BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

ORIGINAL APPLICATION No. 13 OF 2022 (SZ)

IN THE MATTER OF:

Dara Nagaraju .... Applicant

Versus

Union of India,
MoEF&CC, New Delhi & Ors .... Respondent(s)

REPORT OF THE TELANGANA STATE POLLUTION CONTROL BOARD (RESPONDENT NO. 2)

RUNNING INDEX

Place: Hyderabad

Date: 06-04-2022.

REPORT OF THE TELANGANA STATE POLLUTION CONTROL BOARD (RESPONDENT NO. 2) IN ORIGINAL APPLICATION NO. 13 OF 2022 FILED BY DARA NAGARAJU, R/O.MAHABUBNAGAR DISTRICT VS UNION OF INDIA & OTHERS

It is to submit that an Original Application was filed before the Hon'ble NGT, Chennai by Dara Nagaraju, R/o.Mahabubnagar District against the pollution caused by M/s. GTN Industries Ltd., (Yarn Processing Unit), Gundlapotlapally (V), Balanagar (M), Mahabubnagar District. The Hon'ble NGT vide order dated 03.02.2022 directed to file independent response.

In this regard, the following points are herewith submitted:

- The Board has issued Closure Order to M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District vide order dated 09.12.2017 with regard to the Complaint filed by Sri Mohan Naik and others, R/o B.B. Nagar Thanda, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District regarding discharging of effluents by the industry **(Annexure –I)**.

- The Board office has directed the EE, RO, Hyderabad to launch prosecution against the industry for the violations. Accordingly, the EE, RO, Hyderabad has launched the prosecution against the industry in the Hon'ble Court of the Hon'ble Judicial Magistrate of First Class at Jadcherla, and the case Registered with C.C.No.186 of 2018. The case is posted on 29.04.2022.

- Subsequently, this office has received a notice from Hon'ble HRC Case with Case No.2559/2018 filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District regarding the water pollution caused by M/s GTN Engineering (India) Limited on 16.08.2018 and directed the Environmental Engineer to submit report and case was posted on 22.10.2018. This office has submitted status report to the Hon'ble HRC on 01.10.2018. The case is pending. **(Annexure – II)**.

- The Board office has constituted special teams vide order dated 29.12.2018 to collect the water samples from the surrounding Agriculture Fields / villages of the industry with regard to the complaints against water pollution caused by M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District **(Annexure – III)**.

- The District Collector, Mahaboobnagar District has forwarded Prajavani Petition filed by Sri M. Brahma Chary & Others, R/o Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District regarding ground water pollution. The Board Officials

inspected the industry and its surroundings on 05.07.2019 and collected Borewell samples and report submitted to the Head Office, Hyderabad on 10.07.2019 **(Annexure – IV)**.

- The Board office has addressed a letter to the Collector & District Magistrate, Mahabubnagar District on 17.04.2019, requesting to constitute a Multi Disciplinary Committee comprising officials from Revenue, Agriculture, Ground water and TSPCB to carryout assessment of Crop damages, ground water pollution and to fix to a compensation to the affected farmers under "Pay Principle".

- Accordingly, the Collector & District Magistrate, Mahabubnagar has constituted a Committee. The Committee has inspected the industry and its surrounding areas on 13.08.2019 and 16.08.2019. This office has submitted a report to the District Collector, Mahabubnagar on 11.09.2019 duly copy marking to the Board Office **(Annexure – V)**.

- The Board has issued Extension of Temporary Revocation of Closure Order to the industry vide order dt:26.11.2019 for period upto 29.02.2020 stipulating certain conditions to comply with and the same is annexed as **Annexure – VI**.

- Again, the Board Officials have inspected the industry and its surroundings on 01.06.2020. A report was forwarded to Board Office on 05.06.2020 **(Annexure – VII)**.

- A mail was received on 04.11.2020 from the Board Office directing to submit the latest status report on M/s GTN Engineering (India) Limited (Unit: Yarn Processing) for further review of the industry and also a complaint was filed through Prajavani by Sri Syed Jainulabuddin r/o Agraharam, Potlapally and other villagers regarding water pollution being caused by the industry on 02.03.2020 and another complaint was by the SEE (TF), Board Office, Hyderabad forwarding complaint filed by Sri Nandeshwar Reddy r/o Gundlapotlapally on 03.06.2019.

- The officials of the Board have attended the complaint and inspected the industry and surroundings on 27.11.2020 and report was submitted to the Board Office, Hyderabad on 07.12.2020 for review of on extension of Temporary Revocation of Closure Order **(Annexure – VIII)**.

- The Board Office has reviewed issue of extension of Temporary Revocation of Closure Order before Task Force Committee meeting held on 29.01.2021. After detailed discussion, the Committee recommended to extension of Temporary Revocation of Closure Order for six months and the Board was in the process of preparing the Order copy of Temporary Revocation of Closure orders.

- However, it is to submit that, the industry has stopped its operations from 15.04.2021 and submitted a letter to the Board, stating that they have suspended the operations w.e.f. 15.04.2021.

- A complaint was again received from Sri D. Nagaraju r/o Guntlapotlapally, Rajapur (M), Mahabubnagar District against M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District on 12.08.2021, regarding water pollution caused by the industry. The Board officials have inspected the industry on 06.09.2021. During the inspection, the industry was not in operation. The Board officials met the complainant and enquired about the problem and a detailed report was forwarded to Board Office, Hyderabad for taking action on 20.10.2021 **(Annexure – IX).**

- The Hon'ble NGT, Southern Zone, Chennai passed an Order dated 03.02.2022 in the O.A. No. 13 of 2022 filed before Hon'ble NGT, Southern Zone, Chennai order constituting a Joint committee comprising of following members with the nodal agency as Telangana State Pollution Control Board (TSPCB).

- In compliance to the Hon'ble NGT orders, the Member Secretary has constituted Committee vide letter dated 25.02.2022 consisting of following members i) District Collector or nominee, Mahabubnagar District, ii) Senior Officer, TSPCB iii) Joint Director of Agriculture, Mahabubnagar District or his / her nominee.

- As per the Member Secretary letter, the following Committee members have inspected the industry on 04.03.2022 consisting of i) The Additional Collector, Mahabubnagar District ii) Sri.D.Krupananad, Joint Chief Environmental Engineer, Zonal Office, Hyderabad and Additional Commissioner, Ground water Department, Telangana.

- During the inspection, the Zonal Laboratory, Warangal officials have collected the following samples i) Borewell water sample collected from D. Naga raju' Agriculture Fields, Gundlapotlapaly (V), Rajapur (M), Mahaboobnagar District ii) Water Sample collected from vagu adjacent to Agriculture fields of D. Naga Raju, Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District iii) Soil sample collected from Vagu, adjacent to agriculture Land of D. Naga Raju, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District. iv) Open well water sample collected from D. Balaiah's Agricultural Land, Gundlapotlapally (V), Rajapur (M), Mahabubnagar District. v) Upstream of GTN Textile near Vagu water sample collected at Gundlapotlapally (V), Rajapur (M), Mahabubnagar District. vi) Soil sample collected from Vagu, adjacent to agriculture Land of D. Naga Raju, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District. vii) Open

well water sample collected from D. Balaiah's Agricultural Land, Gundlapotlapally (V), Rajapur (M), Mahabubnagar District.

The analysis results are as follows:

1) **Bore well water sample collected from D. Naga raju's Agricultural fields, Gundlapotlapally (V), Rajapur (M), Mahabubnagar District.**

Sl.No.	Parameter	Sample No.	Drinking water Standards IS 10500: 2012	
		03082	Max. permissible Limit	Acceptable Limit
		Values		
1.	p^H	6.77	No relaxation	6.5-8.5
2.	Electrical Conductivity	16380	--	--
3.	Total Suspended Solids	440	--	--
4.	Total Dissolved Solids	10320	2000	500
5.	Turbidity	2.06	5	1
6.	Chlorides	3584	1000	250
7.	Sulphates	3168	400	200
8.	Chemical Oxygen Demand (COD)	440	--	--
9.	BOD 3 days at 27^0C	8	-	-
10.	Total Hardness (as $CaCO_3$)	3675	600	200
11.	Ammonia as Total Ammonia Ca^{++}	2.8	No relaxation	0.5
12.	Calcium as Ca^{++}	724	200	75
13.	Magnesium as Mg^{++}	453	100	30
14.	Total alkalinity as $CaCO_3$	640	600	200
15.	Nitrates as NO_3^-	5.5	No relaxation	45
16.	Fluorides as F^-	2.0	1.5	1.0
17.	Copper as Cu	0.041	No relaxation	0.05
18.	Iron as Fe	0.134	No relaxation	0.3
19.	Zinc as Zn	0.177	15	5
20.	Cadmium as Cd	0.021	No relaxation	0.003
21.	Lead as Pb	0.194	No relaxation	0.01
22.	Nickel as Ni	0.021	No relaxation	0.02
23.	Total Chromium as Cr	0.0186	No relaxation	0.05
24.	Boron as B	1.02	1.0	0.5
Units :	All values are expressed in mg/ltr, except p^H, EC and Turbidity			
Note:	• Results related to samples as received. • "-"Indicates standard not mentioned in ISI 0500:1991. • "*" For agricultural use Boran as B – Shall be below 1.0 ppm as per ID 11624-1986 (reaffirmed in 2001).			

2) **Water Sample collected from vagu adjacent to Agriculture fields of D. Naga Raju, Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District.**

Sl.No.	Parameter	Sample No.	CPCB water Quality Criteria				
		03083	Class– A	Class– B	Class– C	Class– D	Class– E
		Values					
1.	p^H	7.56	6.5-8.5	6.5-8.5	6.5-8.5	6.5-8.5	6..0-8.5

2.	Electrical conductivity (µS/cm)	6730	-	-	-	-	2250 Max
3.	Total Suspended Solids	26	-	-	-	-	-
4.	Total Dissolved Solids	3996	-	-	-	-	-
5.	Dissolved Oxygen	4.97	> 6.0	≥ 5.0	≥ 4.0	≥ 4.0	-
6.	Chemical Oxygen Demand (COD)	43	-	-	-	-	-
7.	BOD 3 days at 27^0C	1.7	≤ 2.0	≤ 3.0	≤ 3.0	-	-
8.	Total Coliform	11	≤ 50	≤ 500	≤ 5000	-	-
9.	Fecal Coliform	2	-	-	-	-	-
10.	Free Ammonia	0.113	-	-	-	≤ 1.2	-
11.	Born as B	0.398	-	-	-	-	2 Max
12.	Sodium Absorption Ratio	**	-	-	-	-	26 Max
Units:	Al values are expressed in mg/l except p^H, Electrical conductivity. Total Coliform and Fecal Coliform						
Note:	"*" – Parameter is not analyzed due to instrument problem.						

Class of Water Use:

Class-A: Drinking water source without conventional treatment but after disinfection.

Class- B: Outdoor bathing (Organized).

Class-C: Drinking water source after conventional treatment and disinfection.

Class-D: Propagation of Wild life and Fisheries

Class-E: Irrigation, Industrial Cooling, Controlled Waste disposal.

Below Class: Not meeting A, B, C, D and E criteria.

3) Soil sample collected from Vagu, adjacent to agriculture Land of D. Naga Raju, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District.

Parameter (S)	Ratio	Results
		03084
Colour	-	Brown
State	-	Solid
p^H	(1:5)	7.22
Electrical Conductivity (µS/cm)	(1:5)	24670
Chemical Oxygen Demand (COD) (mg/gr)	(1:5)	459
Copper as Cu	(1:100)	7.7
Zinc as Zn	(1:100)	18.1
Cadmium as Cd	(1:100)	ND
Lead as Pb	(1:100)	11.9
Nickel as Ni	(1:100)	13.2
Total Chromium as Cr	(1:100)	16.4

Mercury as Hg	(1:100)	0.00407
Note	All values are expressed in gr/kg, except p^H, EC and COD is expressed in mg/gr.	

4. **Open well water sample collected from D. Balaiah's Agricultural Land, Gundlapotlapally (V), Rajapur (M), Mahabubnagar District.**

Sl.No.	Parameter	Sample No.	Drinking water Standards IS 10500: 2012	
		03085 Values	Max. Permissible Limit	Acceptable Limit
1.	p^H	7.47	No relaxation	6.5-8.5
2.	Electrical Conductivity	3290	-	-
3.	Total Suspended Solids	410	-	-
4.	Total Dissolved Solids	1852	2000	500
5.	Chemical Oxygen Demand (COD)	47	-	-
6.	Turbidity	170	5	1
7.	Chlorides	629	1000	250
8.	Sulphates	305	400	200
9.	Total Hardness (as $CaCO_3$)	1010	600	200
10.	Ammonia as Total Ammonia –N	1.68	No relaxation	0.5
11.	Calcium as Ca^{++}	58	200	75
12.	Magnesium as Mg^{++}	210	100	30
13.	Total alkalinity as $CaCO_3$	325	600	200
14.	Nitrates as NO_3^-	1.17	No relaxation	45
15.	Fluorides as F^-	0.975	1.5	1.0
16.	Boran as B	0.996	1.0	0.5
17.	Copper as Cu	0.0064	1.5	0.05
18.	Iron as Fe	4.832	No relaxation	0.3
19.	Zinc as Zn	0.1094	15	5
20.	Cadmium as Cd	0.0014	No relaxation	0.003
21.	Lead as Pb	0.0414	No relaxation	0.01
22.	Nickel as Ni	0.039	No relaxation	0.02
23.	Total Chromium as Cr	0.015	No relaxation	0.05
Units :	All values are expressed in mg/ltr, except p^H, EC and Turbidity			
Note:	• Results related to samples as received. • "-" Indicates standard not mentioned in ISI 0500:1991. • "*" For agricultural use Boran as B – Shall be below 1.0 ppm as per ID 11624-1986 (reaffirmed in 2001).			

5. **Upstream of GTN Textile near Vagu water sample collected at Gundlapotlapally (V), Rajapur (M), Mahabubnagar District.**

Sl.No.	Parameter	Sample No.	CPCB water Quality Criteria				
		03086 Values	Class– A	Class– B	Class– C	Class– D	Class– E
1.	p^H	7.46	6.5-8.5	6.5-8.5	6.5-9.0	6.5-8.5	6.0-8.5
2.	Electrical conductivity (µS/cm)	8030	-	-	-	-	2250 Max
3.	Total Suspended Solids	34	-	-	-	-	-

4.	Total Dissolved Solids	4938	-	-	-	-	-
5.	Dissolved Oxygen	4.8	> 6.0	≥ 5.0	≥ 4.0	≥ 4.0	-
6.	Chemical Oxygen Demand (COD)	35	-	-	-	-	-
7.	BOD 3 days at 27^0C	1.6	≤ 2.0	≤ 3.0	≤ 3.0	-	-
8.	Total Coliform	8.3	≤ 50	≤ 500	≤ 5000	-	-
9.	Fecal Coliform	1.8	-	-	-	-	-
10.	Free Ammonia	0.036	-	-	-	≤ 1.2	-
11.	Born as B	0.08	-	-	-	-	2 Max
12.	Sodium Absorption Ratio	**	-	-	-	-	26 Max
Units:	All values are expressed in mg/l except p^H, Electrical conductivity. Total Coliform and Fecal Coliform						
Note:	"**" – Parameter is not analyzed due to instrument problem.						

Class of Water Use:

Class-A: Drinking water source without conventional treatment but after disinfection.

Class-B: Outdoor bathing (Organized).

Class-C: Drinking water source after conventional treatment and disinfection.

Class-D: Propagation of Wild life and Fisheries

Class-E: Irrigation, Industrial Cooling, Controlled Waste disposal.

6. Soil sample collected from Vagu, adjacent to agriculture Land of D. Naga Raju, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District.

Parameter (S)	Ratio	Results
		03084
Colour	-	Brown
State	-	Solid
p^H	(1:5)	7.33
Electrical Conductivity (µS/cm)	(1:5)	7200
Chemical Oxygen Demand (COD) (mg/gr)	(1:5)	40
Copper as Cu	(1:100)	3.2
Zinc as Zn	(1:100)	10.5
Cadmium as Cd	(1:100)	ND
Lead as Pb	(1:100)	9.0
Nickel as Ni	(1:100)	9.5
Total Chromium as Cr	(1:100)	9.3
Note	All values are expressed in gr/kg, except p^H, EC and COD is expressed in mg/gr.	

7. Open well water sample collected from D. Balaiah's Agricultural Land, Gundlapotlapally (V), Rajapur (M), Mahabubnagar District.

Sl.No.	Parameter	Sample No.	Drinking water Standards IS 10500: 2012	
		03088	Max. Permissible Limit	Acceptable Limit
		Values		

1.	p^H	7.21	No relaxation	6.5-8.5
2.	Electrical Conductivity	1498	-	-
3.	Total Suspended Solids	25	-	-
4.	Total Dissolved Solids	879	2000	500
5.	Chemical Oxygen Demand (COD)	16	-	-
6.	Turbidity	7.66	5	1
7.	Chlorides	237	1000	250
8.	Sulphates	38	400	200
9.	Total Hardness (as $CaCO_3$)	480	600	200
10.	Ammonia as Total Ammonia –N	NIL	No relaxation	0.5
11.	Calcium as Ca^{++}	88	200	75
12.	Magnesium as Mg^{++}	63	100	30
13.	Total alkalinity as $CaCO_3$	300	600	200
14.	Nitrates as NO_3^-	4.91	No relaxation	45
15.	Fluorides as F^-	0.475	1.5	1.0
16.	Boran as B	0.88	1.0	0.5
17.	Copper as Cu	<0.004	1.5	0.05
18.	Iron as Fe	2.152	No relaxation	0.3
19.	Zinc as Zn	0.0472	15	5
20.	Cadmium as Cd	<0.0028	No relaxation	0.003
21.	Lead as Pb	0.018	No relaxation	0.01
22.	Nickel as Ni	0.019	No relaxation	0.02
23.	Total Chromium as Cr	0.0186	No relaxation	0.05
Units :	All values are expressed in mg/ltr, except p^H, EC and Turbidity			
Note:	• Results related to samples as received. • "-"Indicates standard not mentioned in ISI 0500:1991. • "*" For agricultural use Boran as B – Shall be below 1.0 ppm as per ID 11624-1986 (reaffirmed in 2001).			

The analysis reports indicates that there is no evidence of dye and dye intermediates present in the Borewell and open well samples. Regarding the soil samples, the agriculture departments has stated that the soil is slightly acidic which can be managed by applying 950 kilograms of lime per acres under rain fed conditions.

Date: 04-03-2022.

Place: HYDERABAD

ENVIRONMENTAL ENGINEER

ENVIRONMENTAL ENGINEER
Telangana State Pollution Control Board
Regional Office, Hyderabad
4th Floor, Podupu Bhavan,
Hyderabad Collectorate Complex
N S ROAD HYDERABAD-500 001

(9) ANNEXURE-I

Annexure – I 2

TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-III, Industrial Estate, Sanathnagar, Hyderabad-500 018
Phones :040-23887500 Fax: 040 – 23887519

BY REGD. POST WITH ACK. DUE

Order No. MHB-122/TSPCB/U-I/TF/2017- 2984 **Date:09.12.2017**

Sub : M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District – Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and control of Pollution) Amendment Act, 1987 – Non compliance of the Board directions - **Closure Orders - Issued – Reg.**

Ref :
1. CFO order No. MHB/TSPCB/ZO-HYD/CFO/2017 Dated 27.01.2017.
2. A complaint was filed by Sri Mohan Naik and others regarding discharging of effluents.
3. Inspection of your industry by the Board officials on 07.11.2017.
4. Notice issued to your industry on 08.11.2017
5. Inspection of your industry by the Board officials on 05.12.2017.
6. Hearing held on 07.12.2017 at Board office, Hyderabad.

***

1. WHEREAS, you are operating the Industry located at Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District.

2. WHEREAS, the Board issued CFO to your industry on 27.01.2017 valid upto 31.12.2021 for production of Yarn 100% Cotton - 120 TPM and Grey Gassed (unprocessed) - 60 TPM.

3. WHEREAS, the Board has received a complaint filed by Sri Mohan Naik and others, R/o B.B. Nagar Thanda, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District regarding discharging of effluents by your industry.

4. WHEREAS, the Board officials inspected your industry and surroundings on 07.11.2017. The Board Officials met the complainant Sri Mohan Naik and informed as follows :

   i. The industry is discharging untreated effluents into surrounding area and also ultimately joining into the Dundubi Vagu and their crops are damaging due to discharge of untreated effluents.
   ii. The complainant has shown lagoons and Dundubi Vagu where effluents were stagnated.

   The Board Officials observed that the boundary of industry is adjacent to the Dundubi Vagu which is about 500 mtrs. away from the industry. The Dundubi Vagu flows along the Bibinagar Thanda which is about 1.4 km away from the industry.

5. WHEREAS, the Board observed the following during the inspection of your industry:

   i. The industry has damaged compound wall near ETP and discharging effluents through compound wall and the pH value is 10.
   ii. The industry has hose pipe for discharge of effluents from pit.
   iii. The industrial effluents and domestic effluents passing through drain and joining effluents into lagoon which is near to Dundubi Vagu.
   iv. The industry has laid pipe line for discharge of effluents without treatment and also stored untreated effluents in the lagoon.
   v. The stagnated colour effluents were observed in the Dundubi vagu which was discharged by the industry and also colored effluents observed about 1.0 km in the vagu.
   vi. The industry is not operating STP and discharging effluents into drain.
   vii. A lot of spillages were observed around the ETP area.

12 DEC 2017

Engineering (India) Ltd. G.P. Polly

(SRINIVAS.T) 9949493171

viii. The industry has below ground level tanks ie., collection tank, aera n drain out and Supernatant tank.

ix. The industry has not provided closed shed for stroage of husk and husk ash.

x. The industry has not shown records of production, water consumption, waste water generation & its treatment and soild waste details,

xi. The industry has not provided flow meter before raw effluents collection tank.

xii. The industry has only one ton of MEE salt and about 20 Tons ETP sludge.

xiii. The house keeping of industry is very poor.

xiv. The industry water consumption is 1040.0 KLD viz., (Process & Washing effluents - 660.0 KLD, Process & washes - 90.0 KLD, Boiler Feed - 50.0 KLD, Cooling (makeup/humidification/water spraying) - 35.0 KLD, Gardening - 100.0 KLD and Domestic - 105.0 KLD). The wastewater generation is 836 KLD, viz., (Process & Washings - 660.0 KLD, Process & Washings - 90.0 KLD, Boiler blow down - 2.0 KLD and Domestic - 84.0 KLD). As per CFO, the industry" Shall treat the effluents of 752 KLD in the ETP and treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO permeate shall be recycled back into the process (660 KLD). The RO rejects (92 KLD) shall be evaporated in Multiple Effect Evaporator (MEE) and Domestic - 84.0 KLD "After treatment in STP, shall be used for on land application / irrigation within the factory premises".

xv. The industry has ETP consisting of below ground level collection tank, Reaction chamber, Primary settling tanks , below ground level Supernatant tank, Aeration tank, Areation tank drain out below ground level trench , Multigrade filiter, Natural pond (oxidation), Sand filter and ActivatedCarbon filters, Ultra filtration/ Nano filtration, 3 Stage RO Plant, MEE for waste water treatment.

xvi. The industry has Husk fired boiler of capacity - 1 x 6 TPH, Oil fired Thermic Fluid Heaters - 2 x 15 Lakh K.cal/hr. and D.G. Set - 1 x 1250 KVA. The industry has provided mechanical dust collector followed by Bag filters to the boiler.

xvii. The industry generates Used oil / Waste oil - 200 LPA (Shall be sent to Authorized waste oil Re-processors / Re-Cycling units, ETP Sludge - 10 TPD (Shall be sent to M/s. HWMP (TSDF), Dundigal, Rangareddy district / sold to brick manufacturing units for incineration.), Boiler ash - 4.5 TPD (Shall be sold to brick manufacturing units) and Used lead acid batteries - 8Nos./annum (Shall be sold to authorized recyclers or to be returned to the suppliers/dealers on buy back basis.)

xviii. The Board Officials have collected samples at following places in presence of industry representative. The Legal samples are submitted to the Central Laboratory for analysis. The analysis reports indicate

11142	Discharging effluents through loose pipe into open land from collection pit
11143	Below ground level collection pit near husk storage
11144	Stagnated effluents at open land
11145	Discharging effluents into open drain passing from the industry
11146	Domestic effluents discharging into open drain

Parameters	Unit	Results					AS Per CFO Order Limiting Standards
		11142	11143	11144	11145	11146	
pH at 25°C	-	8.1	8.3	8.2	8.7	8.5	5.5 - 9.0
Total Suspended Solids	mg/L	239	247	61	73	86	200
Total Dissolved Solids	mg/L	7,459	8,251	6,975	6,791	1,337	-
Chemical Oxygen Demand	mg/L	1,767	2,050	1,170	1,338	187	-
BOD_3 at 27°C	mg/L	428	506	295	340	48	30
Oil and Grease	mg/L	1.7	1.8	0.9	0.8	BDL	10

Note: Results related to sample as received.
(*) Standard methods of APHA, 22nd Edition.

11147	Effluent sample collected at before joining lagoon
11148	Stagnated effluents from lagoon which is adjacent vagu
11149	Stagnated effluents at Dundibi vagu which is discharged by industry
11150	Sample collected at 1.0 Km away from stagnated effluents discharging by Industry
11151	Stagnated effluent from lagoon

Parameters	Unit	Results					AS Per CFO Order Limiting Standards
		11147	11148	11149	11150	11151	
pH at 25°C	-	8.7	8.5	8.6	8.2	8.6	5.5 – 9.0
Total Suspended Solids	mg/L	74	69	**361**	57	49	200
Total Dissolved Solids	mg/L	7,666	3,932	3,882	8,201	4,589	-
Chemical Oxygen Demand	mg/L	430	375	780	617	355	-
BOD_3 at 27°C	mg/L	**104**	**95**	**197**	**152**	**93**	30
Oil and Grease	mg/L	0.2	0.2	0.3	0.3	BDL	10

Note: Results related to sample as received.
(*) Standard methods of APHA, 22nd Edition.

11152	ETP Inlet
11153	ETP Outlet into RO Feed
11154	RO Permeate
11155	RO Rejects
11156	MEE Condensate

Parameters	**Unit**	**Results**					**AS Per CFO Order Limiting Standards**
		11152	**11153**	**11154**	**11155**	**11156**	
pH at 25°C	-	8.4	8.5	7.4	6.8	7.9	5.5 – 9.0
Total Suspended Solids	mg/L	181	28	11	39	16	200
Total Dissolved Solids	mg/L	7,418	4,628	349	5,028	81	-
Chemical Oxygen Demand	mg/L	479	441	298	586	527	-
BOD_3 at 27°C	mg/L	**118**	**111**	**72**	**139**	**128**	30
Oil and Grease	mg/L	0.4	BDL	BDL	BDL	BDL	10

6. WHEREAS, the Board issued a show cause notice to your industry on 08.11.2017 for above non-compliances.

7. WHEREAS, vide letter dated 18.11.2017 submitted a reply to the notice. The Board officials again inspected the industry on 05.12.2017 and the status is as follows :

S. No.	Observations on 07.11.2017	Reply by the industry (18.11.2017)	Observations of Board officials on 05.12.2017
1.	The Industry has damaged compound wall near ETP and discharging effluents through compound wall.	Due to Heavy rains in the past couple of months, there was stagnated water along with our floor wash within the ETP premises; we broke the ETP compound wall partially for	The industry has closed damaged compound wall. The stagnation of effluents were observed outside compound wall which is back side of ETP area. The Officials have collected sample and observed pH value is 10.

		dispensing the rain water in open area. However we have closed and cemented that portion of the wall and permanently blocked it.	The sample submitted to central laboratory for analysis.
2.	The industry has hose pipe for discharge of effluents from pit.	The pit below the Husk feed vibrating screen was intentially made to collect the rain water from the husk feed area (as per the MS Thermax Design). Thus rain water from husk storage area is being sprayed in the open area. However, as per your advice, we would be pumping back the same rainwater in to our effluent collection system.	During the inspection the pit below the Husk feed vibrating screen was still existing with colour effluents. The Officials have collected sample and observed pH value is 10. The sample submitted to central laboratory for analysis. The reports are awaited.
3.	The industry effluents and domestic effluents passing through drain and joining effluents into lagoon which is adjacent to Dundubi Vagu.	During laying of the recent CC approach road (sanctioned by the Govt.) through the village (they have utilized the sand from behind) some sand has been utilized near vagu. This has in turn formed a lagoon due to recent heavy rains. However, as per your advice same has been leveled.	The industry has leveled drain dismantled the drain which the industry was discharging domestic effluents joining into lagoon which is adjacent to Dundubi Vagu. But the lagoon was not leveled.
4.	The industry has laid pipe line for discharge of effluents without treatment and also stored untreated effluents in the lagoon.		The industry has removed the pipe line used for discharging of effluents.
5.	The stagnated colour effluents were observed in the Dundubi vagu which was discharged by the industry and also colour effluents observed about 1.0 km in the vagu.		The stagnated effluents were still observed in the Dundubi vagu. The Officials have collected sample and observed pH value is 10. The sample submitted to central laboratory for analysis.
6.	The industry is not operating STP and discharging effluents into drain.	The STP plant is being operating for few hours in all 3 shifts depending on the availability of the sewage. On that particular time, the plant was not in operation due to lack of sewage. We have been regularly operating the STP and the same treated water is being used for our lawn maintenance purpose.	During the inspection the industry was not operating STP. After the Board officials entering near the STP the industry staff started priming the STP pumps for operating the STP. The Board Officials collected samples of inlet and outlet of STP and the sample submitted to central laboratory for analysis.
7.	A lot of spillages were observed around the ETP area.	The spillages observed by you around the ETP are corrected.	Spillages were observed around the ETP area.
8.	The industry has below ground level tanks ie., collection tank, aeration drain out and Supernatant tank.	=	The industry has below ground level tanks ie., collection tank, aeration drain out and Supernatant tank.

9.	The industry has not provided closed shed for storage of husk and husk ash.	However as per your advice, we would be enclosing the existing sheds keeping in view of safety.	The industry has not provided closed shed for storage of husk and husk ash.
10.	The industry has not shown records of production, water consumption, waste water generation & its treatment and solid waste details,	All records pertaining to production, water consumption, waste water generation & its treatment and solid waste, we are monitoring and submitting every month to PCB. Last three months details enclosed for your kind reference.	The industry is not submitting production details. However the Industry is submitting flow meter readings of water consumption and waster water details.
11.	The industry has not provided flow meter before raw effluents collection tank.	Flow meter before collection tank: being open trench and cement hume pipe, we are unable to provide water meter in inlet but we provided electronic flow meter at outlet. However we are exploring the possibility of installing the flow meter, as the flow is being through the trench.	Not provided flow meter before raw effluents collection tank
12.	The industry has only one ton of MEE salt and about 20 Tons ETP sludge.	Monthly we submitting MEE salt & ETP sludge details to PCB. Last three months disposal details enclosed for your kind reference.	The industry has disposed ETP sludge 25.225 Tons to M/s. TSDF on 11.07.2017. Now the industry has not disposed solid waste to TSDF after July,2017. The MEE Salt and ETP sludge is about 25 Tons in the industry premises.
13.	The house keeping of industry is very poor.	Noted Sir, we will definitely improve the house keeping of industry.	The house keeping of industry is very poor i.e., lot of spillages were observed near ETP area, boiler area with husk and ash

8. WHEREAS, the Board has reviewed the status of industry in the Task Force Committee meeting held on 07.12.2017. The Complainants have not attended the meeting. The representatives of the industry attended the meeting and informed that there were heavy rains during that period due to rains, the water was collected in a sump, the compound wall was collapsed and the water was discharged out of their premises. Further stated that they have 60 – 70 acres of land. Now, they have rectified the lapses and assured that they will not discharge any effluents and will also comply with the Board directions.

The committee noted that they are discharging the effluents through hose pipes and through open drains outside the factory premises which are finally joining Dundubi Vagu. The same are supported with the photographs.

The committee after detailed discussions, recommended to issue closure orders to the industry and also prosecute the industry for the following reasons:

i. The industry's compound wall near ETP was damaged and discharging effluents through compound wall and the pH value of effluents was 10.

(14)

ii. The industry effluents along with domestic waste water was passing through th drain and joining into lagoon which is near to Dundubi Vagu.

iii. The industry has laid pipe line for discharge of untreated effluents through a pit below the husk feed vibrating screen and also storing untreated effluents in the lagoon adjacent to Dundubi Vagu.

iv. The stagnated colour effluents were observed in the Dundubi vagu which was discharged by the industry. The color was observed upto 1.0 km in the vagu.

v. The industry is not operating STP and discharging effluents into the drain.

vi. The industry has below ground level tanks ie., collection tank, aeration drain out and supernatant tank.

vii. The industry has not provided closed shed for storage of husk and husk ash.

viii. The industry has not shown records of production, water consumption, waste water generation & its treatment and solid waste details.

ix. The industry has not provided flow meter before raw effluents collection tank.

x. The industry has not disposed solid waste to TSDF after July,2017 and stored about 25 Tons of MEE Salt and ETP sludge.

xi. The house keeping of industry is very poor i.e., lot of spillages were observed near ETP area, boiler area with husk and ash.

xii. The Board Officials collected samples on 07.11.2017 at following places and the results indicate that the values are exceeding the Board standards. The results are as follows :

11142	Discharging effluents through loose pipe into open land from collection pit
11143	Below ground level collection pit near husk storage
11144	Stagnated effluents at open land
11145	Discharging effluents into open drain passing from the industry
11146	Domestic effluents discharging into open drain

Parameters	Unit	Results					AS Per CFO Order Limiting Standards
		11142	11143	11144	11145	11146	
pH at 25°C	-	8.1	8.3	8.2	8.7	8.5	5.5 - 9.0
Total Suspended Solids	mg/L	**239**	**247**	61	73	86	200
Total Dissolved Solids	mg/L	7,459	8,251	6,975	6,791	1,337	-
Chemical Oxygen Demand	mg/L	1,767	2,050	1,170	1,338	187	-
BOD_3 at 27°C	mg/L	**428**	**506**	**295**	**340**	**48**	30
Oil and Grease	mg/L	1.7	1.8	0.9	0.8	BDL	10

Note: Results related to sample as received.
(*) Standard methods of APHA, 22nd Edition.

11147	Effluent sample collected at before joining lagoon
11148	Stagnated effluents from lagoon which is adjacent vagu
11149	Stagnated effluents at Dundibi vagu which is discharged by industry
11150	Sample collected at 1.0 Km away from stagnated effluents discharging by industry
11151	Stagnated effluent from lagoon

Parameters	Unit	Results					AS Per CFO Order Limiting Standards
		11147	11148	11149	11150	11151	
pH at 25°C	-	8.7	8.5	8.6	8.2	8.6	5.5 - 9.0
Total Suspended Solids	mg/L	74	69	**361**	57	49	200
Total Dissolved Solids	mg/L	7,666	3,932	3,882	8,201	4,589	-
Chemical Oxygen Demand	mg/L	430	375	780	617	355	-

BOD_3 at 27°C	mg/L	104	95	197	152	93	30
Oil and Grease	mg/L	0.2	0.2	0.3	0.3	BDL	10

Note: Results related to sample as received.
(*) Standard methods of APHA, 22nd Edition.

11152	ETP Inlet
11153	ETP Outlet into RO Feed
11154	RO Permeate
11155	RO Rejects
11156	MEE Condensate

Parameters	Unit	Results					AS Per CFO Order Limiting Standards
		11152	11153	11154	11155	11156	
pH at 25°C	-	8.4	8.5	7.4	6.8	7.9	5.5 – 9.0
Total Suspended Solids	mg/L	181	28	11	39	16	200
Total Dissolved Solids	mg/L	7,418	4,628	349	5,028	81	-
Chemical Oxygen Demand	mg/L	479	441	298	586	527	-
BOD_3 at 27°C	mg/L	118	111	72	139	128	30
Oil and Grease	mg/L	0.4	BDL	BDL	BDL	BDL	10

The Board Officials collected samples on 05.12.2017 at following places and the results indicate that the values are exceeding the Board standards. The results are as follows :

12075	Inlet of ETP
12076	Outlet of ETP i.e., RO Feed
12077	RO permeate
12078	RO Rejects
12079	MEE Condensate

Parameters	Unit	Results					AS Per CFO Order Limiting Standards
		12075	12076	12077	12078	12079	
pH at 25°C	-	9.0	7.2	6.1	8.5	5.9	5.5 – 9.0
Total Suspended Solids	mg/L	257	176	5	861	64	200
Total Dissolved Solids	mg/L	11377	8321	455	8685	270	-
Chemical Oxygen Demand	mg/L	1008	520	40	3104	8	-

12082	Stagnated sample backside of ETP
12083	Sample collected from 1.0 KM away from stagnated effluents discharged by the industry
12084	Below ground level collection pit near Husk Storage

Parameters	Unit	Results			AS Per CFO Order Limiting Standards
		12082	12083	12084	
pH at 25°C	-	8.9	8.4	8.6	5.5 – 9.0
Total Suspended Solids	mg/L	164	248	910	200
Total Dissolved Solids	mg/L	6750	3250	20720	-
Chemical Oxygen Demand	mg/L	432	424	424	-

9. After careful consideration of material facts of the case, the Board is of the firm opinion that you are not complying with the Board directions and discharging the untreated effluents outside the premises causing severe air and water pollution in the surrounding area. Under the Powers vested with the T.S. Pollution Control Board under Section 33 (A) of the Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31 (A) of the Air (Prevention and Control of Pollution) Amendment Act, 1987 for the reasons stated above, the **Board hereby issues closure orders to your industry** in the interest of protecting public health and environment.

10. You are directed to take note that if you continue to operate your industry even after receipt of this orders, you will be liable for prosecution in the court of Metropolitan Magistrate **or** Judicial Magistrate of the first class under section 41(2) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under section 37 (1) of Air (Prevention and Control of Pollution) Amendment Act, 1987, the punishment for which includes imprisonment for a term which shall not be less than one year six months which may be extended to six years and with fine.

11. You are further directed to take note that the TSSPDCL, has been ordered to disconnect the Power Supply to your industry with immediate effect. Should you resort to run your industry by means of diesel generator **or** any mechanical device, you will be attracting prosecution under section 41(2) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and under section 37 (1) of Air (Prevention and Control of Pollution) Amendment Act, 1987.

Sd/-
MEMBER SECRETARY

To
M/s GTN Engineering (India) Limited,
(Unit: Yarn Processing), Sy. No. 51,52,53,
Gundlapotlapalli (V), Balanagar (M),
Mahaboobnagar District

Copy to :

1. The District Collector, Mahaboobnagar District for favour of information.
2. The Superintending Engineer (Operations), TSSPDCL., Mettugadda, Mahaboobnagar for information and necessary action.
3. The JCEE, ZO, Hyderabad for information and necessary action.
4. The Environmental Engineer, Regional Office, Hyderabad for information and necessary action. The RO shall takeup prosecution against the industry immediately for the violations under Section 24 of Water (Prevention & Control of Pollution) Act, 1974.
5. Concerned file.

//T.C.F.B.O//

Senior Environmental Engineer
(Unit -I)

Office of the Superintending Engineer WARD No. 12 DEC 2017 TSSPDCL Elect. Mahabubnagar.

ANNEXURE-II

(17)

c/c Annexure-II

TELANGANA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE: HYDERABAD
4th Floor, PODUPU BHAVAN, Hyderabad Collectorate Complex S Road, Hyderabad-500 001.
Phone No. 040-23205367, e-mail: ee-hyd-tspcb@telangana.gov.in

Lr. No.2/TSPCB/ROH/MBNR/2018- 546

Date: 01.10.2018

03 OCT 2018

To
The Deputy Registrar,
Andhra Pradesh State Human Right Commission.
"Gruhakalpa", M.J. Road,
Hyderabad - 500 001.

Sir,

Sub: TSPCB – RO – Hyd – The petition filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District before Hon'ble HRC regarding ground water pollution caused by M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District – Report submitted – Reg.

Ref:
1. TSPCB, Order No.MHB-122/TSPCB/U-I/TF/2017-2984, dated 09.12.2017.
2. Industry's request for Revocation of Closure Order dated 28.12.2017.
3. Board's Temporary Revocation of Closure Order No.MHB-122/TSPCB/U-I/TF/2017-3793, dated 10.02.2018.
4. Industry's request for Revocation of Closure Order dated 16.05.2018.
5. Board's Temporary Revocation of Closure Order No.MHB-122/TSPCB/U-I/TF/2017-1382, dated 27.06.2018.
6. The Notice received from Hon'ble HRC vide HRC Case No.2559/2018 by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District received in this office 16.08.2018.
7. A Complaint filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District forwarded by the Board Office through mail on 27.08.2018.
8. Inspection conducted by the Board Officials on 04.09.2018.
9. The Board Office forwarded Legal Services Authority letter by enclosing copy of the representation filed by Sri J. Ravi Kumar received in this office on 17.09.2018.
10. Analysis report received on 20.09.2018.
11. T.O.Lr.No.2/TSPCB/ROH/MBNR/2018-545, dated 28.09.2018.

* * *

With reference to above, it is to submit that this office received a Hon'ble HRC Case filed vide H.R. Case No.2559/2018 enclosing petition filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District regarding water pollution caused by M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District by this office on 16.08.2018 and also directed to Environmental Engineer to submit report and case is posted on 22.10.2018.

In this regard, it is to submit that, earlier the Board has issued Closure Order to M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District vide order dated 09.12.2017 on receiving the complaint receiving complaint from Sri Mohan Naik and others from Bibinagar Thanda, Gundlapotlapally village, Rajapur Mandal duly directing the EE, RO, Hyderabad to launch prosecution against the industry for the violations. Accordingly, the EE, RO, Hyderabad has launched the prosecution against the industry in the Hon'ble Court of the Hon'ble Judicial Magistrate of First Class at Jadcherla, and the case Registered with C.C.No.186 of 2018. The case is pending.

(18)

The industry has submitted representation for Revocation of Closure Orders vide reference 2nd cited above. The issue of Revocation of Closure Order was placed before Task Force Committee hearing held on 22.01.2018 and 03.02.2018 at Board Office, Hyderabad. After detailed discussions, the Committee recommended to issue Temporary Revocation of Closure Order to the industry for a period upto 31.05.2018. Accordingly, the Board has issued Temporary Revocation of Closure Orders to the industry vide order dated 10.02.2018 for a period upto 31.05.2018 with certain conditions vide reference 3rd cited (Copy enclosed).

Vide reference 4th cited above, the industry has again submitted representation for extension of Temporary Revocation of Closure Orders. The issue of extension Temporary Revocation of Closure Order was placed before Task Force Committee hearing held on 20.06.2018 at Board Office, Hyderabad. After detailed discussions, the Committee recommended to issue extension of Temporary Revocation of Closure Order to the industry for a period upto 31.01.2019. Accordingly, the Board has issued Extension of Temporary Revocation of Closure Orders to the industry vide order dated 27.06.2018 for a period upto 31.01.2019 with certain conditions vide reference 5th cited (Copy enclosed).

Vide reference 6th cited above, it is to submit that this office received a Hon'ble HRC Case filed vide H.R. Case No.2559/2018 enclosing petition filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District regarding water pollution caused by M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District. The Board Office also received complaint from Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District regarding water pollution caused by the industry vide reference 7th cited. The Telangana State Legal Service Authority, Nyaya Seva Sadhan, Purani Haweli, Hyderabd has forwarded the representation filed by Sri J. Ravi Kumar, to the Board Office vide reference 9th cited. In this regard, the Board Officials inspected the industry on 04.09.2018. The details are as follows:

The Board Officials met with the complainant Sri R. Anji Reddy during the inspection. The complainant shown his agricultural lands which is other side bank side of the Vagu. The complainant has shown total 6 Nos. of Borewells and 2 Nos. of Open Wells in his agricultural fields. During inspection, it was observed that, the Corn and Paddy crops are existing in part of his land. The Board Officials was asked to complainant to switch on motor pump of Borewell collect water sample. But, he replied that, there is no motor pumps to draw water from 5 Borewells and another one Borewell is in working condition. The 2 Nos. of Open Wells in that, only one well has small quantity of water and another open well is in dry condition. The Sample collected from Open well. It was also observed that, the complainant is not using borewell water, open well water for cultivation purpose. The complainant is drawing water from the Vagu and using for cultivation of Paddy. The Board Officials have collected water sample from the Vagu from where the complainant drawing the water for cultivation purpose and also collected water samples from Borewell which is in working condition, Open Well and submitted to the Central Laboratory, Board Office for analysis. The results mentioned below.

The Board Officials have also met with the another complainant i.e. Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda. He informed that, M/s. G.T.N. Engineering India Pvt. Ltd. discharging their wastewater into the Balanagar (Dundidibi) Vagu without any treatment, their Borewell water is contaminated due to discharge of wastewater by M/s. G.T.N. Engineering India Pvt. Ltd. thereby their crops are damaged. The Board Officials have collected at Borewell sample collected from field of P. Jatavath Ravi Naik r/o Rangam Bhavi Thanda which is located 500 mtrs. from the Vagu and from the industry is about 1.0 km.

The Board Officials observed that the boundary of the industry to the Dundubi Vagu (Balanagar Vagu) which is located about 500 mtrs. away from the industry. The Agraharampotlapally about 2.0 km away and Rangam Bhavi Thanda is about 1.2 km away from Dundubi (Balanagar Vagu) Vagu. During the inspection, it was observed no flow of water was observed in the Vagu, only small quantity of water stagnated at various locations within the

's vide
ask

Vagu. The Board officials have collected borewell and Vagu at following places and submitted to the Central Laboratory for analysis. The results are tabulated below.

a) Borewell sample collected from field of P. Jatavath Ravi Naik r/o Rangam Bhavi Thanda which is located 500 mtrs. from the Vagu.
b) Borewell sample collected from Agraharampotlapally which is supplied to the villagers.
c) Borewell samples collected from the Agriculture Fields of Sri Anji Reddy, Agraharampotlapally.
d) Open Well water sample from the Agriculture Fields of Sri Anji Reddy, Agraharampotlapally.
e) Water sample collected from Dundibi (Balanagar) Vagu from where the water drawing for cultivation of paddy.
f) Stagnated water from the Vagu downstream of the industry.

During inspection, Sri Durga Prasad, Maintenance In-charge of the industry was present. The general & inspection observations of the industry are follows:

- M/s GTN Engineering (India) Limited, (Unit: Yarn Processing) located at Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District and involved in production of Processed Yarn 100 % cotton and Grey Gassed (Unprocessed).
- The industry was in operation during the inspection.
- The industry has obtained CFO of the Board vide order dated 27.01.2017for production of Processed Yarn 100 % cotton – 120 TPM and Grey Gassed (Unprocessed) – 60 TPM which is valid upto 31.12.2021. The industry has submitted production details from the period from September, 2017 to August, 2018. As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) – 1058.14 Tons i.e. an average of 88.178 TPM against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) – 312.63 Tons i.e. an average of 26.05 TPM against the permitted capacity of 60 TPM during the last one year period from September, 2017 to August, 2018.
- The industry has obtained Amendment of CFO order on 19.04.2018 for the disposal of the effluents as given below:

Outlets for discharge of effluents:

Outlet No	Outlet Description	Max Daily Discharge	Point of Disposal	Parameter Limiting Standards
1.	Process & Washings	660 KLD	Shall be treat the effluents of 752 KLD in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD), The RO rejects (92 KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE) 4 Kl/day of mother liquor generated from ME operations shall be disposed to M/s IL & FS Environmental Infrastructure and Services Ltd.,	pH – 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 30.0 mg /l
2.	Process & Washings	90 KLD		
3.	Boiler Blow Down	2 KLD		

(20)

4.	Domestic	84 KLD	After treatment in STP, shall be used for on land application/ irrigation within the factory premises.	pH – 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 100.0 mg /l

- Further, the industry has obtained CFO Expansion of the Board vide order dated 12.06.2018 for installation of 1 x 3 TPH husk fired boiler with validity upto 31.12.2021.
- The industry consumes water for Process & washing effluents, Boiler feed, Cooling, Gardening and domestic purposes. The industry has consumed an average of 586.625 KLD against the permitted capacity of 1040 KLD during the period from September, 2017 to August, 2018.
- The industry generates wastewater of about 836.0 KLD from Process & Washings – 750 KLD, Boiler Blow Down - 2 KLD and Domestic - 84 KLD.
- The industry has provided ZLD system consisting of biological ETP of capacity - 750 KLD followed by, RO (4 Stage) for the treatment of the waste water, followed by MEE, ATFD. The resultant ATFD salt is lifted to M/s TSDF for secure land fill.
- The biological ETP consisting of Equalization/Stabilization Tank, Reaction Tank, Primary settling tanks - (DECANTER /MONOBELT), Supernatant tank, Aeration tank, Secondary clarifier, Natural pond (oxidation), Pressure sand filter, Sand filter, Cartridge filter < 10, Ultra filtration/ Nano filtration, Reverse Osmosis, MEE/ Triple Effective Forced Circulation Evaporation System(TEFCES)-100 KLD followed by ATFD - 4 KLD. The samples were collected from Inlet of ETP, Outlet of ETP (RO Feed), RO permeate, RO Reject (MEE Feed), MEE Reject (ATFD feed), MEE condensate and ATFD condensate and submitted to the Central Laboratory for analysis. The results are tabulated below.
- As per the records submitted by the industry, during the period from September, 2017 to August, 2018 the industry has evaporated 15926 KL in the MEE.
- Earlier, the industry has obtained membership from M/s IL & FS, Environmental Infrastructure and Services Ltd on 02.04.2018 and lifted the mother liquor to M/s IL & FS from April'2018 to June, 2018. Presently, the industry has stopped the lifting of mother liquor to M/s. IL & FS and provided ATFD to evaporate the MEE concentrate. The industry has lifted total 164.506 KL of mother liquor (HTDS) lifted to M/s. IL & FS during the months April, 2018 to June, 2018. Presently, the industry is disposing the effluents ETP, RO system. The RO rejects is feeding to MEE followed by ATFD. The resultant ATFD salt is lifted to M/s. TSDF. The RO permeate, MEE condensate and ATFD condensate is being recycled for process / utilities. The industry representative informed that, they have installed the ATFD in the month of August, 2018.
- As per the CFO amendment order dated 19.04.2018, the Board is permitted the industry for mode disposal of effluents "*Shall be treat the effluents of 752 KLD in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD), The RO rejects (92 KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE) 4 Kl/day of mother liquor generated from ME operations shall be disposed to M/s IL & FS Environmental*

Infrastructure and Services Ltd.". At present, the industry has provided ATFD in addition to existing system i.e. ETP, RO System, MEE.

- The industry has submitted a letter submitted a representation to this office on 14.09.2018. The industry in its representation stated that, they have Forced Evaporation System to handle RO Rejects. Further, they have taken temporary permission from PCB to send mother liquor to M/s. IL & FS until to install their own system to handle mother liquor and informed that, the IL & FS not taking their mother liquor for the last one month due to their internal problems. Hence, they have installed ATFD system in the month August, 2018 and operating the same to treat the mother liquor to achieve the Zero Liquid Discharge System. The same was forwarded to Zonal Office, Hyderabad for taking necessary action.
- The industry has provided STP of capacity 80 KLD for treatment of Domestic effluents. After treatment the treated domestic waste water is being utilized for onland gardening. The officials have collected wastewater samples from Inlet STP and Outlet of STP used for Onland gardening and submitted at Central Laboratory for analysis. The results are tabulated below.
- The industry has installed 2 Nos. of Husk fired boilers of capacities 6 TPH & 3 TPH respectively for which industry has provided individual dust collector followed by Bag filters as APCE of chimney of Height 30 Mtrs. each.
- The industry has thermic fluid heater of capacity 1 x 15 Lakh Kcal/hr.
- The industry has provided individual sheds for storage of husk and husk ash. But, the openings were observed in between roof and side walls of the shed. During inspection, it was observed that husk and husk ash was stored outside the sheds.
- The industry has obtained CFO & HWA vide order dated 27.01.2017 for only for ETP Sludge – 1 TPD, Used oil / waste oil – 200 LPA, Boiler ash – 0.5 TPD and Lead Acid Batteries – 8 nos/annum.
- The industry has obtained Membership from M/s TSDF, Dundigal for disposal of Hazardous waste. The industry is being lifted ETP sludge to M/s. TSDF / Cement industries, used / waste oil. During the last one year period i.e. from September, 2017 to August, 2018, the industry has lifted total ETP Sludge of 598.51 Tons to TSDF / Cement Industries and 382.74 Tons of MEE salts to TSDF. The industry has stored 1.5 Tons of MEE salts and about 4 Tons of ETP sludge within the premises.
- The industry has provided above ground level GFS tanks – 1 x 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also having below ground level raw effluents collection tank of capacity 500 KL.
- The industry has stored MEE salts of about 1.5 Tons stored openly.
- During the inspection, openings were observed to the compound wall near Vagu which is between industry and vagu. The traces of dry flow path observed with ash deposition which is leading to vagu from opening of compound wall.
- The Board Officials have collected stagnated water sample from the Vagu. The analysis results are tabulated below.

The Board issued Extension of Temporary Revocation of Closure Order to the industry vide order dated 27.06.2018 for a period upto 31.01.2019. The compliance status of the conditions of Extension of Temporary Revocation of Closure Order dated 27.06.2018 are as follows:

S. No.	Conditions of Extension of Temporary Revocation of Closure Order dated 27.06.2018	Compliance Status
1.	The industry shall comply with all conditions stipulated in the CFO order issued by the Board.	The conditions wise compliance status is reported below.

22

2.	The industry shall dismantle all the below ground level tanks and provide above ground level tanks by June, 2018 as committed during the meeting.	The industry is collecting [illegible] effluent in existing below ground level collection tank from their lifting effluents to above ground level GFS tanks - 500 KL capacity for storage of effluents before sending to further treatment. The industry has provided above ground level GFS tank – 1 x 100 KL for storage of RO Rejects before sending to MEE. The industry has not dismantled below ground level aeration drain out tank.
3.	The industry shall ensure that all the sides of husk & husk ash storage sheds are closed to avoid dust pollution in the surrounding areas.	The industry has provided individual sheds for storage of husk and husk ash. But, the openings were observed in between roof and side walls of the shed. During inspection, it was observed that husk and husk ash was stored outside the sheds.
4.	The industry shall regularly lift the solid waste / sludge / Hazardous waste to M/s. TSDF and shall submit the details to EE, RO-Hyderabad.	The industry has obtained Membership from M/s TSDF, Dundigal for disposal of Hazardous waste. During the last one year period i.e. from September, 2017 to August, 2018, the industry has lifted total ETP Sludge of 598.51 Tons to TSDF / Cement Industries and 382.74 Tons of MEE salts to TSDF.
5.	The industry shall maintain / provide flow meter before raw effluents collection tank	The industry has provided flow meters to the Raw effluent collections tank and maintaining.
6.	The industry shall revalidate the BGs before its expiry till further orders from the Board.	The industry has submitted BG of Rs. 16 Lakhs for period upto 09.02.2019.

<u>The condition wise compliance of Schedule – B of CFO Order dated 27.01.2017 are as follows:</u>

<table>
<tr><th>S. No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td>1.</td><td>The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below
<table>
<tr><th>Sl No</th><th>Purpose</th><th>Quantity</th></tr>
<tr><td>1.</td><td>Process & washing effluents</td><td>660.0 KLD</td></tr>
<tr><td>2.</td><td>Process & washes</td><td>90.0 KLD</td></tr>
<tr><td>3.</td><td>Boiler feed</td><td>50.0 KLD</td></tr>
<tr><td>4.</td><td>Cooling (makeup / humidification / water spraying)</td><td>35.0 KLD</td></tr>
<tr><td>5.</td><td>Gardening</td><td>100.0 KLD</td></tr>
<tr><td>6.</td><td>Domestic</td><td>105.0 KLD</td></tr>
<tr><td></td><td>TOTAL</td><td>1040.0 KLD</td></tr>
</table></td><td>Complied. The water consumption is within the permitted capacity. The industry has consumed an average of 586.625 KLD against the permitted capacity of 1040 KLD during the period from September, 2017 to August, 2018.</td></tr>
<tr><td>2.</td><td>The industry shall file the water Cess returns in Form-I as required under section (5) of Water (Prevention and Control</td><td>-</td></tr>
</table>

	of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water Cess as per the assessment orders as and when issued by Board.	
3.	The industry shall comply with all the Rules and Regulations specified in Water (P&C of P) Act, 1974, Air (P&C of P) Act, 1981 and Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and their amendments issued thereof.	Directed to comply
4.	The industry should comply with the National ambient air quality standards as per MoEF, GoI notification dated. 18.11.2009 along the premises of the factory as prescribed below. S. No. / Parameters / Standards in $\mu g/m^3$: 1 / Particulate Matter (PM_{10}) / 100 2 / Particulate Matter ($PM_{2.5}$) / 60 3 / SO_2 / 80 4 / NOx / 80 **Noise Levels**: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A).	Directed to comply
5.	The industry shall not manufacture new products / increase the capacity beyond the permitted capacity mentioned in this consent order, without obtaining CFE/CFO of the Board.	As per production records submitted by the industry , the industry is manufacturing consent products within the consented capacity. As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) – 1058.14 Tons i.e. an average of 88.178 Tons per month against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) – 312.63 Tons i.e. an average of 26.05 Tons /month against the permitted capacity of 60 TPM during the last one year period from September, 2017 to August, 2018.
6.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE).	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD and ATFD of capacity 4 KLD. The Ro reject evaporated in the MEE and RO permeate is reusing into the process. The resultant MEE salt is lifted to M/s TSDF for secure land fill.
7.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	Complied. The industry is maintained energy meter records pertaining to the ETP & APCE.

8.	The industry shall regularly operate air pollution control equipment i.e., bag filter provided to the 5 TPH coal / husk fired boiler and shall meet the emission standards of the Board i.e., SPM – 115mg/Nm^3.	The industry has provided separate air pollution control equipments i.e., dust collector followed by bag filters.
9.	The industry shall collect the hazardous waste i.e., ETP Sludge and MEE Salts properly and shall send the waste to M/s. HWMP (TSDF), Dundigal for safe disposal.	The industry is a member unit of M/s TSDF and disposing ETP sludge and MEE salts to TSDF.
10.	The industry shall not discharge any waste water to outside the factory premises.	During inspection, no wastewater discharges were observed outside the premises.
11.	The industry shall not cause any air pollution / odour nuisance to the surrounding environment	The industry has provided cyclone dust collector followed by Bag filter to the Boiler.
12.	The industry shall develop 33% of the total area as thick green belt all along the boundary of the unit and also in the vacant places with all tall growing trees with wide leaf area.	The industry has developed green belt in an area of 5 Acres.
13.	The industry shall maintain good housekeeping in the factory premises.	The industry needs to improve Housekeeping near MEE.
14.	The industry should maintain the following records and the same should be made available to the Board Officials during the inspection. a) Daily production details, RG-I records and Central Excise Returns. b) Quantity of trade effluents generated, treated in ETP, reused and force evaporated c) Quantity of domestic effluents generated, treated in STP, reused and forced evaporated d) Log Books for pollution control systems. e) Daily solid waste generated and details of the disposal.	The industry is maintaining the records pertaining to the production, water consumption, wastewater generation and solid waste generation and its disposal.
15.	The industry shall submit Environmental Statement in Form V before 30th September every year as per Rule No.14 of Environmental (Protection) Act, 1986.	Submitted for the year, 2017.
16.	The industry shall take necessary measures to control fugitive emissions.	Directed to comply
17.	The industry shall take all precautionary and safety measures during process operations.	--
18.	The industry shall comply with the ambient air quality standards in respect of noise, as stipulated in the Environment (Protection) Rules, 1986.	--
19.	The industry shall construct separate rain water drains.	The industry has provided separate rain water drains.
20.	The industry shall comply with all the directions issued by the Board from time to time.	Directed to comply
21.	Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts.	--
22.	The Board reserves its right to modify above conditions or stipulate any further conditions in the interest of environment protection.	--
23.	The conditions are without prejudice to the rights and contentions of this Board in any Hon'ble Court of Law.	--

provided
ollution
i.e.

Special Conditions of CFO amendment order dated: 19.04.2018:

Sl No	Conditions	Compliance
1.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE). The industry shall dispose 4 KL /day of mother liquor generated from ME Operations to M/s IL & FS Environmental Infrastructure and Services Ltd duly meeting the inlet standards of CETP prescribed by the Board for a period of One year from date of issue of this order.	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD. The Ro reject evaporated in the MEE and RO permeate is reusing into the process. The resultant MEE salt is lifted to M/s TSDF for secure land fill. The industry has disposed mother liquor generated from the MEE operations to M/s IL & FS Environmental Infrastructure and Services Ltd. upto June, 2018. Now, the industry has installed ATFD for evaporation mother MEE concentrate and resultant ATFD salts is being disposed to M/s. TSDF. The industry has submitted a representation to this office on 14.09.2018 and the same was forwarded to Zonal Office, Hyderabad for taking necessary action.
2.	The industry shall obtain membership from M/s IL & FS. Environmental Infrastructure and Services Ltd. For disposal of effluents.	The Industry has obtain membership from M/s IL & FS. Environmental Infrastructure and Services Ltd on 02.04.2018. But, now the industry has made representation stating that they are not sending the mother liquor to M/s. IL & FS, as they have provided ATFD system for treatment.
3.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry is maintained energy meter records pertaining to the ETP & APCE.
4.	The industry shall have minimum of 7 days storage capacity of effluents on above ground level, with-in-the premies.	The industry has provided above ground level GFS tanks - 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also having below ground level raw effluents collection tank of capacity 500 KL.

i. **Analysis results of Stagnated water sample Collected from Potlapallyyagu (Dundhubi) used for Agriculture:**

Parameter	Unit	Results
pH	-	7.46
Electrical conductivity	µS/cm	1918
Total Dissolved Solids	mg/L	978
Chemical Oxygen Demand	mg/L	27
BOD at 27°C	mg/L	<3
Chlorides as Cl	mg/L	424
Sulphates as SO_4^{-2}	mg/L	3
Total alkalinity as CaCO3	mg/L	136
Total Hardness as CaCO3	mg/L	348
Calcium as Ca+2	mg/L	59
Magnesium as Mg+2	mg/L	49
Sodium as Na	mg/L	200
Potassium as K	mg/L	5
% Sodium	-	55.3
SAR	-	4.7

provided
llution
i.e.

Special Conditions of CFO amendment order dated: 19.04.2018:

Sl No	Conditions	Compliance
1.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE). The industry shall dispose 4 KL /day of mother liquor generated from ME Operations to M/s IL & FS Environmental Infrastructure and Services Ltd duly meeting the inlet standards of CETP prescribed by the Board for a period of One year from date of issue of this order.	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD. The Ro reject evaporated in the MEE and RO permeate is reusing into the process. The resultant MEE salt is lifted to M/s TSDF for secure land fill. The industry has disposed mother liquor generated from the MEE operations to M/s IL & FS Environmental Infrastructure and Services Ltd. upto June, 2018. Now, the industry has installed ATFD for evaporation mother MEE concentrate and resultant ATFD salts is being disposed to M/s. TSDF. The industry has submitted a representation to this office on 14.09.2018 and the same was forwarded to Zonal Office, Hyderabad for taking necessary action.
2.	The industry shall obtain membership from M/s IL & FS, Environmental Infrastructure and Services Ltd. For disposal of effluents.	The Industry has obtain membership from M/s IL & FS, Environmental Infrastructure and Services Ltd on 02.04.2018. But, now the industry has made representation stating that they are not sending the mother liquor to M/s. IL & FS, as they have provided ATFD system for treatment.
3.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry is maintained energy meter records pertaining to the ETP & APCE.
4.	The industry shall have minimum of 7 days storage capacity of effluents on above ground level, with-in-the premies.	The industry has provided above ground level GFS tanks - 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also having below ground level raw effluents collection tank of capacity 500 KL.

1. **Analysis results of Stagnated water sample Collected from Potlapallyvagu (Dundhubi) used for Agriculture:**

Parameter	Unit	Results
p^H	-	7.46
Electrical conductivity	µS/cm	1918
Total Dissolved Solids	mg/L	978
Chemical Oxygen Demand	mg/L	27
BOD at 27°C	mg/L	<3
Chlorides as Cl	mg/L	424
Sulphates as SO_4^{-2}	mg/L	3
Total alkalinity as CaCO3	mg/L	136
Total Hardness as CaCO3	mg/L	348
Calcium as Ca+2	mg/L	59
Magnesium as Mg+2	mg/L	49
Sodium as Na	mg/L	200
Potassium as K	mg/L	5
% Sodium	-	55.3
SAR	-	4.7

Boron	mg/L	ND
Nitrates as NO_3	mg/L	3.3
Phosphates as PO_4^{-3}	mg/L	0.031
Ammonical Nitrogen	mg/L	20.7
Free Ammonia	mg/L	0.03
Dissolved Oxygen	mg/L	6

*Acceptable limit
**permissible limit in the absence of alternate source.
ND: Not detected

CPCB - Water criteria :

Designated best use	Class of Water	Criteria
Drinking water source without conventional treatment but after disinfection	A	➢ Total coliform organisms (MPN*/100 ml) shall be 50 or less ➢ pH between 6.5 and 8.5 ➢ Dissolved Oxygen 6 mg/l or more, and ➢ Biochemical Oxygen Demand 2 mg/l or less
Outdoor bathing (organized)	B	➢ Total coliform organisms(MPN/100 ml) shall be 500 or less ➢ pH between 6.5 and 8.5 ➢ Dissolved Oxygen 5 mg/l or more, and ➢ Biochemical Oxygen Demand 3 mg/l or less
Drinking water source with conventional Treatment and disinfection	C	➢ Total coliform organisms(MPN/100 ml) shall be 5000 or less ➢ pH between 6 and 9 ➢ Dissolved Oxygen 4 mg/l or more, and ➢ Biochemical Oxygen Demand 3 mg/l or less
Propagation of wildlife and fisheries	D	➢ pH between 6.5 and 8.5 ➢ Dissolved Oxygen 4 mg/l or more, and ➢ Free ammonia (as N) 1.2 mg/l or less
Irrigation, industrial cooling, and controlled Disposal	E	➢ pH between 6.0 and 8.5 ➢ Electrical conductivity less than 2250 micro mhos/cm, ➢ Sodium Aborption Ratio less than 26, and Boron less than 2 mg/l.
	Below E	Not meeting A,B,C,D & E Criteria

Remarks:
1. The water quality falls under Class 'D' and 'E' as per CPCB water quality criteria.
2. The water can be used for Propagation of Wild Life and Fisheries and Irrigation, Industrial Cooling, Controlled waste disposal.

II. Water sample collected from Open Well near paddy fields of Sri Anji Reddy:

Parameter	Unit	Results	As per Drinking Water Standards IS 10500 : 2012

pH	-	6.88	6.5-8.5
Total Dissolved Solids	mg/L	1064	500*(2000**)
Chemical Oxygen Demand	mg/L	6	-
Chlorides as Cl^-	mg/L	428	250*(1000**)
Sulphates as SO_4^{-2}	mg/L	3	200*(400**)
Total alkalinity as CaCO3	mg/L	212	200*(600**)
Total Hardness as CaCO3	mg/L	476	200*(600**)
Calcium as Ca+2	mg/L	107	75*(200**)
Magnesium as Mg+2	mg/L	51	30*(100**)
Sodium as Na	mg/L	174	-
Potassium as K	mg/L	174	-
% Sodium	-	44	-
SAR	-	3.5	-
Boron	mg/L	ND	-
Fluoride	mg/L	0.95	1.0*(1.5**)
Nitrates as NO_3	mg/L	1.5	45
Phosphates as PO_4^{-2}	mg/L	0.59	-

*Acceptable limit
**permissible limit in the absence of alternate source.
ND : Not Detected.

III. **Borewell located at Field of Sri Anji Reddy**

Parameter	Unit	Results	As per Drinking Water Standards IS 10500 : 2012
pH	-	6.02	6.5-8.5
Total Dissolved Solids	mg/L	912	500*(2000**)
Chemical Oxygen Demand	mg/L	7	-
Chlorides as Cl^-	mg/L	384	250*(1000**)
Sulphates as SO_4^{-2}	mg/L	4	200*(400**)
Total alkalinity as CaCO3	mg/L	136	200*(600**)
Total Hardness as CaCO3	mg/L	458	200*(600**)
Calcium as Ca+2	mg/L	115	75*(200**)
Magnesium as Mg+2	mg/L	41	30*(100**)
Sodium as Na	mg/L	124	-
Potassium as K	mg/L	3	-
% Sodium	-	37.1	-
SAR	-	2.5	-
Boron	mg/L	ND	-
Fluoride	mg/L	0.40	1.0*(1.5**)
Nitrates as NO_3	mg/L	10	45
Phosphates as PO_4^{-2}	mg/L	0.009	-

*Acceptable limit
**permissible limit in the absence of alternate source.
ND : Not Detected.

IV. **Borewell located at Agraharam Potlapally village**

Parameter	Unit	Results	As per Drinking Water Standards IS 10500 : 2012
pH	-	6.69	6.5-8.5
Total Dissolved Solids	mg/L	898	500*(2000**)
Chemical Oxygen Demand	mg/L	2	-
Chlorides as Cl^-	mg/L	201	250*(1000**)
Sulphates as SO_4^{-2}	mg/L	2.8	200*(400**)
Total alkalinity as CaCO3	mg/L	404	200*(600**)
Total Hardness as CaCO3	mg/L	496	200*(600**)
Calcium as Ca+2	mg/L	90	75*(200**)
Magnesium as Mg+2	mg/L	66	30*(100**)
Sodium as Na	mg/L	114	-
Potassium as K	mg/L	2	-

% Sodium	-	33.4	-
SAR	-	2.2	-
Boron	mg/L	ND	-
Fluoride	mg/L	0.90	1.0*(1.5**)
Nitrates as NO_3	mg/L	36	45
Phosphates as PO_4^{-3}	mg/L	0.16	-

*Acceptable limit
**permissible limit in the absence of alternate source.
ND : Not Detected.

V. **Borewell of Agriculture fields belongs to Smt. Jatavath Laxmi**

Parameter	Unit	Results	As per Drinking Water Standards IS 10500 : 2012
pH	-	6.54	6.5-8.5
Total Dissolved Solids	mg/L	1024	500*(2000**)
Chemical Oxygen Demand	mg/L	3	-
Chlorides as Cl^-	mg/L	378	250*(1000**)
Sulphates as SO_4^{-2}	mg/L	4	200*(400**)
Total alkalinity as CaCO3	mg/L	256	200*(600**)
Total Hardness as CaCO3	mg/L	498	200*(600**)
Calcium as Ca+2	mg/L	78	75*(200**)
Magnesium as Mg+2	mg/L	74	30*(100**)
Sodium as Na	mg/L	152	-
Potassium as K	mg/L	1	-
% Sodium	-	40	-
SAR	-	2.97	-
Boron	mg/L	ND	-
Fluoride	mg/L	1.1	1.0*(1.5**)
Nitrates as NO_3	mg/L	12	45
Phosphates as PO_4^{-3}	mg/L	0.002	-

*Acceptable limit
**permissible limit in the absence of alternate source.
ND : Not Detected.

VI. **Stagnated water collected from the Vagu which is Down Stream of the industry**

Parameter	Unit	Results
pH	-	6.51
Electrical conductivity	µS/cm	2592
Total Dissolved Solids	mg/L	1296
Chemical Oxygen Demand	mg/L	Nil
Chlorides as Cl^-	mg/L	520
Sulphates as SO_4^{-2}	mg/L	11
Total alkalinity as CaCO3	mg/L	100
Total Hardness as CaCO3	mg/L	208
Calcium Hardness	mg/L	120
Calcium as Ca+2	mg/L	48
Magnesium Hardness	mg/L	88
Magnesium as Mg+2	mg/L	21
Sodium as Na	mg/L	324
Potassium as K	mg/L	2
% Sodium	-	77.1
SAR	-	9.8
Boron	mg/L	ND
Flouride	mg/L	0.37
Nitrates as NO_3	mg/L	6
Phosphates as PO_4^{-3}	mg/L	0.124
Ammonical Nitrogen	mg/L	8.4
Free Ammonia	mg/L	NIL
Dissolved Oxygen	mg/L	6.6

Acceptable limit
Impermissible limit in the absence of alternate source.
ND: Not detected

CPCB - Water criteria :

Designated best use	Class of Water	Criteria
Drinking water source without conventional treatment but after disinfection	A	➢ Total coliform organisms (MPN*/100 ml) shall be 50 or less ➢ pH between 6.5 and 8.5 ➢ Dissolved Oxygen 6 mg/l or more, and ➢ Biochemical Oxygen Demand 2 mg/l or less
Outdoor bathing (organized)	B	➢ Total coliform organisms(MPN/100 ml) shall be 500 or less ➢ pH between 6.5 and 8.5 ➢ Dissolved Oxygen 5 mg/l or more, and ➢ Biochemical Oxygen Demand 3 mg/l or less
Drinking water source with conventional Treatment and disinfection	C	➢ Total coliform organisms(MPN/100 ml) shall be 5000 or less ➢ pH between 6 and 9 ➢ Dissolved Oxygen 4 mg/l or more, and ➢ Biochemical Oxygen Demand 3 mg/l or less
Propagation of wildlife and fisheries	D	➢ pH between 6.5 and 8.5 ➢ Dissolved Oxygen 4 mg/l or more, and ➢ Free ammonia (as N) 1.2 mg/l or less
Irrigation, industrial cooling, and controlled Disposal	E	➢ pH between 6.0 and 8.5 ➢ Electrical conductivity less than 2250 micro mhos/cm, ➢ Sodium Aborption Ratio less than 26, and Boron less than 2 mg/l.
	Below E	Not meeting A,B,C,D & E Criteria

Remarks:
1. The water quality falls under class 'D' as per CPCB water quality criteria.
2. The water can be used for Propagation of Wild Life and Fisheries.

VII. **Analysis results of ETP Inlet & ETP outlet (RO Feed):**

Parameters	Units	Results		Parameter limiting standards
		ETP Inlet	ETP Outlet	
pH at 25°C	-	9.0	8.6	5.5 - 9.0
Total Suspended Solids	mg/L	73	80	200 mg/l
Total Dissolved Solids	mg/L	4,697	3,100	--
Chemical Oxygen	mg/L	718	240	--

Demand				
BOD_3 at 27°C	mg/L	173	25	30 mg/l
Oil & Grease	mg/L	0.6	BDL	10 mg/l

VIII. Analysis results of RO permeate, RO Rejects(MEE Feed), MEE Reject (ATFD Feed), MEE Condensate and ATFD Condensate :

Parameters	Units	Results					
		RO permeate	RO Rejects(MEE Feed)	MEE Reject (ATFD Feed)	MEE Condensate	ATFD Condensate	
pH at 25°C	-	8.4	7.9	8.46	8.53	8.51	
Total Suspended Solids	mg/L	4	280	3,340	24	20	
Total Dissolved Solids	mg/L	240	4,313	80,000	505	92	ZLD
Chemical Oxygen Demand	mg/L	20	2,407	23,990	31	51	
BOD_3 at 27°C	mg/L	ND	221	2,990	ND	ND	

IX. Analysis results of STP Inlet & STP outlet

Parameters	Units	Results		Parameter limiting standards
		STP Inlet	STP Outlet	
pH at 25°C	-	7.13	7.3	5.5 - 9.0
Total Suspended Solids	mg/L	30	18	200 mg/l
Total Dissolved Solids	mg/L	1,451	1,313	--
Chemical Oxygen Demand	mg/L	196	106	--
BOD_3 at 27°C	mg/L	54	17	30 mg/l
Oil & Grease	mg/L	BDL	BDL	10 mg/l

The detailed report is submitted to the Member Secretary, TSPCB, Board Office for taking necessary action vide reference 11th cited.

Submitted.

Yours faithfully

Encl: As above

ENVIRONMENTAL ENGINEER

Copy submitted to:

1) The Chief Environmental Engineer, TSPCB, Board Office, Sanathnagar, Hyderabad for kind information.
2) The JCEE (UH-II), TSPCB, Board Office, Sanathnagar, Hyderabad for kind information and necessary action.

ANNEXURE-III

(32)

Annexure-III (29)

TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-III, Industrial Estate, Sanathnagar, Hyderabad-500 018
Phones : 040-23887500 Fax: 040 - 23887519

2589

Order.No.02/TSPCB/U-I/RTF/2018 -2360-2 JAN 2019 Date:29.12.2018

Sub : TSPCB - Unit - I - Complaints received on M/s GTN Textiles Pvt., Ltd., Gundlapotla pally (V), Balanagar (M), Mahabubnagar District from the nearby thandas / villagers on water pollution - Special Teams constituted for samples collection and reporting - Reg.

* * *

The Board has received complaints on M/s GTN Textiles Pvt., Ltd., Gundlapotla pally (V), Balanagar (M), Mahabubnagar District from the nearby thandas / villagers stating that the industry is causing pollution and their agricultural lands / crops are badly effected there by effecting their lively hood.

Special teams are constituted with the following officers of TSPCB to collect the samples from the following locations:

S.No.	Location
1.	Grampanchayat borewell, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
2.	Borewell water of Sri S Lakshma Reddy, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
3.	Stagnated water from Balanagar Vagu, near Sri Lakshma Reddy borewell, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
4.	Water collected from open well of Sri Wyed Fiyazuddin, S/o Syed Zainulabeddin, Sy No. 5,6,7,8,9,10,11,12 & 13, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
5.	Borewell water of Syed Fiyazuddin, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
6.	Borewell water of Syed Arifuddin, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
7.	Borewell water of Smt Shantamma, W/o Bala Chennaiah, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
8.	Borewell water of smt Shiyamma Madiga, Sy No. 74 & 75, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
9.	Borewell water of Smt Lakshmamma, W/o Ramulu Madiga, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
10.	Borewell water of Sri Chakali Venkataiah, S/o Ramaiah, Agraharam potlapally (V), Balanagar (M), Mahabubnagar District.
11.	Open well water of Sri J Lakshman, S/o Bhadriya Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
12.	Open well water of Sri Narasimhulu S/o Bhadru, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
13.	Borewell water of Sri J Bhimla, S/o Varshiya, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
14.	Borewell water of Sri J Venkataiah S/o Somla, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
15.	Handpump (Govt. Borewell), Rangabai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
16.	Borewell water of Sri Nanya, S/o Mansingh, Rangabai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
17.	Borewell water of Sri J Hanimya, S/o Seveya Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
18.	Borewell water of Sri J Ketiya, S/o Bhadru, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
19.	Borewell water of Sri J Umbya, S/o Hanya, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
20.	Borewell water of Sri J Badya, S/o Saveya, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
21.	Borewell water of Sri J Kishan, S/o Nanya, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
22.	Borewell water of Sri J Lakshmi, W/o Kishan, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District
23.	Borewell water of Sri J Hirya, S/o Gonya, Rangambai Thanda, Gundlapotlapally (V), Balanagar (M), Mahabubnagar District

Team – A (Sample collection from locations 1 – 5):

1. B.Rajender, AEE, RO, RR-I
2. B. Jeemuthavahana, AES, RO, SRD-II (RCPuram)

Team – 2 (Sample collection from locations 6 – 10):

1. P.Suresh Babu, AEE, RO, RR-II
2. S.Sreenivas, AES, ZO, Hyderabad

Team – 3 (Sample collection from locations 11 – 16):

1. Ramappa Siddi, AEE, RO, RR-I
2. Vidhyullatha, AES, RO, Hyderabad

Team – 4 (Sample collection from locations 17 – 23):

1. B.Ravinder, AEE, BO
2. C.H. Srinivas, AES, RO, RR-II

The team shall contact the complainant Sri Ravi Kumar @ 9550143573 during the sample collection and additional samples from the borewells shown by the complainants shall also be collected.

The teams shall collect the samples on 04.01.2019 and the samples collected shall be submitted to the Central Lab for analysis.

Sd/-
MEMBER SECRETARY

To

1. B.Rajender, AEE, RO, RR-I
2. B. Jeemuthavahana, AES, RO, SRD-II (RC Puram)
3. P.Suresh Babu, AEE, RO, RR-II
4. S.Sreenivas, AES, ZO, Hyderabad
5. Ramappa Siddi, AEE, RO, RR-I
6. Vidhyullatha, AES, RO, Hyderabad
7. B.Ravinder, AEE, BO
8. C.H. Srinivas, AES, RO, RR-II

Coy to:

1. The JCES (FAC), Central Lab for extending facilities for collection of samples and ensuring sample analysis by deputing officials & staff during the holidays.
2. The JCEE, ZO, Hyderabad / RC Puram for information and extending necessary facilities and relieve from regular duties to the team for inspection and sample collection.
3. The SEE, Unit-I, Board office for providing transport facilities for the team members.
4. The EE, RO, RR-I / RR-II / SRD-II / Hyderabad for information and necessary action.
5. Concerned File

// T.C.F.B.O//

Senior Environmental Engineer
(Unit – I)

(34)

ANNEXURE -IV

Annexure-IV

TELANGANA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE: HYDERABAD
4th Floor, PODUPU BHAVAN, Hyderabad Collectorate Complex S.Road, Hyderabad-500 001.
Phone No.:040-23205367, e-mail: ee-hyd-tspcb@telangana.gov.in

Lr. No.2/TSPCB/ROH/MBNR/2019- 497 Date:10.07.2019

To
The Member Secretary,
T.S. Pollution Control Board,
Board Office, Sanathnagar,
Hyderabad.

Sir,

Sub: TSPCB - RO - Hyd - Complaints received against M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District regarding water pollution - Report submitted - Reg.

Ref:
1. Board's Closure Order No.MHB-122/TSPCB/U-I/2017-2984, dated 09.12.2017.
2. Board's Extension of Temporary Revocation of Closure Order No.MHB-122/TSPCB/U-I/TF/2017-195, dated 22.04.2019.
3. The industry request for Permanent Revocation of Closure Order received in this office on 24.06.2019.
4. Complaint received from Sri K. Shiva & Others, Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District forwarded by the Board Office vide Endorsement dated 17.06.2019 received in this office on 24.06.2019.
5. Complaint filed by Sri M. Nandeshwar Reddy, Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District forwarded by the Board Office vide Endorsement dated 17.06.2019 received in this office on 24.06.2019.
6. The District Collector, Mahaboobnagar forwarded the Prajavani Complaint filed by Sri M. Brahma Chary & Others, r/o Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District through mail dated 25.06.2019.
7. Complaint filed by Sri K. Nagaraju & Sri K. Krishnaiah r/o Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District received in this office on 05.07.2019.
8. The Board Officials inspected on 05.07.2019.

* * *

With reference to 1st cited above, the Board has issued Closure Order to M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District with regard to the Complaint filed by Sri Mohan Naik and others, R/o B.B. Nagar Thanda, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District regarding discharging of effluents duly directing the EE, RO, Hyderabad to launch prosecution against the industry for the violations. Accordingly, the EE, RO, Hyderabad has launched the prosecution against the industry in the Hon'ble Court of the Hon'ble Judicial Magistrate of First Class at Jadcherla, and the case Registered with C.C.No.186 of 2018. The same was communicated to the Board Office, Hyderabad vide letter 13.06.2018. The case is pending.

It is to submit that, a Hon'ble HRC Case filed vide H.R. Case No.2559/2018 filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District regarding water pollution caused by M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District by this office on 16.08.2018 and also directed to Environmental Engineer to submit report and case is posted on 22.10.2018. This office has submitted status report to the Hon'ble HRC on 01.10.2018. The Case is pending.

(35)

Further, it is to submit that the Board Office forwarded complaint filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District against the industry on 27.08.218 regarding ground water pollution and discharge of effluents by M/s. G.T.N. Engineering India Pvt. Ltd. into the Vagu and also the Board Office forwarded the Legal Services Authority letter by enclosing representation filed by Sri J. Ravi Kumar on 17.09.2018 and with a direction to submit a report. This office has submitted detailed report to Board Office (Legal Cell), Hyderabad on 28.09.2018.

The Board has issued Latest Extension of Temporary Revocation of Closure Order to the industry vide order dt:22.04.2019 for period upto 30.06.2019 stipulating certain conditions to comply vide reference 2nd cited.

Vide reference 3rd cited, the industry has submitted a representation, requesting for permanent revocation of Closure Orders.

Vide reference 4th & 5th cited, the Board Office forwarded a complaint filed by Sri K. Shiva & Others from Gundlapotlapally Village and Sri Nandishwar Reddy, Gundlapotlapally Village, Rajapur (M), Mahaboobnagar District regarding water pollution.

Vide reference 6th cited, the District Collector, Mahaboobnagar District has forwarded Prajavani Petition filed by Sri M. Brahma Chary & Others, r/o Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District regarding ground water pollution.

In this regard, the AEE - I along with Asst. Scientist of this office has inspected the industry and its surroundings on 05.07.2019. During inspection, the Board officials have contacted the complainant's Sri Brahma Chary, Sri K. Shiva, Sri Shekar, Sri Anjaneyulu and others and they informed that, their Borewell water contaminated due to water pollution caused by the industry. The Board Officials have collected Borewell water from the complainants fields at the following locations:

- Sample collected from Gundlapotlapalli Grampanchayat borewell (About 1 Km distance from M/s.GTN Engineering (India) Limited, (Unit:YarnProcessing).
- Sample collected from Sri Anjaneyulu boreweil (About 1 Km distance from M/s.GTN Engineering (India) Limited, (Unit:YarnProcessing).
- Sample collected from Sri Shekar borewell (About 1.5 Km distance from M/s.GTN Engineering (India) Limited, (Unit:YarnProcessing).
- Sample collected from Sri Goverdhan borewell (About 1 Km distance from M/s.GTN Engineering (India) Limited, (Unit:YarnProcessing).
- Sample collected from Sri Shiva Kumar borewell (About 1.5 Km distance from M/s.GTN Engineering (India) Limited, (Unit:YarnProcessing).
- Sample collected from Sri Sailu borewell (About 1 Km distance from M/s.GTN Engineering (India) Limited, (Unit:YarnProcessing).

The above Borewell samples were submitted to the Central Laboratory, Board Office for analysis. The results are awaited.

Vide reference 7th cited, it is to submit that, Sri K. Nagaraju & Sri K. Krishnaiah, Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District against the industry regarding pollution on 05.07.2019. The Board Officials have visited the Borewell which is not in working condition. Hence, sample could not collected. The Board Officials instructed to them to inform after erecting the Motor pump in the Borewell for collecting samples.

Annexure-IV

During the inspection, Sri Durga Prasad, Industry representative was present. The details of the industry and inspection observation are as follows:

- M/s GTN Engineering (India) Limited, (Unit: Yarn Processing) located at Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District and engaged in production of Processed Yarn 100 % cotton and Grey Gassed (Unprocessed).
- On the day of inspection, the industry was in operation.
- The industry has obtained CFO of the Board vide order dated 27.01.2017 for production of Processed Yarn 100 % cotton - 120 TPM and Grey Gassed (Unprocessed) - 60 TPM which is valid upto 31.12.2021.
- The industry has submitted production details from the period from July, 2018 to June, 2019. As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) an average of 82.91 TPM against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) an average of 39.39 TPM against the permitted capacity of 60 TPM during the from July, 2018 to June, 2019.
- The industry has obtained Amendment of CFO order on 19.04.2018 for the disposal of the effluents as given below:

Outlets for discharge of effluents:

Outlet No	Outlet Description	Max Daily Discharge	Point of Disposal	Parameter Limiting Standards
1.	Process & Washings	660 KLD	Shall be treat the effluents of 752 KLD in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD), The RO rejects (92 KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE) 4 Kl/day of mother liquor generated from ME operations shall be disposed to M/s IL & FS Environmental Infrastructure and Services Ltd.,	pH - 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 30.0 mg /l
2.	Process & Washings	90 KLD		
3.	Boiler Blow Down	2 KLD		
4.	Domestic	84 KLD	After treatment in STP, shall be used for on land application/ irrigation within the factory premises.	pH - 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 100.0 mg /l

- Further, the industry has obtained CFO Expansion of the Board vide order dated 12.06.2018 for installation of 1 x 3 TPH husk fired boiler with validity upto 31.12.2021.
- The industry consumes water for Process & washing effluents, Boiler feed, Cooling, Gardening and domestic purposes. The industry has consumed an average of 462.0 KLD (Fresh water is 127 KLD and Recycled water is 335 KLD) against the permitted capacity of 1040 KLD during the period from from July, 2018 to June, 2019.
- The industry generates wastewater of about 836.0 KLD from Process & Washings – 750 KLD, Boiler Blow Down - 2 KLD and Domestic - 84 KLD.
- The industry has provided above ground level GFS tanks – 1 x 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also using existing below ground level raw effluent collection tank for collection of effluents and pumping to above ground level GFS tank for final storage.
- The industry has installed water flow meter to the Raw effluent collection tank.
- The industry has provided ZLD system consisting of biological ETP of capacity -750 KLD followed by, RO (4 Stage) for the treatment of the waste water, followed by MEE, ATFD.
- The biological ETP consisting of Equalization/Stabilization Tank, Reaction Tank, Primary settling tanks - (DECANTER /MONOBELT), Supernatant tank, Aeration tank, Secondary clarifier, Natural pond (oxidation), Pressure sand filter, Sand filter, Cartridge filter < 10, Ultra filtration/ Nano filtration. Reverse Osmosis, MEE/ Triple Effective Forced Circulation Evaporation System(TEFCES)-100 KLD followed by ATFD - 4 KLD. The RO permeate, MEE condensate and ATFD condensate is reusing into the process / utilities. The resultant ATFD salt is lifted to M/s TSDF.
- During the inspection, ETP, RO, MEE and ATFD were in operation.
- The samples were collected from Inlet of ETP, Outlet of ETP (RO Feed), RO permeate, RO Reject (MEE Feed), MEE Reject (ATFD feed), MEE condensate and ATFD condensate and submitted to the Central Laboratory for analysis. The results are awaited.
- As per the records submitted by the industry, during the period from from July, 2018 to June, 2019 the industry has evaporated an average 338KLD in the MEE followed by ATFD.
- The industry has provided STP of capacity 80 KLD for treatment of Domestic effluents. After treatment the treated domestic waste water is being utilized for onland gardening. Samples were collected from Inlet STP and Outlet of STP and submitted at Central Laboratory for analysis. The results are awaited.
- The industry has installed 2 Nos. of Husk fired boilers of capacities 6 TPH & 3 TPH respectively for which industry has provided individual separate dust collector followed by Bag filters to each boiler as APCEs. The industry has provided individual separate chimneys of height 30 Mtrs. to each boiler.
- The industry has Thermic Fluid Heater of capacity 1 x 15 Lakh Kcal/hr.
- The industry has provided separate sheds for storage of husk and husk ash. The industry has closed the openings of the sheds with G.I. Sheets.

- The industry generates solid / Hazardous waste such as ETP Sludge - 1 TPD, Used oil / waste oil - 200 LPA, Boiler ash - 0.5 TPD and Lead Acid Batteries - 8 nos/annum.
- The industry has provided separate shed for storage of Hazardous Waste. The industry has also provided concreted platform for storage of Hazardous waste within the premises. The industry has not provided shed and lechate collection system to the Hazardous waste storage platform. The stagnated water sample was collected near the concreted platform and submitted to the Central Laboratory, Board Office for analysis. The results are awaited.
- The industry has obtained Membership from M/s TSDF, Dundigal for disposal of Hazardous waste. The industry has lifted total ETP Sludge of 486.83 Tons and ATFD salts of 819.85 Tons to TSDF, during the last one year period i.e from July, 2018 to June, 2019. The industry has stored about 10 Tons of MEE salts and about 12 Tons of ETP sludge within the premises.
- On the day of inspection, the Board Officials inspected the Dundubhi vagu down stream of the industry premises. No water flow was observed in the Vagu and it is in dry condition. Hence, the samples could not be collected from the Vagu.
- The Board Officials have inspected along the compound wall of the industry near the Vagu. No discharge of effluents was observed outside the industry premises.

The compliance on the Temporary Revocation of Closure Order dated 22.04.2019 conditions are as below:

S. No.	Conditions of Temporary Revocation of Closure Order dated 22.04.2019	Compliance Status
1.	The industry shall comply with all conditions stipulated in the CFO order issued by the Board.	The conditions wise compliance to the Schedule - B conditions of CFO Order dated 27.01.2017 is reported below.
2.	The industry shall dismantle all the below ground level tanks and provide above ground level tanks by June, 2019 as committed during the meeting.	The industry is not dismantled below ground level raw effluent collection tank. The industry is collecting raw effluent in existing below ground level collection tank from there pumping to above ground level GFS tanks - 100 KL & 500 KL capacities for final storage.
3.	The industry shall ensure that all the sides of husk & husk ash storage sheds are closed to avoid dust pollution in the surrounding areas.	The industry has provided individual sheds for storage of husk and husk ash.
4.	The industry shall regularly lift the solid waste / sludge / Hazardous waste to M/s. TSDF and shall submit the details to EE, RO-Hyderabad.	The industry has obtained Membership from M/s TSDF, Dundigal for disposal of Hazardous waste. The industry has lifted total ETP Sludge of 486.83 Tons and ATFD salts of 819.85 Tons to TSDF, during the last one year period i.e. from July,

		2018 to June, 2019.
5.	The industry shall maintain / provide flow meter before raw effluents collection tank	The industry has provided flow meters to the Raw effluent collections tank.
6.	The industry shall revalidate the BGs before its expiry till further orders from the Board.	The industry has submitted BG of Rs. 16 Lakhs for period upto 08.02.2020.

The condition wise compliance of Schedule - B of CFO Order dated 27.01.2017 are as follows:

<table>
<tr><th>S. No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td>1.</td><td>The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below
<table>
<tr><th>Sl No</th><th>Purpose</th><th>Quantity</th></tr>
<tr><td>1.</td><td>Process & washing effluents</td><td>660.0 KLD</td></tr>
<tr><td>2.</td><td>Process & washes</td><td>90.0 KLD</td></tr>
<tr><td>3.</td><td>Boiler feed</td><td>50.0 KLD</td></tr>
<tr><td>4.</td><td>Cooling (makeup / humidification / water spraying)</td><td>35.0 KLD</td></tr>
<tr><td>5.</td><td>Gardening</td><td>100.0 KLD</td></tr>
<tr><td>6.</td><td>Domestic</td><td>105.0 KLD</td></tr>
<tr><td></td><td>TOTAL</td><td>1040.0 KLD</td></tr>
</table></td><td>The industry has consumed an average of 462.0 KLD (Fresh water is 127 KLD and Recycled water is 335 KLD) against the permitted capacity of 1040 KLD during the period from from July, 2018 to June, 2019.</td></tr>
<tr><td>2.</td><td>The industry shall file the water Cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water Cess as per the assessment orders as and when issued by Board.</td><td>-</td></tr>
<tr><td>3.</td><td>The industry shall comply with all the Rules and Regulations specified in Water (P&C of P) Act, 1974, Air (P&C of P) Act, 1981 and Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and their amendments issued thereof.</td><td>Directed to comply</td></tr>
<tr><td>4.</td><td>The industry should comply with the National ambient air quality standards as per MoEF, GoI notification dated. 18.11.2009 along the premises of the factory as prescribed below.
<table>
<tr><th>S. No.</th><th>Parameters</th><th>Standards in $\mu g/m^3$;</th></tr>
<tr><td>1</td><td>Particulate Matter (PM_{10})</td><td>100</td></tr>
<tr><td>2</td><td>Particulate Matter ($PM_{2.5}$)</td><td>60</td></tr>
</table></td><td>Directed to comply</td></tr>
</table>

3	SO_2	80
4	NOx	80

Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A).

5.	The industry shall not manufacture new products / increase the capacity beyond the permitted capacity mentioned in this consent order, without obtaining CFE/CFO of the Board.	The industry has submitted production details from the period from July, 2018 to June, 2019. As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) an average of 82.91 TPM against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) an average of 39.39 TPM against the permitted capacity of 60 TPM during the from July, 2018 to June, 2019.
6.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE).	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD and ATFD of capacity 4 KLD. The Ro reject evaporated in the MEE and RO permeate is reusing into the process. The resultant MEE salt is lifted to M/s TSDF for secure land fill.
7.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry has installed energy meter to the ETP and APCE and maintaining the records.
8.	The industry shall regularly operate air pollution control equipment i.e., bag filter provided to the 5 TPH coal / husk fired boiler and shall meet the emission standards of the Board i.e., SPM - 115mg/Nm^3.	The industry has provided separate air pollution control equipments i.e. dust collector followed by bag filters to control air pollution.
9.	The industry shall collect the hazardous waste i.e., ETP Sludge and MEE Salts properly and shall send the waste to M/s. HWMP (TSDF), Dundigal for safe disposal.	The industry is a member unit of M/s TSDF and disposing ETP sludge and MEE salts to TSDF regularly.
10.	The industry shall not discharge any waste water to	During inspection, no wastewater discharges

	outside the factory premises.	were observed outside the premises.
11.	The industry shall not cause any air pollution / odour nuisance to the surrounding environment	The industry has provided cyclone dust collector followed by Bag filter to the Boiler to control air pollution.
12.	The industry shall develop 33% of the total area as thick green belt all along the boundary of the unit and also in the vacant places with all tall growing trees with wide leaf area.	The industry has developed green belt in an area of 5 Acres.
13.	The industry shall maintain good housekeeping in the factory premises.	Good housekeeping maintained.
14.	The industry should maintain the following records and the same should be made available to the Board Officials during the inspection. a) Daily production details, RG-I records and Central Excise Returns. b) Quantity of trade effluents generated, treated in ETP, reused and force evaporated c) Quantity of domestic effluents generated, treated in STP, reused and forced evaporated d) Log Books for pollution control systems. e) Daily solid waste generated and details of the disposal.	The industry is maintaining the records pertaining to the production, water consumption, wastewater generation and solid waste generation and its disposal.
15.	The industry shall submit Environmental Statement in Form V before 30th September every year as per Rule No.14 of Environmental (Protection) Act, 1986.	Submitted for the year, 2018.
16.	The industry shall take necessary measures to control fugitive emissions.	Directed to comply
17.	The industry shall take all precautionary and safety measures during process operations.	--
18.	The industry shall comply with the ambient air quality standards in respect of noise, as stipulated in the Environment (Protection) Rules, 1986.	--
19.	The industry shall construct separate rain water drains.	The industry has provided separate rain water drains.
20.	The industry shall comply with all the directions issued by the Board from time to time.	The Board has issued Extension of Temporary Revocation of Closure orders latest vide order dated 22.04.2019 for a period upto 30.06.2019.
21.	Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts.	--
22.	The Board reserves its right to modify above conditions or stipulate any further conditions in the interest of environment protection.	--
23.	The conditions are without prejudice to the rights and contentions of this Board in any Hon'ble Court of	--

(42)

ANNEXURE-I

TELANGANA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE: HYDERABAD
4th floor, PODUPU BHAVAN, Hyderabad Collectorate Complex, N.S.Road, Hyderabad- 500001.
Phone: 23205367, e-mail.ee-hyd-tspcb@telangana.gov.in

4 MBR. Annexure-V

O/C

Lr. No.11/PCB/ROH/MBNR/2019-689 Date:11.09.2019

To
The Collector & District Magistrate,
Mahabubnagar,
Mahabubnagar District.

Sir,

Sub : TSPCB - RO-Hyd - Constituted Multi Disciplinary Committee for assessment of crop damage and fixing of compensation - Report submitted - Reg.

Ref : Collector, Mahabubnagar File No.Rev/C1/POLN/0003/2019-C-Section, dated 06.07.2019.

* * *

With reference to above, it is to submit the Collector & District Magistrate, Mahabubnagar has constituted a Multi Disciplinary Committee with officials from Revenue, Agriculture, Ground Water departments, TSPCB to study the impact / effects of pollution being caused by Gundlapotlapalli village , Balanagar (M), that M/s GTN Engineering (India) Limited., factory situated in Sy.No.51, 52 and 53 of Gundlapotlapalli (V), Balanagar (M) is discharging effluents of contaminated water causing gorund water pollution and crop damage to the surrounding village for assessment of crop damage and fixing of compensation.

In this regard, the RDO Mahabubnagar, JD Agriculture , Dy. Director Ground Water Department Mahabubnagar, Assistant Hydrologist (Ground Water Department) and Assistant Scientist, TSPCB RO-HYD visited M/s GTN Engineering (India) Limited., and Gundlapotlapalli village surrounding areas and contacted villagers on 13.08.2019 and 16.08.2019.

The inspection report along with analysis results are herewith submitted for kind information and necessary action.

Yours faithfully,

ENVIRONMENTAL ENGINEER

Advanced copy submitted to the Member Secretary, TSPCB, Board Office, Sanathnagar, Hyderabad for kind information and necessary.

INSPECTION REPORT OF M/S GTN ENGINEERING (INDIA) LIMITED.,SY.NO.51, 52 AND 53 OF GUNDLAPOTLAPALLI (V), BALANAGAR (M) MAHABUBNAGAR DISTRICT AS PER PROCEEDINGS OF COLLECTOR AND DISTRICT MAGISTRATE.

The Member Secretary TSPCB has addressed a letter on 17.04.2019 to the Collector and District Magistrate, Mahaboobnagar District with requesting to constitute a multi Disciplinary Committee comprising Revenue, Agriculture, Ground waterand TSPCB to carryout assessment of Crop damages, ground water pollution and to fix a compensation to the affected farmers under "Polluter pay Principle".

Accordingly, the Collector & District Magistrate, Mahabubnagar has constituted a Multi Disciplinary Committee with officials from Revenue, Agriculture, Ground Water departments, TSPCB to study the impact / effects of pollution being caused by Gundlapotlapalli village , Balanagar (M), that M/s GTN Engineering (India) Limited., factory situated in Sy.No.51, 52 and 53 of Gundlapotlapalli (V), Balanagar (M) is discharging effluents of contaminated water causing gorund water pollution and crop damage to the surrounding village for assessment of crop damage and fixing of compensation. The Multi Disciplinary Committee with the following members:

1. Joint Director, Agriculture ,Mahabubnagar.
2. Dy.Director, Ground Water Department, Mahabubnagar.
3. Revenue Divisional Officer, Mahabubnagar.
4. Environmental Engineer, TSPCB, Mahabubnagar.

In this regard, the Multi Disciplinary Committee visited M/s GTN Engineering (India) Limited., factory situated in Sy.No.51, 52 and 53 of Gundlapotlapalli (V), Balanagar (M) and Gundlapotlapalli village surrounding areas on 13.08.2019 and 16.08.2019.The RDO Mahabubnagar, JD Agriculture , Dy. Director Ground Water Department Mahabubnagar, Assistant Hydrologist (Ground Water Department) and Assistant Scientist, TSPCB RO-HYD were contacted villagers and visited surrounding area for collecting samples. The villagers of gundlapotlapalli informed that the surrouding ground water polluted and crops are not growing due to effluents of this unit.

The Multi Disciplinary Committee has inspected Effluent Treatment Plant and the industry is having ZLD System (Zero Liquid Discharge)for treatment of effluents. The ETP is consisting with • The biological ETP consisting of Equalization/Stabilization Tank, Reaction Tank, Primary settling tanks - (DECANTER /MONOBELT), Supernatant tank, Aeration tank, Secondary clarifier, Natural pond (oxidation), Pressure sand filter, Sand filter, Cartridge filter < 10, Ultra filtration/ Nano filtration. Reverse Osmosis, MEE/ Triple Effective Forced Circulation Evaporation System(TEFCES)-100 KLD followed by ATFD - 4 KLD. The RO permeate, MEE condensate and ATFD condensate is reusing into the process / utilities. The resultant ATFD salt is lifted to M/s TSDF.

i. The TSPCB Officals has collected section wise samples from Effluent Treatment Plant and following results are as below.

Parameters	Unit	Results							
		GFS Tank	Primary Treatment Plant	Aeration Tank	RO - Permeate	MEE Feed (RO – Reject)	MEE Reject (ATFD Feed)	MEE Condensate	Parameter Limiting Standards as per CFO Order
pH at 25^0 C	--	11.62	6.33	7.72	7.45	8.0	9.27	9.18	5.5-9.0

Total Suspended Solids	Mg/L	295	195	205	<5	295	505	<5	200.0
Total Dissolved Solids (TDS)	Mg/L	8,287	7,420	6750	233	20,370	1,32,500	354	--
Chemical Oxygen Demand	Mg/L	984	774	226	8	790	1,760	8	--

ii. The Board Officals has collected borewell water samples within the industry premises. The Analysis results as below:

Sl. No.	Parameter	Units	Borewell sample collected from GTN Quarters –I	Borewell sample collected near main gate to from GTN Quarters - 2	Drinking water standards IS 10500:2012.
1.	p^H	--	7.32	6.97	6.5-8.5
2.	Electrical conductivity	µS/cm	2094	9870	--
3.	Total Suspended Solids	Mg/l	<5	<5	--
4.	Total Dissolved Solids	Mg/l	1560	7440	500*(2000**)
5.	Chlorides	Mg/l	352	2873	250* (1000**)
6.	Suplhates	Mg/l	87	347	200* (400**)
7.	Total Hardness (as $CaCO_3$)	Mg/l	636	3800	200* (600**)
8.	Calcium as Ca^{+2}	Mg/l	120	976	75* (200**)
9.	Magnesium as Mg^{+2}	Mg/l	82	340	30* (100**)
10.	Total Alkalinity as $CaCO_3$	Mg/l	308	432	200* (600**)
11.	Nitrates as NO_3^-	Mg/l	41	39	45
12.	Sodium as Na^+	Mg/l	139	271	--
13.	Potassium as K^-	Mg/l	3	6	--
14.	Phosphates as PO_4^{-3}	Mg/l	0.3	BDL	--
15.	Fluoride as F^-	Mg/l	BDL	BDL	1.0* (1.5**)
16.	% Sodium	-	-	--	--
17.	SAR	--	2.4	1.9	--
18.	Copper	Mg/l	BDL	BDL	0.05* (1.5**)
19.	Nickel	Mg/l	0.111	0.101	0.02
20.	Zinc	Mg/l	BDL	BDL	5* (15**)
21.	Lead	Mg/l	0.287	0.374	0.01
Note:		Results related to sample as received. * Acceptable limit ** Permissible limit in the absence of alternate source. BDL: Below Detectable Limit			

iii. The Board Officals has collected Stagnated water samples outside the industry premises. The Analysis results as below:

Sl. No.	Parameter	Units	Stagnated water sample collected from Potlapallivagu (Dundubhi)
1.	p^H	--	7.9
2.	Electrical conductivity	µS/cm	14430
3.	Dissolved Oxygen	Mg/L	5.8
4.	Chemical Oxygen Demand (COD)	Mg/L	22
5.	Total Suspended Solids	Mg/L	36
6.	Total Dissolved solids	Mg/L	9091
7.	Ammonical Nitrogen	Mg/L	BDL
8.	Free Ammonia	Mg/L	BDL
9.	% Sodium	%	26
10.	SAR	--	3.8
11.	Boron	Mg/L	BDL
12.	Total Coliform	MPN / 100 ml	17
13.	Fecal Coliform	MPN / 100 ml	Nil
	Heavy Metals		
14.	Copper	Mg/L	BDL
15.	Nickel	Mg/L	0.106
16.	Zinc	Mg/L	BDL
17.	Lead	Mg/L	0.243
Note:		Results related to sample as received. BDL : Below Detectable Limit.	

CPCB Water Quality Criteria					
Parameters	A	B	C	D	E
pH	6.5-8.5	6.5-8.5	6.0-9.0	6.5-8.5	6.5-8.5
Electrical conductivity	-	-	-	-	Max2250
Dissolved Oxygen	6 or > 6	5 or > 5	4 or > 4	4 or > 4	-
BOD 3 at 27oC	2 or < 2	3 or < 3	3 or < 3	-	-
Free Ammonia				1.2 or < 1.2	
SAR					Max 26
Boron					Max 2
Total Coliform	50 or < 50	500 or < 500	5000 or < 5000	-	-

Below E: Not Meeting A,B,C,D,E Criteria.

iv. Stagnated water collected from outside the compound wall of the industry (Nagaraju Agriculture land) sample.

Parameters	Unit	Stagnated water collected from outside the compound wall of the industry (Nagaraju Agricultural Land).
pH at 25° C	--	8.44
Total Suspended Solids	Mg/L	175
Total Dissolved Solids (TDS)	Mg/L	4,169
Chemical Oxygen Demand	Mg/L	228
BOD 3 at 27° c	Mg/L	23
Oil and Grease	Mg/L	0.2

The Board (Analysis resu

v. The Board Officals has collected surrounding grampanchyat borewell water samples. The Analysis results as below:

Sl. No.	Parameter	Units	PathlavathPondu, near BB NagarThanda, back side of GTN Industry	Pathlavath Etya, near BB NagarThanda, back side of GTN Industry	Gundlapotlapalli village, Grampanchayat	Fayaz, Agarharam, Potlapalle.	Drinking water standards IS 10500:2012.
1.	pH	--	7.4	6.9	7.0	7.21	6.5-8.5
2.	Electrical conductivity	µS/cm	1825	4330	2797	2049	--
3.	Total Suspended Solids	Mg/L	<5	<5	<5	<5	--
4.	Total Dissolved Solids	Mg/L	1096	2770	1790	[illegible]	500*(2000**)
5.	Chlorides	Mg/L	297	1001	599	321	250* (1000**)
6.	Suplhates	Mg/L	63	304	156	118	200* (400**)
7.	Chemical Oxygen Demand (COD)	Mg/L	20	48	54	12	--
8.	Total Hardness (as $CaCO_3$)	Mg/L	812	1680	912	800	200* (600**)
9.	Calcium as Ca^{+2}	Mg/L	208	412	146	200	75* (200**)
10.	Magnesium as Mg^{+2}	Mg/L	71	158	133	73	30* (100**)
11.	Total Alkalinity as $CaCO_3$	Mg/L	328	336	360	456	200* (600**)
12.	Nitrates as NO_3^-	Mg/L	51	52	24	32	45
13.	Sodium as Na^+	Mg/L	98	280	222	180	--
14.	Potassium as K^+	Mg/L	1.8	4.0	6	1.2	--
15.	Phosphates as PO_4^{-3}	Mg/L	0.2	0.3	BDL	BDL	--
16.	Fluoride as F^-	Mg/L	0.8	0.4	0.3	0.4	1.0* (1.5**)
17.	% Sodium	%	21	26	34	33	--
18.	SAR	--	1.5	3.0	3.2	2.8	--
19.	Copper	Mg/L	BDL	BDL	BDL	BDL	0.05* (1.5**)
20.	Nickel	Mg/L	BDL	0.111	BDL	BDL	0.02
21.	Zinc	Mg/L	BDL	BDL	BDL	BDL	5* (15**)
22.	Lead	Mg/L	BDL	0.243	0.287	BDL	0.01

Note:
Results related to sample as received.
* Acceptable limit
** Permissible limit in the absence of alternate source.
BDL: Below Detectable Limit

(47)

Officials has collected surrounding agriculture borewell water samples. The Analysis results as below:

Sl. No.	Parameter	Units	Sri JatawathLimbya, near thanda Gundlapotlapally (V)	Sri Chinna Jangaiah Sy No:100, Gundlapotlapally (V)	Sri Muthyalu, Sy No:91, Gundlapotlapally (V)	Sri Chenniah, Sy No:136, Gundlapotlapally (V)	Sri Shankaraiah, Sy No:136, Gundlapotlapally (V)	D Manya Sy No: 49, Thimmareddy Kunta Thanda, Mallepally Grampanchayat	K Ramulu, Sy no 107, Gundlapotlapalli Village.	The industry premises which is coming from outside bore-well (using for industry purpose)	srijatawanthKishan near thanda Gundlapotlapally (V)	Drinking water standards IS 10500:2012.
1.	pH	--	7.4	7.0	7.0	7.4	7.3	6.9	6.5	7.57	7.33	6.5-8.5
2.	Electrical conductivity	µS/cm	3630	5750	7320	2641	2961	5540	10120	1380	4120	--
3.	Total Suspended Solids	Mg/l	<5	<5	<5	<5	<5	<5	26	<5	<5	--
4.	Total Dissolved Solids	Mg/l	2392	3853	4758	1769	1895	3546	6470	980	2760	500*(2000**)
5.	Chlorides	Mg/l	805	1653	2145	551	728	980	3363	177	925	250* (1000**)
6.	Suplhates	Mg/l	300	310	492	59	86	403	534	42	356	200* (400**)
7.	Total Hardness (as $CaCO_3$)	Mg/l	1200	2384	3008	1040	1204	1640	3640	376	1400	200* (600**)
8.	Calcium as Ca^{+2}	Mg/l	58	420	960	80	139	464	832	70	91	75* (200**)
9.	Magnesium as Mg^{+2}	Mg/l	257	324	148	204	208	117	379	49	285	30* (100**)
10.	Total Alkalinity as $CaCO_3$	Mg/l	472	384	328	296	276	376	428	488	444	200* (600**)
11.	Nitrates as NO_3^-	Mg/l	36	34	35	40	38	49	41	41	42	45
12.	Sodium as Na^+	Mg/l	272	102	138	46	36	240	412	135	291	--
13.	Potassium as K^+	Mg/l	1	3	3	2	2	4.0	6	2	2	--
14.	Phosphates as PO_4^{-3}	Mg/l	0.3	BDL	BDL	0.2	0.3	0.08	BDL	BDL	0.2	--

15.	Fluoride as F^-	Mg/l	0.215	0.08	BDL	0.28	0.20	0.5	0.7	0.32	0.08	1.0* (1.5**)
16.	% Sodium	-	-	-	-	-	-	24	20	--	--	--
17.	SAR	--	3.4	0.9	1.1	0.6	0.4	2.6	3.0	3.0	3.4	--
Heavy Metals												
18.	Copper	Mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	--	BDL	0.05* (1.5**)
19.	Nickel	Mg/l	BDL	0.101	0.122	BDL	0.101	0.111	0.166	--	0.166	0.02
20.	Zinc	Mg/l	BDL	BDL	0.156	BDL	BDL	BDL	BDL	--	BDL	5* (15**)
21.	Lead	Mg/l	0.374	0.374	0.374	0.287	0.287	0.330	0.417	--	0.200	0.01
Note:		Results related to sample as received. * Acceptable limit ** Permissible limit in the absence of alternate source. BDL: Below Detectable Limit.										

Sl. No.	Parameter	Units	Banu Agriculture Field, Sy.No:72, Agarharam, Potlapalle.	Yadhireddy, Sy No 107, Agarharam, potlapalle	Drinking water standards IS 10500:2012.
1.	p^H	--	7.08	7.04	6.5-8.5
2.	Electrical conductivity	µS/cm	3550	4910	--
3.	Total Suspended Solids	Mg/L	<5	<5	--
4.	Total Dissolved Solids	Mg/L	2284	3092	500*(2000**)
5.	Chlorides	Mg/L	763	1254	250* (1000**)
6.	Suplhates	Mg/L	361	238	200* (400**)
7.	Chemical Oxygen Demand (COD)	Mg/L	23	61	--
8.	Total Hardness (as $CaCO_3$)	Mg/L	1390	1900	200* (600**)
9.	Calcium as Ca^{+2}	Mg/L	312	260	75* (200**)
10.	Magnesium as Mg^{+2}	Mg/L	148	304	30* (100**)
11.	Total Alkalinity as $CaCO_3$	Mg/L	472	440	200* (600**)
12.	Nitrates as NO_3^-	Mg/L	21	25	45
13.	Sodium as Na^+	Mg/L	322	415	--
14.	Potassium as K^+	Mg/L	3.1	6	--
15.	Phosphates as PO_4^{-3}	Mg/L	0.2	BDL	--
16.	Fluoride as F^-	Mg/L	0.4	0.6	1.0* (1.5**)
17.	% Sodium	%	33	32	--
18.	SAR	--	3.7	4.1	--
19.	Copper	Mg/L	BDL	BDL	0.05* (1.5**)
20.	Nickel	Mg/L	0.111	BDL	0.02
21.	Zinc	Mg/L	BDL	BDL	5* (15**)
22.	Lead	Mg/L	0.200	0.287	0.01
Note:		Results related to sample as received. * Acceptable limit ** Permissible limit in the absence of alternate source. BDL: Below Detectable Limit			

(49)

- It is to submit that the water quality monitoring, both inside and outside of the industry was carried out by way of collecting surface & ground water samples.
- The industry is having ZLD system for treatment of effluents and results found within the limits as per CFO Order.
- The quality of the water (surface & bore wells) found not to be permissible quality and stagnated water at Dundubhi comes under below E & Not meeting A,B,C, D,E criteria.

This is submitted for kind information.

Your's Faithfully

Environmental Engineer,
TSPCB, RO-HYD.

50

	Law.	

Special Conditions of CFO amendment order dated: 19.04.2018:

Sl No	Conditions	Compliance
1.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE). The industry shall dispose 4 KL /day of mother liquor generated from ME Operations to M/s IL & FS Environmental Infrastructure and Services Ltd duly meeting the inlet standards of CETP prescribed by the Board for a period of One year from date of issue of this order.	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD followed by ATFD. The outlet of ETP is sent to 4 stage RO System. The RO Rejects is further sent to MEE followed by ATFD for evaporation. The RO permeate, MEE condensate and ATFD condensate is reusing into the process / utilities. The resultant ATFD salt is lifted to M/s TSDF. The industry has applied for amendment of CFO and it is under process at Zonal Office, Hyderabad.
2.	The industry shall obtain membership from M/s IL & FS, Environmental Infrastructure and Services Ltd. For disposal of effluents.	The Industry has stopped lifting of mother liquor to M/s IL & FS, Environmental Infrastructure and Services Ltd from July, 2018. Presently, they have installed ATFD and operating the same from August, 2018.
3.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry has installed separate energy meter records pertaining to the ETP & APCE and maintaining log registers.
4.	The industry shall have minimum of 7 days storage capacity of effluents on above ground level, with-in-the premies.	The industry has provided above ground level GFS tanks - 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also having below ground level raw effluents collection tank of capacity 500 KL.

In view of the above, the industry may be called for hearing before Task Force Committee and industry's request for permanent Revocation of Closure Order may be examined.

This is submitted for kind information and necessary action.

Yours faithfully

Encl: As above

ENVIRONMENTAL ENGINEER

Copy submitted to:

1. The Joint Chief Environmental Engineer, TSPCB, Zonal Office - Hyd, Begumpet, Hyderabad for kind information.
2. The Senior Environmental Engineer (UH-I), TSPCB, Board Office, Sanathnagar, Hyderabad for kind information and necessary action.

(51)

ANNEXURE-VI

TELANGANA STATE POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-III, Industrial Estate, Sanathnagar, Hyderabad-500 018
Phones : 040-23887500 Fax: 040 - 23887519

Annexure-V

BY REGD. POST WITH ACK. DUE

Order No. MHB-122/TSPCB/U-I/TF/2019 - 1994 **Date:26.11.2019**

Sub: M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. Nos. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District - Water (Prevention and Control of Pollution) Amendment Act, 1988 - Air (Prevention and Control of Pollution) Amendment Act, 1987 - **Extension of Temporary Revocation of Closure Orders - Issued - Reg.**

Ref :
1. CFO order No. MHB/TSPCB/ZO-HYD/CFO/2017 dated 27.01.2017.
2. Order No. MHB-122/TSPCB/U-I/TF/2017-195 dated 22.04.2019.
3. Your unit letter dated 24.06.2019.
4. Complaint received against the industry regarding ground water pollution in the area.
5. Inspection of your industry by the Board officials on 05.07.2019.
6. Hearing held on 15.11.2019 at Board office, Hyderabad.

***

1. WHEREAS, you are operating the industry located at Sy. Nos. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District and involved in processing of Yarn 100% cotton and Grey Gassed (Unprocessed).

2. WHEREAS, the Board issued CFO for production of Yarn 100% Cotton - 120 TPM and Grey Gassed (unprocessed) - 60 TPM which is valid upto 31.12.2021.

3. WHEREAS, the Board vide order dated 09.12.2017 issued closure order to the unit for non compliance of the Board directions.

4. WHEREAS, the Board vide order dated 22.04.2019 issued extension of temporary revocation of closure orders which was expired on 30.06.2019.

5. WHEREAS, vide letter dated 24.06.2019, you have represented the Board for permanent revocation of closure orders.

6. WHEREAS, the Board has received complaints filed villagers of Gundlapotlapally Village Rajapur (M), Mahaboobnagar District on 05.07.2019 regarding water pollution from the unit.

7. WHEREAS, the District Collector, Mahaboobnagar District has forwarded Prajavani Petition filed by Sri M. Brahma Chary & Others, r/o Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District regarding ground water pollution being caused by the industry.

8. WHEREAS, the Board Officials visited the Borewell of Sri K. Nagaraju & Sri K. Krishnaiah, which is not in working condition. Hence, sample could not collected. The Board Officials instructed to them to inform after erecting the Motor pump in the Borewell for collecting samples.

9. WHEREAS, the Board officials inspected your industry and its surroundings on 05.07.2019. During inspection, the Board officials have contacted the complainant's Sri Brahma Chary, Sri K. Shiva, Sri Shekar, Sri Anjaneyulu and others and they informed that, their Borewell water contaminated due to water pollution caused by the industry. The Board Officials have collected Borewell water from the complainants fields at the following locations:

Sample code	:	**Sample details / collection point**
7194	-	Water sample collected from Gundlapotlapalli Grampancayat borewell

7194	-	(About 1 km distance from M/s. GTN Engineering (India) Limited, (Unit : YarnProcessing)
7195	-	Water sample collected from Sri. Anjaneyulu borewell (About 1 km distance from M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing)
7196	-	Water sample collected from Sri. Shekar borewell (About 1.5 km distance from M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing)

Parameters	Unit	Results			Drinking water standards as per IS 10500: 2012
		7194	7195	7196	
pH	-	7.23	6.90	7.03	6.5-8.5
Electrical conductivity	µS/cm	2021	2436	1752	-
Total Suspended Solids	mg/L	< 5	< 5	< 5	-
Total Dissolved Solids	mg/L	1222	1455	1008	500* (2000**)
Chlorides as Cl^-	mg/L	435	535	368	250* (1000**)
Sulphates as SO_4^{-2}	mg/L	106	185	37	200* (400**)
Total Alkalinity as CaCO3	mg/L	228	136	240	200* (600**)
Total Hardness as CaCO3	mg/L	672	988	716	200* (600**)
Calcium as Ca+2	mg/L	171	270	131	75* (200**)
Magnesium as Mg+2	mg/L	59	76	94	30* (100**)
Nitrates	mg/L	16	18	41	45
Fluoride	mg/L	0.66	0.39	0.003	1.0* (1.5**)
Phosphates	mg/L	0.09	0.10	0.12	-
Sodium as Na	mg/L	156	72	50	-
Potassium as K	mg/L	4.0	2.0	1.0	-
SAR	-	2.6	1.0	0.8	
Chemical Oxygen Demand	mg/L	12	14	11	-

Note: Results related to sample as received.
* Acceptable limit.
** Permissible limit in the absence of alternate source.

Sample code : Sample details / collection point

7197	-	Water sample collected from Sri Goverdhan borewell (About 1 km distance from M/s. GTN Engineering (India) Limited, (Unit : YarnProcessing)
7198	-	Water sample collected from Sri Shiva Kumar borewell (About 1.5 km distance from M/s. GTN Engineering (India) Limited, (Unit : YarnProcessing)
7199	-	Water sample collected from Sri. Sallu borewell (About 1 km distance from M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing)

Parameters	Unit	Results			Drinking water standards as per IS 10500: 2012
		7197	7198	7199	
pH	-	6.79	6.99	7.25	6.5-8.5
Electrical conductivity	µS/cm	1769	2006	1564	-
Total Suspended Solids	mg/L	< 5	< 5	< 5	-

Total Dissolved Solids	mg/L	997	1140	910	500* (2000**)
Chlorides as Cl^-	mg/L	343	469	362	250* (1000**)
Sulphates as SO_4^{-2}	mg/L	36	41	104	200* (400**)
Total Alkalinity as CaCO3	mg/L	236	172	84	200* (600**)
Total Hardness as CaCO3	mg/L	712	836	624	200* (600**)
Calcium as Ca+2	mg/L	187	186	170	75* (200**)
Magnesium as Mg+2	mg/L	59	90	49	30* (100**)
Nitrates	mg/L	43	41	12	45
Fluoride	mg/L	0.97	0.24	0.25	1.0* (1.5**)
Phosphates	mg/L	0.09	0.07	0.02	-
Sodium as Na	mg/L	43	41	12	-
Potassium as K	mg/L	2.0	1.3	2.0	-
SAR	-	0.8	0.8	0.7	
Chemical Oxygen Demand	mg/L	26	12	13	-

Note: Results related to sample as received.
* Acceptable limit.
** Permissible limit in the absence of alternate source.

Sample code : Sample details / collection point

8250 - Sample collected from GFS Tank.
8251 - Sample collected from primary Treatment Plant.
8252 Sample collected from Aeration Tank.
8253 Sample collected from RO-Permate.

Parameters	Method (*) No.	Unit	Results			
			8250	8251	8252	8253
pH at 25°C	4500-B	-	11.62	6.33	7.72	7.45
Total Suspended Solids	2540-B	mg/L	295	195	205	< 5
Total Dissolved Solids (TDS)	2540-C	mg/L	8,287	7,420	6,750	233
Chemical Oxygen Demand	5220-B	mg/L	984	774	226	8

Note: Results related to sample as received.
(*) Standard methods of APHA, 23rd Edition.

Sample code : Sample details / collection point

8254 - Sample collected from MEE Feed (RO-Reject).
8255 - Sample collected from MEE Reject (ATFD Feed).
8256 Sample collected from MEE Condensate.

Parameters	Method (*) No.	Unit	Results		
			8254	8255	8256
pH at 25°C	4500-B	-	8.0	9.27	9.18
Total Suspended Solids	2540-B	mg/L	295	505	< 5
Total Dissolved Solids (TDS)	2540-C	mg/L	20,370	1,32,500	354
Chemical Oxygen Demand	5220-B	mg/L	790	1,760	8

Note: Results related to sample as received.
(*) Standard methods of APHA, 23rd Edition.

Sample code : Sample details / collection point

(54)

Further, dated 12.

8260 - Stagnated water collected from outside the compound wall of the industry (Nagaraju Agricultural land).

Parameters	Method (*) No.	Unit	Result 8260
pH at 25°C	4500-B	-	8.44
Total Suspended Solids	2540-B	mg/L	175
Total Dissolved Solids (TDS)	2540-C	mg/L	4,169
Chemical Oxygen Demand	5220-B	mg/L	228
BOD 3 at 27°C	IS 3025, 1993	mg/L	23
Oil and Grease	5520 - B	mg/L	0.2

Note: Results related to sample as received.

The details of the industry and inspection observation are as follows:

- On the day of inspection, the industry was in operation.
- The industry has submitted production details from the period from July, 2018 to June, 2019. As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) an average of 82.91 TPM against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) an average of 39.39 TPM against the permitted capacity of 60 TPM during the from July, 2018 to June, 2019.
- The industry has obtained Amendment of CFO order on 19.04.2018 for the disposal of the effluents as given below:

Outlets for discharge of effluents:

Outlet No	Outlet Description	Max Daily Discharge	Point of Disposal	Parameter Limiting Standards
1.	Process & Washings	660 KLD	Shall be treat the effluents of 752 KLD in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD), The RO rejects (92 KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE) 4 Kl/day of mother liquor generated from ME operations shall be disposed to M/s IL & FS Environmental Infrastructure and Services Ltd.,	pH - 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 30.0 mg /l
2.	Process & Washings	90 KLD		
3.	Boiler Blow Down	2 KLD		
4.	Domestic	84 KLD	After treatment in STP, shall be used for on land application/ irrigation within the factory premises.	pH - 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 100.0 mg

				/1

- Further, the industry has obtained CFO Expansion of the Board vide order dated 12.06.2018 for installation of 1 x 3 TPH husk fired boiler with validity upto 31.12.2021.
- The industry consumes water for Process & washing effluents, Boiler feed, Cooling, Gardening and domestic purposes. The industry has consumed an average of 462.0 KLD (Fresh water is 127 KLD and Recycled water is 335 KLD) against the permitted capacity of 1040 KLD during the period from from July, 2018 to June, 2019.
- The industry generates wastewater of about 836.0 KLD from Process & Washings – 750 KLD, Boiler Blow Down - 2 KLD and Domestic - 84 KLD.
- The industry has provided above ground level GFS tanks – 1 x 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also using existing below ground level raw effluent collection tank for collection of effluents and pumping to above ground level GFS tank for final storage.
- The industry has installed water flow meter to the Raw effluent collection tank.
- The industry has provided ZLD system consisting of biological ETP of capacity - 750 KLD followed by, RO (4 Stage) for the treatment of the waste water, followed by MEE, ATFD.
- The biological ETP consisting of Equalization/Stabilization Tank, Reaction Tank, Primary settling tanks - (DECANTER /MONOBELT), Supernatant tank, Aeration tank, Secondary clarifier, Natural pond (oxidation), Pressure sand filter, Sand filter, Cartridge filter < 10, Ultra filtration/ Nano filtration. Reverse Osmosis, MEE/ Triple Effective Forced Circulation Evaporation System(TEFCES)-100 KLD followed by ATFD - 4 KLD. The RO permeate, MEE condensate and ATFD condensate is reusing into the process / utilities. The resultant ATFD salt is lifted to M/s TSDF.
- During the inspection, ETP, RO, MEE and ATFD were in operation.
- The samples were collected from Inlet of ETP, Outlet of ETP (RO Feed), RO permeate, RO Reject (MEE Feed), MEE Reject (ATFD feed), MEE condensate and ATFD condensate and submitted to the Central Laboratory for analysis. The results are awaited.
- As per the records submitted by the industry, during the period from from July, 2018 to June, 2019 the industry has evaporated an average 338KLD in the MEE followed by ATFD.
- The industry has provided STP of capacity 80 KLD for treatment of Domestic effluents. After treatment the treated domestic waste water is being utilized for onland gardening. Samples were collected from Inlet STP and Outlet of STP and submitted at Central Laboratory for analysis. The results are awaited.
- The industry has installed 2 Nos. of Husk fired boilers of capacities 6 TPH & 3 TPH respectively for which industry has provided individual separate dust collector followed by Bag filters to each boiler as APCEs. The industry has provided individual separate chimneys of height 30 Mtrs. to each boiler.
- The industry has Thermic Fluid Heater of capacity 1 x 15 Lakh Kcal/hr.
- The industry has provided separate sheds for storage of husk and husk ash. The industry has closed the openings of the sheds with G.I. Sheets.
- The industry generates solid / Hazardous waste such as ETP Sludge – 1 TPD, Used oil / waste oil – 200 LPA, Boiler ash – 0.5 TPD and Lead Acid Batteries – 8 nos/annum.
- The industry has provided separate shed for storage of Hazardous Waste. The industry has also provided concreted platform for storage of Hazardous waste within the premises. The industry has not provided shed and lechate collection system to the Hazardous waste storage platform. The stagnated water sample was collected near the concreted platform and the analysis indicate.

Parameters	Unit	Results	On land for Irrigation
		7193	

pH	-	8.16	5.5-9.0
Electrical conductivity	µS/cm	3091	-
Total Suspended Solids	mg/L	86	200
Total Dissolved Solids	mg/L	1764	2100
Chlorides as Cl^-	mg/L	669	-
Sulphates as SO_4^{-2}	mg/L	562	-
Total Alkalinity as CaCO3	mg/L	316	-
Total Hardness as CaCO3	mg/L	140	-
Calcium as Ca+2	mg/L	24	-
Magnesium as Mg+2	mg/L	19	-
Nitrates	mg/L	41	-
Fluoride	mg/L	0.40	-
Phosphates	mg/L	0.79	-
Sodium as Na	mg/L	536	-
Potassium as K	mg/L	22.0	-
SAR	-	19.8	-
Chemical Oxygen Demand	mg/L	154	-

Note: Results related to sample as received.
* Acceptable limit.
** Permissible limit in the absence of alternate source.

- The industry has obtained Membership from M/s TSDF, Dundigal for disposal of Hazardous waste. The industry has lifted total ETP Sludge of 486.83 Tons and ATFD salts of 819.85 Tons to TSDF, during the last one year period i.e. from July, 2018 to June, 2019. The industry has stored about 10 Tons of MEE salts and about 12 Tons of ETP sludge within the premises.
- On the day of inspection, the Board Officials inspected the Dundubhi vagu down stream of the industry premises. No water flow was observed in the Vagu and it is in dry condition. Hence, the samples could not be collected from the Vagu.
- The Board Officials have inspected along the compound wall of the industry near the Vagu. No discharge of effluents was observed outside the industry premises.
- The condition wise compliance on the directions issued in Temporary Revocation of Closure are as below:

S. No.	Conditions	Compliance Status
1.	The industry shall comply with all conditions stipulated in the CFO order issued by the Board.	The conditions wise compliance to the Schedule – B conditions of CFO Order dated 27.01.2017 is reported below.
2.	The industry shall dismantle all the below ground level tanks and provide above ground level tanks by June, 2019 as committed during the meeting.	The industry is not dismantled below ground level raw effluent collection tank. The industry is collecting raw effluent in existing below ground level collection tank from there pumping to above ground level GFS tanks - 100 KL & 500 KL capacities for final storage.
3.	The industry shall ensure that all the sides of husk & husk ash storage sheds are closed to avoid dust pollution in the surrounding areas.	The industry has provided individual sheds for storage of husk and husk ash.
4.	The industry shall regularly lift the solid waste / sludge / Hazardous waste to M/s. TSDF and shall submit the details to EE, RO-Hyderabad.	The industry has obtained Membership from M/s TSDF, Dundigal for disposal of Hazardous waste. The industry has lifted total ETP Sludge of 486.83 Tons and ATFD salts of 819.85 Tons to TSDF, during the last one year period i.e. from July, 2018 to June, 2019.

5.	The industry shall maintain / provide flow meter before raw effluents collection tank	The industry has provided flow meters to the Raw effluent collections tank.
6.	The industry shall revalidate the BGs before its expiry till further orders from the Board.	The industry has submitted BG of Rs. 16 Lakhs for period upto 08.02.2020.

The condition wise compliance of Schedule – B of CFO Order dated 27.01.2017 are as follows:

S. No.	Condition	Compliance
1.	The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below **Sl No / Purpose / Quantity** 1. Process & washing effluents — 660.0 KLD 2. Process & washes — 90.0 KLD 3. Boiler feed — 50.0 KLD 4. Cooling (makeup / humidification / water spraying) — 35.0 KLD 5. Gardening — 100.0 KLD 6. Domestic — 105.0 KLD **TOTAL — 1040.0 KLD**	The industry has consumed an average of 462.0 KLD (Fresh water is 127 KLD and Recycled water is 335 KLD) against the permitted capacity of 1040 KLD during the period from from July, 2018 to June, 2019.
2.	The industry shall file the water Cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water Cess as per the assessment orders as and when issued by Board.	-
3.	The industry shall comply with all the Rules and Regulations specified in Water (P&C of P) Act, 1974, Air (P&C of P) Act, 1981 and Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and their amendments issued thereof.	Directed to comply
4.	The industry should comply with the National ambient air quality standards as per MoEF, GoI notification dated. 18.11.2009 along the premises of the factory as prescribed below. S. No. / Parameters / Standards in $\mu g/m^3$; 1 — Particulate Matter (PM_{10}) — 100 2 — Particulate Matter ($PM_{2.5}$) — 60 3 — SO_2 — 80 4 — NOx — 80 **Noise Levels:** Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A).	Directed to comply
5.	The industry shall not manufacture new products / increase the capacity beyond the permitted capacity mentioned in this consent order, without obtaining CFE/CFO of the Board.	The industry has submitted production details from the period from July, 2018 to June, 2019. As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) an average of 82.91 TPM against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) an average of 39.39 TPM against the permitted capacity of 60 TPM

(58)

Special Cond. No 1

		during the from July, 2018 to June, 2019.
6.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE).	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD and ATFD of capacity 4 KLD. The Ro reject evaporated in the MEE and RO permeate is reusing into the process. The resultant MEE salt is lifted to M/s TSDF for secure land fill.
7.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry has installed energy meter to the ETP and APCE and maintaining the records.
8.	The industry shall regularly operate air pollution control equipment i.e., bag filter provided to the 5 TPH coal / husk fired boiler and shall meet the emission standards of the Board i.e., SPM – 115mg/Nm^3.	The industry has provided separate air pollution control equipments i.e. dust collector followed by bag filters to control air pollution.
9.	The industry shall collect the hazardous waste i.e., ETP Sludge and MEE Salts properly and shall send the waste to M/s. HWMP (TSDF), Dundigal for safe disposal.	The industry is a member unit of M/s TSDF and disposing ETP sludge and MEE salts to TSDF regularly.
10.	The industry shall not discharge any waste water to outside the factory premises.	During inspection, no wastewater discharges were observed outside the premises.
11.	The industry shall not cause any air pollution / odour nuisance to the surrounding environment	The industry has provided cyclone dust collector followed by Bag filter to the Boiler to control air pollution.
12.	The industry shall develop 33% of the total area as thick green belt all along the boundary of the unit and also in the vacant places with all tall growing trees with wide leaf area.	The industry has developed green belt in an area of 5 Acres.
13.	The industry shall maintain good housekeeping in the factory premises.	Good housekeeping maintained.
14.	The industry should maintain the following records and the same should be made available to the Board Officials during the inspection. a) Daily production details, RG-I records and Central Excise Returns. b) Quantity of trade effluents generated, treated in ETP, reused and force evaporated c) Quantity of domestic effluents generated, treated in STP, reused and forced evaporated d) Log Books for pollution control systems. e) Daily solid waste generated and details of the disposal.	The industry is maintaining the records pertaining to the production, water consumption, wastewater generation and solid waste generation and its disposal.
15.	The industry shall submit Environmental Statement in Form V before 30th September every year as per Rule No.14 of Environmental (Protection) Act, 1986.	Submitted for the year, 2018.
16.	The industry shall take necessary measures to control fugitive emissions.	Directed to comply
17.	The industry shall take all precautionary and safety measures during process operations.	--
18.	The industry shall comply with the ambient air quality standards in respect of noise, as stipulated in the Environment (Protection) Rules, 1986.	--
19.	The industry shall construct separate rain water drains.	The industry has provided separate rain water drains.
20.	The industry shall comply with all the directions issued by the Board from time to time.	The Board has issued Extension of Temporary Revocation of Closure orders latest vide order dated 22.04.2019 for a period upto 30.06.2019.

(59)

Special Conditions of CFO amendment order dated: 19.04.2018:

No	Conditions	Compliance
1.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE). The Industry shall dispose 4 KL /day of mother liquor generated from ME Operations to M/s IL & FS Environmental Infrastructure and Services Ltd duly meeting the inlet standards of CETP prescribed by the Board for a period of One year from date of issue of this order.	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD followed by ATFD. The outlet of ETP is sent to 4 stage RO System. The RO Rejects is further sent to MEE followed by ATFD for evaporation. The RO permeate, MEE condensate and ATFD condensate is reusing into the process / utilities. The resultant ATFD salt is lifted to M/s TSDF. The Industry has applied for amendment of CFO and it is under process at Zonal Office, Hyderabad.
2.	The industry shall obtain membership from M/s IL & FS, Environmental Infrastructure and Services Ltd. For disposal of effluents.	The Industry has stopped lifting of mother liquor to M/s IL & FS, Environmental Infrastructure and Services Ltd from July, 2018. Presently, they have installed ATFD and operating the same from August, 2018.
3.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry has installed separate energy meter records pertaining to the ETP & APCE and maintaining log registers.
4.	The industry shall have minimum of 7 days storage capacity of effluents on above ground level, with-in-the premises.	The industry has provided above ground level GFS tanks - 500 KL, 1 x 100 KL capacity for storage of effluents. The Industry is also having below ground level raw effluents collection tank of capacity 500 KL.

The following samples were collected during the inspection on 05.07.2019. The analysis reports indicate the following :

Sample code : **Sample details / collection point**

7184 - Inlet of ETP.
7185 - Outlet of ETP (RO-Feed).

Parameters	Unit	Results	
		7184	7185
pH at 25°C	-	10.7	7.68
Total Suspended Solids	mg/L	288	182
Total Dissolved Solids (TDS)	mg/L	9,734	8,179
Chemical Oxygen Demand	mg/L	1,275	956

Note: Results related to sample as received.
(*) Standard methods of APHA, 23rd Edition.

Sample code : **Sample details / collection point**

7186 - RO Permeate.
7187 - MEE Feed (RO Reject).

Parameters	Unit	Results	
		7186	7187
pH at 25°C	-	6.34	9.19
Total Suspended Solids	mg/L	12	479

Total Dissolved Solids (TDS)	mg/L	830	19,154
Chemical Oxygen Demand	mg/L	32	2,800

Note: Results related to sample as received.
(*) Standard methods of APHA, 23rd Edition.

Sample code : **Sample details / collection point**

7188 - MEE Concentrate. (ATFD Feed).
7189 - MEE Condensate.
7190 - ATFD Condensate.

Parameters	Unit	Results		
		7188	7189	7190
pH at 25°C	-	9.66	7.93	8.59
Total Suspended Solids	mg/L	742	2	12
Total Dissolved Solids (TDS)	mg/L	1,33,131	454	363
Chemical Oxygen Demand	mg/L	11,955	16	32

Note: Results related to sample as received.
(*) Standard methods of APHA, 23rd Edition.

Sample code : **Sample details / collection point**

7191 - STP Inlet.
7192 - STP Outlet.

Parameters	Unit	Results		Limiting Standards as per CFO Order
		7191	7192	
pH at 25°C	-	9.10	7.21	5.5-9.0
Total Suspended Solids	mg/L	88	57	200mg/L
Total Dissolved Solids (TDS)	mg/L	1,772	1,205	-
Chemical Oxygen Demand	mg/L	151	116	-
BOD 3 at 27°C	mg/L	37	17	100mg/L
Oil and Grease	mg/L	0.2	BDL	10mg/L

Note: Results related to sample as received.
(*) Standard methods of APHA, 23rd Edition.
BDL: Below detectable limit

10. WHEREAS, the Board has reviewed the status of industry in the Task Force Committee meeting held on 15.11.2019. The representatives of the industry and the complainants have attended the meeting. The complainants stated that the unit is causing severe water pollution in the area and all the borewells in their land are polluted and could not cultivate and requested to direct the industry to pay crop damage compensation.

The industry representatives stated that the unit commenced its operations in 1997 in an area of 80 acres with about 20 acres of builtup. During the year 2011, the unit has replaced solar evaporation ponds with FE system to handle the concentrates and the unit is not discharging any waste water outside the premises. The unit has dismantled the Solar Evaporation ponds permanently.During the year 2018, the unit upgraded by providing above ground level GFS effluent collection tanks - 500 KLD & 100 KLD and also added 3 TPH Husk fired boiler (1 No.).Presently, the industry has provided ZLD system consisting of biological ETP of capacity -750 KLD followed by, RO (4 Stage) for the treatment of the waste water, followed by MEE, ATFD

The industry representative informed that at present, on request of the surrounding villagers, the unit is paying compensation to 676.5 acres (Rs.10.147 lakhs) every year and also providing drinking water for Gundlapotlapally villagers and also facilitating school transportation.

The committee noted that the villagers are continuously complaining about the pollution being caused by the unit.During the year 1997 to 2003, the unit was discharging pretreated HTDS effluents into lagoons / on-land within the premises.The Board received complaints against the industry in December 2017. During the inspection by the Board officials, the effluents were being discharged outside the premises ultimately joining the nearby DundubiVagu, spillages & stagnated effluents were observed on open land within the premises & industry was not operating STP. The Board issued closure orders to the industry vide order dated 09.12.2017. The Board has also launched prosecution vide CC No. 186/2018 on 26.02.2018 at Hon'ble Court of Judicial Magistrate of 1st class at Jadcherla for indulging in illegal discharge of effluents.

The Board has again received complaints on ground water pollution in the Gundlapotlapally, Agraharam Potla Pally &Rangambaithanda, Rajapur Mandal, Mahabubnagar District causing crop damage & reduction of yield. Based on the complaints, special teams were constituted to collect the samples from the same locations from where samples were collected on 27.05.2003 to ascertain the status of ground water. The teams collected samples from the locations on 04.01.2019. As per the analysis, the parameters are not meeting the drinking water standards. However, the concentration levels decreased compared to the year 2003.

The Board has reviewed in the status and issued extension of revocation of closure orders on vide order dated 22.04.2019 expired on 30.06.2019. The Board has requested the District collector to constitute Multi-disciplinary team to assess the damage and recommend for the crop damage compensation. The committee noted that the District Collector is yet to furnish the report.

The Committee opined that the Board shall collect the samples from the same locations from where samples were collected on 27.05.2003 to ascertain the present status of ground water. The committee after detailed discussions recommended to extend the temporary revocation of closure orders for a further period upto 29.02.2020 with certain conditions. The Committee also recommended that the Board shall collect the samples from the same locations from where samples were collected on 27.05.2003 to ascertain the present status of ground water.

11. After careful consideration of material facts of the case, the Board hereby extend the temporary revocation of closure orders for a period **upto 29.02.2020** with the following conditions:

i. The industry shall comply with all conditions stipulated in the CFO order issued by the Board.

ii. The industry shall dismantle all the below ground level storage tanks except for collection of effluents.

iii. The industry shall ensure that husk & husk ash shall be stored in sheds to avoid dust pollution in the surrounding areas.

iv. The industry shall regularly operate the ZLD system to treat the effluents generated and shall maintain records regarding operation of the system. The same shall be submitted to the Regional Office on monthly basis.

v. The industry shall regularly operate STP for treatment of Domestic effluents. After treatment the treated domestic waste water shall be utilized for onland gardening duly meeting the prescribed standards.

vi. The industry shall regularly lift the solid waste/sludge/Hazardous waste to M/s. TSDF and shall submit the details to EE, RO-Hyderabad.

STP → Cement

vii. The industry shall maintain / provide flow meter before raw effluents collection tank. provided. Digital Meter

viii. The industry shall revalidate the BGs before its expiry till further orders from the Board.

12. The T.S.S.P.D.C.L has been directed to restore the power supply to your industry temporarily for a further period **upto 29.02.2020**.

13. These orders are issued under Section 33(A) of the Water (Prevention and Control of Pollution) Amendment Act, 1988 and under Section 31(A) of the Air (Prevention and Control of Pollution) Amendment Act, 1987.

14. You are hereby directed to note that, should you misuse these orders to operate the unit violating any of the conditions mentioned above, your unit will be closed under section 33(A) of Water (Prevention and Control of Pollution) Amendment Act, 1988 and section 31(A) of the Air (Prevention and Control of Pollution) Amendment Act, 1987. You will also be liable for prosecution in the court of Metropolitan Magistrate or Judicial Magistrate of the first class under section 41(2) of the Water (Prevention and Control of Pollution) Amendment Act, 1988 and under section 37(1) of the Air (Prevention and Control of Pollution) Amendment Act, 1987, the punishment for which includes imprisonment for a term which shall not be less than one year six months and which may be extended to six years with fine.

Sd/-
MEMBER SECRETARY

To
M/s GTN Engineering (India) Limited,
(Unit: Yarn Processing), Sy. Nos. 51,52,53,
Gundlapotlapalli (V), Balanagar (M),
Mahaboobnagar District

Copy to :

1. The District Collector, Mahaboobnagar District for favour of information.
2. The Superintending Engineer (Operations), Rangareddy - South / Greater Hyderabad, TSSPDCL, Mettugadda, Mahabubnagar.
3. The JCEE, ZO, Hyderabad for information and necessary action.
4. The EE, RO-Hyderabad for information and necessary action. The RO shall ensure that the industry extend the BGs before its expiry till further orders from the Board. The RO shall collect the samples from the same locations from where samples were collected on 27.05.2003 to ascertain the present status of ground water
5. Concerned file.

//T.C.F.B.O//

26/12/2019
Senior Environmental Engineer (FAC)
(UH - V)

(63)

ANNEXURE - VII

Annexure - VII

TELANGANA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE: HYDERABAD
4th Floor, PODUPU BHAVAN, Hyderabad Collectorate Complex S.Road, Hyderabad-500 001.
Phone No.:040-23205367, e-mail: ee-hyd-tspcb@telangana.gov.in

Lr. No.2/TSPCB/ROH/MBNR/2020-70 Date:05.06.2020

To
The Member Secretary,
T.S. Pollution Control Board,
Board Office, Sanathnagar,
Hyderabad.

Madam,

Sub: TSPCB - RO - Hyd - M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District- Industry's request for revocation of Closure Order - Report submitted - Reg.

Ref: 1. Board's Closure Order No.MHB-122/TSPCB/U-I/2017-2984, dated 09.12.2017.
2. Board's Extension of Temporary Revocation of Closure Order No.MHB-122/TSPCB/U-I/TF/2019, dated 26.11.2019.
3. Industry request for Permanent Revocation of Closure Order forwarded by the Board Office on 21.05.2020.
4. Inspection of the industry by the Board Officials on 01.06.2020.

***

With reference to 1st cited above, the Board has issued Closure Order to M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District with regard to the Complaint filed by Sri Mohan Naik and others, R/o B.B. Nagar Thanda, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District regarding discharging of effluents by M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District duly directing the EE, RO, Hyderabad to launch prosecution against the industry for the violations. Accordingly, the EE, RO, Hyderabad has launched the prosecution against the industry in the Hon'ble Court of the Hon'ble Judicial Magistrate of First Class at Jadcherla, and the case Registered with C.C.No.186 of 2018. The same was communicated to the Board Office, Hyderabad vide letter 13.06.2018. The case is pending.

It is to submit that, a Hon'ble HRC Case filed vide H.R. Case No.2559/2018 filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District regarding water pollution caused by M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District by this office on 16.08.2018 and also directed to Environmental Engineer to submit report and case is posted on 22.10.2018. This office has submitted status report to the Hon'ble HRC on 01.10.2018. The Case is pending.

Further, it is to submit that the Board Office forwarded complaint filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District against the industry on 27.08.218 regarding ground water pollution and discharge of effluents by M/s. G.T.N. Engineering India Pvt. Ltd. into the Vagu and also the Board Office forwarded the Legal Services Authority letter by enclosing representation filed by Sri J. Ravi Kumar on 17.09.2018 and with a direction to submit a report. This office has submitted detailed report to Board Office (Legal Cell), Hyderabad on 28.09.2018.

The Board office has constituted special teams vide order dated 29.12.2018 to collect the water samples from the surrounding Agriculture Fields / villages of the industry with regard to the complaints against water pollution caused by M/s. GTN

Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District.

Subsequently, the District Collector, Mahaboobnagar District has forwarded Prajavani Petition filed by Sri M. Brahma Chary & Others, r/o Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District regarding ground water pollution. The AEE - I along with Asst. Scientist of this office has inspected the industry and its surroundings on 05.07.2019 and collected Borewell samples and report submitted to the Head Office, Hyderabad on 10.07.2019.

Subsequently, the Board office has addressed a letter to the Collector & District Magistrate, Mahabubnagar District on 17.04.2019 with requesting to constituted a Multi Disciplinary Committee with comprises Revenue, Agriculture, Ground water and TSPCB to carryout assessment of Crop damages, ground water pollution and to fix to a compensation to the affected farmers under "Pay Principle". Accordingly, the Collector & District Magistrate, Mahabubnagar has constituted a Committee. The Committee has inspected the industry and its surrounding areas on 13.08.2019 and 16.08.2019. The Report submitted to the District Collector, Mahabubnagar on 11.09.2019 and Board Office.

The Board has issued Extension of Temporary Revocation of Closure Order to the industry vide order dt:26.11.2019 for period upto 29.02.2020 stipulating certain conditions to comply vide reference 2nd cited.

Vide reference 3rd cited, the industry has submitted a representation, requesting for permanent revocation of Closure Orders.

In this regard, the AEE - I of this office has inspected the industry and its surroundings on 01.06.2020. During inspection, the Board Officials inspected the Dundubhi vagu, which is down-stream of the industry premises. It was observed that, the Vagu is in dry condition, no effluent stagnation was observed. Hence, the samples could not be collected from the Vagu.

On the day of inspection, the industry was in operation. Sri. Gopal Rao Vice President of the industry was present. The industry representative informed that, they have not operated the industry from 23.03.2020 to 19.05.2020 due to lockdown and restarted operations from 20.05.2020. The General & inspection details of the industries are as given below:

- M/s GTN Engineering (India) Limited, (Unit: Yarn Processing) located at Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District and involved in production of Processed Yarn 100 % cotton and Grey Gassed (Unprocessed).
- The industry has obtained CFO of the Board vide order dated 27.01.2017for production of Processed Yarn 100 % cotton - 120 TPM and Grey Gassed (Unprocessed) - 60 TPM which is valid upto 31.12.2021. The industry has submitted production details from the period from November, 2019 to April, 2020.
- As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) - 421.93 Tons i.e. an average of 84.38 TPM against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) - 125.5 Tons i.e. an average of 25.1 TPM against the permitted capacity of 60 TPM during the from November, 2019 to March, 2020.

(65)

- The industry has obtained Amendment of CFO order on 19.04.2018 for the disposal of the effluents as given below:

Outlets for discharge of effluents:

Outlet No	Outlet Description	Max Daily Discharge	Point of Disposal	Parameter Limiting Standards
1.	Process & Washings	660 KLD	Shall be treat the effluents of 752 KLD in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD), The RO rejects (92 KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE) 4 Kl/day of mother liquor generated from ME operations shall be disposed to M/s IL & FS Environmental Infrastructure and Services Ltd.,	pH - 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 30.0 mg /l
2.	Process & Washings	90 KLD		
3.	Boiler Blow Down	2 KLD		
4.	Domestic	84 KLD	After treatment in STP, shall be used for on land application/ irrigation within the factory premises.	pH - 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 100.0 mg /l

- Further, the industry has obtained CFO Expansion of the Board vide order dated 12.06.2018 for installation of 1 x 3 TPH husk fired boiler with validity upto 31.12.2021.
- The industry consumes water for Process & washing effluents, Boiler feed, Cooling, Gardening and domestic purposes. The industry has consumed an average of 390.04 KLD against the permitted capacity of 1040 KLD during the period from November, 2019 to March, 2020.
- The industry generates wastewater of about 836.0 KLD from Process & Washings - 750 KLD, Boiler Blow Down - 2 KLD and Domestic - 84 KLD.
- The industry has provided above ground level GFS tanks - 1 x 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also using existing below ground level raw effluent collection tank for collection of effluents and pumping to above ground level GFS tank for final storage.
- The industry has installed Digital water flow meter to the Raw effluent collection tank and maintaining records.

(66)

The com condition

- The industry has provided ZLD system consisting of biological ETP of capacity -750 KLD followed by, RO (4 Stage) for the treatment of the waste water, followed by MEE, ATFD.
- During the inspection, ETP, RO, MEE and ATFD were in operation.
- The biological ETP consisting of Equalization/Stabilization Tank, Reaction Tank, Primary settling tanks - (DECANTER /MONOBELT), Supernatant tank, Aeration tank, Secondary clarifier, Natural pond (oxidation), Pressure sand filter, Sand filter, Cartridge filter < 10, Ultra filtration/ Nano filtration. Reverse Osmosis, MEE/ Triple Effective Forced Circulation Evaporation System(TEFCES)-100 KLD followed by ATFD - 4 KLD. The RO permeate, MEE condensate and ATFD condensate is reusing into the process / utilities. The resultant ATFD salt is lifted to M/s TSDF.
- The samples were collected from Inlet of ETP, Outlet of ETP (RO Feed), RO permeate, RO Reject (MEE Feed), MEE Reject (ATFD feed), MEE condensate and ATFD condensate and submitted to the Central Laboratory for analysis. The results are awaited.
- As per the records submitted by the industry, during the period from November, 2019 to March, 2020 the industry has evaporated total 1025 KL in the MEE followed by ATFD.
- The industry has provided STP of capacity 80 KLD for treatment of Domestic effluents. After treatment the treated domestic waste water is being utilized for onland gardening. The wastewater samples collected from Inlet STP and Outlet of STP used for Onland gardening and submitted at Central Laboratory for analysis. The results are awaited.
- The industry has installed 2 Nos. of Husk fired boilers of capacities 6 TPH & 3 TPH respectively for which industry has provided individual separate dust collector followed by Bag filters to each boiler as APCEs to control boiler emissions. The industry has provided individual separate chimneys of height 30 Mtrs. to each boiler for dispersion of flue gases.
- The industry has Thermic fluid heater of capacity 1 x 15 Lakh Kcal/hr.
- The industry has provided individual closed sheds for storage of husk and husk ash. The industry has closed the openings of the sheds with G.I. Sheets.
- The industry generates solid / Hazardous waste such as ETP Sludge - 1 TPD, Used oil / waste oil - 200 LPA, Boiler ash - 0.5 TPD and Lead Acid Batteries - 8 nos/annum.
- The industry has obtained Membership from M/s TSDF, Dundigal for disposal of Hazardous waste. The industry is being lifted ETP sludge to M/s. TSDF / Cement industries, used / waste oil. During the period from i.e. from November, 2019 to March, 2020, the industry has lifted total ETP Sludge of 242.47 Tons (141.51 Tons to M/s. Enviro Waste Management Services, 100.92 Tons to TSDF) and ATFD salts of 247 Tons to TSDF. The industry has stored about 2 Tons of ETP Sludge, 10 Tons of MEE salts within the premises.
- The industry Board Officials inspected the compound wall near the Vagu. The industry has closed the openings of the compound wall. No discharge of effluents was observed outside the industry premises.

The compliance on the Temporary Revocation of Closure Order dated 26.11.2019 conditions are as below:

S. No.	Conditions of Temporary Revocation of Closure Order dated 26.11.2019	Compliance Status
1.	The industry shall comply with all conditions stipulated in the CFO order issued by the Board.	The conditions wise compliance status is reported below.
2.	The industry shall dismantle all the below ground level storage tanks except for collection of effluents.	The industry is collecting raw effluent in existing below ground level collection tank from there pumping to above ground level GFS tanks - 100 KL & 500 KL capacities for final storage.
3.	The industry shall ensure that husk & husk ash shall be stored in sheds to avoid dust pollution in the surrounding areas.	The industry has provided individual closed sheds for storage of husk and husk ash.
4.	The industry shall regularly operate the ZLD system to treat the effluents generated and shall maintain records regarding operation of the system. The same shall be submitted to the Regional Office on monthly basis.	Complied.
5.	The industry shall regularly operate STP for treatment of Domestic effluents. After treatment the treated domestic waste water shall be utilized for onland gardening duly meeting the prescribed standards.	The industry treating domestic wastewater in STP. The treated domestic wastewater is used for onland for gardening within the premises. The wastewater samples collected from Inlet STP and Outlet of STP used for Onland gardening and submitted at Central Laboratory for analysis. The results are awaited.
6.	The industry shall regularly lift the solid waste/sludge/Hazardous waste to M/s. TSDF and shall submit the details to EE, RO-Hyderabad.	The industry is lifting Hazardous waste to TSDF regularly and maintaining the records.
7.	The industry shall maintain / provide flow meter before raw effluents collection tank.	The industry has installed Digital water flow meter to the Raw effluent collection tank and maintaining records.
8.	The industry shall revalidate the BGs before its expiry till further orders from the Board.	The industry has submitted BG of Rs. 16 Lakhs for period upto 09.02.2021.

The condition wise compliance of Schedule – B of CFO Order dated 27.01.2017 are as follows:

S. No.	Condition	Compliance
1.	The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below	The water consumption is within the permitted capacity. The industry

	<table><tr><th>Sl No</th><th>Purpose</th><th>Quantity</th></tr><tr><td>1.</td><td>Process & washing effluents</td><td>660.0 KLD</td></tr><tr><td>2.</td><td>Process & washes</td><td>90.0 KLD</td></tr><tr><td>3.</td><td>Boiler feed</td><td>50.0 KLD</td></tr><tr><td>4.</td><td>Cooling (makeup / humidification / water spraying)</td><td>35.0 KLD</td></tr><tr><td>5.</td><td>Gardening</td><td>100.0 KLD</td></tr><tr><td>6.</td><td>Domestic</td><td>105.0 KLD</td></tr><tr><td></td><td>TOTAL</td><td>1040.0 KLD</td></tr></table>	consumes water for Process & washing effluents, Boiler feed, Cooling, Gardening and domestic purposes. The industry has consumed an average of 390.04 KLD against the permitted capacity of 1040 KLD during the period from November, 2019 to March, 2020.
2.	The industry shall file the water Cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water Cess as per the assessment orders as and when issued by Board.	-
3.	The industry shall comply with all the Rules and Regulations specified in Water (P&C of P) Act, 1974, Air (P&C of P) Act, 1981 and Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and their amendments issued thereof.	Directed to comply
4.	The industry should comply with the National ambient air quality standards as per MoEF, GoI notification dated. 18.11.2009 along the premises of the factory as prescribed below <table><tr><th>S. No.</th><th>Parameters</th><th>Standards in $\mu g/m^3$;</th></tr><tr><td>1</td><td>Particulate Matter (PM_{10})</td><td>100</td></tr><tr><td>2</td><td>Particulate Matter (PM_{25})</td><td>60</td></tr><tr><td>3</td><td>SO_2</td><td>80</td></tr><tr><td>4</td><td>NOx</td><td>80</td></tr></table>**Noise Levels**: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A).	Directed to comply
5.	The industry shall not manufacture new products / increase the capacity beyond the permitted capacity mentioned in this consent order, without obtaining CFE/CFO of the Board.	As per production records submitted by the industry, the industry is manufacturing consent products within the consented capacity. As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) - 421.93 Tons i.e. an average of 84.38 TPM against the permitted capacity of

		120 TPM and Grey Gassed (Unprocessed) – 125.5 Tons i.e. an average of 25.1 TPM against the permitted capacity of 60 TPM during the from November, 2019 to March, 2020.
6.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE).	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD and ATFD of capacity 4 KLD. The Ro reject evaporated in the MEE and RO permeate is reusing into the process. The resultant MEE salt is lifted to M/s TSDF for secure land fill.
7.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry has installed energy meter to the ETP and APCE and maintaining the records.
8.	The industry shall regularly operate air pollution control equipment i.e., bag filter provided to the 5 TPH coal / husk fired boiler and shall meet the emission standards of the Board i.e., SPM – 115mg/Nm^3.	The industry has provided separate air pollution control equipments i.e. dust collector followed by bag filters to control air pollution.
9.	The industry shall collect the hazardous waste i.e., ETP Sludge and MEE Salts properly and shall send the waste to M/s. HWMP (TSDF), Dundigal for safe disposal.	The industry is a member unit of M/s TSDF and disposing ETP sludge and MEE salts to TSDF regularly.
10.	The industry shall not discharge any waste water to outside the factory premises.	During inspection, no wastewater discharges were observed outside the premises.
11.	The industry shall not cause any air pollution / odour nuisance to the surrounding environment	The industry has provided cyclone dust collector followed by Bag filter to the Boiler to control air pollution.
12.	The industry shall develop 33% of the total area as thick green belt all along the boundary of the unit and also in the vacant places with all tall growing trees with wide leaf area.	The industry has developed green belt in an area of 5 Acres.
13.	The industry shall maintain good housekeeping in the factory premises.	The industry maintaining good housekeeping.
14.	The industry should maintain the following records and the same should be made available to the Board	The industry is maintaining the records

	Officials during the inspection. a) Daily production details, RG-I records and Central Excise Returns. b) Quantity of trade effluents generated, treated in ETP, reused and force evaporated c) Quantity of domestic effluents generated, treated in STP, reused and forced evaporated d) Log Books for pollution control systems. e) Daily solid waste generated and details of the disposal.	pertaining to the production, water consumption, wastewater generation and solid waste generation and its disposal.
15.	The industry shall submit Environmental Statement in Form V before 30th September every year as per Rule No.14 of Environmental (Protection) Act, 1986.	--
16.	The industry shall take necessary measures to control fugitive emissions.	Directed to comply
17.	The industry shall take all precautionary and safety measures during process operations.	--
18.	The industry shall comply with the ambient air quality standards in respect of noise, as stipulated in the Environment (Protection) Rules, 1986.	--
19.	The industry shall construct separate rain water drains.	The industry has provided separate rain water drains.
20.	The industry shall comply with all the directions issued by the Board from time to time.	The Board has issued Extension of Temporary Revocation of Closure orders latest vide order dated 26.11.2019 for a period upto 29.02.2020.
21.	Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts.	--
22.	The Board reserves its right to modify above conditions or stipulate any further conditions in the interest of environment protection.	--
23.	The conditions are without prejudice to the rights and contentions of this Board in any Hon'ble Court of Law.	--

Special Conditions of CFO amendment order dated: 19.04.2018:

Sl No	Conditions	Compliance
1.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE). The industry shall	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD followed by ATFD. The outlet of ETP is sent to 4 stage RO System. The RO Rejects is further sent to MEE followed by ATFD for evaporation. The RO permeate, MEE condensate and ATFD condensate is reusing into the

	dispose 4 KL /day of mother liquor generated from ME Operations to M/s IL & FS Environmental Infrastructure and Services Ltd duly meeting the inlet standards of CETP prescribed by the Board for a period of One year from date of issue of this order.	process / utilities. The resultant ATFD salt is lifted to M/s TSDF.
2.	The industry shall obtain membership from M/s IL & FS, Environmental Infrastructure and Services Ltd. For disposal of effluents.	The Industry has lifted mother liquor to M/s IL & FS, Environmental Infrastructure and Services Ltd July, 2018. Presently, they have installed ATFD and operating the same from August, 2018. The industry has submitted representation for amendment of CFO for ZLD system. The report was submitted to the Zonal Office, Hyderabad and it is under process.
3.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry has installed separate energy meter records pertaining to the ETP & APCE and maintaining log registers.
4.	The industry shall have minimum of 7 days storage capacity of effluents on above ground level, with-in-the premies.	The industry has provided above ground level GFS tanks - 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also having below ground level raw effluents collection tank of capacity 500 KL.

In view of the above, the issue of revocation of closure order to the industry may be placed before Task Force Committee for taking suitable decision.

This is submitted for kind information and necessary action.

Yours faithfully

Encl: As above

ENVIRONMENTAL ENGINEER

Copy submitted to:

1. The Joint Chief Environmental Engineer, TSPCB, Zonal Office - Hyd, Begumpet, Hyderabad for kind information.
2. The Senior Environmental Engineer (UH-II), TSPCB, Board Office, Sanathnagar, Hyderabad for kind information and necessary action.

(72)

ANNEXURE - VIII

Annexure-VIII

TELANGANA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE: HYDERABAD
4th Floor, PODUPU BHAVAN, Hyderabad Collectorate Complex NS.Road, Hyderabad-500 001.
Phone No.:040-23205367, e-mail: ee-hyd-tspcb@telangana.gov.in

Lr. No.2/TSPCB/ROH/MBNR/2020- 1170 Date:07.12.2020.

To
The Member Secretary,
T.S. Pollution Control Board,
Board Office, Sanathnagar,
Hyderabad.

Madam,

Sub: TSPCB - RO - Hyd - M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District- Latest status report - Submitted - Reg.

Ref:
1. Board's Closure Order No.MHB-122/TSPCB/U-I/2017-2984, dated 09.12.2017.
2. Board's Extension of Temporary Revocation of Closure Order No.MHB-122/TSPCB/U-I/TF/2019, dated 26.11.2019.
3. Inspection of the industry by the Board Officials on 01.06.2020.
4. T.O. Report forwarding the request of industry for extension of Temporary Revocation of Closure Orders dated 05.06.2020.
5. Board Office mail dated 04.11.2020.
6. A complaint was filed through Prajavani by Sri Syed Jainulabuddin r/o Agraharam, Potlapally and other villagers regarding pollution being caused by the industry on 02.03.2020.
7. Board Office mail dated 26.11.2020 forwarding the complaint dated 03.06.2019 against the industry.
8. Inspection of the industry by the Board Officials on 27.11.2020.

***

With reference to 1st cited above, the Board has issued Closure Order to M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District with regard to the Complaint filed by Sri Mohan Naik and others, R/o B.B. Nagar Thanda, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District regarding discharging of effluents by the industry. The Board office has directed the EE, RO, Hyderabad to launch prosecution against the industry for the violations. Accordingly, the EE, RO, Hyderabad has launched the prosecution against the industry in the Hon'ble Court of the Hon'ble Judicial Magistrate of First Class at Jadcherla, and the case Registered with C.C.No.186 of 2018. The same was communicated to the Board Office, Hyderabad vide letter 13.06.2018. The case is pending.

It is to submit that, this office has received a Hon'ble HRC Case filed vide H.R. Case No.2559/2018 filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District regarding the water pollution caused by M/s GTN Engineering (India) Limited on 16.08.2018 and directed the Environmental Engineer to submit report and case was posted on 22.10.2018. This office has submitted status report to the Hon'ble HRC on 01.10.2018. The case is pending.

Further, it is to submit that the Board Office forwarded complaint filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District against the industry on 27.08.218 regarding ground water pollution and discharge of effluents by M/s. G.T.N. Engineering India Pvt. Ltd. into the Vagu and also the Board Office forwarded the Legal Services Authority letter by enclosing representation filed by Sri J. Ravi Kumar on 17.09.2018 and with a direction to submit a report. This office has submitted detailed report to Board Office (Legal Cell), Hyderabad on 28.09.2018.

The Board office has constituted special teams vide order dated 29.12.2018 to collect the water samples from the surrounding Agriculture Fields / villages of the industry with regard to the complaints against water pollution caused by M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District.

Subsequently, the District Collector, Mahaboobnagar District has forwarded Prajavani Petition filed by Sri M. Brahma Chary & Others, r/o Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District regarding ground water pollution. The AEE - I along with Asst. Scientist of this office has inspected the industry and its surroundings on 05.07.2019 and collected Borewell samples and report submitted to the Head Office, Hyderabad on 10.07.2019.

Subsequently, the Board office has addressed a letter to the Collector & District Magistrate, Mahabubnagar District on 17.04.2019 with requesting to constituted a Multi Disciplinary Committee with comprises Revenue, Agriculture, Ground water and TSPCB to carryout assessment of Crop damages, ground water pollution and to fix to a compensation to the affected farmers under "Pay Principle". Accordingly, the Collector & District Magistrate, Mahabubnagar has constituted a Committee. The Committee has inspected the industry and its surrounding areas on 13.08.2019 and 16.08.2019. The Report submitted to the District Collector, Mahabubnagar on 11.09.2019 and Board Office.

The Board has issued Extension of Temporary Revocation of Closure Order to the industry vide order dt:26.11.2019 for period upto 29.02.2020 stipulating certain conditions to comply vide reference 2nd cited.

Vide reference 3rd cited, the AEE - I of this office has inspected the industry and its surroundings on 01.06.2020. During inspection, the Board Officials inspected the Dundubhi vagu, which is down-stream of the industry premises. It was observed that, the Vagu is in dry condition, no effluent stagnation was observed. It was observed that, the Vagu is in dry condition, no effluent stagnation was observed. Hence, the samples could not be collected from the Vagu.

Subsequently, a report was forwarded to Board Office informing the status and observations vide reference 4th cited.

Vide reference 5th cited above, a mail was received from the Board Office directing to submit the latest status reports of certain industries for further review and for taking necessary action. M/s GTN Engineering (India) Limited (Unit: Yarn Processing) is one amongst them.

Vide reference 6th cited, a complaint was filed through Prajavani by Sri Syed Jainulabuddin r/o Agraharam, Potlapally and other villagers regarding water pollution being caused by the industry.

Vide reference 7th cited, the a mail received from the SEE (TF), Board Office, Hyderabad forwarding complaint filed by Sri Nandeshwar Reddy r/o Gundlapotlapally.

In this regard, the AEE - I and Asst. Scientist of this office have attended the complaint on 27.11.2020. The Board officials have contacted complainant through mobile. He informed that, a person will accompany for showing their problems. But, no person has met the Board officials to inform about their pollution problems due to industry and surroundings.

However, the Board Officials have inspected the industry. During inspection the industry was in operation. Sri Durga Prasad, Plant operations Head was present. The General & inspection details of the industries are as given below:

- M/s GTN Engineering (India) Limited, (Unit: Yarn Processing) located at Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District which is involved in production of Processed Yarn 100 % cotton and Grey Gassed (Unprocessed).
- The industry has obtained CFO of the Board vide order dated 27.01.2017for production of Processed Yarn 100 % cotton – 120 TPM and Grey Gassed (Unprocessed) – 60 TPM which is valid upto 31.12.2021. The industry has submitted production details from the period from November, 2019 to October, 2020.
- As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) – 764.61 Tons i.e. an average of 69.51 TPM against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) – 190.84 Tons i.e. an average of 17.35 TPM against the permitted capacity of 60 TPM during the from November, 2019 to October, 2020.
- The industry has obtained Amendment of CFO order on 19.04.2018 for the disposal of the effluents as given below:

Outlets for discharge of effluents:

Outlet No	Outlet Description	Max Daily Discharge	Point of Disposal	Parameter Limiting Standards
1.	Process & Washings	660 KLD	Shall be treat the effluents of 752 KLD in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD), The RO rejects (92 KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE) 4 Kl/day of mother liquor generated from ME operations shall be disposed to M/s IL & FS Environmental Infrastructure and Services Ltd.,	pH – 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 30.0 mg /l
2.	Process & Washings	90 KLD		
3.	Boiler Blow Down	2 KLD		
4.	Domestic	84 KLD	After treatment in STP, shall be used for on land application/ irrigation within the factory premises.	pH – 5.5-9.0, Total Suspended Solids - 200.0 mg /l, Oil & Grease - 10.0 mg /l & Biochemical Oxygen Demand (3 days at 270 C) - 100.0 mg /l

- Further, the industry has obtained CFO Expansion of the Board vide orde[illegible] dated 12.06.2018 for installation of 1 x 3 TPH husk fired boiler with validity upto 31.12.2021.
- As per the details submitted by the industry from the period from November, 2019 to October, 2020, the industry's water consumption is an average of 327 KLD against the permitted capacity of 1040 KLD.
- As per the details submitted by the industry from the period from November, 2019 to October, 2020, the industry has generated wastewater of about 123 KLD from Process & Washings - 149 KLD, Boiler Blow Down - 2 KLD and Domestic - 52 KLD.
- The industry has provided above ground level GFS tanks - 1 x 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also using existing below ground level raw effluent collection tank for collection of effluents and pumping to above ground level GFS tank for final storage.
- The industry has installed Digital water flow meter to the Raw effluent collection tank and maintaining records.
- The industry has provided ZLD system consisting of biological ETP of capacity -750 KLD followed by, RO (4 Stage) for the treatment of the waste water, followed by MEE, ATFD.
- During the inspection, ETP, RO, MEE and ATFD were in operation.
- The biological ETP consisting of Equalization/Stabilization Tank, Reaction Tank, Primary settling tanks - (DECANTER /MONOBELT), Supernatant tank, Aeration tank, Secondary clarifier, Natural pond (oxidation), Pressure sand filter, Sand filter, Cartridge filter < 10, Ultra filtration/ Nano filtration. Reverse Osmosis, MEE/ Triple Effective Forced Circulation Evaporation System(TEFCES)-100 KLD followed by ATFD - 4 KLD. The RO permeate, MEE condensate and ATFD condensate is reusing into the process / utilities. The resultant ATFD salt is lifted to M/s TSDF.
- The samples were collected from i) Inlet of ETP, ii) Outlet of ETP (RO Feed), iii) MEE Feed iv) MEE concentrate v) RO permeate vi) RO Rejects vii) MEE Condensate viii) ATFD Concentrate ix) STP Inlet and x) STP outlet and submitted to the Central Laboratory for analysis. The results are awaited.
- As per the records submitted by the industry, during the period from November, 2019 to October, 2020 the industry has evaporated total 9513 KL in the MEE followed by ATFD.
- The industry has provided STP of capacity 80 KLD for treatment of Domestic effluents. After treatment the treated domestic waste water is being utilized for onland gardening. The stagnated water sample collected from Potlapallivagu(Dundubhi) used for Agriculture and submitted at Central Laboratory for analysis. The results are awaited.
- The industry has installed 2 Nos. of Husk fired boilers of capacities 6 TPH & 3 TPH respectively for which industry has provided individual separate dust collector followed by Bag filters to each boiler as APCEs to control boiler emissions. The industry has provided individual separate chimneys of height 30 Mtrs. to each boiler for dispersion of flue gases.
- The industry has Thermic fluid heater of capacity 1 x 15 Lakh Kcal/hr.

- The industry has provided individual closed sheds for storage of husk and husk ash. The industry has closed the openings of the sheds with G.I. Sheets.
- The industry generates solid / Hazardous waste such as ETP Sludge - 1 TPD, Used oil / waste oil - 200 LPA, Boiler ash - 0.5 TPD and Lead Acid Batteries - 8 nos/annum.
- The industry has obtained Membership from M/s TSDF, Dundigal for disposal of Hazardous waste. The industry is being lifted ETP sludge to M/s. TSDF / Cement industries, used / waste oil. During the period from i.e. from November, 2019 to October, 2020, the industry has lifted total ETP Sludge of 454.4 Tons (353.44 Tons to M/s. Enviro Waste Management Services, 100.96 Tons to TSDF) and ATFD salts of 296.19 Tons to TSDF. The industry has stored about 15 Tons of ETP Sludge, 4 Tons of MEE salts within the premises.
- The Board Officials inspected the compound wall near the Dundubhi Vagu which is down-stream of the industry premises. The industry has closed the openings of the compound wall. No discharge of effluents was observed outside the industry premises. It was observed that, the Vagu was flowing. Flowing water sample collected from Potlapalli vagu (Dundubhi) and submitted to Central Laboratory for analysis. The analysis reports are awaited.

The compliance on the Temporary Revocation of Closure Order dated 26.11.2019 conditions are as below:

S. No.	Conditions of Temporary Revocation of Closure Order dated 26.11.2019	Compliance Status
1.	The industry shall comply with all conditions stipulated in the CFO order issued by the Board.	The conditions wise compliance status is reported below.
2.	The industry shall dismantle all the below ground level storage tanks except for collection of effluents.	The industry is collecting raw effluent in existing below ground level collection tank from there pumping to above ground level GFS tanks - 100 KL & 500 KL capacities for final storage.
3.	The industry shall ensure that husk & husk ash shall be stored in sheds to avoid dust pollution in the surrounding areas.	The industry has provided individual closed sheds for storage of husk and husk ash.
4.	The industry shall regularly operate the ZLD system to treat the effluents generated and shall maintain records regarding operation of the system. The same shall be submitted to the Regional Office on monthly basis.	Complied.
5.	The industry shall regularly operate STP for treatment of Domestic effluents. After treatment the treated domestic waste water shall be utilized for onland gardening duly meeting the prescribed standards.	The industry treating domestic wastewater in STP. The treated domestic wastewater is used for onland for gardening within the premises. The wastewater samples collected from Inlet STP and Outlet of STP used for

		Onland gardening and submitted at Central Laboratory for analysis. The results are awaited.
6.	The industry shall regularly lift the solid waste/sludge/Hazardous waste to M/s. TSDF and shall submit the details to EE, RO-Hyderabad.	The industry is lifting Hazardous waste to TSDF regularly and maintaining the records. During the period from i.e. from November, 2019 to October, 2020, the industry has lifted total ETP Sludge of 454.4 Tons (353.44 Tons to M/s. Enviro Waste Management Services, 100.96 Tons to TSDF) and ATFD salts of 296.19 Tons to TSDF. The industry has stored about 15 Tons of ETP Sludge, 4 Tons of MEE salts within the premises.
7.	The industry shall maintain / provide flow meter before raw effluents collection tank.	The industry has installed Digital water flow meter to the Raw effluent collection tank and maintaining records.
8.	The industry shall revalidate the BGs before its expiry till further orders from the Board.	The industry has submitted BG of Rs. 16 Lakhs for period upto 09.02.2021.

The condition wise compliance of Schedule – B of CFO Order dated 27.01.2017 are as follows:

<table>
<tr><th>S. No.</th><th>Condition</th><th>Compliance</th></tr>
<tr><td>1.</td><td>The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below
<table>
<tr><th>Sl No</th><th>Purpose</th><th>Quantity</th></tr>
<tr><td>1.</td><td>Process & washing effluents</td><td>660.0 KLD</td></tr>
<tr><td>2.</td><td>Process & washes</td><td>90.0 KLD</td></tr>
<tr><td>3.</td><td>Boiler feed</td><td>50.0 KLD</td></tr>
<tr><td>4.</td><td>Cooling (makeup / humidification / water spraying)</td><td>35.0 KLD</td></tr>
<tr><td>5.</td><td>Gardening</td><td>100.0 KLD</td></tr>
<tr><td>6.</td><td>Domestic</td><td>105.0 KLD</td></tr>
<tr><td></td><td>TOTAL</td><td>1040.0 KLD</td></tr>
</table></td><td>The water consumption is within the permitted capacity. The industry consumes water for Process & washing effluents, Boiler feed, Cooling, Gardening and domestic purposes. The industry has consumed an average of 327 KLD against the permitted capacity of 1040 KLD during the period from November, 2019 to October, 2020.</td></tr>
<tr><td>2.</td><td>The industry shall file the water Cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water Cess as per the assessment orders as and when issued by Board.</td><td>-</td></tr>
</table>

	The industry shall comply with all the Rules and Regulations specified in Water (P&C of P) Act, 1974, Air (P&C of P) Act, 1981 and Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and their amendments issued thereof.	Directed to comply
4.	The industry should comply with the National ambient air quality standards as per MoEF, GoI notification dated. 18.11.2009 along the premises of the factory as prescribed below. S. No. / Parameters / Standards in $\mu g/m^3$; 1 / Particulate Matter (PM_{10}) / 100 2 / Particulate Matter ($PM_{2.5}$) / 60 3 / SO_2 / 80 4 / NOx / 80 Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A).	Directed to comply
5.	The industry shall not manufacture new products / increase the capacity beyond the permitted capacity mentioned in this consent order, without obtaining CFE/CFO of the Board.	The industry has submitted production details from the period from November, 2019 to October, 2020. As per the production records, the industry has manufactured Processed Yarn (100 % Cotton) - 764.61 Tons i.e. an average of 69.51 TPM against the permitted capacity of 120 TPM and Grey Gassed (Unprocessed) - 190.84 Tons i.e. an average of 17.35 TPM against the permitted capacity of 60 TPM during the from November, 2019 to October, 2020.
6.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE).	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD and ATFD of capacity 4 KLD. The Ro reject evaporated in the MEE and RO permeate is reusing into the process. The resultant MEE salt is lifted to M/s TSDF for secure land fill.

7.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry has installed energy meter to the ETP and APCE and maintaining the records.
8.	The industry shall regularly operate air pollution control equipment i.e., bag filter provided to the 5 TPH coal / husk fired boiler and shall meet the emission standards of the Board i.e., SPM - 115mg/Nm^3.	The industry has provided separate air pollution control equipments i.e. dust collector followed by bag filters to control air pollution.
9.	The industry shall collect the hazardous waste i.e., ETP Sludge and MEE Salts properly and shall send the waste to M/s. HWMP (TSDF), Dundigal for safe disposal.	The industry is a member unit of M/s TSDF and disposing ETP sludge and MEE salts to TSDF regularly.
10.	The industry shall not discharge any waste water to outside the factory premises.	During inspection, no wastewater discharges were observed outside the premises.
11.	The industry shall not cause any air pollution / odour nuisance to the surrounding environment	The industry has provided cyclone dust collector followed by Bag filter to the Boiler to control air pollution.
12.	The industry shall develop 33% of the total area as thick green belt all along the boundary of the unit and also in the vacant places with all tall growing trees with wide leaf area.	The industry has developed green belt in an area of 5 Acres.
13.	The industry shall maintain good housekeeping in the factory premises.	The industry maintaining good housekeeping.
14.	The industry should maintain the following records and the same should be made available to the Board Officials during the inspection. a) Daily production details, RG-I records and Central Excise Returns. b) Quantity of trade effluents generated, treated in ETP, reused and force evaporated c) Quantity of domestic effluents generated, treated in STP, reused and forced evaporated d) Log Books for pollution control systems. e) Daily solid waste generated and details of the disposal.	The industry is maintaining the records pertaining to the production, water consumption, wastewater generation and solid waste generation and its disposal.
15.	The industry shall submit Environmental Statement in Form V before 30th September every year as per Rule No.14 of Environmental (Protection) Act, 1986.	--
16.	The industry shall take necessary measures to control fugitive emissions.	Directed to comply
17.	The industry shall take all precautionary and safety measures during process operations.	--

	The industry shall comply with the ambient air quality standards in respect of noise, as stipulated in the Environment (Protection) Rules, 1986.	--
19	The industry shall construct separate rain water drains.	The industry has provided separate rain water drains.
20.	The industry shall comply with all the directions issued by the Board from time to time.	The Board has issued Extension of Temporary Revocation of Closure orders latest vide order dated 26.11.2019 for a period upto 29.02.2020. Subsequently, the industry has applied for Extension of Temporary Revocation of Closure Orders and report was forwarded to Board Office, Hyderabad on 05.06.2020.
21.	Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts.	--
22.	The Board reserves its right to modify above conditions or stipulate any further conditions in the interest of environment protection.	--
23.	The conditions are without prejudice to the rights and contentions of this Board in any Hon'ble Court of Law.	--

Special Conditions of CFO amendment order dated: 19.04.2018:

Sl No	Conditions	Compliance
1.	The industry shall treat the effluents (752 KLD) in the ETP and the treated effluents shall be further treated through Reverse Osmosis (RO) Plant and the RO Permeate shall be recycled back into the process (660 KLD). The RO rejects (92KLD) shall be evaporated in Multiple Effect Evaporator (MEE) / Triple Effect Evaporator (TEE). The industry shall dispose 4 KL /day of mother liquor generated from ME Operations to M/s IL & FS Environmental Infrastructure and Services Ltd duly meeting the inlet standards of CETP prescribed by the Board for a period of One year from date of issue of this order.	The industry has ETP of capacity 750 KLD followed 4 stage of RO system, MEE of capacity 100 KLD followed by ATFD. The outlet of ETP is sent to 4 stage RO System. The RO Rejects is further sent to MEE followed by ATFD for evaporation. The RO permeate, MEE condensate and ATFD condensate is reusing into the process / utilities. The resultant ATFD salt is lifted to M/s TSDF.

(81)

2.	The industry shall obtain membership from M/s IL & FS, Environmental Infrastructure and Services Ltd. For disposal of effluents.	The Industry has lifted mother liquor to M/s IL & FS, Environmental Infrastructure and Services Ltd till July, 2018. Presently, they have installed ATFD and operating from August, 2018. The industry has submitted representation for amendment of CFO for ZLD system. The report was submitted to the Zonal Office, Hyderabad.
3.	The industry shall operate the energy meter installed to the ETP, RO Plant, MEE, Air pollution control equipment installed to the boiler and maintain the log registers.	The industry has installed separate energy meter to the ETP, RO Plant, MEE & APCE and they are maintaining log registers.
4.	The industry shall have minimum of 7 days storage capacity of effluents on above ground level, with-in-the premises.	The industry has provided above ground level GFS tanks - 500 KL, 1 x 100 KL capacity for storage of effluents. The industry is also having below ground level raw effluents collection tank of capacity 500 KL.

Submitted for kind information and necessary action.

Yours faithfully

Encl: As above

ENVIRONMENTAL ENGINEER

Copy submitted to:

1. The Joint Chief Environmental Engineer, TSPCB, Zonal Office - Hyd, Begumpet, Hyderabad for kind information.
2. The Senior Environmental Engineer (UH-II, TF), TSPCB, Board Office, Sanathnagar, Hyderabad for kind information and necessary action.

(82) ANNEXURE- IX

Annexure-IX

TELANGANA STATE POLLUTION CONTROL BOARD
REGIONAL OFFICE: HYDERABAD
4th Floor, PODUPU BHAVAN, Hyderabad Collectorate Complex S.Road, Hyderabad-500 001.
Phone No.:040-23205367, e-mail: ee-hyd-tspcb@telangana.gov.in

Lr. No.2/TSPCB/ROH/MBNR/2021- 505 **Date:20.10.2021.**

To
The Member Secretary,
T.S. Pollution Control Board,
Board Office, Sanathnagar,
Hyderabad.

Madam,

Sub: TSPCB – RO – Hyd Complaint filed by Sri D. Nagaraju r/o Guntlapotlapally, Rajapur (M), Mahabubnagar District against M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District regarding water pollution caused by the industry – Report submitted - Reg.

Ref:
1. Complaint filed by Sri D. Nagaraju r/o Gundlapotlapally received on 12.08.2021.
2. The Board Officials inspected the industry on 06.09.2021.
3. Analysis reports received on 07.10.2021.

* * *

It is to submit that, the Board has issued Closure Order to M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District with regard to the Complaint filed by Sri Mohan Naik and others, R/o B.B. Nagar Thanda, Gundlapotlapally (V), Rajpur (M), Mahaboobnagar District regarding discharging of effluents by the industry vide order dated 09.12.2017. The Board office has directed the EE, RO, Hyderabad to launch prosecution against the industry for the violations. Accordingly, the EE, RO, Hyderabad has launched the prosecution against the industry in the Hon'ble Court of the Hon'ble Judicial Magistrate of First Class at Jadcherla, and the case Registered with C.C.No.186 of 2018. The same was communicated to the Board Office, Hyderabad vide letter 13.06.2018. The case is pending.

Further, it is to submit that, this office has received a Hon'ble HRC Case filed vide H.R. Case No.2559/2018 filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District regarding the water pollution caused by M/s GTN Engineering (India) Limited on 16.08.2018 and directed the Environmental Engineer to submit report and case was posted on 22.10.2018. This office has submitted status report to the Hon'ble HRC on 01.10.2018. The case is pending.

The Board Office forwarded complaint filed by Sri Jatavath Ravi Kumar, Rangam Bhavi Thanda, Rajapur (M), Mahaboobnagar District against the industry on 27.08.218 regarding ground water pollution and discharge of effluents by M/s. G.T.N. Engineering India Pvt. Ltd. into the Vagu and also the Board Office forwarded the Legal Services Authority letter by enclosing representation filed by Sri J. Ravi Kumar on 17.09.2018 and with a direction to submit a report. This office has submitted detailed report to Board Office (Legal Cell), Hyderabad on 28.09.2018.

The Board office has constituted special teams vide order dated 29.12.2018 to collect the water samples from the surrounding Agriculture Fields / villages of the industry with regard to the complaints against water pollution caused by M/s. GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District.

(83)

Total (TDS) Chlorid

Subsequently, the District Collector, Mahaboobnagar District has forwarded Prajavani Petition filed by Sri M. Brahma Chary & Others, r/o Gundlapotlapally (V), Rajapur (M), Mahaboobnagar District regarding ground water pollution. The AEE – I along with Asst. Scientist of this office has inspected the industry and its surroundings on 05.07.2019 and collected Borewell samples and report submitted to the Head Office, Hyderabad on 10.07.2019.

Subsequently, the Board office has addressed a letter to the Collector & District Magistrate, Mahabubnagar District on 17.04.2019 with requesting to constituted a Multi Disciplinary Committee with comprises Revenue, Agriculture, Ground water and TSPCB to carryout assessment of Crop damages, ground water pollution and to fix to a compensation to the affected farmers under "Pay Principle". Accordingly, the Collector & District Magistrate, Mahabubnagar has constituted a Committee. The Committee has inspected the industry and its surrounding areas on 13.08.2019 and 16.08.2019. The Report submitted to the District Collector, Mahabubnagar on 11.09.2019 and Board Office.

A complaint was filed through Prajavani by Sri Syed Jainulabuddin r/o Agraharam, Potlapally and other villagers regarding water pollution being caused by the industry and also a complaint was forwarded by the Board filed by Sri Nandeshwar Reddy r/o Gundlapotlapally. This office has submitted report to the Board Office, Hyderabad on 07.12.2020.

A complaint was received from Sri D. Nagaraju r/o Guntlapotlapally, Rajapur (M), Mahabubnagar District against M/s GTN Engineering (India) Limited, (Unit: Yarn Processing), Sy. No. 51,52,53, Gundlapotlapalli (V), Balanagar (M), Mahaboobnagar District regarding water pollution caused by the industry. The complainant has stated that, the industry has paid compensation towards damage of agriculture field earlier. Now, the industry has stopped payment of compensation. The complainant has also informed that, the industry management has closed the industry and started selling machinery of the industry to the outsiders and also requested to stop shifting of the machinery till Justification to the farmers vide reference 1st cited.

In this regard, the AEE-I along with AES – II of this office have inspected the industry on 06.09.2021. During the inspection, the industry was not in operation. The Board officials met the complainant and enquired about the problem. The complainant has informed that, the industry has stopped paying the compensation to the farmers as the industry has stopped its activities. He claimed that, the Borewell water of their field is still contaminated, which making the agricultural cultivation not possible. The complainant has also informed that, recently they have digged a Borewell in his field in month of February, 2021 to use its water for agricultural activities, but unable to use the same for agricultural purpose as the water is observed to be different compared to normal water. Hence, the complainant requested to instruct the industry to pay compensation as it is not possible to use the contaminated water for agriculture purpose. The Board officials have inspected the Agricultural Field of Sri Nagaraj, complainant and observed that, a new Borewell was digged in the agricultural field which was located at a distance of about 0.9 km from the boundary wall of the industry and at a distance of about 1.2 km from the ETP of the industry and no cultivation was carried in the agriculture land of the complainant.

The Board officials have collected samples from the following points and submitted to the Central Laboratory, Board Office for analysis.

- Balaiah, Father of Sri Nagaraj, complainant's new Bore well at Sy.No.79, Gundlapotlaplly village.
- GundlaPotlapallivagu (Dundubhi).
- Sample collected from the stagnated water located near the ETP of the industry.

The Analysis results are as follows:

Borewell sample collected from field of Balaiah

Parameters	Unit	Results	IS 10500 : 2012	
			Acceptable Limit	Permissible Limit
p^H at 25^0C	-	7.27	6.5-8.5	No Relaxation
Total Suspended Solids	mg/L	59	-	-

Total Dissolved Solids (TDS)	mg/L	10.541	500	2000
Chlorides as Cl^-	mg/L	4772	250	1000
Sulphates as SO_4^{-2}	mg/L	580	200	400
Total Alkalinity as CaCO3	mg/L	496	200	600
Total Hardness as CaCO3	mg/L	2030	200	600
Calcium as Ca^{+2}	mg/L	768	75	200
Magnesium as Mg^{+2}	mg/L	493	30	100
Fluoride	mg/L	0.6	1.0	1.5
Nitrates	mg/L	15	45	No relaxation
Phosphates	mg/L	<0.1	-	-
Boron	mg/L	<0.1	0.5	1.0
%Sodium	%	51	-	-
SAR	-	12.9	-	-
Sodium	mg/L	1879	-	-
Potassium	mg/L	3	-	-
Chemical Oxygen Demand	mg/L	261	-	-
Nickel (as Ni)	mg/L	ND	0.02	No relaxation
Copper as (as Cu)	mg/L	<0.1	0.05	1.5
Zinc (as Zn)	mg/L	0.2	5	15
Lead (as Pb)	mg/L	ND	0.01	No relaxation
Arsenic (as As)	mg/L	<0.1	0.01	0.05
Mercury (as Mg)	mg/L	ND	0.001	No relaxation
Cadmium (as Cd)	mg/L	ND	0.003	No relaxation
Total Chromium (as Cr)	mg/L	ND	0.05	No relaxation

ND: Not detected

Remarks: The TDS, Chlorides, Sulphates, Total Hardness, Calcium, Magnesium and COD are exceeding as per the prescribed standards.

Analysis results of sample of Potlapallivagu Dundhubi

Parameters	Unit	Results
pH at 25°C	--	8.01
Electrical conductivity	µS/cm	1036
Total Suspended Solids	mg/L	<5
Total Dissolved Solvents (TDS)	mg/L	745
Total Hardness as CaCO3	mg/L	290
Dissolved oxygen	mg/L	4.1
Chemical Oxygen Demand	mg/L	24

Free ammonia	mg/L	NIL
Calcium as Ca^{+2}	mg/L	80
Magnesium mg^{+2}	mg/L	22
Nitrates	mg/L	12
Boron	mg/L	<0.1
% Sodium	%	41
SAR	-	2.4
Sodium	mg/L	93
Potassium	mg/L	3
BOD_3 at 27°C	mg/L	3
Total Coliform	mg/L	1600
Fecal Coliform	mg/L	140
Nickel (as Ni)	mg/L	<0.1
Copper (as Cu)	mg/L	<0.1
Zinc (as Zn)	mg/L	<0.1
Lead (as Pb)	mg/L	ND
Arsenic (as As)	mg/L	<0.02
Mercury (as Hg)	mg/L	<0.01
Cadmium (Cd)	mg/L	<0.1
Total Chromium (as Cr)	mg/L	<0.2

CPCB Water Quality Criteria					
Parameters	A	B	C	D	E
pH	6.5-8.5	6.5-8.5	6.0-9.0	6.5-8.5	6.0-8.5
Electrical conductivity	-	-	-	-	Max 2250
Dissolved Oxygen	6 or >6	5 or >5	4 or >4	4 or >4	-
BOD_3 at 27°C	2 or <2	3 or <3	3 or <3	-	-
Free Ammonia	-	-	-	12 or <12	-
SAR	-	-	-	-	Max 26
Boron	-	-	-	-	Max 2
Total Coliform	50 or <50	500 or <500	5000 or <5000	-	-

CPCB Water Quality Criteria:
A – Drinking Water source without conventional treatment but after disinfection.
B – Outdoor bathing (Organised)
C – Drinking water source after conventional treatment and disinfection.
D – Propagation of Wild life and Fisheries.
E-Irrigation, Industrial cooling, Controlled Waste disposal.
Below E : Not meeting A, B,C,D,E criteria

Remarks: The sample belongs to C Category as per the CPCB Water Quality Criteria.

Analysis results sample collected near to ETP.

Parameters	Unit	Result
pH at 25°C	-	10.32
Total Suspended Solids	mg/L	24
Total Dissolved Solids	mg/L	2582
COD	mg/L	209

(86)

BOD_3 at 27°C	mg/L	41
Oil & Grease	mg/L	0.4
Nickel (as Ni)	mg/L	<0.1
Copper (as Cu)	mg/L	<0.1
Zinc (as Zn)	mg/L	<0.1
Lead (as Pb)	mg/L	<0.2
Arsenic (as As)	mg/L	<0.02
Mercury (as Mg)	mg/L	<0.01
Cadmium (as Cd)	mg/L	<0.1
Total Chromium	mg/L	<0.2

Remarks: The Sample is Alkaline in nature with high TDS value.

However, it is to submit that, during the inspection, the industry was not in operation and submitted a letter on 15.04.2021 stating that they have suspended the operations w.e.f. 15.04.2021.

During inspection, the industry was not in operation and they started dismantling machinery and no effluent water was found in ETP.

This is submitted for kind information and necessary action.

Yours faithfully

Encl: As above AEE-1

ENVIRONMENTAL ENGINEER

Copy submitted to the Joint Chief Environmental Engineer, TSPCB, Zonal Office - Hyd, Begumpet, Hyderabad for kind information.

87

TELANGANA STATE POLLUTION CONTROL BOARD
Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018
Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2021/21/09/123
Collected on: 06/09/2021
Test method: Standard Methods of APHA, 23rd Edition
Issue date: 13/09/2021

Collected by: AES-II, RO-Hyderabad
Received on: 07/09/2021
Quantity of the sample: 1Ltr. sample each
Page No.: 1 of 1

Source : Balaiah Borewell, Sy.No 79, Gundlapotlapally Village.

Sample code : Sample details / collection point

21/09/123 - Borewell Sample Collected from field of Balaiah.

Parameters	Unit	Results 21/09/123	IS 10500 : 2012	
			Acceptable Limit	Permissible Limit
pH at 25°C	-	7.27	6.5-8.5	No Relaxation
Total Suspended Solids	mg/L	59	-	-
Total Dissolved Solids (TDS)	mg/L	10,541	500	2000
Chlorides as Cl	mg/L	4772	250	1000
Sulphates as SO_4^{-2}	mg/L	580	200	400
Total Alkalinity as CaCO3	mg/L	496	200	600
Total Hardness as CaCO3	mg/L	2030	200	600
Calcium as Ca+2	mg/L	768	75	200
Magnesium as Mg+2	mg/L	493	30	100
Fluoride	mg/L	0.6	1.0	1.5
Nitrates	mg/L	15	45	No Relaxation
Phosphates	mg/L	<0.1	-	-
Boron	mg/L	<0.1	0.5	1.0
% Sodium	%	51	-	-
SAR	-	12.9	-	-
Sodium	mg/L	1879	-	-
Potassium	mg/L	3	-	-
Chemical Oxygen Demand	mg/L	261	-	-
Nickel (as Ni)	mg/L	ND	0.02	No Relaxation
Copper (as Cu)	mg/L	<0.1	0.05	1.5
Zinc (as Zn)	mg/L	0.2	5	15
Lead (as Pb)	mg/L	ND	0.01	No Relaxation
Arsenic (as As)	mg/L	<0.01	0.01	0.05
Mercury (as Hg)	mg/L	ND	0.001	No Relaxation
Cadmium (as Cd)	mg/L	ND	0.003	No Relaxation
Total Chromium (as Cr)	mg/L	ND	0.05	No Relaxation

Note: Results related to sample as received.
ND: Not detected.

Remarks: The TDS, Chlorides, Sulphates, Total Hardness, Calcium, Magnesium and COD Values are exceeding as per the Prescribed Standards.

(Dr. M.S. Satyanarayana Rao)
Joint Chief Environmental Scientist (FAC)

.....End of report.....

88

TELANGANA STATE POLLUTION CONTROL BOARD

Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018
Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R.00/LAB/2021/21/09/124
Collected on: 06/09/2021
Test method: Standard Methods of APHA, 23rd Edition
Issue date: 13/09/2021

Collected by: AES-II, RO-Hyderabad
Received on: 07/09/2021
Quantity of the sample: 1Ltr. sample each
Page No.: 1 of 1

Source : **Gundla Potlapallivagu (Dundubhi).**

Sample code : Sample details / collection point

21/09/124 - Sample Collected from Potlapallivagu Dundubhi.

Parameters	Unit	Results 21/09/124
pH at 25 °C	-	8.01
Electrical conductivity	µs/cm	1036
Total Suspended Solids	mg/L	<5
Total Dissolved Solids (TDS)	mg/L	745
Total Hardness as CaCO3	mg/L	290
Dissolved oxygen	mg/L	4.1
Chemical Oxygen Demand	mg/L	24
Free Ammonia	mg/L	NIL
Calcium as Ca+2	mg/L	80
Magnesium as Mg+2	mg/L	22
Nitrates	mg/L	12
Boron	mg/L	<0.1
% Sodium	%	41
SAR	-	2.5
Sodium	mg/L	93
Potassium	mg/L	3
BOD 3 at 27 °C	mg/L	3
Total coliform	MPN/100ml	1600
Fecal Coliform	MPN/100ml	140
Nickel (as Ni)	mg/L	<0.1
Copper (as Cu)	mg/L	<0.1
Zinc (as Zn)	mg/L	<0.1
Lead (as Pb)	mg/L	ND
Arsenic (as As)	mg/L	<0.02
Mercury (as Hg)	mg/L	<0.01
Cadmium (as Cd)	mg/L	<0.1
Total Chromium as Cr+	mg/L	<0.2

Note: Results related to sample as received.

Parameters	CPCB Water Quality Criteria				
	A	B	C	D	E
pH	6.5 – 8.5	6.5 – 8.5	6.0 – 9.0	6.5 – 8.5	6.0 – 8.5
Electrical conductivity	-	-	-	-	Max 2250
Dissolved oxygen	6 or >6	5 or >5	4 or >4	4 or >4	-
BOD 3 at 27°C	2 or < 2	3 or < 3	3 or < 3	-	-
Free Ammonia	-	-	-	1.2 or <1.2	-
SAR	-	-	-	-	Max 26
Boron	-	-	-	-	Max 2
Total coliform	50 or < 50	500 or < 500	5000 or < 5000	-	-

CPCB Water Quality Criteria:
A-Drinking Water Source without conventional treatment but after disinfection
B-Outdoor bathing (Organised)
C-Drinking water source after conventional treatment and disinfection
D-Propagation of Wild life and Fisheries
E-Irrigation, Industrial Cooling, Controlled Waste disposal
Below E - Not meeting A, B, C, D, E criteria

Remarks: The Sample belongs to C Category as per CPCB Water Quality Criteria.

(Dr. M.S. Satyanarayana Rao)
Joint Chief Environmental Scientist (FAC)

(89)

TELANGANA STATE POLLUTION CONTROL BOARD
Paryavarana Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018
Ph: 040-23887500

CENTRAL LABORATORY

Analysis Report

Reg. No. SR/05/TSPCB/HO/R00/LAB/2021/21/09/125
Collected on: 06/09/2021
Test method: Standard Methods of APHA, 23rd Edition
Issue date: 13/09/2021

Collected by: AES-II, RO-Hyderabad
Received on: 07/09/2021
Quantity of the sample: 1Ltr. sample each
Page No.: 1 of 1

Source: M/s. GTN Engineering (India) Limited, Gudlapottlapalli (V), Balanagar(M), Mahaboobnagar District.

Sample code : Sample details / collection point

21/09/125 - Sample collected from near to ETP.

Parameters	Method (*) No.	Unit	Results
			21/09/125
pH at 25°C	4500-B	-	10.32
Total Suspended Solids	2540-B	mg/L	24
Total Dissolved Solids	2540-C	mg/L	2582
COD	5220-B	mg/L	209
BOD 3 at 27°C	IS 3025, 1993	mg/L	41
Oil and Grease	5520 – B	mg/L	0.4
Nickel (as Ni)	3111 B	mg/L	<0.1
Copper (as Cu)	3111 B	mg/L	<0.1
Zinc (as Zn)	3111 B	mg/L	<0.1
Lead (as Pb)	3111 B	mg/L	<0.2
Arsenic (as As)	3114 C	mg/L	<0.02
Mercury (as Hg)	3112 B	mg/L	<0.01
Cadmium (as Cd)	3111 B	mg/L	<0.1
Total Chromium (as Cr)	3111 D	mg/L	<0.2

Note: Results related to sample as received.

Remarks: The Sample is Alkaline in nature with high TDS value.

(Dr. M.S. Satyanarayana Rao)
Joint Chief Environmental Scientist (FAC)

.....End of report.....