m}^3/\text{m}^2/\text{hr}$
Treated water tank	260	cum	10 hours

ETP's: Apart from the domestic sewage generated, the university generates effluent from their kitchens, laboratories and the laundry. The break up of the effluent generated along with treatment parameters is detailed below:

ETP 1 : (L1 Block Labs) Capacity – 30 ltrs per day; Peak flow 300 ltrs per week

S. No.	Parameters	Inlet	Outlet
1	BOD	100 – 150 mg/l	< 10
2	COD	300 – 450 mg/l	< 150
3	TSS	100 – 200 mg/l	< 50
4	pH	6 – 7.5	6 – 8.5
5	Oil & Grease	10 – 12 mg/l	< 5

ETP 2 : (L1 Block labs) Capacity – 30 ltrs per day; Peak flow 300 ltrs per week

S. No.	Parameters	Inlet	Outlet
1	BOD	100 – 150 mg/l	< 10
2	COD	300 – 450 mg/l	< 150
3	TSS	100 – 200 mg/l	< 50
4	pH	6 – 7.5	6 – 8.5
5	Oil & Grease	10 – 12 mg/l	< 5

ETP 3: (Laundry at D Block) Capacity – 4,000 ltrs per hour; Flow 40,000 ltrs per day

S. No.	Parameters	Inlet	Outlet
1	BOD	100 – 150 mg/l	< 10
2	COD	300 – 450 mg/l	< 150
3	TSS	100 – 200 mg/l	< 50
4	pH	6 – 7.5	6 – 8.5
5	Oil & Grease	10 – 12 mg/l	< 5

ETP 4: (For H Block Canteen kitchen) Capacity – 1,500 ltrs per hour; Flow 20,000 ltrs per day

S. No.	Parameters	Inlet	Outlet
1	BOD	900 mg/l	< 30
2	COD	1,600 mg/l	< 150
3	TSS	200 – 300 mg/l	< 50
4	pH	6 – 7.5	6 – 8.5
5	Oil & Grease	10 – 12 mg/l	< 10

ETP 5: (For E Block Labs) Capacity 30 ltrs per hour; Flow 2,000 ltrs per day

S. No.	Parameters	Inlet	Outlet
1	BOD	100 mg/l	< 20
2	COD	3,500 mg/l	< 150
3	TSS	200 – 300 mg/l	< 50
4	pH	2 - 9	6 – 8.5
5	Oil & Grease	20 – 45 mg/l	< 5

ETP 6 : (E Block labs) Capacity – 30 ltrs per day; Peak flow 300 ltrs per week

S. No.	Parameters	Inlet	Outlet
1	BOD	100 – 150 mg/l	< 20
2	COD	300 – 450 mg/l	< 150
3	TSS	100 – 200 mg/l	< 50
4	pH	6 – 7.5	6 – 8.5
5	Oil & Grease	10 – 12 mg/l	< 5

ETP 7 : (For J Block Labs) Capacity 300 ltrs per hour; Flow 2,000 ltrs per day

S. No.	Parameters	Inlet	Outlet
1	BOD	100 mg/l	< 20
2	COD	3,500 mg/l	< 150
3	TSS	200 – 300 mg/l	< 50
4	pH	2 - 9	6 – 8.5
5	Oil & Grease	20 – 45 mg/l	< 5

All the treated water from the ETPs is pumped into the sewage line after preliminary treatment and undergoes final treatment along with the sewage water.

Total volume of Waste water generated in the University

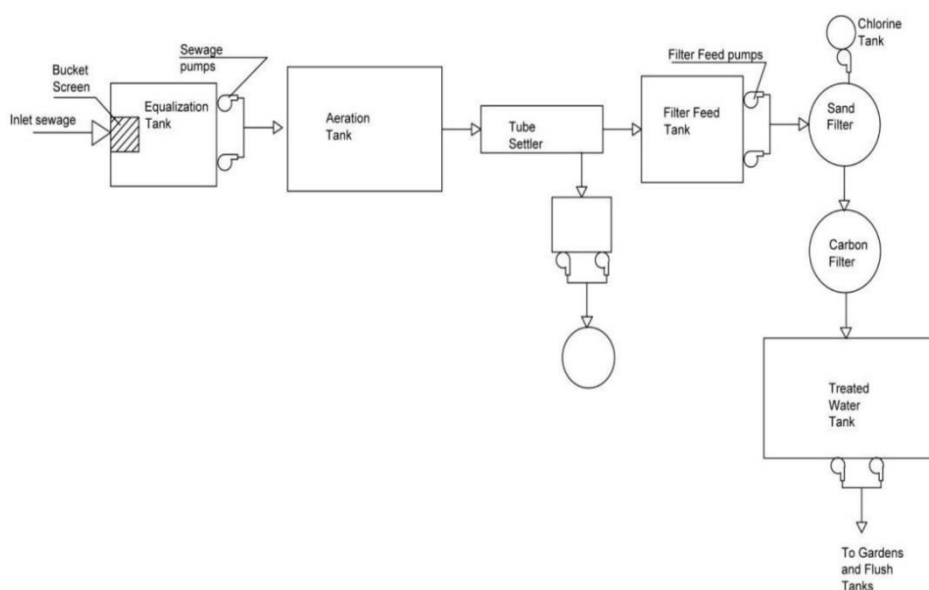
Total flow per day : **13,09,050** ltrs. per day

Total Sludge generated = 13,09,050 ltrs @ 200 mgs/ltr = 262 Kg/day

Sludge recycled back in aeration tanks = @ 70% = 183 Kg per day.

Sludge dried and handed over to be used as compost = $262 - 183 = 79$ kg/day.

Typical Flow Diagram of STP's



Note on functioning of STP's

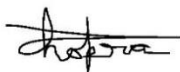
1. The raw sewage water from different buildings/blocks reaches the raw water sumps by gravity flow from the sewage pipelines. The BOD of the raw water is taken to be 200 mgs./ltr. **Aer Bac** bacterial solution is added in this tank at a ratio of 1:1000 to assist in break down of organic mass and autolysis.
2. From the raw water sump the sewage mixed with the bacteria is pumped into the aerobic reactor. The reactor is designed for BOD reduction of 95%. Air is pumped into the reactor to assist the bacteria in multiplication. **Aer Bac** microbes multiply rapidly and curb the generation of pathogens. The BOD is reduced to approx. 10 mg./ltr.
3. From the Aeration Tank the water flows into a settling tank where solids are allowed to settle. Since the water is rich in **Aer Bac** microbes approx 70% of the solids are pumped back to the aeration chamber where they react with the waste water. Some dead cells are consumed by the active microbes as nutrient and do not require removal due to the process of enhanced autolysis. The settled sludge is removed via a Drying Beds and handed over to the gardener to be used as compost.

4. The filters are backwashed on a daily basis and the backwashed water is returned into the aerobic reactor
5. The treated water from all the STPs is recycled back into the flushing tanks, Chiller Plants and the excess treated water is used for irrigation the lawns.

Note on functioning of ETP's

1. Effluent from the laboratories is collected in a equalization cum neutralizing tank. PH is checked and the water is neutralized. Lime and Ferric Alum are added one by one in the collection tank. Each chemical is allowed to react with the waste water for 20 minutes and the mixture is pumped into the mixing cum settling tank. After allowing the coagulation and separation process to take place Polyelectrolyte is added and mixture is allowed to settle. The settled and floating pollutants are removed into the sludge drying bed while the clear water is collected in a separate tank. From here the water is pumped through a filter into the nearest manhole. The sludge from the drying beds is collected after allowing drying time and stored for safe disposal as per CPCB guidelines.
2. Effluent from the laundry is collected into a sump from where it is pumped into the chemical reaction tank. Lime, Ferric alum and Polyelectrolyte are added in the CRTs for flocculation and coagulation. Floccs are developed in the flocculation tank and the water is allowed to flow to the settler where the floccs are settled and separated in the Sludge Drying Beds. The clear water is sent to the nearest manhole from where it reaches the STP. The Sludge is collected and stored in PVC bags and will be disposed as per CPCB guidelines.
3. Effluent form the Kitchens are collected in a sump and pumped into a grease trap. Grease and fats are removed physically and sent along with the other kitchen wastes for composting. The waste water then flows into the STPs. Here Air is pumped using appropriately sized Twin lobe roots type air blowers through fine bubble air diffusers. Aer Bac bacteria is also added. The Oxygen helps in providing energy to the microbes to multiply faster using the waste water as nutrient. The oxygen demand is reduced and the water gets stabilized. The Sludge is removed using sludge filters and the treated water is pumped into the adjoining garden for watering.

For Green Envirotech



Navin Chopra

TEST REPORT

***Issued To:**

Amity University Campus
D- Block, Amity University Campus, Plot No-4, Near Express Highway,
Sector-125, Noida 201303 U.P.

Kind Att : Col. Baljinder Singh

ULR : TC527523000016144F

Reg. No : FRAC/W/2302270093/A
*Your Ref. No : TRF

*Letter/TRF Dated : 27/02/2023
Date of Issue : 06/03/2023
Date of Sample Recd. : 27/02/2023
Date of Sampling : 22/02/2023
Sample Condition : Satisfactory
*Sample Packing : Plastic Container
Date of Sample Booking : 27/02/2023
Date of Start of Analysis : 27/02/2023
Date of Completion : 06/03/2023

***Sample Description:**

RO Water

Specification Followed : IS 10500:2012
Sampling Method : FRAC/SOP/CHEM-MICRO/016
Sampled By : Sample drawn by FRAC representative
Sampler Name : Anuj Sehrawat
Product Group : Water

*Sample Qty : 7+1 Ltr
*Batch No : Not Specified
*Mfg. Date : Not Specified
*Exp. Date : Not Specified

*Location : F-1 Block

TEST RESULTS

S.No.	Parameters	Unit	Results	Desirable Limit as Per IS 10500:2012	Permissible Limit as Per IS 10500:2012	Test Method
Chemical Test Parameters						
1	Colour	Hazen Unit	< 2.0	Max 5.0	Max 15	IS 3025-4:2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025-5:2018
3	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025-7 & 8:1984
4	Turbidity	NTU	BLQ (LOQ-0.01)	Max 1.0	Max 5	IS 3025-10:1984
5	Total Dissolved Solids	mg/l	65.0	Max 500	Max 2000	IS 3025-16:1984
6	Nitrate (as NO3)	mg/l	BLQ (LOQ-0.5)	Max 45	No relaxation	IS 3025-34:1988
7	Total Hardness (as CaCO3)	mg/l	6.06	Max 200	Max 600	IS 3025-21:2009
8	Chloride (as Cl)	mg/l	28.37	Max 250	Max 1000	IS 3025-32:1988
9	Sulphate (as SO4)	mg/l	BLQ (LOQ-5.0)	Max 200	Max 400	IS 3025-24:1986
10	Sulphide (as H2S)	mg/l	BLQ (LOQ-0.05)	Max 0.05	No relaxation	IS 3025-29: 1986
11	Fluoride (as F)	mg/l	BLQ (LOQ-0.05)	Max 1.0	Max 1.5	IS 3025-60:2008



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Kavita Rana
Sr Analyst-Environment

Authorised Signatory

Amarnath Patel

Deputy OIC-Instrument

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Sector-125, Noida 201303 U.P.

ULR : TC527523000016144F

Reg. No : FRAC/W/2302270093/A

*Your Ref. No : TRF

*Letter/TRF Dated : 27/02/2023

S.No.	Parameters	Unit	Results	Desirable Limit as Per IS 10500:2012	Permissible Limit as Per IS 10500:2012	Test Method
12	Total Alkalinity as CaCO ₃	mg/l	15.30	Max 200	Max 600	IS 3025-23:1986
13	Cyanide (CN)	mg/l	BLQ (LOQ-0.02)	Max 0.05	No relaxation	IS 3025-27:1986
14	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	BLQ (LOQ-0.001)	Max 0.001	Max 0.002	IS 3025-43:1992
15	Anionic Detergents (as MBAS)	mg/l	BLQ (LOQ-0.05)	Max 0.20	Max 1.0	Annexure K of IS 13428:2005
16	pH Value@25°C	-	6.9	6.5-8.5	No relaxation	IS 3025-11:1983
17	#Residual Free Chlorine	mg/l	BLQ (LOQ-0.1)	Min 0.2	Min 1.0	IS 3025-26:2021
18	Ammonia (as total ammonia-N)	mg/l	BLQ (LOQ-0.1)	Max 0.50	No relaxation	IS 3025 (34):1988
19	Chloramines (as Cl ₂)	mg/l	BLQ (LOQ-0.01)	Max 4.0	No relaxation	IS 3025-26:2021
20	Iron (as Fe)	mg/l	BLQ (LOQ-0.02)	Max 1.0	No relaxation	IS 3025 (P-2): 2004
21	Manganese (as Mn)	mg/l	BLQ (LOQ-0.02)	Max 0.1	Max 0.3	IS 3025 (P-65): 2014
22	Copper (as Cu)	mg/l	BLQ (LOQ-0.02)	Max 0.05	Max 1.5	IS 3025 (P-65): 2014
23	Zinc (as Zn)	mg/l	BLQ (LOQ-0.02)	Max 5.0	Max 15	IS 3025 (P-65): 2014
24	Magnesium (Mg)	mg/l	0.97	Max 30	Max 100	IS 3025 (P-2): 2004
25	Lead (as Pb)	mg/l	BLQ (LOQ-0.002)	Max 0.01	No relaxation	IS 3025 (P-65): 2014
26	Calcium (as Ca)	mg/l	0.96	Max 75	Max 200	IS 3025 (P-2): 2004
27	Selenium (as Se)	mg/l	BLQ (LOQ-0.002)	Max 0.01	No relaxation	IS 3025 (P-65):2014
28	Arsenic (as As)	mg/l	BLQ (LOQ-0.002)	Max 0.01	No relaxation	IS 3025 (P-65): 2014
29	Cadmium (as Cd)	mg/l	BLQ (LOQ-0.002)	Max 0.003	No relaxation	IS 3025 (P-65): 2014
30	Boron (as B)	mg/l	0.071	Max 0.5	Max 2.4	IS 3025 (P-65): 2014
31	Molybdenum (as Mo)	mg/l	BLQ (LOQ-0.002)	Max 0.07	No relaxation	IS 3025 (P-65): 2014
32	Chromium (as Cr)	mg/l	BLQ (LOQ-0.02)	Max 0.05	No relaxation	IS 3025 (P-65): 2014
33	Aluminum (as Al)	mg/l	BLQ (LOQ-0.02)	Max 0.03	Max 0.2	IS 3025 (P-65): 2014
34	Mercury (as Hg)	mg/l	BLQ	Max 0.001	No relaxation	IS 3025 (P-65): 2014



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TEST REPORT

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D- Block, Amity University Campus, Plot No-4, Near Express Highway,
Sector-125, Noida 201303 U.P.

ULR : TC527523000016144F

Reg. No : FRAC/W/2302270093/A
*Your Ref. No : TRF

*Letter/TRF Dated : 27/02/2023

S.No.	Parameters	Unit	Results	Desirable Limit as Per IS 10500:2012	Permissible Limit as Per IS 10500:2012	Test Method
34			(LOQ-0.0005)			
35	Barium (s Ba)	mg/l	BLQ (LOQ-0.02)	Max 0.7	No relaxation	IS 3025 (P-65): 2014
36	Nickel (as Ni)	mg/l	BLQ (LOQ-0.002)	Max 0.02	No relaxation	IS 3025 (P-65): 2014
37	Silver (as Ag)	mg/l	BLQ (LOQ-0.002)	Max 0.1	No relaxation	IS 3025 (P-65): 2014
38	Mineral oil	mg/l	BLQ(LOQ-0.4)	Max 1.0	No relaxation	Clause 6 of IS 3025 (P-39): 2021
PCB						
39	2,2,5-Trichlorobiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
40	2,4,4-TrichloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
41	2,4,5-TrichloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
42	2,2,3,5-TetrachloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
43	2,2,5,5-TetrachloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
44	2,2,4,5,5-PentachloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
45	2,3,4,4,5- PentachloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
46	2,2,3,4,4,5- HexachloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
47	2,2,3,4,5,6-HexachloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
48	2,2,4,4,5,5- HexachloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017
49	2,2,3,4,4,5,5-HeptachloroBiphenyl	mg/l	BLQ(LOQ-0.00005)	Max 0.0005	No relaxation	APHA 6630 23rd Edition:2017



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RO water quality parameters – per month

Location of RO Plants	RO water generated per hour	Parameter	Standard	Results
D Block RO Plant	42000	Colour	Max 15	2.5
H Block RO Plant	50000	Odour	Agreeable	Agreeable
I Block RO Plant	40000	Taste	Agreeable	Agreeable
		Turbidity	Max 5	BLQ (LOQ- 0.01)
		Total Dissolved Solids	Max 2000	65.0
		Nitrate (as N03)	No relaxation	BLQ(LOQ-0.5)
		Chloride (As Cl)	Max 600	6.06
		Total Hardness	Max 1000	28.37
		Chloride (as Cl)	Max 400	BLQ(LOQ-5.0)
		Sulphate (as SO4)	No relaxation	BLQ(LOQ-0.05)
		Sulphide (as H2S)	Max 1.5	Max 1.0
		Fluoride (as F)	Max 1.5	Max 0.5
		Total Alkalinity as CaCO3	Max 200	15.3
		Cyanide (CN)	No relaxation	LOQ 0.05
		Phenolic Compounds	Max 0.002	Max 0.001
		Anionic Detergents (as MBAS)	Max 1.0	LOQ 0.005
		pH Value@25°C	No relaxation	6.9
		#Residual free Chlorine	Min 1.0	LOQ0.1
		Ammonia (as total ammonia N)	No relaxation	LOQ 0.1
		Chloramines (as C12)	No relaxation	LOQ 0.01
		Iron	No relaxation	LOQ 0.02
		Manganese	Max 0.3	LOQ 0.1
		Copper	Max 1.5	LOQ 0.02
		Zinc	Max 15	LOQ 0.02
		Magnesium	Max 100	0.97
		Lead (as Pb)	No relaxation	LOQ 0.002
		Calcium (as Ca)	Max 200	0.96
		Selenium (as Se)	No relaxation	LOQ 0.002
		Arsenic (as As)	No relaxation	LOQ 0.002

		Cadmium (as Cd)	No relaxation	LOQ 0.002
		Boron (as B)	Max 2.4	0.071
		Molybdenum(as MO)	No relaxation	LOQ 0.002
		Chromium (as Cr)	No relaxation	LOQ 0.02
		Aluminum (as Al)	Max 0.2	LOQ 0.02
		Mercury (as Hg)	No relaxation	BLQ
		Barium (as Ba)	No relaxation	LOQ 0.002
		Nickel (as Ni)	No relaxation	LOQ 0.002
		Silver (as Ag)	No relaxation	LOQ 0.002
		Mineral oil	No relaxation	LOQ 0.4

Note :- 36 parameters test for year
12 parameters test for quarterly

Water treatment and recycling -per month

Block/ Area or total for campus	Total Water consumption (Lts)	STP input (Lts) per day	ETP input (Lts) per day	STP output (Lts) per month	ETP output (Lts) per month	Recycling of treated water to toilets (Lts)	Recycling of treated water to gardening (Lts)
STP1		1,80,000		54,00,000		25,65,000	15,39,000
STP2		1,40,000		42,00,000		19,95,000	11,97,000
STP3		3,00,000		90,00,000		42,75,000	25,65,000
STP4		3,50,000		1,05,00,000		49,87,000	29,92,500
Dell Building STP		30,000		9,00,000		-	8,55,000
D- Block Laundry			30,000		9,00,000		
Mama-Mia Kitchen ETP			25,000		7,50,000		
C - 1 Block Lab ETP			500		15,000		
E - 3 Block Lab ETP			200		6,000		
J - 1 Block Lab ETP			500		15,000		
L - 1 Block Lab ETP			200		6,000		
L - 1 A Block Lab ETP			200		6,000		
		10,00,000	56,600	3,00,00,000	16,98,000	1,38,22,000.00	91,48,500

