

**Status of Sewage Treatment Plants in Bihar (August -November, 2023)**

- Commissioned STPs – 8 (5 town) with designed capacity – 233.5 MLD
- Operational STPs – 7 (Operational capacity –224.5 MLD) with utilized capacity – 110.6 MLD (~ 49.27 % of operational capacity)
- Compliance Status of operational STPs

	Compliance w.r.t. Hon'ble NGT vide order 30.04.2019	Compliance Status w.r.t MoEF&CC norms dated 13.10.2017
Complying	0	0
Non-complying	7	7

- Non-operational STP-09 MLD Naugachia STP, Naugachia (Bhagalpur).
- STPs complying for Faecal Coliform norms (<230 MPN/100ml) – 0
- STPs non-complying for Faecal Coliform norms (>230 MPN/100ml) – 7
- Disinfection system available at all 8 STPs.
- BOD removal efficiency range: ≤50%- 3 STPs and 50 -70%-4 STPs
- STPs working at under-capacity-7 STPs

**Operational and Compliance status of Sewage Treatment Plants in Bihar**

S. No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Date of Inspection	Operational /Non-Operational Status	Compliance Status w.r.t Hon'ble NGT norms dated 30.04.2019	Compliance Status w.r.t MoEF&CC norms dated 13.10.2017
1	Beur New, Patna	Patna	SBR	43	23.11.2023	Operational	Non-complying TSS, TN, FC	Non-complying FC
2	Karmali Chak	Patna	SBR	37	22.11.2023	Operational	Non-complying TN, FC	Non-complying FC
3	Pahari (New) STP, 60MLD	Patna	SBR	60	23.11.2023	Operational	Non-complying TN, FC	Non-complying FC
4	Saidpur (60 MLD) STP	Patna	SBR	60	22.11.2023	Operational	Non-complying TN, FC	Non-complying pH, FC
5	Sonepur STP, 3.5MLD,	Sonepur	SBR	3.5	23.11.2023	Operational	Non-complying FC	Non-complying FC
6	Naugachia STP (9 MLD)	Naugachia (Bhagalpur)	SBR	9	09.11.2023	Non-operational		
7	Barh	Barh	SBR	11	07.11.2023	Operational	Non-complying TN, FC	Non-complying FC
8	Sultanganj	Sultanganj	MBBR	10	08.11.2023	operational	Non-complying TN, TP, FC	Non-complying FC

- STPs complying to BOD Norms ( $\leq 10$ mg/l) in Bihar (August -November, 2023) w.r.t. NGT and MoEF&CC norms

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	BOD ( $\leq 10$ mg/l)
1	Beur New, Patna	Patna	43	4
2	Karmali Chak	Patna	37	3
3	Pahari (New) STP, 60MLD	Patna	60	5
4	Saidpur (60 MLD) STP	Patna	60	4
5	Sonepur STP, 3.5MLD,	Sonepur	3.5	2
6	Barh	Barh	11	4
7	Sultanganj	Sultanganj	10	4

- STPs complying to COD ( $\leq 50$  mg/l) in Bihar (August -November, 2023) w.r.t. NGT Norms

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	COD ( $\leq 50$ mg/l)
1	Beur New, Patna	Patna	43	17.21
2	Karmali Chak	Patna	37	16
3	Pahari (New) STP, 60MLD	Patna	60	28
4	Saidpur (60 MLD) STP	Patna	60	28
5	Sonepur STP, 3.5MLD,	Sonepur	3.5	12
6	Barh	Barh	11	24
7	Sultanganj	Sultanganj	10	24

- STPs complying to TSS ( $\leq 20$  mg/l) in Bihar (August -November, 2023) w.r.t. NGT and MoEF&CC norms

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	TSS ( $\leq 20$ mg/l)
1	Beur New, Patna	Patna	43	80
2	Karmali Chak	Patna	37	38
3	Pahari (New) STP, 60MLD	Patna	60	40
4	Saidpur (60 MLD) STP	Patna	60	56
5	Sonepur STP, 3.5MLD,	Sonepur	3.5	22
6	Barh	Barh	11	64
7	Sultanganj	Sultanganj	10	68

- STPs complying to FC ( $\leq 230$  MPN/100 ml) in Bihar (August -November, 2023) w.r.t. NGT and MoEF&CC norms

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	FC ( $\leq 230$ MPN/100 ml)
1	Beur New, Patna	Patna	43	3300
2	Karmali Chak	Patna	37	160000
3	Pahari (New) STP, 60MLD	Patna	60	92000
4	Saidpur (60 MLD) STP	Patna	60	28000
5	Sonepur STP, 3.5MLD,	Sonepur	3.5	7000
6	Barh	Barh	11	$54 \times 10^3$
7	Sultanganj	Sultanganj	10	2300

- STPs having Disinfection system

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	Disinfection Technology
1	Beur New, Patna	Patna	43	Chlorination
2	Karmali Chak	Patna	37	Chlorination
3	Pahari (New) STP, 60MLD	Patna	60	Chlorination
4	Saidpur (60 MLD) STP	Patna	60	Chlorination
5	Sonepur STP, 3.5MLD,	Sonepur	3.5	UV
6	Naugachia STP (9 MLD)	Bhagalpur	9	Chlorination
7	Barh	Barh	11	Chlorination
8	Sultanganj	Sultanganj	10	Chlorination

- STPs with weak strength sewage (<40 mg/l)

S. No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	BOD
1	Beur New, Patna	Patna	SBR	43	11
2	Karmali Chak	Patna	SBR	37	7
3	Pahari (New) STP, 60MLD	Patna	SBR	60	7
4	Saidpur (60 MLD) STP	Patna	SBR	60	9
5	Sonepur STP, 3.5MLD,	Sonepur	SBR	3.5	4
6	Barh	Barh	SBR	11	7
7	Sultanganj	Sultanganj	MBBR	10	7

- Performance Analysis of STPs

S.No.	Technology (No.)	Range of BOD removal efficiency (%age)				Total	Overall complying		Overall non-complying		Non-complying Parameters		Non-operational
		<50	50-70	70-90	>90		Hon'ble NGT norms	MoEF&CC norms	Hon'ble NGT norms	MoEF&CC norms	either BOD,COD,TSS/FC		
											Hon'ble NGT norms	MoEF&CC norms	

1	SBR (7)	2	4	0	0	6	0	0	6	6	1/6	0/6	1
2	MBBR	1	0	0	0	1	0	0	1	1	0/1	0/1	
	<b>Total</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>7</b>	<b>1/7</b>	<b>0/7</b>	<b>1</b>

- **STPs operating at under-capacity (<75% of designed capacity)**

S. No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Utilized capacity (MLD)	Compliance Status w.r.t Hon'ble NGT norms dated 30.4.2019	Compliance w.r.t. MoEF norms dtd 13.10.2017
1	Beur New, Patna	Patna	SBR	43	22.97	Non-complying	Non-complying
2	Karmali Chak	Patna	SBR	37	18	Non-complying	Non-complying
3	Pahari (New) STP, 60MLD	Patna	SBR	60	17.51	Non-complying	Non-complying
4	Saidpur (60 MLD) STP	Patna	SBR	60	40	Non-complying	Non-complying
5	Sonepur STP, 3.5MLD,	Sonepur	SBR	3.5	1.1	Non-complying	Non-complying
6	Barh	Barh	SBR	11	6.5	Non-complying	Non-complying
7	Sultanganj	Sultanganj	MBBR	10	4.6	Non-complying	Non-complying

- **Under-construction STPs**

S. No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Date of Monitoring	Under Construction/ Under Trial/ DPR
1	Phulwari Shariff	Patna	SBR	6	23.11.2023	Under construction
2	Bhaktiarpur STP	Bakhtiarpur	SBR	10	07.11.2023	Under construction
3	Begusarai STP Mauza – Raja Dumri, Begusarai	Begusarai	SBR	17	08.11.2023	Under construction
4	Mokama STP, Patna	Patna	SBR	8	07.11.2023	Under construction
5	Kankarbagh STP	Patna	ASP	50	23.11.2023	Under construction
6	Maner STP	Patna	SBR	6.5	22.11.2023	Under construction
7	Chapra STP	Chapra	SBR	32	22.11.2023	Under construction
8	Digha STP	Patna	ASP	100	21.11.2023	Under construction
9	Danapur STP	Patna	SBR	25	21.11.2023	Under construction

NGT Standards: Compliance based on norms prescribed by Hon'ble NGT vide order dt 30.04.2019 in the matter of OA no. 1069/2018 (pH – 5.5-9.0, BOD <10mg/l, TSS< 20mg/l, COD< 50mg/l; Faecal Coliform – desirable <100MPN/100ml & permissible < 230 MPN/100 ml, Nitrogen-Total < 10 mg/l and Phosphorous-Total < 1.0 mg/l (TP compliance for discharge into ponds and lakes).

*Compliance compared with MoEF&CC notification dt. 13.10.2017: Standard for treated sewage from STPs for cities other than metro cities, state capitals and union territories were notified as pH-6.5-9.0, BOD as 30mg/L, Total suspended solids (TSS) as less than 100mg/L and Faecal coliform as less than 1000MPN per 100mL.*