

Status of Sewage Treatment Plants in Ganga Front Towns of Bihar (April-July, 2023)

- Commissioned STPs - 7 (4 towns) with designed capacity – 224.5 MLD
- Operational STPs – 6 (Operational capacity -164.5 MLD) with Utilized capacity – 92.6 MLD (~ 56.3% 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	1	2
Non-complying	5	4

- Non-operational STPs – 1 (Designed capacity – 60 MLD)
- STPs complying for Faecal Coliform norms (<230 MPN/100ml) – 2
- STPs non-complying for Faecal Coliform norms (>230 MPN/100ml) – 4
- Operational STPs having Disinfection system– 6
- STPs working at under-capacity (<75% of designed capacity)-06 STPs

Operational and Compliance status of Sewage Treatment Plants in Bihar

S. No.	Name of STPs/CETPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Date of monitoring	Operational Status	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 STP	Patna	Sequential Batch Reactor	43	13.06.2023	Operational	Non-complying COD, TSS, TN	Complying
2	Karmali Chak STP	Patna	Sequential Batch Reactor	37	13.06.2023	Operational	Non-complying TSS, T.N, FC	Non-complying FC
3	Pahari STP	Patna	Sequential Batch Reactor	60	14.06.2023	Non-Operational	Non-operational	
4	Saidpur STP	Patna	Sequential Batch Reactor	60	14.06.2023	Operational	Complying	Complying
5	Sonepur STP	Sonepur	Sequential Batch Reactor	3.5	15.06.2023	Operational	Non-complying TN ,FC	Non-complying FC
6	Barh STP	Barh	Sequential Batch Reactor	11	11.07.2023	Operational	Non-complying TN, FC	Non-complying FC
7	Sultanganj STP	Sultanganj	Moving Bed Biological Reactor	10	18-07-2023	Operational	Non-complying COD, TN, FC	Non-complying FC

STPs complying to BOD Norms (<10mg/l) in Bihar (April-July, 2023) w.r.t. NGT norms dated 30.4.2019 and MoEF&CC norms dtd 13.10.2017

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	Outlet BOD (mg/l)
1	Beur New STP	Patna	43	7
2	Karmali Chak STP	Patna	37	6
3	Saidpur STP	Patna	60	2
4	Sonepur STP	Sonepur	3.5	3
5	Barh STP	Barh	11	3
6	Sultanganj STP	Sultanganj	10	8

- **STPs complying to COD (≤ 50 mg/l) in Bihar (April-July, 2023) w.r.t. NGT norms dated 30.4.2019**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	Outlet COD (mg/l)
1	Karmali Chak STP	Patna	37	36
2	Saidpur STP	Patna	60	12
3	Sonepur STP	Sonepur	3.5	20
4	Barh STP	Barh	11	36

- **STPs non-complying to COD (> 50 mg/l) in Bihar (April-July, 2023) w.r.t. NGT norms dated 30.4.2019**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	Outlet COD (mg/l)
1	Beur New STP	Patna	43	52
2	Sultanganj STP	Sultanganj	10	52

- **STPs complying to TSS (≤ 20 mg/l) in Bihar (April-July, 2023) w.r.t. NGT norms dated 30.4.2019 and MoEF&CC norms dtd 13.10.2017**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	Outlet TSS (mg/l)
1	Saidpur STP	Patna	60	12
2	Sonepur STP	Sonepur	3.5	8
3	Barh STP	Barh	11	6
4	Sultanganj STP	Sultanganj	10	6

- **STPs complying to TSS (> 20 mg/l - 100 mg/l) in Bihar (April-July, 2023) w.r.t. MoEF&CC norms dtd 13.10.2017**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	Outlet TSS (mg/l)
1	Beur New STP	Patna	43	38
2	Karmali Chak STP	Patna	37	26

- **STPs complying to FC (≤ 230 MPN/100 ml) in Bihar (April-July, 2023) w.r.t. NGT norms dated 30.4.2019 and MoEF&CC norms dtd 13.10.2017**

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	Outlet FC (MPN/100ml)
1	Beur New STP	Patna	43	BDL
2	Saidpur STP	Patna	60	BDL

- STPs non-complying to FC (≥ 1000 MPN/100 ml) in Bihar (April-July, 2023) w.r.t. MoEF&CC norms dtd 13.10.2017

S. No.	Name of STPs	Ganga Front Town	Designed Capacity (MLD)	Outlet FC (MPN/100ml)
1	Karmali Chak STP	Patna	37	54×10^3
2	Sonepur STP	Sonepur	3.5	79×10^2
3	Barh STP	Barh	11	35×10^3
4	Sultanganj STP	Sultanganj	10	24×10^4

- STPs having Disinfection system

S. No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Disinfection Technology
1	Beur New STP	Patna	Sequential Batch Reactor	43	Chlorination
2	Karmali Chak STP	Patna	Sequential Batch Reactor	37	Chlorination
3	Pahari STP	Patna	Sequential Batch Reactor	60	Chlorination
4	Saidpur STP	Patna	Sequential Batch Reactor	60	Chlorination
5	Sonepur STP	Sonepur	Sequential Batch Reactor	3.5	Ultra-Violet
6	Barh STP	Barh	Sequential Batch Reactor	11	Chlorination
7	Sultanganj STP	Sultanganj	Moving Bed Biological Reactor	10	Chlorination

- Inlet BOD Range

Inlet BOD			STPs with weak sewage (upto 40 mg/l)	Treated sewage Complying w.r.t BOD (<10mg/l)	Inlet BOD				Overall compliance for BOD	
≤ 10 mg/l	11-20 mg/l	21-40mg/l			40-100 mg/l	100 - 150 mg/l	150-250mg/l	>250mg/l	Complying Treated sewage w.r.t BOD (<10mg/l) (NGT)	complying Treated sewage w.r.t BOD (<30mg/l)
1	4	-	5	5	1	-	-	-	6	6

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

S. No.	Name of STPs	Ganga Front Town	Treatment Technology	Designed Capacity (MLD)	Inlet BOD (mg/l)
1	Beur New STP	Patna	Sequential Batch Reactor	43	18
2	Karmali Chak STP	Patna	Sequential Batch Reactor	37	12
3	Saidpur STP	Patna	Sequential Batch Reactor	60	16
4	Sonepur STP	Sonepur	Sequential Batch Reactor	3.5	6
5	Barh STP	Barh	Sequential Batch Reactor	11	18

- STP operating under capacity (<75% of designed capacity)

S. No.	Name of STPs	Ganga Front Town	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 STP	Patna	43	16	Non-complying	Complying
2	Karmali Chak STP	Patna	37	27	Non-complying	Non-complying
3	Saidpur STP	Patna	60	38.7	Complying	Complying
4	Sonepur STP	Sonepur	3.5	0.5	Non-complying	Non-complying

S. No.	Name of STPs	Ganga Front Town	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
5	Barh STP	Barh	11	6	Non-complying	Non-complying
6	Sultanganj STP	Sultanganj	10	4.4	Non-complying	Non-complying

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.