



क्षेत्रीय कार्यालय

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, मुजफ्फरनगर

U.P. POLLUTION CONTROL BOARD, MUZAFFARNAGAR

6-बी, नई मण्डी, मुजफ्फरनगर-251001 (उ०प्र०)

संदर्भ सं०
Ref. No.

945/आ.सं.०७१/चन्द्रशेखर/२०२२

दिनांक
Dated

11-01-2022

To,

The Registrar
National Green Tribunal
Principal Bench
New Delhi.
E-mail : judicial-ngt@gov.in

Sub.- Compliance to the direction issued on 21.09.2021 by Hon'ble National Green Tribunal in O.A. No. 71/2021 Chandrashekhar Vs State of Uttar Pradesh.

Sir,

With reference to the subject mentioned above kindly find enclosed herewith the Joint Committee Report in compliance of the order issued on 21.09.2021 by Hon'ble National Green Tribunal in O.A. No. 71/2021 Chandrashekhar Vs State of Uttar Pradesh.

Encl. : As above.

Yours faithfully

(Ankit Singh)
Regional Officer

Copy to :

1. Member Secretary, U.P. Pollution Control Board, Lucknow for information.
2. Shri Pradeep Mishra, Advocate, Hon'ble Supreme Court/NGT, New Delhi for perusal and necessary action.
3. Chief Law Officer, U.P. Pollution Control Board, Lucknow for information.
4. Chief Environmental Officer (Circle-3), U.P. Pollution Control Board, Lucknow for information.

Regional Officer

Joint Inspection Report

(08.12.2021)

of

M/s Triveni Engineering and Industries Limited,

Sugar Unit, Village- Sheikhpura, Khatauli,

Distt. - Muzaffarnagar (U.P.)

In the Matter of

Chandrashekar Versus State of Uttar Pradesh

in O.A. No. 71/2021

-Prepared by-

The Joint Committee of CPCB & UPPCB

Constituted by

Hon'ble National Green Tribunal

(Order dated 21st September, 2021)

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JOINT INSPECTION REPORT OF M/S TRIVENI ENGINEERING AND INDUSTRIES LIMITED, SUGAR UNIT, VILLAGE SHEIKHPURA, KHATAULI, DISTT. - MUZAFFARNAGAR ON 08.12.2021 IN COMPLIANCE TO DIRECTION ISSUED BY HON'BLE NATIONAL GREEN TRIBUNAL IN O.A. NO. 71/2021, IN THE MATTER OF CHANDRASHEKHAR VERSUS STATE OF UTTAR PRADESH. –REG.

1.0 Background

Hon'ble NGT vide order dated 21.09.2021 in the matter of Chandrashekhar Versus State of Uttar Pradesh in O.A. No. 71/2021 had directed following:

“..we direct the Joint Committee to conduct inspection when the unit is functional and furnish a report to the Tribunal on or before 15.12.2021 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The report may indicate status of compliance with the Standards as prior to the season, quality of treated effluents and utilisation as per protocol/agreement with the users/farmers. It may also be mentioned whether effluents are reaching any drain leading to river/water body. Further, ground water quality be checked as per parameters relevant to the industry in question, particularly, fluoride etc.”

2.0 Inspection of M/S Triveni Engineering and Industries Limited, Sugar Unit, Village Sheikhpura, Khatauli, Distt Muzaffarnagar on 08.12.2021 By Joint Team of Officials from CPCB and Regional Office, UPPCB, Muzaffarnagar.

In compliance to the aforesaid Hon'ble NGT order, a joint team of officials from Central Pollution Control Board, Delhi and Regional Office, Muzaffarnagar, Uttar Pradesh Pollution Control Board (UPPCB) visited the unit M/s Triveni Engineering and Industries Limited, Sugar Unit, Village Sheikhpura, Khatauli, Distt Muzaffarnagar premise (“hereafter referred as the Unit”) and the nearby areas of the unit on 08.12.2021. The joint team has collected samples from Groundwater, Sugar mill Drain, River Kali-East i.e. upstream and downstream of the Sugar mill drain confluence point to river Kali-East & Canal near sugar mill, Effluent Treatment Plant and Sewage Treatment Plant.

The analysis results of samples collected from 01 borewell located inside premise of unit and 04 handpumps located outside the unit premises shows fluoride within permissible limit i.e. 1.5 mg/l as per **BIS IS 10500:2012 Standards**.

A. GENERAL INFORMATION

1.	Date of Inspection	08.12.2021					
2.	Name of the unit with complete postal address	M/s Triveni Engineering and Industries Limited, Sugar Unit, Village Sheikhpura, Khatauli, Distt Muzaffarnagar					
3.	Name of Contact person	Designation	Contact No & E- mail				
	Sh. Sanjay Saxena	ETP Head operator	9936571691				
4.	Spatial Co-ordinates Latitude and longitude (in Decimal format only)	Latitude: 29.274755 Longitude: 77.739623					
5.	Year of commissioning	1934					
6.	Standalone/ integrated (with co-generation) Sugar/ sugar refinery	Integrated back-end sugar refinery					
7.	Co-generation capacity, MW	45 MW					
8.	License capacity of sugar Mill (TCD)	16000 TCD					
9.	Average actual crush rate (TCD)	As per DMRs provided by the unit, the average actual crush rate is 11975.56 TCD (for duration of 20 th November - 07 th December, 2021)					
10.	Consent status & its Validity with date a. Air Consent b. Water consent c. Hazardous Waste Authorization	Yes, Valid up to 31.12.2023 & 31.12.2024 (Annexure-I) Yes, Valid up to 31.12.2023, and Up to 31.12.2024 (for approved production capacity of electricity generation 45 MW) (Annexure-II) Yes, Valid up to 13.01.2023 (Annexure-III)					
11.	NOC from CGWA & its Validity with date	NOC obtained from UPGWD valid up to 03.03.2026. (Annexure- IV) Withdrawal permission:					
		S.No.	Bore-well No.	Date of energization	Rate of withdrawal (m³/hr)	Max. permitted annual extraction	Maximum allowable running Hours per day
		1	I	15.12.1990	100.00	60000m ³	2.00
		2	II	14.12.1990	110.00	66000m ³	2.00
		3	III	17.12.1990	100.00	20000 m ³	1.00
		4	IV	19.12.1990	120.00	24000m ³	1.00
		Total permitted withdrawal=			430.00	170000 m ³	-

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B. OPERATIONAL STATUS

S.No.	Particulars																			
1.	Start period of crushing season	07.11.2021 (as per DMR)																		
2.	No. of operational days at the time of inspection	32																		
3.	Operational status during visit	Operational																		
4.	Sources of fresh water																			
	a. Bore well/Tube well/ Any other & its No's	Borewell (04 nos.)																		
	b. Flow meter Installation at wells	Yes																		
	c. Reading of Flow Meter during visit	<p>Bore-well-I (Loco) Totalizer = 778029 m³</p> <p>Bore-well-II (Canteen) Totalizer = 504307 m³</p> <p>Bore-well-III (Colony) 02 flow meters were installed: 1. EMF: Flow meter reading= 40.22 m³/hr Totalizer = 12855.6 m³</p> <p>2. Flow meter: Totalizer = 775437 m³</p> <p>Bore-well-IV (Dispensary) Totalizer = 548660 m³</p>																		
	d. Any Logbook maintained, if yes, attach.	(Annexure-V)																		
	e. Quantity of water withdrawal (KLD)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">S.No.</th> <th style="text-align: center;">Borewell No.</th> <th style="text-align: center;">Quantity of fresh water withdrawal (in KLD)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Tubewell 1 (Loco)</td> <td style="text-align: center;">263.33</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Tubewell 2 (Canteen)</td> <td style="text-align: center;">5.56</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Tubewell 3 (Colony)</td> <td style="text-align: center;">5.56</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Tubewell 4 (Dispensary)</td> <td style="text-align: center;">82.33</td> </tr> <tr> <td style="text-align: center;">5</td> <td>Total (KLD)</td> <td style="text-align: center;">356.78</td> </tr> </tbody> </table>	S.No.	Borewell No.	Quantity of fresh water withdrawal (in KLD)	1	Tubewell 1 (Loco)	263.33	2	Tubewell 2 (Canteen)	5.56	3	Tubewell 3 (Colony)	5.56	4	Tubewell 4 (Dispensary)	82.33	5	Total (KLD)	356.78
S.No.	Borewell No.	Quantity of fresh water withdrawal (in KLD)																		
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3	Tubewell 3 (Colony)	5.56																		
4	Tubewell 4 (Dispensary)	82.33																		
5	Total (KLD)	356.78																		
5.	Fresh water consumption (KLD)- Average																			
	a. Sugar plant:																			
	i. Cleaning washing and machinery cooling make-up																			
	ii. Spray pond/PCT make-up																			
	iii. Any other, such as Cleaning and human requirements including lab requirements																			
	iv. Co-generation/Boiler section																			
	Total Sugar unit	263.33 KLD (21.99 L/t of cane)																		
	b. Residential etc.	5.56 KLD																		
	c. Other etc.	5.56 KLD (Canteen)+82.33 KLD (Dispensary)= 87.89 KLD																		

	d. Total fresh water Consumption (KLD)	356.78 KLD	
	e. Log book maintained (Yes/ No) If any, details to be collected	Yes	
6.	Details of Hot & Cold-water recycling system	Number	Capacity
	a. Details of Hot water UGR.	01 no.	300 m ³
	b. Cold water UGR and cooling towers	01 no.	400 m ³
	c. Hot water - Location of flow meter & its Installation-	Flow meter	Flow meter reading
	1. Imbibition water at mills	Yes	T1-118 m ³ T2-104 m ³
	2. Filter cake wash water at rotary vacuum filter	Yes	Totalizer- 1= 8772.67 m ³ (12.04 m ³ /hr) Totalizer- 2= 8863.92 m ³ (12.21 m ³ /hr) Total Reading = 17530.02 m ³ (24.30 m ³ /hr)
	3. Sugar melting, pan boiling, molasses conditioning	Yes	Melting-30419.8 m ³ (7.36 m ³ /hr) Magma- 74823.4 m ³ (30.70 m ³ /hr) Dirty Sugar melting- 0.01 m ³
	4. Wash water at Centrifugal	Yes	Raw- 108802.6 m ³ (25.08 m ³ /hr) Refined - 2.901 m ³ /hr
	5. Wet Scrubber make-up	No	-
	6. Boiler make-up in case of low-pressure boiler	No	-
	d. Cold water -Location of flow meter & its Installation.	Flow meter	Flow meter reading
	1. Power turbine cooling	Yes	3200 m ³ /hr
	2. Mills, fibrizer bearing, pumps cooling	Yes	210.59 m ³ (0.0 m ³ /hr)
	3. Wet scrubber make-up	Yes	130.46 m ³
	4. Cooling tower of co-generation make-up	Yes	20911 m ³
	5. SO ₂ gas cooling	No	-
	6. B and C massecuite cooling	Yes	B- 2.35 m ³ (Avg.) C- 2.66 m ³ (Avg.)
7. Final molasses cooling	No	-	
8. Others	No	-	
7.	Waste water (Influent) generation (KLD)		
	a. Process cooling tower	Flow meter not available	
	b. Mills, boiling house, D.M./ R.O. Plant boilers etc.		
	c. Soda/Acid boiling water (Hazardous)		
	d. Co-generation		
	e. Brine solution reject after regeneration (for refine sugar)		

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	f. IER wash water generation.	
	g. Brine reject from brine recovery system	Flow meter not available. <ul style="list-style-type: none"> Two stage Brine recovery system installed. Brine recovery is more than 90%.
	h. Common / total influent generation.	No separate flow meter installed at mill house, boiling house to calculate influent generation separately. Influent generation as per log book from 20.11.2021 to 07.12.2021= 1574.88 KLD
8.	Effluent discharge, KLD	Avg. effluent discharge as per logbook data from 20 th Nov-21 to 7 th Dec-21) = 1430.80 KLD
9.	Specific effluent discharge, L/t of cane	119.47 L/t of cane
10.	Treated effluent used from lagoon for irrigation, KLD	Treated effluent was not used for irrigation purpose and the same was stored in lagoon. Although, some part of treated effluent was sent to plant for utility like sprinkling for dust control, ash quenching etc.
11.	Process Cooling Tower (PCT) overflow	Flow meter Flow meter reading
	a. Flow meter Installation	Yes 4.80 m ³ /hr & totalizer 371325 m ³
	b. Provision of separate spray pond overflow treatment	Not required
12.	Details of tube cleaning method adopted (chemical/ Hydrojet/ any other appropriate method if any), provide details	Hydrojet cleaning
13.	Availability of Hazardous tank to collect wash water generated during chemical/Mechanical cleaning of evaporator tubes, if Yes give Details.	Chemical washing collection tank of 311 m ³ installed
14.	Condensate polishing system adopted by the factory (for boilers >45 kg/cm ² steam pressure)	Sugar Boiler capacity is less than 45 kg/cm ² steam pressure i.e. = 42 kg/cm ² steam pressure Others- Boiler-1, Capacity=120TPH Boiler-2, Capacity=120 TPH
	If yes, then provide the details of condensate polishing system	Condensate polishing unit, capacity= 180 m ³ /hr
15.	Construction of small pits with smooth inner surface with ceramic tiles in the centrifugal section. give details	Construction of small pits near various pumps to collect gland cooling water for recirculation
16.	Mixing arrangement in equalization tank	Yes
17.	Type of aeration in aeration tank Diffused/ surface/ any other	Diffused aeration

18.	Tertiary treatment, give Details	Yes, Multi Grade filter- 01 no. (3.2 m. dia. x 3 m. height) Activated Carbon filter- 01 no. (3.2 m. dia. x 3 m. height)	
19.	Schematic diagram of ETP (flow chart to be collected)	Order of stages: (Annexure-VI) Effluent collection tank→ Bar screen chamber→ Oil & Grease trap→ Equalization tank with aeration→ pH correction tank→ Primary Clarifier → Aeration tank-I & II→ Secondary Clarifier I→ Secondary Clarifier II→ Chlorination→ Pressure Sand Filter→ Activated Carbon Filter→ Treated water storage lagoon	
20.	Rain water harvesting system adopted	Yes	
21.	Treatment capacity of ETP (KLD)	3000 KLD	
22.	Unit with sizes/capacity (as per industry)	Retention Time/ Contact Time (Mentioned in CPCB charter)	As calculated
	1. Bar screen Chamber	30 minutes	-
	2. Oil & Grease Trap	45 minutes	-
	3. Equalization tank with aeration = 4588 m ³	6 hrs	36 hrs. 42 min.
	4. Primary Clarifier =578 m ³	5-6 hrs	04 hrs. 38 min.
	5. Aeration Tank I = 4914 m ³	24-28 hrs	39 hrs. 19 min.
	6. Aeration Tank II = 3670 m ³	24-28 hrs	29 hrs. 22 min.
	7. Secondary Clarifier 1 = 578 m ³	7-8 hrs	04 hrs. 38 min.
	8. Secondary Clarifier 2 =275 m ³	7-8 hrs	02 hrs. 22 min.
	9. Pressure Sand Filter (02 Nos.)	-	-
	10. Activated Carbon Filter (02 Nos.)	-	-
	11. Sludge Drying Bed (08 nos.), 10m x 12m x 1.2m= 960 m ³	-	0.08 m ³ /ton of cane
	12. Clear Water Tank= 705 m ³	-	05 hrs. 38 min.
	13. Centrifuge	No	
23.	Any further treatment after ETP	No, Only storage in lagoon	
24.	Brief processing details (flow chart)	Cane→ Mill→ Raw Juice→ Juice heater→ Juice defecation→ Juice heater →Clarifier → Clear Juice→ Juice heater→ Syrup→ Raw pan section→ Melt clarification→ Raw sugar crystallization and curing→ Refined sugar crystallization and curing (Annexure-VII)	

25.	ETP Analysis (Performance Parameters) : Refer Table No. 1	
26.	Number of Piezometric wells available in the unit premises: Available (01 No.)	
27.	Storage of treated Effluent	
	a. No. & size of lagoons	1 no., Capacity= 16530 m ³
	b. Retention time	Suitable for 5 days holding capacity for 16000 TCD capacity as per the ETP validation report of NSI, Kanpur in season 2018-19.
	c. Lagoon type- permeable/impermeable	Impermeable
28.	Sludge Handling Process, gives details.	
	a. Sludge Digestion Method	No sludge digestion
	b. Sludge Drying Process	Sludge drying bed (08 nos.)
	c. Final Disposal of Sludge	As informed by unit representative, sludge is being distributed to farmers as organic manure.
	d. Whether mechanical sludge handling system installed	No
29.	Any Hazardous Substances, if yes, give details. (Quantity & way of Disposal)	Yes, Hazardous Substances: As per Schedule 1: - a) category-5.1 (Used oil) b) category-5.2 (wastes or residues containing oil) Way of Disposal: Provided to Ramky Enviro Engineers Ltd.
30.	Manpower employed for ETP operation & maintenance.	Contractual manpower for ETP operation & maintenance.
31.	Details of irrigation system & treated effluent used quantity	
	1. Own land area for irrigation	Yes, (20 Hectare)
	2. Farmer land area and their agreement.	Yes, (160.60 Hectare area available)
	3. Flow meter to measure amount of water used for irrigation.	The unit has installed two separate flow meters at lagoon (one for lagoon to Irrigation & one for lagoon to Plant). However, it is informed by the unit's representative that currently there is no requirement of treated water for irrigation purpose therefore, treated water was stored in lagoon & some part of treated effluent was used into the plant for sprinkling for dust control, ash quenching etc. Also, the flow meter reading at lagoon (for irrigation) was 0.0 m ³ /hr at the time of inspection.
	4. Distance of land Area from the Unit (Km)	2.5 Kms

	5. Total Available Area (Hectare)	180.60 Hactare
	6. Soil Texture of land (Sandy, Sandy loam, Loam, Clay loam, Clay)	Sandy loam Loading rate as per MoEF&CC Gazette notification dated 14/01/2016: Sandy -225-280 m ³ /Ha/Day Sandy loam- 170-225 m ³ /Ha/Day
32.	Cleaning mechanizm at Mills and factory floor	NA
33.	Color coding of pipelines for water distribution network	No
34.	Mode of disposal (route to reach Ganga)	Presently used in plant.

3.0 OBSERVATIONS

1. The unit M/s Triveni Engineering and Industries Limited, Sugar Unit, Village Sheikhpura, Khatauli, Distt.-Muzaffarnagar is engaged in production of refined sugar by Defco melt Phosphatation followed by Ion Exchange Process (IER) with consented capacity of 16000 TCD.
2. The unit has started its crushing season 2021-22 on 07th November, 2021 and the unit was operational on the date of visit i.e. 08th December 2021.
3. As informed by the unit ETP was started on 27/09/2021 for stabilization purpose in compliance to notified standards in MoEF&CC Notification G.S.R. 35(E) dated 14th January, 2016
4. The unit has valid Consent to Operate under section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 (as amended) for 65 TPH boiler, which is valid up to 31.12.2023 and for two boilers of 120 TPH, which is valid up to 31.12.2024.
5. The unit has valid Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 (as amended) for discharge of effluent, which is valid up to 31.12.2023.
6. The unit has valid Authorization issued under the provisions of Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 for storage and disposal of hazardous wastes valid up to 13.01.2023.
7. As per Daily Manufacturing Reports (DMRs) provided by the unit, the average actual crush rate (TCD) is 11975.56 TCD (for duration of 20th November – 07th December, 2021), against the consented capacity of 16000 TCD.
8. The unit is an integrated backend refinery sugar unit with 45 MW cogeneration power plant for in-house activity in sugar manufacturing process and the unit has valid Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 (as amended) for discharge of effluent, which is valid up to 31.12.2024.
9. Being a Sugar Refinery SO₂ gas is not used in sugar manufacturing process, hence provision of separate Sulphur Recovery System (SRS) is not required.
10. The unit has installed Ion Exchange Resin Technology for decoloring of sugar syrups. The Ion Exchange resin gets saturated/ exhausted after repeated usage and has to be regenerated. The unit re-generates exhausted resin using caustic brine solutions.
11. The unit has submitted the details about the Brine recovery system, which is as follows:

Overall Operating Parameters	
Feed capacity	7500 LPH

Operating hr	20 hr
Overall permeate	6775 LPH
Final Reject	725 LPH
Overall Recovery	90 % ± 2%

12. The unit has 03 boilers with capacity of 120 TPH (02 nos.) for co-gen and one boiler with capacity of 65 TPH for sugar manufacturing process with valid consent. 65 TPH boiler has stack height of 40m from ground level and two boilers of 120 TPH has stack height of 74 meter from ground level.
13. The unit has 02 DG sets having capacity of 1010 KVA each with acoustic enclosure.
14. As informed, the unit transfers used oil to third party (Ramky Enviro Engineers Ltd.) for its disposal on quarterly basis. The unit has provided membership certificate (UPWMP-KNP-HzW-CHW-TSDF-2174) with Ramky Group, valid up to 23.02.2022
15. The unit has Permitted Quantity (kg/day) of 10.0 kg/day of Used Oil under Schedule I (Category 5.1) and Wastes or residues containing oil under Schedule I (Category 5.2) of Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 as per consent issued by UPPCB. The unit has not provided the details of quantity provided to Ramky Enviro Engineers Ltd.
16. The unit has not installed flow meter at mill house and boiling house to quantify the effluent generation separately. The effluent generated from the mill house and boiling house is being collected in a collection tank and further it goes to ETP inlet by gravity for further treatment.
17. The unit has setup environmental laboratory; however, the unit has not maintained the ETP log book for daily analysis of sugar effluent parameter.
18. As informed by the unit representative, the boiler ash is used to fill low laying area, however, the unit has not provided record of generated boiler ash.
19. It was observed that the unit has not maintained the record of Press mud generation, however, it was informed that press mud was provided to local farmers as organic manure.
20. The unit has two underground reservoirs (UGR) for hot water and cold-water recirculation system having capacities of 300 m³ and 400 m³ each.
21. The Joint Team has observed two ponding (Pond 1- large in size and Pond 2- small in size) filled with waste water at the back side of the press mud storage area. The team has collected the sample from pond for physico-chemical analysis. The analysis results of the collected samples are mentioned as below:

Table-1: Analysis results of Ponding behind press mud storage area

Sample Analysis	pH	COD	BOD	TSS	TDS	Cl ⁻	Color	SO ₄ ²⁻	NO ₃ -N	NO ₂ -N	PO ₄ -P
Pond-1 (Large)	5.8	750	420	43	592	190	65	39	6.89	0.04	2.11
Pond-2 (Small)	5.1	1267	587	94	472	260	57	419	7.69	BDL	2.70

22. Analysis result of sample collected from pond-1 shows acidic pH-5.8, Color-65, high BOD-420 mg/l and COD-750 mg/l, which indicate the characteristics of untreated effluent.
23. Analysis result of sample collected from pond-2 shows acidic pH-5.1, Color-57, high BOD-587 mg/l and COD-1267 mg/l, which reflect the characteristics of Refined Sugar effluent (pH-5.5-6.5, Color- Light brown, BOD- 600-1000 mg/l, COD- 1500-2500 mg/l).

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24. The team has also collected water samples from Sugar mill drain (name of the drain is Sugar mill drain), river Kali East i.e. upstream and downstream of the Sugar mill drain & Canal near sugar mill (Lat-29.269901, Long-77.743243). The analysis results are mentioned as below:

Table-2: Analysis results of Sugar mill Drain, River Kali East i.e. upstream and downstream of the Sugar mill drain & Canal near sugar mill

Sample Analysis	River Kali East u/s Sugar Mill drain	Sugar Mill drain	River Kali East d/s Sugar Mill drain	Canal near Sugar mill (29.269901, 77.743243)
pH	6.5	6.8	6.6	7.9
COD (mg/l)	198	402	529	7.0
BOD (mg/l)	68	98	166	-
TSS (mg/l)	79	567	901	33
TDS (mg/l)	196	120	328	122
Cl ⁻ (mg/l)	47	64	66	46
Color	30	46	43	BDL
SO ₄ ²⁻ (mg/l)	451	57	52	44
NO ₃ ^{-N} (mg/l)	1.95	2.62	1.87	1.3
NO ₂ ^{-N} (mg/l)	BDL	BDL	BDL	-
PO ₄ ^{-P} (mg/l)	0.64	0.75	0.73	0.07
Conductivity (µmho/cm)	-	-	-	216
Total hardness as CaCO ₃ (mg/l)	-	-	-	303
Total Alkalinity as CaCO ₃ (mg/l)	-	-	-	322
Fluoride (mg/l)	-	-	-	0.3

25. Analysis result of sample collected from River Kali East u/s Sugar Mill drain shows pH- 6.5, COD- 198 mg/l, BOD-68 mg/l, TSS-79 mg/l, TDS- 196 mg/l, Chloride-47 mg/l, SO₄²⁻-451 mg/l, NO₃^{-N}-1.96 mg/l, NO₂^{-N}-BDL, PO₄^{-P}-0.64 mg/l.

26. Analysis result of sample collected from River Kali East d/s Sugar Mill drain shows pH- 6.6, COD- 529 mg/l, BOD-166 mg/l, TSS-901 mg/l, TDS- 328 mg/l, Chloride-66 mg/l, SO₄²⁻-52 mg/l, NO₃^{-N}-1.87 mg/l, NO₂^{-N}-BDL, PO₄^{-P}-0.73 mg/l indicate the effect of effluent carried by sugar mill drain i.e. pH- 6.8, COD- 402 mg/l, BOD-98 mg/l, TSS-567 mg/l, TDS- 120 mg/l, Chloride-64 mg/l, SO₄²⁻-46 mg/l, NO₃^{-N}-2.67 mg/l, NO₂^{-N}-BDL, PO₄^{-P}-0.75 mg/l.

27. The increase in BOD, COD and TSS in River Kali East at downstream of Sugar mill drain is due to turbulent flow conditions contributing in higher TSS, thereby BOD & COD increased. The entire flow in drain was sewage. Direct discharge or outlet into the Sugar mill drain was not evident during inspection.

28. Analysis result of samples collected from Canal near Sugar mill shows pH- 7.9, COD- 7.0 mg/l, TSS-33 mg/l, TDS- 122 mg/l, Chloride-46 mg/l, SO₄²⁻-44 mg/l, NO₃^{-N}-1.3 mg/l, PO₄^{-P}-0.07 mg/l.

29. The unit has total four bore-wells for fresh water abstraction and installed 02 Piezometer (01 at Sugar mill & 01 at Co-gen) to monitor the ground water level. All bore-wells are being used to meet the fresh water requirement, which was located at different places within the premises for sugar unit. The details are as below:

Table-3: Details of bore-wells installed at M/s Triveni Engineering and Industries Limited, Sugar Unit, Khatauli, Muzaffarnagar (U.P.)

S.No.	Borewell No.	Location	Flow meter reading	Used for
1.	Borewell No.-01	Loco	Totalizer = 778029 m ³	Sugar manufacturing process
2.	Borewell No.-02	Canteen	Totalizer = 504307 m ³	Canteen
3.	Borewell No.-03	Colony	02 flow meters were installed: EMF: Totalizer = 12855.6 m ³ (40.22 m ³ /hr) Flow meter: Totalizer = 775437 m ³	Residential
4.	Borewell No.-04	Dispensary	Totalizer = 548660 m ³	Dispensary

30. Flowmeter installed at all 04 bore-wells and found operational at the time of inspection by joint team. Logbooks for bore-wells were also maintained.
31. The unit has permission to abstract total 430 m³/hr of groundwater from four existing bore-wells as per No Objection Certificate (NOC) from Uttar Pradesh Ground Water Department (UPGWD), which is valid up to 13.01.2023.
32. Ground water samples were collected from 01 bore-well (sugar mill colony) installed in the unit premises & 04 Ground water samples from handpumps outside of the unit premises were also collected.
33. The analysis results of samples collected from bore-wells and handpumps are placed in Table-below:

Table-4: Analysis results of samples collected from Borewells within unit premises & Handpumps near the Sugar Mills

Sampling locations Parameters	Bore well at Sugar mill Colony	Handpump outside Sugar Mill near ponding (70-80 ft) (29.283621, 77.739457)	Handpump outside Sugar Mill near canal (29.270085, 77.743357)	Handpump outside Sugar Mill near drain (29.277489, 77.771783)	Handpump outside Sugar Mill near Main gate (29.2760829, 77.7459228)	BIS IS 10500:2012 (Permissible limit in absence of alternative source)
pH	7.4	7.1	7.6	7.6	7.6	6.5-8.5
Conductivity (µmho/cm)	777	1035	572	503	580	-
Colour (color units)	BDL	BDL	BDL	BDL	BDL	15
COD (mg/l)	BDL	BDL	BDL	BDL	BDL	-
TDS (mg/l)	464	692	358	326	366	2000
Total hardness as CaCO ₃ (mg/l)	162	323	368	388	376	600

Total alkalinity as CaCO ₃ (mg/l)	62	388	271	267	240	600
Chloride (mg/l)	09	40	10	09	24	1000
Sulfate (mg/l)	52	23	88	40	14	400
Fluoride (mg/l)	0.2	0.2	0.3	0.4	0.2	1.5
NO ₃ -NO ₃ (mg/l)	BDL	1.5	3.6	12.1	2.5	45
PO ₄ -P (mg/l)	0.10	0.06	0.05	0.05	0.04	-
As (mg/l)	BDL	BDL	BDL	BDL	BDL	0.05
Cd (mg/l)	BDL	BDL	BDL	BDL	BDL	0.003
Co (mg/l)	BDL	BDL	BDL	BDL	BDL	-
Cr (mg/l)	BDL	BDL	BDL	0.01	BDL	0.05
Cu (mg/l)	BDL	BDL	BDL	0.01	BDL	1.5
Fe (mg/l)	0.12	0.11	0.62	4.78	0.46	0.3
Mn (mg/l)	0.07	BDL	0.06	0.07	0.07	0.3
Ni (mg/l)	BDL	BDL	BDL	BDL	BDL	0.02
Pb (mg/l)	BDL	BDL	BDL	BDL	BDL	0.01
Sb (mg/l)	BDL	BDL	BDL	BDL	BDL	-
Se (mg/l)	BDL	BDL	BDL	BDL	0.02	0.01
V (mg/l)	BDL	BDL	BDL	BDL	0.02	-
Zn (mg/l)	BDL	0.32	0.03	1.33	0.14	15

34. Analysis results of samples collected from bore-wells within unit premises and all 04 Handpumps outside the unit premises are within permissible limit as per drinking water standard BIS IS 10500:2012 except **Fe- 0.62mg/l, 4.78 mg/l, 0.46 mg/l** from Handpump Sugar Mill near canal, Handpump Sugar Mill near drain and Handpump near Main gate of sugar mill respectively. However, **Selenium (Se)- 0.02 mg/l** is also detected which is beyond the permissible limit i.e. 0.01 mg/l as per drinking water standard BIS IS 10500:2012 in the sample collected from Handpump near Main gate of sugar mill.

35. The unit has installed Sewage Treatment Plant (STP) having capacity of 500 KLD, which is based on **Inbuilt Clarifier Activated Sludge Process technology** for the treatment of domestic waste water generated from its residential colony/mill staff having population around 1000-1200 people.

36. The team has collected sample from inlet and outlet of Sewage Treatment Plant (STP) for physio-chemical analysis. The analysis results are shown in Table-5 below:

Table-5: Analysis results of sample collected from Sewage Treatment Plant (STP) inlet and outlet

Parameters → Location ↓	pH	COD	BOD	TSS	TDS	Color	SO ₄ ²⁻	PO ₄ -P	NO ₃ -N	NH ₃ -N
STP Inlet	7.2	39	10	34	368	33	37	0.44	1.07	BDL
STP Outlet	7.5	05	02	21	200	18	42	0.75	1.13	BDL

Peer

Notified standards as per consent	-	250	30	100	-	-	-	-	-	-
Notified standards for land disposal	5.5 - 8.5	250	100	100	2100	-	-	-	-	-
All Parameters in mg/l except pH, Color in color units.										

37. The characteristics (BOD-10 mg/l and COD- 39 mg/l) of raw sewage at STP inlet, indicate dilution (with fresh water) by the unit.
38. The analysis results of samples collected from STP outlet show pH- 7.5, COD- 05 mg/l, BOD- 02 mg/l, TSS- 21 mg/l, TDS- 200 mg/l).
39. The unit has installed flowmeters at the inlet & outlet locations of STP, however, flowmeters were found not-operational at the time of inspection.
40. Since, the unit has started the crushing on 07.11.2021 and refinery started on 09.11.2021 therefore the unit has not used any acid wash till the date of inspection on 08.12.2021.
41. Regarding the usage of treated effluent, the unit representative informed that presently treated effluent is being used in the plant as there is no requirement for irrigation. The inspection team also observed that treated effluent was stored in the lagoon which was in semi filled condition. The unit has provision of pumping the treated effluent into the plant. However, complete usage of treated effluent is not possible in the plant and part of treated effluent has been discharged into the Sugar mill drain.
42. The logbook data of treated water utilized in plant (for duration of 20th November – 07th December, 2021) calculated as 635.61 KLD.

4.0 OBSERVATIONS W.R.T. EFFLUENT TREATMENT PLANT (ETP)

1. The unit has installed an Effluent Treatment Plant with capacity of 3000 KLD and found operational at the time of inspection. The ETP comprises of the following units:
Effluent collection tank→ Bar screen chamber→ Oil & Grease trap→ Equalization tank with aeration→ pH correction tank→ Primary Clarifier → Aeration Tank-I & II→ Secondary Clarifier I→ Secondary Clarifier II→ Chlorination→ Pressure Sand Filter→ Activated Carbon Filter→ Treated water storage lagoon.
2. The ETP has provision of diffused aeration system in equalization tank, however, uniform aeration not observed at the time of inspection.
3. There are two Aeration Tanks (in series) and Two Secondary Clarifier (in parallel) installed to treat sugar refinery effluent.
4. The joint team has collected effluent samples from various subunits of Effluent Treatment Plant (ETP) i.e. ETP inlet, primary clarifier outlet, aeration tank, secondary clarifier outlet-1 and 2, ETP outlet after filtration as well as treated effluent storage lagoon.
5. The analysis results of sample collected from various subunits of ETP are placed in Table-6 below.

Table-6: Analysis results of sample collected from Effluent Treatment Plant (ETP)

Parameters in mg/l except pH, Color in color units												
Sample Analysis	Effluent flow rate (m ³ /hr)	pH	COD	BOD	TSS	TDS	Color	SO ₄ ²⁻	PO ₄ -P	NO ₃ -N	Oil & Grease	MLSS/MLVSS
ETP Inlet	82.246	4.8	1625	838	189	892	75	171	1.09	9.14	-	-
Primary clarifier outlet	-	4.8	1541	827	224	668	44	90	0.88	3.19	-	-
ETP Aeration Tank-I	-	-	-	-	-	-	-	-	-	-	-	1674/ 1585
Secondary clarifier outlet-1	-	7.3	35	06	BDL	680	12	34	0.08	0.98	-	-
Secondary clarifier outlet-2	-	7.2	05	01	BDL	136	18	81	0.09	0.77	-	-
ETP Outlet (After filtration)	63.3	7.5	15	05	BDL	272	21	77	0.23	1.59	BDL	-
Heavy metal analysis results for ETP Inlet	As-BDL, Cd-BDL, Co-BDL, Cr-BDL, Cu-0.03 mg/l, Fe-10.25 mg/l, Mn-0.49 mg/l, Ni-BDL, Pb- 0.18 mg/l, Sb- BDL, Se- BDL, V- BDL, Zn- 0.20 mg/l											
Heavy metal analysis results for ETP Outlet	As-BDL, Cd-BDL, Co-BDL, Cr-BDL, Cu-BDL, Fe-0.13 mg/l, Mn-0.04 mg/l, Ni-BDL, Pb- BDL, Sb- BDL, Se- BDL, V- BDL, Zn- 0.01 mg/l											
Lagoon	-	7.6	04	01	BDL	532	19	56	0.43	0.79	-	-
Values of OCEMS	63.3	7.0	103.7	13.8	9.7	-	-	-	-	-	-	-
Notified standards for land disposal	-	5.5 - 8.5	250	100	100	2100	-	-	-	-	10	-

- The analysis results of sample collected from Primary Clarifier outlet show BOD-827 mg/l, COD- 1541 mg/l, TSS- 224 mg/l and TDS- 668 mg/l. However, Secondary Clarifier-1 outlet show BOD-06 mg/l, COD- 35 mg/l, TSS- BDL and TDS- 680 mg/l and percentage reduction in BOD -99.27%, COD-97.73% & TSS- 100% by two Aeration Tank (in series) having MLSS- 1674 mg/l & MLVSS- 1585 mg/l, which indicate dilution with fresh water by the unit.
- MLSS value of 1674 mg/l in Aeration Tank-I of ETP indicates presence of less biomass against desired level (2500-3000 mg/l).

8. Secondary Clarifier-2 outlet characteristics TSS- BDL and TDS- 136 mg/l (compared to Secondary Clarifier-1 outlet TDS 680 mg/l with same influent) indicate provisions of dilutions using fresh water in the outlet.
9. The analysis results of sample collected from ETP outlet after filtration show pH- 7.5, COD- 15 mg/l, BOD- 05 mg/l, TSS- BDL, TDS- 272 mg/l, Oil & Grease-BDL.
10. The analysis results of sample collected from lagoon show pH- 7.6, COD- 04 mg/l, BOD- 01 mg/l, TSS- BDL, TDS- 532 mg/l.
11. It was observed that the unit has a lagoon for storage of treated water having capacity of 16530 m³ which seems to be inadequate (3000 KLD x 15 Days= 45000 m³).
12. The unit is complying w.r.t. quantity of final treated effluent discharge norms as the treated effluent discharge i.e. **119.47 L/t of cane** against the notified norm of 200 Liter/ton of cane crushed.
13. The unit has 08 nos. of Sludge Drying Beds (SDB), which are being used for dewatering of sludge and drying. Dried sludge is provided to local farmers as organic manure.

5.0 CONCLUSION

A. Compliance with the Standards:

1. The analysis results of sample collected from ETP outlet after filtration show pH- 7.5, COD- 15 mg/l, BOD- 05 mg/l, TSS- BDL, TDS- 272 mg/l, Oil & Grease-BDL & from lagoon show pH- 7.6, COD- 04 mg/l, BOD- 01 mg/l, TSS- BDL, TDS- 532 mg/l, which are complying w.r.t. the Notified standards in MoEF&CC Notification G.S.R. 35(E) dated 14th January, 2016.
2. However, it seems from the percentage reduction by two Aeration Tank (in series) in BOD- 99.27%, COD- 97.73% & TSS- 100% as compared from Primary Clarifier outlet to Secondary Clarifier-1, indicate dilution with fresh water by the unit.
3. MLSS value of 1674 mg/l in Aeration Tank-I of ETP indicates presence of less biomass against desired level (2500-3000 mg/l).
4. Also, Secondary Clarifier-2 outlet characteristics TSS- BDL and TDS- 136 mg/l (compared to Secondary Clarifier-1 outlet TDS 680 mg/l with same influent) indicate provisions of dilutions using fresh water in the outlet.
5. The effluent stored (Pond 1 & Pond 2) behind press mud is an illegal disposal of untreated effluent and the characteristics i.e. BOD (420 mg/l and 587 mg/l) and COD (750 mg/l and 1267 mg/l) confirm stored/disposed effluent was untreated which is a violation of consent conditions issued by UPPCB.

B. Quality of treated effluents and utilisation as per protocol/agreement with the users/farmers:

1. The unit has stored treated effluent in lagoon after ETP filtration units, which was in semi filled condition. The analysis results of sample collected from lagoon are complying w.r.t. the Notified standards in MoEF&CC Notification G.S.R. 35(E) dated 14th January, 2016.
2. The unit has not provided any agreement for providing treated effluent for irrigation to users/farmers, however as informed by the unit representative, treated effluent used in the plant.

C. Effluents are reaching any drain leading to river/water body:

1. Provision of direct discharge or outlet point from unit into the sugar mill drain was not evident during inspection. The entire flow in Sugar mill drain was carrying sewage. The increase in BOD, COD and TSS in River Kali East at downstream of Sugar mill drain is due to turbulent flow conditions contributing in higher TSS, thereby BOD & COD increased.

D. Ground water quality be checked as per parameters relevant to the industry in question, particularly, fluoride etc.:

1. The analysis result of sample collected from 01 borewell located inside and 04 handpumps located outside the unit premises shows fluoride within permissible limit i.e. 1.5 mg/l as per **BIS IS 10500:2012 Standards**.
2. However, analysis results of samples collected from borewells within unit premises and all 04 Handpumps outside the unit premises are within permissible limit as per drinking water standard BIS IS 10500:2012 except **Fe- 0.62mg/l, 4.78 mg/l, 0.46 mg/l** from Handpump Sugar Mill near canal, Handpump Sugar Mill near drain and Handpump near Main gate of sugar mill respectively. **Selenium (Se)- 0.02 mg/l** is also detected which is beyond the permissible limit i.e. 0.01 mg/l as per drinking water standard BIS IS 10500:2012 in the sample collected from Handpump near Main gate of sugar mill.

E. Others:

1. The unit M/s Triveni Engineering and Industries Limited, Sugar Unit, Village Sheikhpura, Khatauli, Distt Muzaffarnagar is an integrated refinery sugar unit with 45 MW cogen and having consented capacity of 16000 TCD. As per Daily Manufacturing Reports (DMRs) provided by the unit, the average actual crush rate (TCD) is 11975.56 TCD (for duration of 20th November – 07th December, 2021).
2. The unit has valid Consent to Operate under section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 (as amended) for 65 TPH boiler, which is valid up to 31.12.2023 and for two boilers of 120 TPH, which is valid up to 31.12.2024.
3. The unit has valid Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 (as amended) for discharge of effluent, which is valid up to 31.12.2023. The unit has valid Authorization issued under the provisions of Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 for storage and disposal of hazardous wastes valid up to 13.01.2023.
4. The unit has a membership of TSDF with Ramky Enviro Engineers Ltd. as informed for disposal of used oil and wastes or residues containing oil on quarterly basis. Membership is valid up to 23.02.2022
5. The unit has not installed flow meter at mill house and boiling house to quantify the effluent generation separately.
6. The unit has environmental laboratory for daily analysis of sugar effluent parameter, however, the unit has not maintained the ETP log book.
7. The unit has not provided record of generated Boiler ash.
8. The unit has not maintained the record of Press mud generation.
9. The unit has permission to abstract total 430 m³/hr of groundwater from four existing borewells as per No Objection Certificate (NOC) from Uttar Pradesh Ground Water Department (UPGWD), which is valid up to 13.01.2023.
10. The unit has Sewage Treatment Plant (STP) with capacity of 500 KLD for the treatment of domestic waste water generated from its residential colony/mill staff having population around 1000-1200 people. The analysis results (BOD-10 mg/l and COD-39 mg/l) of samples collected from STP inlet indicate dilution with fresh water by the unit.
11. The unit has installed flowmeters at the inlet & outlet of STP, however, flowmeters were found

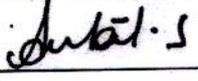
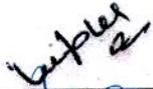
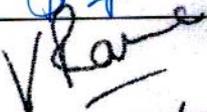
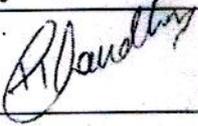
non-operational at the time of inspection.

6.0 RECOMMENDATIONS

1. The unit shall not discharge partially treated effluent into the drain and on land within or outside the unit premises.
2. The unit shall install flow meters at mill house and boiling house to quantify the effluent generation separately.
3. The unit shall maintain the proper records for quantity of used oil & grease as per valid Authorization issued under the provisions of Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 for storage and disposal of hazardous wastes.
4. The unit shall maintain proper record of Press Mud which is provided to the local farmers.
5. The unit shall maintain the ETP log book for daily analysis of raw and treated effluent parameters.
6. The unit shall maintain the proper record of boiler ash generation, sludge and their disposal.
7. The unit shall maintain adequate MLSS & MLVSS concentration in Aeration Tank-I & II while operating the ETP to ensure proper stabilization of ETP.
8. The unit shall make proper color coding of pipelines for water distribution network w.r.t. the defined coding of color for particular pipe carrying sugar effluent, treated effluent and fresh water.
9. The unit shall dismantle the Pond-1 and Pond-2 which contains waste water having characteristics of partially treated industrial effluent.
10. The unit shall restrict the use of Handpump near Main gate of sugar mill **as the sample analysis shows Selenium (Se)- 0.02 mg/l** which is beyond the permissible limit i.e. 0.01 mg/l as per drinking water standard BIS IS 10500.
11. The unit shall make flow meters operational installed at STP inlet and outlet.

Reed

7.0 INSPECTION TEAM

S.No.	Name of the inspecting officers	Designation	Signature
1.	Ms. Reena Satavan	Sc-'D', Central Pollution Control Board, Delhi	
2.	Sh. Ankit Singh	Regional Officer, Muzaffarnagar, UPPCB	
3.	Sh. Vipul Kumar	AEE, Regional office, Muzaffarnagar, Uttar Pradesh Pollution Control Board	
4.	Sh. Jeet Singh Rai	SDM, Khatauli, Muzaffarnagar, UP	
5.	Dr. Vivek Rana	Research Associate-I, Central Pollution Control Board, Delhi	
6.	Sh. Muktesh Chaudhari	Senior Research Fellow, Central Pollution Control Board, Delhi	

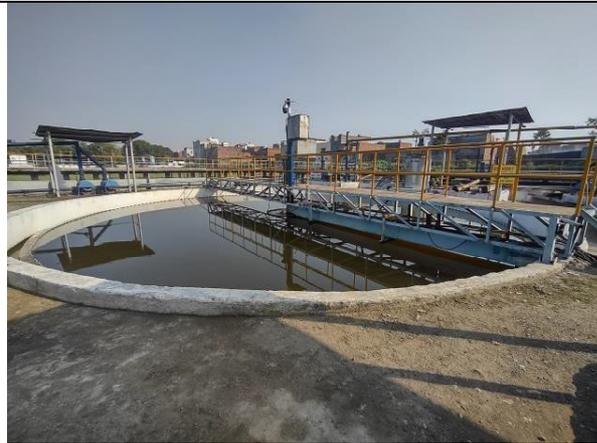
8.0 PHOTOGRAPHS



ETP Inlet



Aeration Tank



Secondary Clarifier



Filtration Unit



Lagoon



Sludge Drying Beds



Rain water harvesting pits



Piezometer



Ponding (Large)



Ponding (Small)



Flow meter at ETP Inlet



OCEMS & Flow meter at ETP outlet



Flow meter at STP Inlet (non-functional)



Flow meter at STP Outlet (non-functional)



Flowmeter for Lagoon to Plant (Process)



Flowmeter for Lagoon to Farm (irrigation)



Flowmeter at Borewell (Loco)



Sampling at Handpump located outside near canal

9.0 ANNEXURES:

S.No.	Details of Annexures	Annexure No.
1.	Air Consent	Annexure I
2.	Water consent	Annexure II
3.	Hazardous Waste Authorization	Annexure III
4.	NOC from CGWA for Borewells	Annexure IV
5.	Photocopy of data recorded on log books of fresh water abstraction and consumption.	Annexure V
6.	ETP details with flow diagram.	Annexure VI
7.	Brief processing details (flow chart)	Annexure VII



UTTAR PRADESH POLLUTION CONTROL BOARD
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.com, Website: www.uppcb.com

CONSENT ORDER

Ref No. -
139117/UPPCB/MuzaffarNagar(UPPCBRO)/CTO/air/MUZAFFARN
AGAR/2021

Dated : 17/12/2021

To ,

Shri TARUN SAWHNEY
M/s TRIVENI ENGINEERING AND INDUSTRIES LIMITED SUGAR UNIT KHATAULI
Triveni Engineering And Industries Ltd Village Sheikhpura Sugar Unit Khatauli,MUZAFFAR
NAGAR,251201
MUZAFFARNAGAR

Sub : Consent under section 21/22 of the Air (Prevention and control of Pollution) Act, 1981 (as amended)
to M/s. TRIVENI ENGINEERING AND INDUSTRIES LIMITED SUGAR UNIT KHATAULI

Reference Application No. 13742221

Dated : 17/12/2021

1. With reference to the application for consent for emission of air pollutants from the plant of M/s TRIVENI ENGINEERING AND INDUSTRIES LIMITED SUGAR UNIT KHATAULI. under Air Act 1981. It is being authorised for said emissions, as per the standards, in environment, by the Board as per enclosed conditions .
2. This consent is valid for the period from 01/01/2022 to 31/12/2023 .
3. In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 21 (6) of the Air (Prevention and Control of Pollution) Act, 1981 as amended.
This consent is being issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board
NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:45:25 +05'30'
Chief Environmental Officer (Circle 3)

Enclosed : As above
(condition of consent):

Copy to: Regional Officer, U.P. Pollution Control Board, MuzaffarNagar to ensure the compliance of the conditions imposed in the certificate.

NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:45:35 +05'30'
Chief Environmental Officer (Circle 3)

U.P. Pollution Control Board

Dated : 17/12/2021

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of cane crushing SUGAR CANE CRUSHING 16000 TCD. .
2. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.
- 3(a) The maximum rate of emission of flue gas should not be more than the emission norms for the stacks.
- 3(b) . Air Pollution Source Details.

Air Pollution Source Details					
S.No	Air Polution Source	Type of Fuel	Stack No.	Parameters	Height
1	65 TPH BOILER	BAGASSE-30 MT/HR	01	Particulate Matter	40 METER FROM GROUND LEVEL

- 3(c) . The emissions by various stacks into the environment should be as per the norms of the Board .

Emission Quality Details Detail			
S.No	Stack No	Parameter	Standard
1	01	Particulate Matter	AS PER E(P) RULES, 1986

4. The industry should be operated in such a manner that it does not adversely affect the environment and the solid waste generated such as ash etc. is disposed in eco friendly manner .
5. Any source of emission other than that mentioned in the Air consent seeking application will not be permitted by the Board .
6. The industry should ensure the operation of the air pollution control system (APCS) in such a manner that the air emission confirms with the standards prescribed under the E.P Act 1986 as amended.
7. The industry shall submit Environmental Statement in prescribed format as per rule no.14 as per E.P Rules 1986 .
8. The industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time .
9. Industry shall submit monthly monitoring reports of all stacks and ambient air quality from a certified / approved laboratory under E.P. Act 1986 .
10. The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.
11. The industry will ensure the continuous and uninterrupted data supply from the OCEEMS to the CPCB and SPCB .
12. The unit shall submit audited balance sheet for the current year and the details of fees deposited during last three years within a month failing which consent would be deemed void.
13. The use of Pet coke and Furnace oil as a fuel in the factory is restricted in compliance of the Hon'ble Supreme court order .
14. The Industry will use minimum 20% Bio Briquette as fuel in the Boiler depending upon its availability .
15. The industry shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).

- 16 . Minimum 33% of the land on which industry is established will be covered and properly maintained by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H-16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf .
- 17 . If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order .
- 18 . Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time .

The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

Specific Conditions:

1. This CTO is valid for production SUGAR AFROM SUGAR CANE CRUSHING CAPACITY OF 16000 TCD.
2. This CTO shall be subject to the order to be passed in OA No. 71/2021 Chandra Shekher Versus State of U.P. by Hon'ble NGT.
3. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/process/fuel/ plant machinery failing which consent would be deemed void.
4. The industry shall establish Miyawaki forest inside the factory in sufficient area the treated effluent from the ETP shall be used for forestation.
5. The industry should be operated in such a manner that it does not adversely affect the environment and the solid waste generated such as ash etc. is disposed in eco friendly manner.
6. The industry shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).
7. Any source of emission other than that mentioned in the Air consent seeking application will not be permitted by the Board.
8. The industry should follow the directions issued by the Ministry of Environment Forest and Climate Change, Delhi vide Notification no. GSR 35(E) dated 14/01/2016.
9. The industry should ensure the operation of the air pollution control system (APCS) in such a manner that the air emission conforms with the standards prescribed under the E.P Act 1986 as amended.
10. The industry shall submit Environmental Statement in prescribed format as per rule no.14 as per E.P Rules 1986.
11. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.
12. The industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time.
13. Industry shall submit monthly monitoring reports of all stacks and ambient air quality from a certified / approved laboratory under E.P. Act 1986.
14. The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended and all other applicable rules notified under E.P. Act 1986.
15. The unit shall submit the point wise compliance report of the previous CTO issued by the Board and the audited balance sheet for the current year and the details of fees deposited during last three years within a month failing which consent would be deemed void.
16. The use of Pet coke and Furnace oil as a fuel in the factory is restricted in compliance of the Hon'ble Supreme court order.
17. The unit shall submit the audited balance sheet for the current year and the details of fees deposited during last three years within a month.
18. This Consent order shall automatically become invalid on issuance of Closure Order by C.P.C.B / UPPCB and further on revoking of Closure order, the Consent order shall become valid.
19. In compliance with the Hon'ble Supreme Court order passed in W.P. (civil) No. 13029/1985 M.C. Mehta Vs. Union of India and ors. the use of Pet coke and furnace oil is prohibited.

20. Unit shall install Online Emission Monitoring System at the stack of air polluting sources and ensure the connectivity with the servers of CPCB and UPPCB.
21. Unit shall use Bio-briquette as co-fuel with main fuel in the ratio of minimum 20 percent in boiler subject to its availability.
22. Fly ash shall be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with storm water. Direct exposure of workers to fly ash & dust shall be avoided.
23. Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India.
24. Unit shall submit emission monitoring report of the stack of air polluting sources and ambient air monitoring of the premises done by MoEF&CC and UPPCB approved laboratory in every 3 months.
25. Minimum 33% of the land on which industry is established will be covered by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf .

Issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board .
NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:45:48 +05'30'
Chief Environmental Officer (Circle 3)



UTTAR PRADESH POLLUTION CONTROL BOARD
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.com, Website: www.uppcb.com

CONSENT ORDER

Ref No. - 139875/UPPCB/MuzaffarNagar(UPPCBRO)/CTO/air/MUZAFFARNAGAR/2021

Dated : 17/12/2021

To ,

Shri TARUN SAWHNEY

M/s TRIVENI ENGINEERING IND LTD

Triveni Engineering And Industries Ltd Cogeneration Unit, Sheikhpura Khatauli, Distt. Muzaffar Nagar (U.P.),MUZAFFAR NAGAR,251201
MUZAFFARNAGAR

Sub : Consent under section 21/22 of the Air (Prevention and control of Pollution) Act, 1981 (as amended) to M/s. TRIVENI ENGINEERING IND LTD

Reference Application No. 13834004

Dated : 17/12/2021

1. With reference to the application for consent for emission of air pollutants from the plant of M/s TRIVENI ENGINEERING IND LTD. under Air Act 1981. It is being authorised for said emissions, as per the standards, in environment, by the Board as per enclosed conditions .
2. This consent is valid for the period from 01/01/2022 to 31/12/2024 .
3. In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 21 (6) of the Air (Prevention and Control of Pollution) Act, 1981 as amended.
This consent is being issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board
NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:47:24 +05'30'
Chief Environmental Officer (Circle 3)

Enclosed : As above
(condition of consent):

Copy to: Regional Officer, U.P. Pollution Control Board, MuzaffarNagar to ensure the compliance of the conditions imposed in the certificate.

NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:47:33 +05'30'
Chief Environmental Officer (Circle 3)

U.P. Pollution Control Board

Dated : 17/12/2021

CONDITIONS OF CONSENT

1. This consent is valid only for the approved production capacity of Electricity Generation 45 MegaWatt..
2. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.
- 3(a) The maximum rate of emission of flue gas should not be more than the emission norms for the stacks.
- 3(b) Air Pollution Source Details.

Air Pollution Source Details					
S.No	Air Pollution Source	Type of Fuel	Stack No.	Parameters	Height
1	120 TPH BOILER	BAGASSE	01	Particulate Matter	74 METER FROM GROUND LEVEL
2	120 TPH BOILER	BAGASSE	01	Particulate Matter	74 METER FROM GROUND LEVEL

- 3(c) The emissions by various stacks into the environment should be as per the norms of the Board .

Emission Quality Details Detail			
S.No	Stack No	Parameter	Standard
1	01	Particulate Matter	AS PER E(P) RULES, 1986
2	01	Particulate Matter	AS PER E(P) RULES, 1986

4. Quantity of other pollutants should also be as per the norms prescribed by the Board/MOEF & CC/or otherwise mandatory .
5. The equipment for air pollution control system and monitoring ,as proposed by the industry and approved by the Board should be installed in their premises itself .
6. The modification or installation in the existing pollution control equipments should be done only by prior approval of Board .
7. The operation of air pollution control system and maintenance be done in such a way that the quantity of pollutants should be in accordance with the standards prescribed by the Board/MoEF & CC/or otherwise mandatory .
8. Unit should do provisions for fugitive emissions chimney/stack as per the norms of the Board/MOEF & CC/or otherwise mandatory .
9. The unit should submit the stack emissions monitoring report within one month from issuance of consent order along with the point wise compliance report of the consent order . Further quarterly monitoring report should be submitted .

The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

Specific Conditions:

1. This CTO is valid for production of Electricity Generation - 45 MegaWatt.
2. This CTO shall be subject to the order to be passed in OA No. 71/2021 Chandra Shekher Versus State of U.P. by Hon'ble NGT.
3. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/process/fuel/ plant machinery failing which consent would be deemed void.
4. The industry shall establish Miyawaki forest inside the factory in sufficient area the treated effluent from the ETP shall be used for forestation.
5. The industry should be operated in such a manner that it does not adversely affect the environment and the solid waste generated such as ash etc. is disposed in eco friendly manner.
6. The industry shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).
7. Any source of emission other than that mentioned in the Air consent seeking application will not be permitted by the Board.
8. The industry should follow the directions issued by the Ministry of Environment Forest and Climate Change, Delhi vide Notification no. GSR 35(E) dated 14/01/2016.
9. The industry should ensure the operation of the air pollution control system (APCS) in such a manner that the air emission conforms with the standards prescribed under the E.P Act 1986 as amended.
10. The industry shall submit Environmental Statement in prescribed format as per rule no.14 as per E.P Rules 1986.
11. The industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time.
12. The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended and all other applicable rules notified under E.P. Act 1986.
13. The unit shall submit the point wise compliance report of the previous CTO issued by the Board and the audited balance sheet for the current year and the details of fees deposited during last three years within a month failing which consent would be deemed void.
14. The use of Pet coke and Furnace oil as a fuel in the factory is restricted in compliance of the Hon'ble Supreme court order.
15. The unit shall submit the audited balance sheet for the current year and the details of fees deposited during last three years within a month.
16. This Consent order shall automatically become invalid on issuance of Closure Order by C.P.C.B / UPPCB and further on revoking of Closure order, the Consent order shall become valid.
17. In compliance with the Hon'ble Supreme Court order passed in W.P. (civil) No. 13029/1985 M.C. Mehta Vs. Union of India and ors. the use of Pet coke and furnace oil is prohibited.
18. Unit shall maintained Online Emission Monitoring System and ensure the connectivity with the servers of CPCB and UPPCB.
19. Unit shall use Bio-briquette as co-fuel with main fuel in the ratio of minimum 20 percent in boiler subject to its availability.
20. Fly Ash content shall be used for low lying industry own land filling in a scientific manner.

21. The industry shall ensure the proper management in all 3 silo located near chimney to control pollution generated due to loading and unloading of bottom ash and fly ash in vehicles/containers.
22. The industry shall ensure continuous water sprinkling in ash yard. Water sprinkling should be done in required quantity only. Extra water sprinkling should not be done which may lead to water logging situation in adjoining agricultural fields. Sprinkling of water on ash must be done only after proper treatment of effusion up to limits prescribed by the board so that ground water quality is not adversely impacted.
23. Fly ash shall be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with storm water. Direct exposure of workers to fly ash & dust shall be avoided.
24. Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India.
25. Unit shall submit emission monitoring report of the stack of air polluting sources and ambient air monitoring of the premises done by MoEF&CC and UPPCB approved laboratory in every 3 months.
26. Minimum 33% of the land on which industry is established will be covered by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf .

Issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board .
NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:47:45 +05'30'
Chief Environmental Officer (Circle 3)



UTTAR PRADESH POLLUTION CONTROL BOARD
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.com, Website: www.uppcb.com

CONSENT ORDER

Ref No. -
139165/UPPCB/MuzaffarNagar(UPPCBRO)/CT
O/water/MUZAFFARNAGAR/2021

Dated : 17/12/2021

To ,

Shri TARUN SAWHNEY
M/s TRIVENI ENGINEERING AND INDUSTRIES LIMITED SUGAR UNIT KHATAULI
Triveni Engineering And Industries Ltd Village Sheikhpura Sugar Unit Khatauli, MUZAFFAR
NAGAR, 251201
MUZAFFARNAGAR

Sub : Consent under Section 25/26 of The Water (Prevention and control of Pollution) Act, 1974 (as amended) for discharge of effluent to M/s. TRIVENI ENGINEERING AND INDUSTRIES LIMITED SUGAR UNIT KHATAULI

Reference Application No :13750472

Dated :17/12/2021

1. For disposal of effluent into water body or drain or land under The Water (Prevention and control of Pollution) Act, 1974 as amended (here in after referred as the act) M/s. TRIVENI ENGINEERING AND INDUSTRIES LIMITED SUGAR UNIT KHATAULI is hereby authorized by the board for discharge of their industrial effluent generated through ETP for irrigation/river through drain and disposal of domestic effluent through septic tank/soak pit subject to general and special conditions mentioned in the annexure ,in reference to their foresaid application .
2. This consent is valid for the period from 01/01/2022 to 31/12/2023 .
3. In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 27(2) of the Water (Prevention and Control of Pollution) Act, 1974 as amended .

This consent is being issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board
NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:44:46 +05'30'
Chief Environmental Officer (Circle 3)

Enclosed : As above
(condition of consent):

Copy to: Regional Officer, U.P. Pollution Control Board, MuzaffarNagar to ensure the compliance of the conditions imposed in the certificate.

NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:44:55 +05'30'
Chief Environmental Officer (Circle 3)

U.P. POLLUTION CONTROL BOARD, LUCKNOW

Annexure to Consent issued to M/s. TRIVENI ENGINEERING AND INDUSTRIES LIMITED SUGAR UNIT KHATAULI vide

Consent Order No. 13750472/ Water

Dated : 17/12/2021

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of SUGAR CANE CRUSHING 16000 TCD. .
2. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.
3. The quantity of maximum daily effluent discharge should not be more than the following :

Effluent Discharge Details			
S.No	Kind of Effluent	Maximum daily discharge, KL/day	Treatment facility and discharge point
1	Domestic	600 KLD	STP
2	Industrial	1935	ETP

4. Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. The treated domestic and industrial effluent if discharged outside the premises, if meets at the end of final discharge point, arrangement should be made for measurement of effluent and for collecting its sample. Except the effluent informed in the application for consent no other effluent should enter in the said arrangements for collection of effluent. It should also be ensured that domestic effluent should not be discharged in storm water drain .
- 4(a) The domestic effluent should be treated in the treatment plant so that it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules 1986 as amended.

Domestic Effluent		
S.No	Parameter	Standard
1	Total Suspended Solids	AS PER E(P) RULES, 1986
2	BOD	AS PER E(P) RULES, 1986
3	COD	AS PER E(P) RULES, 1986
4	Oil & Grease	AS PER E(P) RULES, 1986
5	Quantity of Discharge	600 KLD THROUGH STP

- 4(b) The industrial effluent should be treated in treatment plant so that the treated effluent should be in conformity with the standard lay down under the notification issued by MOEF&CC vide its GO no GSR 35 (E) dated 14/01/2016.

Industrial Effluent		
S.No	Parameter	Standard
1	Total Suspended Solids	AS PER E(P) RULES, 1986
2	BOD	AS PER E(P) RULES, 1986
3	COD	AS PER E(P) RULES, 1986
4	Oil & Grease	AS PER E(P) RULES, 1986
5	Quantity of Discharge	1935 KLD (FOR IRRIGATION AND REUSE IN PROCESS)

- 4(c) Loading Rates for different soil textures.

S.No	Soil Texture	Loading rate in m ³ /Ha/Day
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5. Effluent generated in all the processes, bleed water, cooling effluent and the effluent generated from washing of floor and equipments etc should be treated before its disposal with treated industrial effluent so that it should be according to the norms prescribed under The Environment (Protection) Rules, 1986 or otherwise mandatory.
6. The method for collecting industrial and domestic effluent and its analysis should be as per legal Indian standards and its subsequent amendments/ standards prescribed under the Environment (Protection) Act, 1986.
7. The industry shall establish the cooling arrangement and polishing tank for recycling the excess condensate water to process or utilities or allied units.
8. Effluent Treatment Plant to be stabilized one month prior to the start of the crushing season and continue to operate one month after the crushing season.
9. During no demand period for irrigation, the treated effluent to be stored in a seepage proof lined pond having 15 days holding capacity only.
10. The industry shall implement treated effluent flow distribution measurement for irrigation purposes completely in accordance with irrigation plan.
11. The impact of treated effluent application on land is to be included further in E.I.A. studies, involving ground water monitoring point identified in close proximity to the unit.
12. The industry will have to ensure compliance of the permission from the CGWA before ground water extraction and it will be the responsibility of the industry to comply with the various conditions of the permission taken.
13. The industry shall submit Environmental Statement in prescribed form V rule no.14 of E.P Rules 1986.
14. The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.
15. Minimum 33% of the land on which unit is established will be covered and properly maintained by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H-16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf.
16. The industry will ensure the continuous and uninterrupted data supply from the OCEEMS to the CPCB and SPCB .
17. Flow meter to be installed in all water abstraction points and usage of fresh water to be minimized. The unit will ensure facility to transmit data to CPCB server and submit a regular calibration certificate of Electro Magnetic Flow meter to the Board.
18. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order.
19. Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time.
20. The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

Specific Conditions:

- 1- This CTO is valid for production SUGAR AT SUGAR CANE CRUSHING CAPACITY OF 16000 TCD.
- 2- The industry should comply the condition of SGWA NOC.
- 3- This CTO shall be subject to the order to be passed in OA No. 71/2021 Chandra Shekher Versus State of U.P. by Hon'ble NGT.
- 4- This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/process/fuel/ plant machinery failing which consent would be deemed void.
- 5- The unit shall maintain strict supervision upon fluctuations in operating parameters with respect to each treatment unit of the Effluent treatment plant.
- 6- The E.T.P. unit operation line up Strengthening is to be maintained.
- 7- The industry shall establish Miyawaki forest inside the factory in sufficient area the treated effluent from the ETP shall be used for forestation.
- 8- The Unit shall install Piezometer for measurement of ground water level and the data generated from Piezometer will be provided to the SPCB on monthly basis.
- 9- Flow meter to be installed in all water abstraction points and usage of fresh water to be minimized.
- 10- During no demand period for irrigation, the treated effluent to be stored in a seepage proof lined pond having 15 days holding capacity only.
- 11- The unit shall submit the audited balance sheet for the current year and the details of fees deposited during last three years within a month.
- 12- The industry shall implement treated effluent flow distribution measurement for irrigation purposes completely in accordance with irrigation plan.
- 13- Industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time.
- 14- Industry shall comply with various provisions of Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.
- 15- Minimum 33% of the land on which industry is established will be covered by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf.
- 16- The unit shall comply with the provisions of notification No. S.O. 3187(E) dated 07-10-2016 of Ministry of Water Resources, River Development and Ganga Conservation, GOI.
- 17- The discharge norms must confirm as per the notification no G.S.R. 35 (E) dated: 15.01.2016 of MoEF&CC.
- 18- Unit shall comply with the directions issued by Central Pollution Control Board, New Delhi vide letter-B-190198/WQM/II(RG)/CPCB/Sugar/12/2016-17/16662, dated 14/19.02.2019, and send the compliance report to Board on quarterly basis.
- 19- Unit shall identify recipient drains/ rivulets and their u/s & d/s location in consultation with UPPCB and shall carry out monthly monitoring of identified recipient drains at u/s & d/s location through lab recognized under Environment (Protection) Act, 1986 and shall submit the analysis report on monthly basis by 10th of every month to CPCB and UPPCB.
- 20- Unit shall maintain pipe line from outlet of ETP and to the point of irrigation land.

21- Unit shall ensure the connectivity of the installed online monitoring system to the servers of CPCB and UPPCB.

22- Unit shall provide Pakka channel/ pipe line for irrigation and shall maintain the records of ground water extracted and treated effluent used for irrigation on land.

23- Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India.

24- Unit shall submit treated effluent monitoring report of the ETP and ground water quality of premises as well as of the irrigated area done by MoEF & CC approved laboratory in every 3 months.

25- This Consent order shall automatically become invalid on issuance of Closure Order by C.P.C.B / UPPCB and further on Revoking of Closure order, the Consent order shall become valid.

26- The industry shall also explore treated effluent re-cycle mechanism in furtherance to the application of treated effluent on land as a significant alternative mode of re-cycle. This step shall in turn reduce hydraulic loading of effluent discharge as well as shall eliminate extraneous treated effluent discharge possibility elsewhere.

27- The industry shall submit Environmental Statement in prescribed form V rule no.14 of E.P Rules 1986.

28- Industry shall install at sufficient height from the ground level Open to Network HD PTZ rotation Camera at the Inlet, Aeration tank, Secondary Clarifier and outlet of Effluent treatment plants for On Line Monitoring and its URL and password shall be provided to the UPPCB control room.

Issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board .
NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:45:10 +05'30'
Chief Environmental Officer (Circle 3)



UTTAR PRADESH POLLUTION CONTROL BOARD
Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.com, Website: www.uppcb.com

CONSENT ORDER

Ref No. -
139971/UPPCB/MuzaffarNagar(UPPCBRO)/CT
O/water/MUZAFFARNAGAR/2021

Dated : 17/12/2021

To ,

Shri TARUN SAWHNEY
M/s TRIVENI ENGINEERING IND LTD
Triveni Engineering And Industries Ltd Cogeneration Unit, Sheikhpura Khatauli, Distt. Muzaffar
Nagar (U.P.),MUZAFFAR NAGAR,251201
MUZAFFARNAGAR

Sub : **Consent under Section 25/26 of The Water (Prevention and control of Pollution) Act, 1974**
(as amended) for discharge of effluent to M/s. TRIVENI ENGINEERING IND LTD

Reference Application No :13844950

Dated :17/12/2021

1. For disposal of effluent into water body or drain or land under The Water (Prevention and control of Pollution) Act,1974 as amended (here in after referred as the act) M/s. TRIVENI ENGINEERING IND LTD is hereby authorized by the board for discharge of their industrial effluent generated through ETP for irrigation/river through drain and disposal of domestic effluent through septic tant/soak pit subject to general and special conditions mentioned in the annexure ,in refrence to their foresaid application .
2. This consent is valid for the period from 01/01/2022 to 31/12/2024 .
3. In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 27(2) of the Water (Previntion and Controt of Pollution) Act, 1974 as amended .

This consent is being issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board
NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:46:07 +05'30'
Chief Environmental Officer (Circle 3)

Enclosed : As above
(condition of consent):

Copy to: Regional Officer, U.P. Pollution Control Board, MuzaffarNagar to ensure the compliance of the conditions imposed in the certificate.

NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:46:16 +05'30'
Chief Environmental Officer (Circle 3)

U.P. POLLUTION CONTROL BOARD, LUCKNOW

Annexure to Consent issued to M/s.TRIVENI ENGINEERING IND LTD vide

Consent Order No. 13844950/ Water

Dated : 17/12/2021

CONDITIONS OF CONSENT

1. This consent is valid only for the approved production capacity of Electricity Generation 45 MegaWatt..
2. The quantity of maximum daily effluent discharge should not be more than the following :

Effluent Discharge Details			
S.No	Kind of Effluent	Maximum daily discharge,KL/day	Treatment facility and discharge point
1	Domestic	12 KLD	Septic Tank

3. Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. The treated domestic and industrial effluent if discharged outside the premises, if meets at the end of final discharge point, arrangement should be made for measurement of effluent and for collecting its sample. Except the effluent informed in the application for consent no other effluent should enter in the said arrangements for collection of effluent. It should also be ensured that domestic effluent should not be discharged in storm water drain .
- 4(a) The domestic effluent should be treated in treatment plant so that the should be in conformity with the following norms dated treated effluent .

Domestic Effluent		
S.No	Parameter	Standard
1	Total Suspended Solids	AS PER E(P) RULES, 1986
2	BOD	AS PER E(P) RULES, 1986
3	COD	AS PER E(P) RULES, 1986
4	Oil & Grease	AS PER E(P) RULES, 1986
5	Quantity of Discharge	12 KLD

- 4(b). The industrial effluent should be treated in treatment plant so that the treated effluent should be in conformity with the following norms. .

Industrial Effluent		
S.No	Parameter	Standard

5. Effluent generated in all the processes, bleed water, cooling effluent and the effluent generated from washing of floor and equipments etc should be treated before its disposal with treated industrial effluent so that it should be according to the norms prescribed under The Environment (Protection) Act,1986 or otherwise mandatory .
6. The other pollutant for which norms have not been prescribed, the same should not be more than the norms prescribed for the water used in manufacturing process of the industry .
7. The method for collecting industrial and domestic effluent and its analysis should be as per legal Indian standards and its subsequent amendments/standards prescribed under The Environment (Protection) Act, 1986.
8. The treated domestic and industrial effluent be mixed (as per the provisions of Condition No. 2) and disposed of on one disposal point. This common effluent disposal point should have arrangement for flow meter/V Notch for measuring effluent and its log book be maintained .
9. The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

Specific Conditions:

- 1- This CTO is valid for production of Electricity Generation 45 MegaWatt.
- 2- The unit shall comply all the conditions mentioned in the SGWA Permission.
- 3- This CTO shall be subject to the order to be passed in OA No. 71/2021 Chandra Shekher Versus State of U.P. by Hon'ble NGT.
- 4- This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/process/fuel/ plant machinery failing which consent would be deemed void.
- 5- The unit shall maintain strict supervision upon fluctuations in operating parameters with respect to each treatment unit of the Effluent treatment plant.
- 6- The E.T.P. unit operation line up Strengthening is to be maintained. No effluent shall be discharged outside the premises.
- 7- The industry shall establish Miyawaki forest inside the factory in sufficient area the treated effluent from the ETP shall be used for forestation.
- 8- The Unit shall install Piezometer for measurement of ground water level and the data generated from Piezometer will be provided to the SPCB on monthly basis.
- 9- Flow meter to be installed in all water abstraction points and usage of fresh water to be minimized.
- 10- Polluted effluent generated from power plant unit must not be disposed outside industry premises without proper treatment.
- 11- The unit shall submit the audited balance sheet for the current year and the details of fees deposited during last three years within a month.
- 12- The industry shall implement treated effluent flow distribution measurement for irrigation purposes completely in accordance with irrigation plan.
- 13- Industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time.
- 14- Industry shall comply with various provisions of Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.
- 15- Minimum 33% of the land on which industry is established will be covered by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf.
- 16- The unit shall comply with the provisions of notification No. S.O. 3187(E) dated 07-10-2016 of Ministry of Water Resources, River Development and Ganga Conservation, GOI.
- 17- The discharge norms must confirm as per the notification no G.S.R. 35 (E) dated: 15.01.2016 of MoEF&CC.
- 18- Unit shall comply with the directions issued by Central Pollution Control Board, New Delhi vide letter-B-190198/WQM/II(RG)/CPCB/Sugar/12/2016-17/16662, dated 14/19.02.2019, and send the compliance report to Board on quarterly basis.
- 19- Unit shall identify recipient drains/ rivulets and their u/s & d/s location in consultation with UPPCB and shall carry out monthly monitoring of identified recipient drains at u/s & d/s location through lab recognized under Environment (Protection) Act, 1986 and shall submit the analysis report on monthly basis by 10th of every month to CPCB and UPPCB.
- 20- Unit shall maintain pipe line from outlet of ETP and to the point of irrigation land.

21- Unit shall ensure the connectivity of the installed online monitoring system to the servers of CPCB and UPPCB.

22- Unit shall provide Pakka channel/ pipe line for irrigation and shall maintain the records of ground water extracted and treated effluent used for irrigation on land.

23- Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India.

24- Unit shall submit treated effluent monitoring report of the ETP and ground water quality of premises as well as of the irrigated area done by MoEF & CC approved laboratory in every 3 months.

25- This Consent order shall automatically become invalid on issuance of Closure Order by C.P.C.B / UPPCB and further on Revoking of Closure order, the Consent order shall become valid.

26- The industry shall also explore treated effluent re-cycle mechanism in furtherance to the application of treated effluent on land as a significant alternative mode of re-cycle. This step shall in turn reduce hydraulic loading of effluent discharge as well as shall eliminate extraneous treated effluent discharge possibility elsewhere.

27- The industry shall submit Environmental Statement in prescribed form V rule no.14 of E.P Rules 1986.

28- Industry shall install at sufficient height from the ground level Open to Network HD PTZ rotation Camera at the Inlet, Aeration tank, Secondary Clarifier and outlet of Effluent treatment plants for On Line Monitoring and its URL and password shall be provided to the UPPCB control room.

Issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board .
NISHI KUMAR CHAUHAN Digitally signed by NISHI KUMAR CHAUHAN
Date: 2021.12.17 16:46:35 +05'30'
Chief Environmental Officer (Circle 3)



उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड
UTTAR PRADESH POLLUTION CONTROL BOARD
TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow-226010

Ref. no- H14926 /C-3/Haz-27/MZR/2017

Dated: 13/11/18
Regd.

To,
M/s Triveni Engineering & Industries Ltd.(Sugar Unit),
Vill- Sheikhpura, Khatauli,
Muzaffarnagar.

Subject:- Authorisation issued under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

1. Number of authorization and date of issue : 388/M.W. 27/10/18 13/11/18
2. Reference of application (No. and date) : 25.10.2017
3. Mr Tarun Sawhney of M/s Triveni Engineering & Industries Ltd.(Sugar Unit), is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, utilization, storage and disposal or any other use of hazardous or other wastes or both on the premises situated at Vill- Sheikhpura, Khatauli, Muzaffarnagar.

Details of Authorisation

Sl. No.	Category of Hazardous Waste as per the Schedules I,II and III of these rules	Authorised mode of disposal or recycling or utilization or co-processing, etc.	Quantity (ton/annum)
1	As per schedule I Cat. 5.1 Used or spent oil Cat.5.2 Wastes or residues containing oil	Mixed with baggasse & burnt in boiler	10 Kg/day

1. The authorization shall be valid for a period of **Five Years** from the date of issue of his letter.
2. The authorization is subject to the following general and specific conditions (please specify any conditions that need to be imposed over and above general conditions, if any):
 - General conditions of authorization:**
 - 1 The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
 - 2 The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution Board.
 - 3 The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
 - 4 Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorisation.
 - 5 The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
 - 6 The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and penalty".

Signature

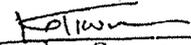
- 7 It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
- 8 The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
- 9 The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
- 10 The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.
- 11 The importer or exporter shall bear the cost of Import or export and mitigation of damages if any.
- 12 An application for the renewal of an authorisation shall be made as laid down under these Rules.
- 13 Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Changes or Central Pollution Control Board from time to time.
- 14 Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

B Specific conditions:

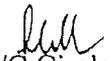
1. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers/bags shall be provided with a general label as given in Form 8. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
2. The authorised person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorisation has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
3. It is brought to your notice that as per the order dated 14.11.2003 passed by the Hon'ble Supreme Court in W.P. (c) 657 of 1995, no industry covered under Hazardous Waste (Management and Handling) Rules, 1989 (as amended) shall be allowed to operate without valid authorisation. It is also provided in the same order that industries which are not complying with the conditions shall not be allowed to operate. Hence in case you fail to apply for authorisation before its expiry or fails to comply with conditions of the earlier authorisation issued to you, closure order shall be issued against your industry without any further notice.
4. The applicant must file returns on prescribed Form 4 along with a compliance report of this letter. You should also maintain records on Form-3 and present it to Board's inspecting officials.
5. In case of occurrence of an accident, complete details on Form-11 must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.
6. It is also the mandatory duty of the occupier of industry as well as operator of a facility to develop suitable waste treatment and disposal facility and the design of the facility must be approved by the Board. Details along with the project report must be sent in this regard within fifteen days of receipt of this letter, otherwise the industry shall become member of a common TSDF and the industry shall start sending the Hazardous waste already stored along with the Hazardous waste generated at present at this TSDF. The proof of valid membership of TSDF along with proof of disposal of hazardous waste to TSDF shall be sent to U.P. Pollution Control Board within three months.
7. The authorised person shall not receive, collect, or store any hazardous waste from any unauthorised occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorisation of the Board.

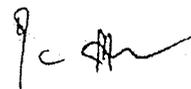
(M/s Triveni Engineering & Industries Ltd., Khatauli, Muzaffarnagar)

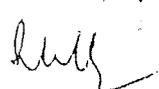
8. In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers of hazardous chemicals such as flammable, corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.
9. Proposal regarding waste minimization and reuse of wastes must be sent. Details of any recovery/ reuse system must be sent within two months.
10. It is within the powers and functions of the U.P. Pollution Control Board to suspend/ cancel the authorisation issued under the Rule- 6(2) of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
11. The stored waste shall not be taken out of the storage area except with the written permission of the State Pollution Control Board in this regard.
12. You are directed to display online data outside the main factory gate with regards to quantity and nature of hazardous chemicals being handled in the plant including waste water and air emissions and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within fifteen days of receipt of this letter.
13. It is the mandatory duty of the authorised person to comply with the guideline for transportation of hazardous waste in accordance with Rule 18 of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Guidelines in this regard has been issued by Central Pollution Control Board from time to time.
14. You are directed to provide the complete details regarding the quantity of hazardous waste stored in the factory premises within a month.
15. You are directed to provide all hazardous waste generated in the factory to any TSDF operating in the state for the treatment and disposal and send the compliance report to the U.P. Pollution Control Board at the earliest.
16. Status report of hazardous waste stored in premises available storage capacity and future action plan for permanent safe disposal of hazardous waste shall be submitted within one month. .
17. Ground water monitoring report of premises shall be submitted within one month.
18. Industry will follow the various provisions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.


Member Secretary

Copy to: To the Regional Officer, U.P. Pollution Control Board, Muzaffarnagar for information and necessary action


EE, I/C Circle-3







U.P. Waste Management Project
(A Division of Ramky Enviro Engineers Ltd.)

Plot No. 672 on NH-2, Sikandra Road, Village-Kumbhi,
Tehsil: Akbarpur, Distt: Kanpur Dehat-209101, UP, India
Mob.: 9335745566,8935001146 E-mail: upwmp@ramky.com
www.ramky.com

To,
M/s. Triveni Engineers & Industries Ltd, Sugar Unit Khatauli
Village Sheikhpura sugar Unit Khatauli, Mujaffarnagr-251201

Email: purchase@kht.trivenigroup.com

Valid From: 24th Nov 2021.

Valid To : 23th Feb 2022.

Kind Attention: **Mr. Tarun Sawhney**

Sub: - Provisional Membership of UPWMP (CHW-TSDF) Site, Kanpur Dehat.

Dear Sir

We thank you for your enrolment as an esteemed member of Ramky Enviro Engineers Limited at our UPWMP TSDF. We welcome you as a **PROVISIONAL MEMBER** of Uttar Pradesh Waste Management Project. (A division of Ramky Enviro Engineers Limited) for utilizing our Common Hazardous Waste Treatment, Storage Disposal Facility [CHW-TSDF] to dispose your Hazardous Waste safely & securely.

Your Provisional Membership No. is **UPWMP-KNP-HzW-CHW-TSDF – 2174**.

This membership is valid for **90 days** as above mentioned dates.

In the mean time you are requested to complete the following steps and begin active disposal of wastes.

1. Submission of Hazardous Waste generation types, quantity and categorization as per “*Hazardous & Other waste (Management and Transboundary movement) Rules - 2016*” to complete the membership and to obtain permanent membership from our TSDF.
2. Submission of Hazardous Waste Comprehensive Analysis report as per the all parameters and standards prescribed by CPCB in the guidelines of Hazardous waste Management series: Hazwams/32/2005-2006

We will provide all the possible guidance and assistance to enable you to complete all the formalities.

We acknowledge the receipt of your Membership Form.

Please feel free to contact for any clarification.

Thanking you,

Yours truly,

For **Uttar Pradesh Waste Management Project**,
[A Division of Ramky Enviro Engineers Limited]



certified by

bsi.



ISO9001:2008 | ISO 14001:2004 | OHSAS 18001:2007 | NABL Accredited
No. FS 570487 | C. No. EMS 570497 | C. No. OHS 570500 | TC-5877

Corporate Office:

Ramky Enviro Engineers Ltd.,

Ramky Grandiose Floor-12&13, Ramky Tower Complex,

Gachibowli Hyderabad - 500 032.

Tel.: 040-2301 5000 (40 Lines) Fax: 040-2330 2353 Website: www.ramky.com

GST: 09AAACR9626A1ZH, CIN: U74140TG1994PLC018833



GROUND WATER DEPARTMENT
 Department of Ground Water, Government of Uttar Pradesh
 Ministry of Jal Shakti
 Government of Uttar Pradesh

Form 8 (C)

**AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW WELL FOR INDUSTRIAL/
 COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER**

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO:

VALID UP TO : 01/03/2026

Name of the Applicant	TARUN SAWHNEY		
Address of the Applicant:	Triveni Engineering And Industries Ltd		
Company Name:	Triveni Engg. & Industries Itd Sugar Unit Khatali	Company Address	Village Shekhipura Khatali Muzaffarnagar
Serial No. of Application Form	MZFN0221NIN0016	Date of Submission	01/02/2021
Specimen Signature of the User:			
Location particulars:			
District	Muzaffar Nagar	Block	KHATAULI
Plot No.	N/A		
Municipality/Corporation	NA	Ward No.	NA
Holding No.			NA
Rate of Withdrawal (m ³ /hr.)	110.00	Date of Energization (In Case of Electric Pump)	14/12/1990
Particulars of the Proposed Well and Pumping Device:			
Type of the Well	Tube Well/Boring	Purpose of the Well	Industrial
Assembly Size (For Tube Well)	0.00	Approx. Strainer Length (For Tube Well)	0.00
Diameter (For Dug Well)	0.00	Type of Pump to be Used:	Submersible
H.P. of the Pump:	40.00	Operational Device	Electric Motor

Maximum Allowable Rate of Withdrawal (m³/hr.): 110.00
 Maximum Allowable Annual Extraction of Ground Water:

Maximum Allowable Running Hours Per Day: 2.00
 66000

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (2) for extraction of ground water at a rate not exceeding that as shown at Sl. (3f), for Running Hours 1 day as shown at Sl. (3k), and for maximum allowable annual extraction of ground water as shown at Sl. (3k) and is valid subject to the observance of the conditions stated overleaf.

Place:

Date:

Yours Faithfully,
 Signature of the Issuing Authority
 and Designation

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
 - No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
 - For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
 - The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
 - In case of any change of ownership of the existing well, fresh registration has to be obtained.
 - No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at Sl. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
 - In case, any of the particulars of information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage, this registration is liable for cancellation.
 - The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
 - Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
 - Guidelines for Installation of Piezometers and their Monitoring
- Piezometer is a borewell/tubewell used only for measuring the water level by lowering the tape/sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

- The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4" to 6".
- The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
- No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No. of piezometers required	Monitoring Mechanism
			Manual DWLR with Telemetry

1	< 10	0	0
2	11 - 50	1	0
3	50- 500	1	1
4	> 500	2	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
- For measurement of water level sounder or automatic water level recorder (AWLR) Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
- The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
- All the details regarding coordinates, reduced level (with respect to mean level), depth, zone tapped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
- The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
- A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
 - Any other site specific requirement regarding safety and access for measurement may be taken care of.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- Any other condition imposed by the concerned Authority.
- In case, any of the particulars furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- **SPECIFIC CONDITIONS:**
 - (A) For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
 - i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
 - ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
 - iii) All industries abstracting ground water in excess of 100 m³/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
 - iv) Construction of observation well(s) (piezometer(s)) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no. 10 shall be mandatory for industries drawing/ proposing to draw more than 10 m³ /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 15 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
 - v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
 - vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
 - vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
 - (B) Infrastructural User: The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
 - i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
 - ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m³ /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc



GROUND WATER DEPARTMENT
 Ministry of Jal Shakti
 Government of Uttar Pradesh

Form 8 (C)

**AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW WELL FOR INDUSTRIAL/
 COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER**

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO:

VALID UP TO : 03/03/2026

Name of the Applicant	TARUN SAWHNEY		
Address of the Applicant:	Triveni Engineering And Industries Ltd		
Company Name:	Triveni Engg & Industries Ltd Sugar Unit Khatuli	Company Address	Village Shekipura Khatuli Muzaffarnagar
Serial No. of Application Form	MZFN0221NIN0017	Date of Submission	01/02/2021
Specimen Signature of the User:			
Location particulars:			
District	Muzaffar Nagar	Block	KHATAULI
Plot No.	N/A		
Municipality/Corporation	NA	Ward No.	NA
Holding No.			NA
Rate of Withdrawal (m ³ /hr.)	100.00	Date of Energization (In Case of Electric Pump)	15/12/1990
Particulars of the Proposed Well and Pumping Device:			
Type of the Well	Tube Well/Boring	Purpose of the Well	Industrial
Assembly Size (For Tube Well)	0.00	Approx. Strainer Length (For Tube Well)	0.00
Diameter (For Dug Well)	0.00	Type of Pump to be Used:	Submersible
H.P. of the Pump:	40.00	Operational Device	Electric Motor

Maximum Allowable Rate of Withdrawal (m³/hr.): 100.00

Maximum Allowable Running Hours Per Day: 2.00

Maximum Allowable Annual Extraction of Ground Water: 60000

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (2) for extraction of ground water at a rate not exceeding that as shown at Sl. (3), for Running Hours | day as shown at Sl. (3k) and for maximum allowable annual extraction of ground water as shown at Sl. (3k) and is valid subject to the observance of the conditions stated overleaf.

Place:

Date:

Yours Faithfully,
Signature of the Issuing Authority
and Designation

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at Sl. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars | information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage, this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- Guidelines for Installation of Piezometers and their Monitoring

Piezometer is a borewell /tubewell used only for measuring the water level by lowering the taped sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

- The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4" to 6".
- The depth of the piezometer should be same as in case of the pumping well from which ground water is being abstracted. If more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
- No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No. of piezometers required	Monitoring Mechanism
			Manual DWLR with Telemetry

1	< 10	0	0
2	11 - 50	1	0
3	50 - 500	1	1
4	> 500	2	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
- For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
- The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
- All the details regarding coordinates, reduced level (with respect to mean level), depth, zone tapped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
- The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
- A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
- Any other site specific requirement regarding safety and access for measurement may be taken care off.

- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- Any other condition imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.

SPECIFIC CONDITIONS:

- (A) For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
 - i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
 - ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
 - iii) All industries abstracting ground water in excess of 100 m³/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
 - iv) Construction of observation well(s) (piezometer(s)) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no. 10 shall be mandatory for industries drawing/ proposing to draw more than 10 m³ /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 15 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
 - v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
 - vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
 - vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
- (B) Infrastructural User: The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
 - i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
 - ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m³ /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc



GROUND WATER DEPARTMENT
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

**AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW WELL FOR INDUSTRIAL/
COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER**

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO:

VALID UP TO : 03/03/2026

Name of the Applicant	TARUN SAWHNEY		
Address of the Applicant:	Triveni Engineering And Industries Ltd		
Company Name:	Triveni Engg. & Industries Iid Sugar Unit Khatali	Company Address	Village Shekhpura Khatali Muzaffarnagar
Serial No. of Application Form	MZEN0221NIN0018	Date of Submission	01/02/2021
Specimen Signature of the User:			
Location particulars:			
District	Muzaffar Nagar	Block	KHATAULI
Plot No.	N/A		
Municipality/Corporation	NA	Ward No.	NA
Holding No.			NA
Rate of Withdrawal (m³/hr.)	100.00	Date of Energization (In Case of Electric Pump)	17/12/1990

Particulars of the Proposed Well and Pumping Device:

Type of the Well	Tube Well/Boring	Purpose of the Well	Industrial
Assembly Size (For Tube Well)	0.00	Approx. Strainer Length (For Tube Well)	0.00
Diameter (For Dug Well)	0.00	Type of Pump to be Used:	Ejector pump
H.P. of the Pump:	40.00	Operational Device	Electric Motor

Maximum Allowable Rate of Withdrawal (m³/hr): 100.00 Maximum Allowable Running Hours Per Day: 1.00
Maximum Allowable Annual Extraction of Ground Water: 20000

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (2) for extraction of ground water at a rate not exceeding that as shown at Sl. (3), for Running Hours 1 day as shown at Sl. (3k), and for maximum allowable annual extraction of ground water as shown at Sl. (3k) and is valid subject to the observance of the conditions stated overleaf.

Place:
Date:

Yours Faithfully,
Signature of the Issuing Authority
and Designation

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at Sl. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars 1 information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage, this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- Guidelines for Installation of Piezometers and their Monitoring

Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

- The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4" to 6"
- The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
- No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No. of piezometers required	Monitoring Mechanism
			Manual DWLR with Telemetry

1	< 10	0	0	0	0
2	11 - 50	1	1	0	0
3	50- 500	1	0	1	1
4	> 500	2	0	2	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
- For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR) with telemetry system should be used for accuracy.
- The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
- All the details regarding coordinates, reduced level (with respect to mean level), depth, zone tapped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
- The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
- A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
- Any other site specific requirement regarding safety and access for measurement may be taken care off.

- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- Any other condition imposed by the concerned Authority.
- In case, any of the particulars furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.

SPECIFIC CONDITIONS:

- (A) For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
 - i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
 - ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
 - iii) All industries abstracting ground water in excess of 100 m³/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
 - iv) Construction of observation well(s) (piezometer(s)) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no. 10 shall be mandatory for industries drawing/ proposing to draw more than 10 m³ /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 15 m from the bore well/producton well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
 - v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
 - vi) Injection of treated waste water into aquifer system is strictly prohibited.
 - vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
- (B) Infrastructural User: The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
 - i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
 - ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m³ /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc



GROUND WATER DEPARTMENT
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 8 (C)

**AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW WELL FOR INDUSTRIAL/
COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER**

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICATE NO:

VALID UP TO : 03/03/2026

Name of the Applicant

TARUN SAWHNEY

Address of the Applicant:

Triveni Engineering And Industries Ltd

Company Name:

Triveni Engg. & Industries Itd Sugar Unit Khatuli

Serial No. of Application Form

MZFN0221NIN0019

Specimen Signature of the User:

Date of Submission

01/02/2021

Location particulars:

District

Muzaffar Nagar

Block

KHATAULI

Plot No.

N/A

Municipality/Corporation

NA

Ward No.

NA

Holding No.

120.00

Rate of Withdrawal (m³/hr.)

120.00

Date of Energization (In Case of Electric Pump)

19/12/1990

Particulars of the Proposed Well and Pumping Device:

Type of the Well	Tube Well/Boring	Purpose of the Well	Industrial
Assembly Size (For Tube Well)	0.00	Approx. Strainer Length (For Tube Well)	0.00
Diameter (For Dug Well)	0.00	Type of Pump to be Used:	Submersible
H. P. of the Pump:	40.00	Operational Device	Electric Motor

Maximum Allowable Rate of Withdrawal (m³/hr.): 120.00
Maximum Allowable Running Hours Per Day: 1.00
24000

Maximum Allowable Annual Extraction of Ground Water:

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (2) for extraction of ground water at a rate not exceeding that as shown at Sl. (3i), for Running Hours 1 day as shown at Sl. (3k) and for maximum allowable annual extraction of ground water as shown at Sl. (3k) and is valid subject to the observance of the conditions stated overleaf.

Place: _____
Date: _____

Yours Faithfully,
Signature of the Issuing Authority
and Designation

GENERAL CONDITIONS:

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at Sl. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at Sl. (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this registration
- In case, any of the particulars / information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage, this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- Guidelines for Installation of Piezometers and their Monitoring

Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

- The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4" to 6".
- The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
- No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Ground water withdrawal (cum/day)	No. of piezometers required	Monitoring Mechanism
			DWLR with Telemetry

1.	< 10	0	0
2	11 - 50	1	0
3	50- 500	1	1
4	> 500	2	2

- o The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
 - o For measurement of water level sounder or automatic water level recorder (AWLRY Digital Automatic water level recorder (DWLR)) with telemetry system should be used for accuracy.
 - o The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
 - o All the details regarding coordinates, reduced level (with respect to mean level), depth, zone tapped and assembly lowered should be provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its validation.
 - o The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
 - o A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
 - o Any other site specific requirement regarding safety and access for measurement may be taken care of.
 - o Any other condition(s) that may be imposed by the concerned Authority.
 - o In case, any of the particulars | information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
 - o Any other condition imposed by the concerned Authority.
 - o In case, any of the particulars | information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- SPECIFIC CONDITIONS:**
- (A) For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
 - j) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
 - k) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
 - l) All industries abstracting ground water in excess of 100 m³/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
 - m) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m³ /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 15 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
 - n) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
 - o) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
 - p) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.
 - (B) Infrastructure User: The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
 - i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
 - ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m³ /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

TUBEWELL WATER METER LOG BOOK SEASON 20 - Dec - 2021

Mtg No	Meter No.	Water Meter Reading		Day	To date	Signature of Meter Reader	Signature of Officer	Remark
		Tubewell No. 2	Tubewell No. 1					
		Loco	Canterbury					
1	776029	00	5049.00	4.00	4.00	[Signature]		
2	776029	00	5044.00	3.50	3.50	[Signature]		
3	778129	1.00	5050.50	0.00	2.00	[Signature]		
4	778129	0.00	5050.50	0.00	0.00	[Signature]		
5	778129	0.00	5050.50	0.00	0.00	[Signature]		
6	778129	0.00	5050.50	0.00	0.00	[Signature]		
7	778129	0.00	5052.00	1.50	1.50	[Signature]		
8								
9								
10								
11								
12								
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15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
Months Total								
to Date Total								

[Handwritten Signature]

Triveni Engineering & Industries Ltd. Sugar Unit Khatauli - 251201 (U.P.)

TUBEWELL WATER METER LOG BOOK SEASON 20 - 2021

Page No.	Water meter Reading		Day	To date	Signature of Meter Reader	Signature of Officer	Remark
	Meter No.	Tubewell No. 4					
1		772619	90	90			
2		772984	85	85			
3		77347	90	90			
4		773182	85	85			
5		773949	87	87			
6		773334	85	85			
7		773422	86	86			
8		773589	87	87			
9		773594	85	85			
10		773684	90	90			
11		773774	90	90			
12		773889	85	85			
13		77394	88	88			
14		77400	87	87			
15		77414	85	85			
16		774201	84	84			
17		774290	89	89			
18		774380	90	90			
19		774470	90	90			
20		774555	85	85			
21		774645	90	90			
22		774735	90	90			
23		774820	85	85			
24		774910	90	90			
25		774995	85	85			
26		775075	80	80			
27		775165	90	90			
28		775255	90	90			
29		775340	85	85			
30		775430	70	70			
31							
Months Total							
To Date Total			2618	2618			

[Handwritten Signature]

Triveni Engineering & Industries Ltd. Sugar Unit Khatauli - 251201 (U.P.)

TUBEWELL WATER METER LOG BOOK SEASON 20 - 21 *2021*

Page No.	Water meter Reading		Day	To date	Signature of Meter Reader	Signature of Officer	Remark
	Meter No.	Tubewell No. 4					
1		775480					
2		775510	90				
3		775593	85				
4		775685	90				
5		775695	90				
6		775762	87				
7		775847	85				
8		775937	90				
9							
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25							
26							
27							
28							
29							
30							
31							
Months Total							
To Date Total							

[Signature]

TRIVENI ENGINEERING & INDUSTRIES,

Village- Sheikhpura, Post-Khatauli,

District- Muzaffarnagar, Uttar Pradesh

DIFFERENT UNITS OF ETP WITH CAPACITY

No.	Particular	Nos	Capacity	H.P.
1.	Equilization tank	2 nos pump	200 m ³ /hr each	30
2.	Primary Clarifier	2 Nos Pump	25 Litre/sec	10
3.	Scraper Motor	1 no.	-	2
4.	Secondary Clarifier	2 Nos Pump	25 Litre/sec	10
5.	Scraper Motor	1 No.	-	5
6.	Lime Tank 1	1 No.	-	1.5
7.	Lime Tank 2	1 No.	-	2.0
8.	Clear water tank	2 Nos Pump	200 m ³ /hr each	30
9.	Blower	4 Nos	4000 m ³ / hr each	120
10.	Diffusers	462 Nos	4 to 6 m ³ /hr	-

Detail of ETP

Holding volumes and size of equalization of anaerobic tank, aerobic tank, primary and secondary clarifiers & sludge drying bed etc. –

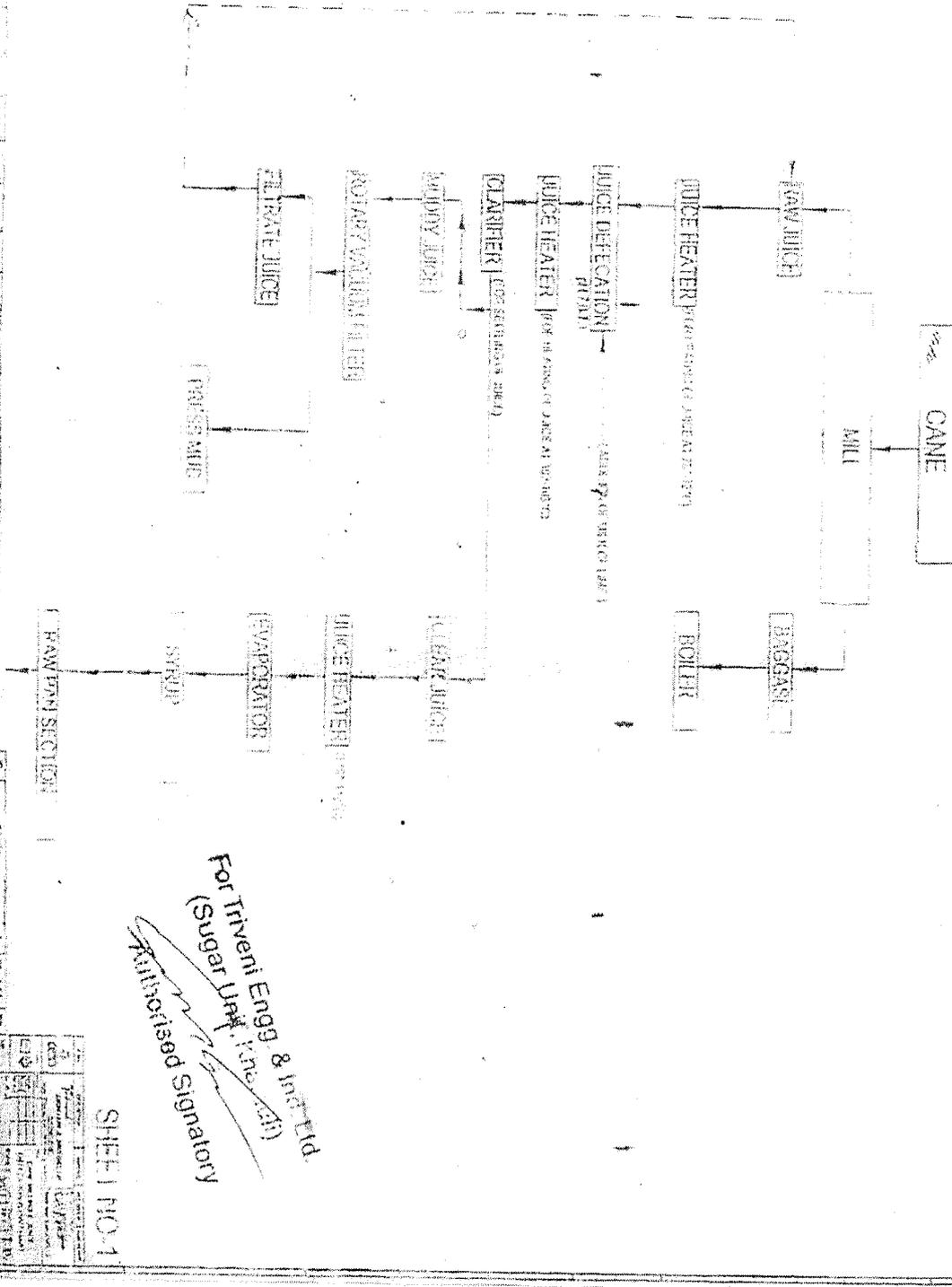
1. Equilization tank - **4588 M³**
2. Primary Clarifier - **578 M³**
3. Aeration tank no.1 - **4914 M³**
4. Aeration tank no.2 - **3670 M³**
5. Secondary Clarifier - **578 M³**
6. Clear Water tank - **705 M³**
7. Treated water storage tank - **16530 M³**
8. Sludge drying bed (8 Nos) - **960 M²**

(L12 Mtr X W10Mtr X D1.2Mtr)

Storage lagoon: Total Capacity- 17235 m³, Lagoon - 16530 m³, Clear water tank -705 m³

Annexure-01

FLOW DIAGRAM OF PROCESS OF CANE MILLING & JUICE DEFLICATION TRIVENI ENGG & INDUSTRIES LTD KHATAULI

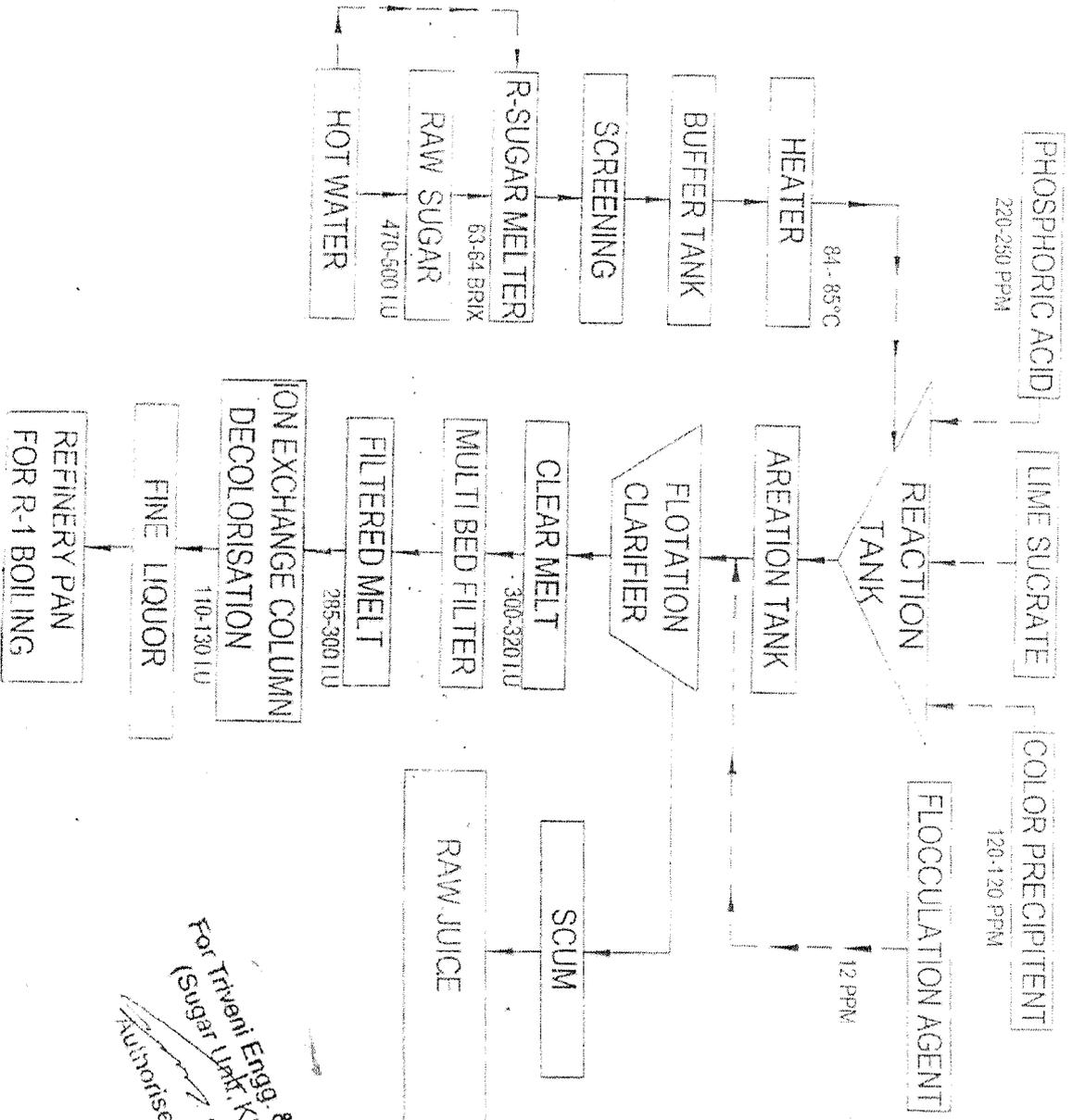


For Triveni Engg & Industries
 (Sugar Unit) Khatauli
 Authorised Signatory

SHEET NO. 1

Project Name	Triveni Engg & Industries
Client Name	Triveni Engg & Industries
Project No.	
Scale	
Sheet No.	1
Date	
Author	
Checked	
Approved	

MELT CLARIFICATION



For Trieni Engg. & Ind. Ltd.
(Sugar Unit, Khera, India)
Authorised Signatory

	Trieni Engineering & Industries Ltd. 10/10, Sector-10, Gurgaon, Haryana INDIA
Project No. _____ Date of Issue _____ Issue No. _____	Sheet No. _____

