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UTTAR PRADESH POLLUTION CONTROL BOARD

141

Ref No.: H8787X/ए-7/अम-40/23

Date: 27-01-23

To,

The Registrar General,
Principal Bench,
Hon'ble National Green Tribunal,
Copernicus Marg, New Delhi.

Sub.: Regarding submission of the Joint Inspection report in the matter of O.A. No. 324/2016 (EA No. 23/2022) Sailesh Singh Vs. State of U.P. and Ors. order dated 16-09-2022.

Sir,

In compliance of the direction passed by Hon'ble National Green Tribunal during hearing on 16-09-2022 in the matter of O.A. No. 324/2016 (EA No. 23/2022) Sailesh Singh Vs. State of U.P. and Ors. the Joint Inspection report dated 17-01-2023 is hereby attached with a request to put up before Hon'ble National Green Tribunal for kind perusal.

In line of the observation and recommendation of Joint Committee UPPCB vide letter dated 27-01-2023 issued a Show Cause Notice under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended for compliance of following directions :

- 1- The leakage observed in treated condensate Line. It was directed to rectify the same on top priority at the time of inspection.
- 2- The pipelines of spent wash lying in the drain upto the lagoon of Ajeetpur site shall be replaced outside/undergroud to avoid any mixing of spent wash with the drain water in case of any leakage.

The Show Cause Notice dated 27-01-2023 IS annexed as **Annexure No. 15.**

Encl: As Above

Yours Sincerely,

(Abhishek Tripathi)
Incharge, Circle-7

Joint Inspection Report**(17-01-2023)****of****M/s Radico Khaitan Ltd., Bareilly Road, Rampur****In the matter of****O.A. No. 324/2016****(E.A. NO. 23/2022)****Shailesh Singh****V/S****State of U.P. & Ors.****Inspected by -****RO, UPPCB, Moradabad & Joint Director, Agriculture, Moradabad**

Inspection report of M/s Radico Khaitan Ltd., Bareilly Road, Rampur on 17-01-2023 in compliance to direction issued by Hon'ble NGT in O.A. No. 324/2016 (EA No. 23/2022) Shailesh Singh Vs State of U.P. & Ors.

Hon'ble NGT has passed an order on 16-09-2022 in matter of Shailesh Singh Vs State of U.P. & Ors in O.A. No. 324/2016 (EA No. 23/2022). Main part of order are produced here -

"4. In the present Application, it is stated that as per photographs taken on 24.07.2022, the PP - Rampur Distillery (Radico Khaitan) is discharging effluent into the drain which finally joins the river. Directions in the order dated 18.03.2021 are still not being followed. This is disputed by learned counsel appearing for the PP.

5. In view of above, we consider it appropriate to ascertain factual position by requiring the Additional Chief Secretary, Agriculture, U.P and the State PCB to furnish a factual report in the matter with regard to compliance status by the PP, particularly mode of disposal of effluents vis a vis CTO conditions within two months by email at judicialngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The Applicant and the PP may give their respective versions to Additional Chief Secretary, Agriculture, U.P and the State PCB within two weeks from today. The State PCB will be the nodal agency for compliance. List for further consideration on 03.02.2023."

In compliance to the direction of Hon'ble NGT dated 16-09-2022, the inspection of M/s Radico Khaitan Ltd., Bareilly Road, Rampur was carried out by the officials of RO, UPPCB, Moradabad & Joint Director (Agriculture), Moradabad as nominated by Agriculture Department, Moradabad on 17-01-2023 in presence of factory representative Mr. Amritraj Tomar, AGM (Environment).

Status of the industry

- i. The unit is engaged in the production of ENA using molasses & grain as raw materials having production capacity of 374 KLD. During Inspection unit was found in operation. The unit has produced ENA 141 KL on 16-01-2023 & 142 KL on 17-01-2023.
- ii. The unit is having Consent to Operate under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and section 21/22 of the Air (Prevention and Control of Pollution) Act, 1981, which is valid upto 31.12.2026. The copy is annexed as **Annexure- 1**.
- iii. The unit is also having valid authorization under the provisions of Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016 for storage and disposal of Hazardous wastes which is valid upto 13-12-2023. The copy is annexed as **Annexure- 2**.
- iv. The unit has obtained NOC from U.P. Ground Water Department for the abstraction of ground water on dated 12-08-2021 which is valid for 03 years (From the date of issue). The copy is annexed as **Annexure- 3**.
- v. The unit is having 03 Nos. borewell for the water requirement in manufacturing process as well as domestic purposes. The unit has installed flow meters at each borewell and as per the logbook submitted by the unit, the average consumption of fresh water from October, 2022 to December 2022 is 1805 KLD, 1526 KLD, 2029 KLD respectively.
- vi. The unit is generating spent wash, spent lees & effluent from fermenter washing, process condensate, floor washing, cooling tower blow down, boiler blow down etc.
- vii. The unit is based on Zero Liquid Discharge (ZLD). For the management of spent wash & to achieve ZLD, the unit has installed Bio Digesters, Clarifiers, Dissolved Air Flootation (DAF), Reverse Osmosis, 03 Stage Integrated Multi Effect Evaporator (MEE), Clariflocculators and 06 Stage Multi Effect Evaporator (BMSW) followed by Bio Composting for the treatment of MEE Condensate, spent lees, RO reject, cooling tower blow down, unit has installed condensate polishing unit (CPU).

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- viii. The unit has bio compost yards located at two deferent places i.e. Ajeetpur site and Hitachi site. The unit has total 58 acres of bio compost area. Out of 58 acres, 25 acres of area is covered and remaining 33 acres of area is open/uncovered. The unit has installed 02 PTZ web cameras at each bio compost yard.
- ix. The unit has 10 piezometric wells & 01 hand pump in the bio compost yard area of Hitachi site, 08 piezometric wells and 01 hand pump in Ajeetpur site.
- x. The unit is having 03 boilers of 65 TPH, 30 TPH & 26 TPH -
- (a) Boiler of 65 TPH capacity - Rice Husk/Bio Gas is used as fuel. Electrostatic precipitator is attached as APCS and the stack height is 65 m above ground level.
- (b) Boiler of 30 TPH capacity - Rice Husk/Bio Gas is used as fuel. Electrostatic precipitator is attached as APCS and the stack height is 45 m above ground level.
- (c) Boiler of 26 TPH capacity - Bio Gas is used as fuel and the stack height is 45 m above ground level.

At the time of inspection, the boiler having capacity of 65 TPH was found not in operation. However, rest two boilers were in operation and the stack monitoring was carried out of only two boilers having capacity 30 TPH & 26 TPH. As per the monitoring report, the value of particulate matters observed 103.84mg/nm³ and 9.77mg/nm³. Copy of monitoring report are annexed as **Annexure-04**.

- xi. The unit has installed STP of capacity 120 KLD for treatment of waste water generated from residential colony. STP consist of holding tank, biological treatment (activated sludge process), settling tank, holding tank for feed into pressure sand filter and activated carbon filter (ACF). During inspection STP was found in operation. Treated sewerage water is being discharged into nearby drain. During inspection sample from outlet of STP was collected and got analysed. As per analysis report parameters of treated effluent was found with in prescribed limit. Copy is annexed as **Annexure - 05**.
- xii. The unit has developed green belt inside the premises in 6.678 acres of land however due to lack of space inside the premises in addition to this the unit has also developed green belt outside the industrial premises in approximately 6.49 acres. The unit is having a total green belt area of 13.27 acres, which is approximately 34.0% of total factory area.
- xiii. For the treatment of process condensate generated from MEE, RO Reject, Spent Less etc, the unit has installed a condensate polishing unit (CPU) of 2000 m³ capacity. The CPU consist of Equalization Tank, Buffer Tank, Anaerobic Digestion, Aerobic Digestion, Clarification, MGF, ACF followed by U.V. Treatment. The treated effluent from CPU is being recycled in cooling tower and for molasses dillution. The unit has installed flow meter at inlet and outlet of CPU and maintaining the records. Analysis result of sample collected from CPU is given below-

S.No.	Sample Description	pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)
1	Out let of CPU	7.71	128.0	24.0	18.0	380.0
2	Out let of STP	7.51	64.0	8.0	9.0	310.0

- xiv. Characteristics of waste water samples collected from drains and test results of drain are as follows -

S.No.	Sample Description	pH	COD (mg/l)	BOD (mg/l)	TDS (mg/l)	TSS (mg/l)
1	Outlet of factory near main gate.	7.83	192.0	24.0	410.0	62.0
2	Drain near Ajeetpur lagoon bio compost yard.	8.10	272.0	70.0	580.0	320.0
3	Rampur Drain	8.13	272.0	60.0	530.0	280.0
4	Panwadiya Drain	6.73	304.0	75.0	510.0	250.0

- From the analysis results of drain samples, no significant impact of industrial effluent discharge could be perceived.
- xv. The unit has installed 02 Nos lagoons of total capacity 25000 m³ for storage of concentrated spent wash. Storage capacity of lagoon located at Ajeetpur site and Hitachi site is 21500 KL and 3500 KL respectively. During inspection storage of spent wash in lagoons was assessed about 9470 m³ and 1380 m³ respectively, which was found less than 50% of total holding capacity.
 - xvi. The unit has installed mass flow meter with totalizer at the inlet and outlet of MEE as well as on BMSW evaporator and maintain the records.
 - xvii. During inspection, leakage was observed at condensate line.
 - xviii. During inspection, it was observed that unit is maintaining Zero Liquid Discharge and no trade effluent discharge was found from outside of factory premises into drain/river/water body or on land. However, the domestic treated effluent was found discharging in the drain. According to the letter dt 21-01-2023 of Executive Engineer, Rampur Canal Division, Rampur, no effluent is being discharged into any canal by the unit. Copy is annexed as **Annexure 06**.
 - xix. It was observed that the pipelines of carrying spent wash to the lagoon at Ajeetpur site are passing/lying through the drain. Hence there is possibility of mixing the spent wash in the drain water in case of leakage.
 - xx. The unit is generating fly ash 16-18 MT/Day approximately, which is being stored in isolated place is being used in bio composting.

Status of CTO conditions -

UPPCB, Lucknow vide reference no. 163196/UPPCB/Moradabad(UPPCBRO)/CTO/both/RAMPUR/2022 dated 19-09-2022 had issued consolidated consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 to the said unit which is valid upto 31-12-2026. Status of CTO conditions are as follows -

Specific Conditions-

Sr. No.	CTO Conditions	Complying Status
1	The Consent to operate issued vide letter number 51907/UPPCB/Moradabad(UPPCBRO)/air/Rampur/2019 dated 19.07.2019 and vide letter number 51900/UPPCB/Moradabad(UPPCBRO)/Water/Rampur/2019 dated 19.07.2019 for production of 200 KLD Alcohol by using Molasses and Consent to operate issued vide letter number 51920/UPPCB/Moradabad(UPPCBRO)/air/Rampur/2019 dated 02.05.2019 and vide letter number 51862/UPPCB/Moradabad(UPPCBRO)/Water/Rampur/2019 dated 02.05.2019 for production of 104 KLD Alcohol by using Grain / Malt is hereby revoked.	Needs no reply.
2	This Consent to Operate is valid for production of 374 KLD ENA by using Molasses/Sugar Syrup/cane juice/Malt/Grain.	As per data submitted by the unit, the average production of Alcohol from October, 2022 to December, 2022 is 4236 KL/Month, 3473.29 KL/Month, 5224.98 KL/Month respectively. Unit is producing alcohol as per

		consented capacity issued by UPPCB. Copy of production data during month October, 2022 to December, 2022 is annexed as Annexure-07 .
3	The validity of the Consent to Operate shall be valid from 01.10.2022 or the date on which the unit shall install all plant and machinery for Zero Liquid Discharge for distillery plant .	Unit has installed the system of ZLD.
4	The unit shall inform UPPCB before operation of the plant and the plant shall be operational after the inspection of UPPCB officials.	Complying.
5	Unit shall dispose spent wash through MEE and the concentrated spent wash shall be disposed through Bio composting in 58 Acre biocompost yard.	Complying, unit has installed 03 stage integrated multi effect evaporator (MEE) and after concentration by MEE, concentrated spent wash is being utilized through bio composting in 58 acres bio compost yard.
6	Unit Shall restrict lined storage capacity to 15 days of spent wash generation.	The unit has installed 02 Nos lagoons of total capacity 25000 m ³ for storage of concentrated spent wash. Storage capacity is being maintaining to 15 days of spent wash generation equivalent according to the direction issued by CPCB.
7	Unit shall operate in Zero Liquid Discharge and no effluent is allowed to discharge outside the premises.	The unit is operating on ZLD and no effluent is being discharged from outside of factory premises.
8	Unit shall comply with the directions of Hon'ble Supreme Court, Hon'ble NGT passed by time to time.	Will be followed by the unit.
9	Unit shall install Electromagnetic Flow Meter at inlet and outlet of STP and shall maintain the records.	The unit has installed Electromagnetic flow meter at inlet & outlet of STP and maintaining records.
10	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.	Complying, the fly ash is generated approx 16-18 MT/Day & being used in bio composting.
11	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.	Complying, monitoring of Rampur Drain is being done by RO, UPPCB, Moradabad regularly and analysis report of water samples is being sent to HO, Lucknow. Copy of water sample report of Rampur drain collected by

		RO, UPPCB, Moradabad during month December, 2022 is annexed as Annexure-08.
12	Unit must operate and maintain properly the installed flow meter and web camera and shall ensure on line connectivity of flow meter and web camera with server of CPCB and UPPCB.	The unit has installed flow meter and web camera which is linked with the server of CPCB & UPPCB and maintaining connectivity.
13	Unit shall develop Green Belt in minimum 33 percent area of Industrial Premises as per the provisions laid down in office order no. H16405/220/2018/02 dated 16-02-2018 of U.P. Pollution Control Board. The copy of said office order is available on the website of U.P. Pollution Control Board www.uppcb.com.	The unit has developed green belt inside the premises in 6.678 acres, however due to lack of space inside the premises in addition to this, the unit has also developed green belt outside the industrial premises in approximately 6.49 acres. The unit is having a total green belt area of 13.27 acres, which is approximately 34.0% of total factory area.
14	Process effluent / any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	Complying, effluent & storm water channels are separate.
15	Unit shall comply with the conditions of NOC issued by ground water department Govt. of Uttar Pradesh for abstraction of ground water, valid till 08.04.2024.	The unit has obtained valid NOC from UPGWD for abstraction of ground water and compliance report of NOC conditions is being submitted to concerned department. Copy is annexed as Annexure-09.
16	The overall noise levels in and around area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc, on all sources of noise generation. The ambient noise level shall confirm to the standards under the Environment (Protection) Act 1986.	Unit has submitted Ambient Noise Monitoring report carried out by NABL Accredited Lab Global Enviro Laboratories, Ghaziabad on 06.12.2022. As per Air Ambient Monitoring report noise level were found within prescribed limits. Copy is annexed as Annexure- 10.
17	Unit shall dispose the Hazardous waste generated i.e. used oil through authorized recycler and send details in prescribed format (Form 10) to UPPCB.	During inspection, it was informed by unit representative that the generation of used oil is very less. Form 10 will be submitted later.
18	Unit shall comply the provisions of Hazardous and Other Waste (Management and Transboundary Movement) Rules	The unit is complying the provisions of The

	2016.	Hazardous and Other Wastes (Management & Transboundary) Rules, 2016.
19	Unit shall comply with the provisions of Rule 19 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and send copy of Form 10 regarding Manifest for Hazardous and Other Wastes.	As stated in Sl. No. 17.
20	Unit shall comply with the provisions of Rule 20 of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and submit Annual Returns to State Board in Form IV.	Complying, copy of annual return in form - IV submitted by unit is annexed as Annexure- 11.
21	Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 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.	Is being ensured.
22	Unit shall submit ground water quality monitoring report done by MoEF & CC approved laboratory in every 3 months.	The unit has submitted ground water quality monitoring report done by NABL Accredited Lab Global Enviro Laboratories, Ghaziabad on 07.12.2022. Copy is annexed as Annexure- 12.
23	Unit shall submit the ambient air quality report and stack report of the air pollution sources from laboratory authorized from MOEF & CC on quarterly basis.	The unit has submitted ambient air quality monitoring report and stack monitoring report done by NABL Accredited Lab Global Enviro Laboratories, Ghaziabad on 06.12.2022 & 07-12-2022. Copy is annexed as Annexure- 13.
24	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.	Will be followed.

General Conditions -

Sr. No.	CTO Conditions	Complying Status
1	The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.	The unit has submitted sample reports of effluent/emission done by NABL Accredited Lab Global Enviro Laboratories, Ghaziabad.
2	The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.	Will be followed by the unit.
3	Treated Industrial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement	Treated industrial effluent i.e. spent wash is being disposed of through bio composting and maintaining ZLD. Domestic effluent generated from residential colony is treated through STP

	equipment at final disposal point.	and discharged in nearby drain. The unit has installed flow meter and maintaining the records.
4	The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.	Unit is submitting the compliance report of CTO conditions and complying.
5	The applicant shall maintain good housekeeping. All valves/pipes/sewer/drains etc. must be leak-proof.	Complying.
6	The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.	Complying.
7	The industry shall provide Inspection Book at the time of inspection to the Board's officials.	Not maintaining.
8	Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.	Will be followed.
9	The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.	Complying.
10	In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.	Will be followed.
11	The applicant shall apply before the 60 days of expiry of CCA or any change in production types/ production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point.	Will be followed.
12	The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.	Will be followed.



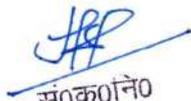

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Conclusion -

1. The unit is having valid Consent to Operate under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and section 21/22 of the Air (Prevention and Control of Pollution) Act, 1981 as well as authorization under the provisions of Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016 for storage and disposal Hazardous wastes. Overall, the unit is complying CTO conditions.
2. The leakage observed in treated condensate line. It was directed to rectify the same on top priority at the time of inspection.
3. The unit is maintaining Zero Liquid Discharge (ZLD) and no trade effluent was being discharged found from outside of factory premises into drain/river or on land. Domestic treated effluent was found discharged into the drain.

Recommendation:

The pipelines of spent wash lying in the drain upto the lagoon of Ajeetpur site shall be replaced outside/underground to avoid any mixing of spent wash with the drain water in case of any leakage.

Sr. No.	Name & Designation of Officials	Signature
1	J.N. Tiwari, Asstt. Env. Engineer, UPPCB, Moradabad.	
2	Jai Prakash Chaudhary, Joint Director, Agriculture, Moradabad Division, Moradabad	 संस्कृतने० मुरादाबाद

**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.in, Website: www.uppcb.com

163196/UPPCB/Moradabad(UPPCBRO)/CTO/both/RAMPUR/2022**Date: 19/09/2022****To,****M/s****RADICO KHAITAN LIMITED MOLASSES & GRAIN DUAL MODE AND MALT SPIRIT PLANT****Radico Khaitan Limited, Bareilly Road, Rampur,
U.P.,RAMPUR,244901****Application Id-
17593886**

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981

CCA is hereby granted to **RADICO KHAITAN LIMITED MOLASSES & GRAIN DUAL MODE AND MALT SPIRIT PLANT** located at **Radico Khaitan Limited, Bareilly Road, Rampur, U.P.,RAMPUR,244901**. subject to the provisions of **the Water Act, Air Act** and the orders that may be made further and subject to following terms and conditions :-

1. This CCA RADICO KHAITAN LIMITED MOLASSES & GRAIN DUAL MODE AND MALT SPIRIT PLANT **granted for the period from 01/10/2022 to 31/12/2026** and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	ENA	374	Kilo Liters/Day

2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-

(i) The daily quantity of effluent discharge (KLD) :-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	120 KLD	STP	ground

(ii) Trade Effluent Treatment and Disposal :-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time :-

Industrial Effluent Quality Standard

S.No.	Parameter	Standard
1	Zero Liquid Discharge	ZLD

(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality. In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	pH	5.5-9
2	BOD (mg/L)	30mg/l
3	TSS (mg/L)	100mg/l

3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	Boiler of 30 TPH	Rice husk wood chips	01	Particulate Matter	Electrostatic Precipitator as APCS along with stack height of 45 meter from ground level
2	Boiler of 26 TPH	Bio gas	02	Particulate Matter	stack height 45 meter from ground level
3	Boiler of 65 TPH	Rice husk, Coal, wood chips	03	Particulate Matter	Electrostatic Precipitator as APCS along with stack height of 65 meter from ground level
4	DG set 1250 KVA, 1250 KVA, 750 KVA, 700 KVA, 625 KVA, 380 KVA, 1500 KVA, 1500 KVA	Diesel	04	Particulate Matter	12 meter, 12 meter, 12 meter, 12 meter, 12 meter, 12 meter, 30 meter and 30 meter from Ground level.
5	Bio Gas generator 1200 KVA, 1200 KVA	Bio gas	5	Particulate Matter	12 meter from ground lwwl

Emmission Quality Standards

S No.	Stack no	Parameters	Standards
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In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

(ii) The unit will not use any type of restricted fuel.

iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows :-

Day time : from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

Standards for Noise level in db(A) Leq	Industrial Area		Commercial Area		Residential Area		Silence Zone	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
	75	70	65	55	55	45	50	40

4. Essential documents to be submitted by the Industry/Unit as Applicable :-

(i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.

(ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.

5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.

6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will results in legal action under the aforesaid Acts and Rules.

7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-<http://www.upecp.in/TrainingSession.aspx> for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of non-compliance of this direction, your consent will be revoked by the Board.

8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

Specific Conditions:-

1. The Consent to operate issued vide letter number 51907/UPPCB/Moradabad(UPPCBRO)/air/Rampur/2019 dated 19.07.2019 and vide letter number 51900/UPPCB/Moradabad(UPPCBRO)/Water/Rampur/2019 dated 19.07.2019 for production of 200 KLD Alcohol by using Molasses and Consent to operate issued vide letter number 51920/UPPCB/Moradabad (UPPCBRO)/air/Rampur/2019 dated 02.05.2019 and vide letter number 51862/UPPCB/Moradabad(UPPCBRO)/Water/Rampur/2019 dated 02.05.2019 for production of 104 KLD Alcohol by using Grain / Malt is hereby revoked.

2. This Consent to Operate is valid for production of 374 KLD ENA by using Molasses/Sugar Syrup/cane juice/Malt/Grain.

3. The validity of the Consent to Operate shall be valid from 01.10.2022 or the date on which the unit shall

install all plant and machinery for Zero Liquid Discharge for distillery plant .

4. The unit shall inform UPPCB before operation of the plant and the plant shall be operational after the inspection of UPPCB officials.
5. Unit shall dispose spent wash through MEE and the concentrated spent wash shall be disposed through Bio composting in 58 Acre biocompost yard.
6. Unit Shall restrict lined storage capacity to 15 days of spent wash generation.
7. Unit shall operate in Zero Liquid Discharge and no effluent is allowed to discharge outside the premises.
8. Unit shall comply with the directions of Hon'ble Supreme Court, Hon'ble NGT passed by time to time.
9. Unit shall install Electromagnetic Flow Meter at inlet and outlet of STP and shall maintain the records.
10. 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 seasons by flowing along with storm water . Direct exposure of workers to fly ash & dust shall be avoided.
11. 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.
12. Unit must operate and maintain properly the installed flow meter and web camera and shall ensure on line connectivity of flow meter and web camera with server of CPCB and UPPCB.
13. Unit shall develop Green Belt in minimum 33 percent area of Industrial Premises as per the provisions laid down in office order no. H16405/220/2018/02 dated 16-02-2018 of U.P. Pollution Control Board. The copy of said office order is available on the website of U.P. Pollution Control Board www.uppcb.com.
14. Process effluent / any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
15. Unit shall comply with the conditions of NOC issued by ground water department Govt. of Uttar Pradesh for abstraction of ground water, valid till 08.04.2024.
16. The overall noise levels in and around area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc, on all sources of noise generation. The ambient noise level shall conform to the standards under the Environment (Protection) Act 1986.
17. Unit shall dispose the Hazardous waste generated i.e. used oil through authorized recycler and send detaklis in prescribed format (Form 10) to UPPCB.
18. Unit shall comply the provisions of Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016 .
19. Unit shall comply with the provisions of Rule 19 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and send copy of Form 10 regarding Manifest for Hazardous and Other Wastes.
20. Unit shall comply with the provisions of Rule 20 of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and submit Annual Returns to State Board in Form IV.
21. Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 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.
22. Unit shall submit ground water quality monitoring report done by MoEF & CC approved laboratory in every 3 months.
23. Unit shall submit the ambient air quality report and stack report of the air pollution sources from laboratory authorized from MOEF & CC on quarterly basis.
24. 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.

General Conditions:-

1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
2. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
3. Treated Industrial waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 30 days of receipt of this CCA. If at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the Board, legal action shall be initiated against the applicant.
5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
8. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect.
9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
10. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
11. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/ production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point
12. The Board reserves the right to revoke/add/modify any stipulated condition issued along with CCA, as may be necessary.

Chief Environment Officer

Copy to:

Regional Officer Moradabad to ensure the compliance of the conditions imposed in the consent order.

Chief Environment Officer



UTTAR PRADESH POLLUTION CONTROL BOARD

156

TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow-226010

Ref. No : 178/UPPCB/Moradabad(UPPCBRO)/HWM/RAMPUR/2017 Dated: 04/04/2018

To,

M/s Radico Khaitan Ltd, Rampur

Radico Khaitan Ltd, Bareilly Road Rampur U.P.

Tehsil :Rampur

District :RAMPUR

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

1. Number of authorization and date of issue 178 and 04/04/2018 .
2. Reference of application (No. and date) 243682 and 13/12/2017 .
3. Mr Krishan Pal Singh of M/s Radico Khaitan Ltd, Rampur 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 Radico Khaitan Ltd, Bareilly Road Rampur U.P. .

Details of Authorisation

S 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	Schedule 1- cat-5.1(used oil)	Authorized recyclers	2.5 KL/annum

1. The authorization shall be valid for a period of 31/03/2023 from the date of issue of this 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) .

A 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 .
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 of Authorization

1- Unit shall ensure compliance of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

2- Unit shall comply with the provisions of Rule 19 of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and send copy of Form 10 regarding Manifest for Hazardous and Other Wastes.

(**Authorized Signatory**)

UTTAR PRADESH POLLUTION CONTROL BOARD

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

CEO/EE, I/C Circle_____

**Form 8 (E)**

[See rules 15(2)]

**(RENEWAL OF AUTHORIZATION/ NO-OBJECTION CERTIFICATE
FOR SINKING OF NEW WELL FOR INDUSTRIAL/ COMMERCIAL/
INFRASTRUCTURAL OR BULK USER OF GROUND WATER)
VALID UP TO :**

Registration No.: 202108000304

Name of the Owner	KRISHAN PAL SINGH	Application Form Serial No.	RMPR0821RIN0037
Address of the Applicant	Radico Khaitan Limited, Brailley Road, Panwaria, Rampur, U.P.-244901	Specimen Signature	
Date of Submission	10/08/2021	Company Address	Bareilly Road, Rampur, U.P. - 244901
Company Name	RADICO KHAITAN LIMITED MOLASSES SPIRIT PLANT	Location Particulars	
District	Rampur	Block	CHAMRAUAA (URBAN)
Plot No./Khasra No.	PLOT NO A 1 INDUSTRIAL AREA RAMPUR	Municipality/Corporation	Yes
Ward No./Holding No.			3
Particular of the Existing Well and Pumping Device			

Date of Construction/Sinking of the Well 01/01/1994

Type of Well	Tube Well/Boring	Depth of the Well (In meter)	110.00
Purpose of well	Industrial	Assembly Size(For Tube Well)	
Strainer Position (For Tube Well)		H.P. of the Pump	41.00
Type of Pump Used	Submersible	Rate of Withdrawal (m3/hr.)	100.00
Operational Device	Electric Motor	Date of Energization (In Case of Electric Pump)	01/01/1994
Maximum Allowable Rate of Withdrawal (m3/hr.):	100.00	Maximum Allowable Running Hours Per Day:	12.00
Maximum Allowable Annual Extraction of Ground Water:			438000

Reason for renewal of N.O.C.

एन.ओ.सी. के नवीनीकरण का कारण as per Government agency rules

Against Case

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

Conditions

- (1) In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- (2) 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.
- (3) 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
- (4) 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.
- (5) In case of any change of ownership of the existing well, fresh registration has to be obtained.
- (6) No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (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.
- (7) 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.
- (8) The Certificate of Authorization/ NOC shall be valid for a period of three 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.
- (9) 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.
- (10) Guidelines for Installation of Piezometers and their Monitoring
- Piezometer is a borewell /tube well 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 whenever needed. General guidelines for installation of piezometers are as follows for compliance of NOC:
 - 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 piezometer 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	Monitiring Mechanism	
			Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter up to two decimals.
- 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 taped 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.
- (11) Any other condition(s) that may be imposed by the concerned Authority.
- (12) 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.

This certificate is electronically generated and does not require digital signature

**Form 8 (E)**

[See rules 15(2)]

**(RENEWAL OF AUTHORIZATION/ NO-OBJECTION CERTIFICATE
FOR SINKING OF NEW WELL FOR INDUSTRIAL/ COMMERCIAL/
INFRASTRUCTURAL OR BULK USER OF GROUND WATER)
VALID UP TO :**

Registration No.: 202108000274

Name of the Owner	KRISHAN PAL SINGH Radico Khaitan Limited, Brailley Road, Panwaria, Rampur, U.P.-244901	Application Form Serial No.	RMPR0821RIN0038
Date of Submission	09/08/2021	Specimen Signature	
Company Name	RADICO KHAITAN LIMITED GRAIN AND MALT SPIRIT PLANT	Company Address	Barcilly Road, Rampur, U.P. - 244901
Location Particulars			
District	Rampur	Block	CHAMRAUAA (URBAN)
Plot No./Khasra No.	PLOT NO A 1 INDUSTRIAL AREA RAMPUR	Municipality/Corporation	Yes
Ward No./Holding No.			N/A
Particular of the Existing Well and Pumping Device			
Date of Construction/Sinking of the Well	01/01/1995		
Type of Well	Tube Well/Boring	Depth of the Well (In meter)	110.00
Purpose of well	Industrial	Assembly Size(For Tube Well)	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	H.P. of the Pump	41.00
Operational Device	Electric Motor	Rate of Withdrawal (m3/hr.)	100.00
Date of Energization (In Case of Electric Pump)		01/01/1995	
Maximum Allowable Rate of Withdrawal (m3/hr.):	100.00	Maximum Allowable Running Hours Per Day:	12.00
Maximum Allowable Annual Extraction of Ground Water:			438000
Reason for renewal of N.O.C.			
एन.ओ.सी. के नवीनीकरण का कारण	AS PER GOVERNMENT RULES		
Against Case			

This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at Sl. (3) for extraction of ground water at a rate not exceeding that as shown at Sl. (3j), 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.

Conditions

- (1) In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- (2) 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.
- (3) 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
- (4) 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.
- (5) In case of any change of ownership of the existing well, fresh registration has to be obtained.
- (6) 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.
- (7) In case, any of the particulars or 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.
- (8) The Certificate of Authorization/ NOC shall be valid for a period of three 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.
- (9) 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.
- (10) Guidelines for Installation of Piezometers and their Monitoring
- Piezometer is a borewell /tube well 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 whenever needed. General guidelines for installation of piezometers are as follows for compliance of NOC:
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 - 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	
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3	50- 500	1	0	1
4	> 500	2	0	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter up to two decimals.
- 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.
 - (11) Any other condition(s) that may be imposed by the concerned Authority.
 - (12) 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:
 - 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) 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.

This certificate is electronically generated and does not require digital signature

**Form 8 (E)**

[Sec rules 15(2)]

**(RENEWAL OF AUTHORIZATION/ NO-OBJECTION CERTIFICATE
FOR SINKING OF NEW WELL FOR INDUSTRIAL/ COMMERCIAL/
INFRASTRUCTURAL OR BULK USER OF GROUND WATER)
VALID UP TO :**

Registration No.: 202108000378

Name of the Owner	KRISHAN PAL SINGH	Application Form Serial No.	RMPR0821RIN0039
Address of the Applicant	Radico Khaitan Limited, Brailley Road, Panwaria, Rampur, U.P.-244901	Specimen Signature	
Date of Submission	12/08/2021	Company Address	Barcilly Road, Rampur, U.P. - 244901
Company Name	RADICO KHAITAN LIMITED BOTTLING PLANT		
Location Particulars			
District	Rampur	Block	CHAMRAUAA (URBAN)
Plot No./Khasra No.	PLOT NO A 1 INDUSTRIAL AREA RAMPUR	Municipality/Corporation	Yes
Ward No./Holding No.			3
Particular of the Existing Well and Pumping Device			

Date of
Construction/Sinking of the Well 01/01/2005

Type of Well	Tube Well/Boring	Depth of the Well (In meter)	90.00
Purpose of well	Industrial	Assembly Size(For Tube Well)	
Strainer Position (For Tube Well)			
Type of Pump Used	Submersible	H.P. of the Pump	41.00
Operational Device	Electric Motor	Rate of Withdrawal (m3/hr.)	100.00
Date of Energization (In Case of Electric Pump)		01/01/2005	
Maximum Allowable Rate of Withdrawal (m3/hr.):	100.00	Maximum Allowable Running Hours Per Day:	12.00
Maximum Allowable Annual Extraction of Ground Water:			438000

Reason for renewal of
N.O.C.

एन.ओ.सी. के नवीनीकरण का कारण AS PER GOVERNMENT AGENCY RULES

Against Case

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

1/23/23, 3:59 PM

Conditions

- (1) In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- (2) 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.
- (3) 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
- (4) 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.
- (5) In case of any change of ownership of the existing well, fresh registration has to be obtained.
- (6) No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (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.
- (7) 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.
- (8) The Certificate of Authorization/ NOC shall be valid for a period of three 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.
- (9) 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.
- (10) Guidelines for Installation of Piezometers and their Monitoring
 - Piezometer is a borewell /tube well 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 whenever needed. General guidelines for installation of piezometers are as follows for compliance of NOC:
 - 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 piezometer 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
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter up to two decimals.
- 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 taped 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.
 - (11) Any other condition(s) that may be imposed by the concerned Authority.
 - (12) 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.

This certificate is electronically generated and does not require digital signature



REGIONAL LABORATORY MORADABAD
UTTAR PRADESH POLLUTION CONTROL BOARD
 1-A/I.N.S.-1, Avas Vikas Colony, Buddha Vihar, Delhi Road, Moradabad

Stack Emission Test Report

Ref No.19502637/Moradabad/2023

Date: 23/01/2023

- 1- Name & Address of Industry: RADICO KHAITAN LIMITED
- 2- Sample Collected By: J.N.Tiwari, AEE, Vinay Kumar, JRF, Asif Ali, JLA, Rajendra Lal, JLA
- 3- Date of Monitoring: 17/01/2023
- 4- Source of Sampling: Stack
- 5- Stack attached to: Boiler
- 6- Stack Height: 45.0 M
- 7- Total No. of Boiler: 01
- 8- Capacity of Boiler: 26.0 TPH
- 9- Fuel used: Biogas
- 10- Quantity of Fuel used: 91000 m³/day
- 11- Flue Gas Velocity: 8.14
- 12- Air Pollution Control Device: Biogas Fired Boiler
- 13- Other remarks (if any): -
- 14- Further details of sample location and Test methods followed are appended overleaf:

Sr no.	Parameter	Unit	Result	Standards
1	PM	mg/Nm ³	9.77	150.0

Analysed by-
[Vinay Kumar JRF]

Authorised Signatory-
Sunil Singh
Chauhan
Sunil Singh Chauhan (ASO)

Digitally signed by Sunil Singh Chauhan
Date: 2023.01.23 12:48:50 +05'30'

VIKAS
MISHRA
Regional Officer

Digitally signed by VIKAS MISHRA
Date: 2023.01.23 12:49:25 +05'30'



REGIONAL LABORATORY MORADABAD
UTTAR PRADESH POLLUTION CONTROL BOARD
 1-A/I.N.S.-1, Avas Vikas Colony, Buddha Vihar, Delhi Road, Moradabad

Stack Emission Test Report

Ref No.19502643/Moradabad/2023

Date: 23/01/2023

- 1- Name & Address of Industry: RADICO KHAITAN LIMITED
- 2- Sample Collected By: J.N.Tiwari, AEE , Vinay Kumar ,JRF, Asif Ali ,JLARajendra Lal ,JLA
- 3- Date of Monitoring: 17/01/2023
- 4- Source of Sampling: Stack
- 5- Stack attached to: Boiler
- 6- Stack Height: 45.0 M
- 7- Total No. of Boiler: 01
- 8- Capacity of Boiler: 30.0 TPH
- 9- Fuel used: Rice Husk & Biogas
- 10- Quantity of Fuel used: 130.0 MTD
- 11- Flue Gas Velocity: 7.86
- 12- Air Pollution Control Device: ESP
- 13- Other remarks (if any): -
- 14- Further details of sample location nad Test methods followed are appened overleaf:

Sr no.	Parameter	Unit	Result	Standards
1	PM	mg/Nm ³	103.84	150.0

Analysed by-
[Vinay Kumar JRF]

Authorised Signatory-
Sunil Singh
Chauhan
Sunil Singh Chauhan (ASO)

Digitally signed by Sunil Singh
Chauhan
Date: 2023.01.23 12:48:35 +05'30'

VIKAS
MISHRA
Regional Officer

Digitally signed by
VIKAS MISHRA
Date: 2023.01.23
12:48:08 +05'30'



REGIONAL LABORATORY MORADABAD
UTTAR PRADESH POLLUTION CONTROL BOARD
 1-A/I.N.S.-1, Avas Vikas Colony, Buddha Vihar, Delhi Road, Moradabad

TEST REPORT: WASTE WATER LABORATORY

Ref No: 19503007/Moradabad/2023

Date: 23/01/2023

- 1- **Name of Industry:** Radico Khaitan Ltd, Rampur
- 2- **Address of Industry:** Radico Khaitan Ltd, Bareilly Road Rampur U.P.
- 3- **District:** Rampur
- 4- **Description about sampling point:** OUTLET OF STP
- 5- **Type of Sample (Grab/Composite/Integrated):** Grab
- 6- **Sample Collected By:** Jitendra Nath Tiwari AEE & Vinay Kumar JRF
- 7- **Colour and Odour:** colourless Odourless
- 8- **Quantity and Packing:** 2 Liter
- 9- **Date of Sample Collection:** 17/01/2023
- 10- **Analysis Indented by:** RO Moradabad
- 11- **Date of sample receipt in Lab:** 17/01/2023

Parameter/Method Name	Unit	Results	Standard	Detection Range
pH, 4500 H B Electronic method	-	7.51		02-12
Suspended Solids, 2540 D Total Suspended Solids dried at 103-105 OC	mg/l	9.0		10-20000 mg/l
Dissolved Solids, 2540 C Total Dissolved Solids dried at 180 OC	mg/l	310		10- 50000 mg/l
BOD, 3 day 27 OC IS 3025 (Part 44): 1993 Bio	mg/l	8.0		1.0 -50000 mg/l
COD, 5220 B Open Reflux Method	mg/l	64.0		5.0 -100000 mg/l

Reference- (1)General Standards for discharge of environment Pollutants are as per-A Effluent(Schedule-VI).The environment (Protection) Rules,1986 source:
www.cpcb.nic.in/GeneralStandards.pdf. Besides these standards, refer EPA standards for specific purpose

Remark: NA

Analysed by-
[Atul Kumar(JRF)]

Authorized by

Sunil Singh Chauhan (ASO)

Regional Officer

Note: 1 The results in the Test Report relate only to the items tested: 2. The report shall not be reproduced-except in full, without the written permission of laboratory. 3. The test report pertains to the sample as received in Lab.

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General Standards for Discharge of Environmental Pollutants Part -A:Effluents (Schedule - VI) The Environment(Protection) Rules, 1986

1	Parameter	Standards			
		Inland Surface water	Public Sewers	Land for Irrigation	Marine coastal areas
		a	b	c	d
1	Color and Odor	All efforts should be made to remove colour and unpleasant odour as far as practicable			
2	Suspended Solids mg/l, Max	100	600	200	(a) for process waste water- 100(b) For cooling water effluent 10 percent above total suspended matter of influent.
3	Particulate size of suspended solids	Shall pass 850 micron IS Sieve	-	-	(a) Floatable solids, max. 3 mm
4	2(***)	*	*	*	*
5	pH Value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6	Temperature	Shall not exceed 5°C above receiving water temperature	-	-	Shall not exceed 5°C above receiving water temperature
7	Oil and Grease Mg/l Max.	10	20	10	20
8	Total residual chlorine mg/l Max	1	-	-	1
9	Ammonical Nitrogen(as N), mg/l Max	50	50	-	50
10	Total Kjeldahl Nitrogen(as NH ₃) mg/l,Max	100	-	-	100
11	Free ammonia (as NH ₃)mg/l, Max	5	-	-	5
12	3Biochemical Oxygen Demand [3 days at 270C] mg/l, Max	30	350	100	100
13	chemical Oxygen Demand, mg/l, Max	250	-	-	250
13	chemical Oxygen Demand, mg/l, Max	250	-	-	250
14	Arsenic(as As), mg/l, max	0.2	0.2	0.2	0.2
15	Murcury(as Hg), mg/l, max	0.01	0.01	-	0.01
16	Lead (as Pb), mg/l, max	0.1	1	-	2
17	Cadmium (as Cd), mg/l, max	2	1	-	2
18	Hexavalentchromium (as Cr+6), mg/l, max	0.1	2	-	1
19	Total chromium (as Cr)mg/l, max	0.1	2	-	1
20	Copper(as Cu), mg/l, max	3	3	-	3
21	Zinc(as Zn), mg/l, max	5	15	-	5
22	Selenium (as Se) mg/l, max	0.05	0.05	-	0.05
23	Nickel (as Ni) mg/l, max	3	3	-	5
24	2(***)	*	*	*	*
25	2(***)	*	*	*	*
26	2(***)	*	*	*	*
27	Cyanide (as CN), mg/l, max	0.2	2	0.2	0.2
28	2(***)				
29	Fluoride (as F) mg/l, max	2	15	-	15
30	Dissolved Phosphates (as P), mg/l, max	5	-	0	-
31	2 (***)	*	*	*	*
32	Sulphide (as S), mg/l, max	2	-	-	5
33	Phenolic Compounds (as C ₆ H ₅ OH) mg/l, max	1	5	-	5
34	Radioactive materials: (a)Alpha emitter micro curie/ml (b)Beta emitter micro curie/ml	10 ⁻⁷ 10 ⁻⁶	10 ⁻⁷ 10 ⁻⁶	10 ⁻⁸ 10 ⁻⁷	10 ⁻⁷ 10 ⁻⁶
35	Radioactive materials: (a)Alpha emitter micro curie/ml (b)Beta emitter micro curie/ml	10 ⁻⁷ 10 ⁻⁶	10 ⁻⁷ 10 ⁻⁶	10 ⁻⁸ 10 ⁻⁷	10 ⁻⁷ 10 ⁻⁶
35	Bio-assay test	90% survival of fish after 96 hours in 100 % effluent	90% survival of fish after 96 hours in 100 % effluent	90% survival of fish after 96 hours in 100 % effluent	90% survival of fish after 96 hours in 100 % effluent

36	Manganese (as Mn)	2 mg/l	2 mg/l	-	2 mg/l
37	Iron (as Fe)	3 mg/l	3 mg/l	-	3 mg/l
38	Vanadium (as V)	0.2 mg/l	0.2 mg/l	-	0.2 mg/l
39	Nitrate Nitrogen	10 mg/l	-	-	20 mg/l
40	2 (***)	*	*	*	*

1. Schedule VI inserted by Rule 2 (d) of the Environment(Protection) Second Amendment Rules, 1993 notified vide G.S.R. 422 (E) dated 19.05.1993 published in the Gazette no. 174 dated 19.05.1993.
2. Omitted by Rule 2 (d)(i) of the Environment(Protection) Third Amendment Rules, 1993 vide Notification No. G.S.R. 801 (E), dated 31.12.1993.
3. Substituted by Rule 2 of the Environment(Protection) Amendment Rules, 1996 notified by G.S.R 176, dated 02.04.1996 may be read as BOD (3days at 270C) whenever BOD 05 days 200C occurred.
4. Besides these standards, refer EPA standards for specific industry Source (1):
<https://cpcb.nic.in/displaypdf.php?id=R2VuZXJhbFN0YW5kYXJkcy5wZGY=>
(2) cpcb.nic.in/Industry_Specific_Standards.php

कार्यालय अधिशासी अभियन्ता,
रामपुर नहर खण्ड, रामपुर

पत्रांक:- C-44 /रानख

दिनांक: 21 / 01 / 2023

विषय:- मा0 एन0जी0टी0 के आदेश दिनांक 12.05.2022 श्री शैलेश सिंह बनाम उ0प्र0 राज्य व अन्य (E.A.No./19/2021 in O.A.No 324/2016) के अनुपालन हेतु समिति के गठन के सम्बन्ध में।

सन्दर्भ:-जिलाधिकारी महोदय, रामपुर के पत्रांक 423/ल0सि0/जि0भू0ज0प0/2022-23,
दिनांक 11 जुलाई, 2022

अधिशासी अभियन्ता, भूगर्भ जल विभाग/नोडल अधिकारी, रामपुर

कृपया उपरोक्त विषयक सन्दर्भित पत्र का अवलोकन करने की कृपा करें, जिसके द्वारा जिलाधिकारी महोदय, रामपुर द्वारा रेडिको खेतान लिमिटेड (रामपुर बिसलरी), रामपुर, भूगर्भ जल प्रबन्धक और विनियम/अधि0 2019 में निहित प्रावधानों के अन्तर्गत निरीक्षण किये जाने हेतु निर्देशित/आदेशित किया गया है तथा आपके दूरभाष/मौखिक निर्देशों के अनुपालन में इस कार्यालय में कार्यरत जू0इं0 श्री रविन्द्र तोमर द्वारा अवगत कराया गया है कि उनके एवं आपके तथा क्षेत्रीय अधिकारी उ0प्र0 प्रदूषण नियंत्रण बोर्ड, मुरादाबाद द्वारा रेडिको खेतान लिमिटेड (रामपुर बिसलरी), रामपुर, का सम्मिलित निरीक्षण किया तथा निरीक्षण के दौरान पाया गया कि रेडिको खेतान लिमिटेड (रामपुर बिसलरी), रामपुर, अपने निकासी जल को पूर्ण रूप से उनके स्वयं के ट्रीटमेंट प्लांट द्वारा मानकों के अनुरूप ठीक कर सभी जल को अपने परिसर में ही उपयोग करते हैं तथा इस कार्यालय के अन्तर्गत आने वाली नहरों में कोई जल प्रवाहित नहीं किया जाता है।

अतः उपरोक्त निरीक्षण सूचना आपकी सेवा में आवश्यक कार्यवाही हेतु प्रेषित हैं।

21.1.23
अधिशासी अभियन्ता,
रामपुर नहर खण्ड रामपुर
SK

Radico Khaitan limited, Rampur, U.P. -244901 – Alcohol Production Data

Month	Total alcohol Production K.L/ Month
	KL/ Month
Oct.-2022	4236.30
Nov.-2022	3473.29
Dec.-2022	5224.98

For Radico Khaitan limited, Rampur, U.P. – 244901

Authorised Signatory with



Regional Office
UP Pollution Control Board
Moradabad
Rampur Drain, Ajeetpur Bypass, Rampur
Dec-22

S.No.	Reported Date	Color (Hazen)	pH	Dissolved Oxygen (mg/L)	BOD (mg/L)	COD (mg/L)	TSS(mg/L)
1	01-12-2022	25.0	7.8	0.0			
2	02-12-2022	29.0	8.0	0.0			
3	03-12-2022	26.0	7.8	0.0			
4	04-12-2022	26.0	8.0	0.0			
5	05-12-2022	28.0	7.8	0.0			
6	06-12-2022	28.0	8.0	0.0	105.0	360.0	486.0
7	07-12-2022	26.0	7.8	0.0			
8	08-12-2022	28.0	8.0	0.0			
9	09-12-2022	26.0	7.9	0.0			
10	10-12-2022	26.0	8.0	0.0			
11	11-12-2022	28.0	7.8	0.0			
12	12-12-2022	27.0	7.9	0.0			
13	13-12-2022	28.0	8.1	0.0	85.0	256.0	380.0
14	14-12-2022	27.0	7.9	0.0			
15	15-12-2022	28.0	8.0	0.0			
16	16-12-2022	28.0	8.1	0.0			
17	17-12-2022	26.0	8.0	0.0			
18	18-12-2022	26.0	8.1	0.0			
19	19-12-2022	28.0	7.7	0.0			
20	20-12-2022	25.0	7.9	0.0	85.0	256.0	421.0
21	21-12-2022	28.0	7.9	0.0			
22	22-12-2022	26.0	8.0	0.0			
23	23-12-2022	25.0	7.9	0.0			
24	24-12-2022	30.0	7.6	0.2			
25	25-12-2022	25.0	7.6	0.0			
26	26-12-2022	30.0	8.0	0.0			
27	27-12-2022	35.0	8.1	0.0	85.0	256.0	380.0
28	28-12-2022	30.0	8.0	0.0			
29	29-12-2022	35.0	8.0	0.0			
30	30-12-2022	30.0	8.1	0.0			
31	31-12-2022	35.0	7.9	0.0			



Deepak
(J.R.F.)

Office copy 176



RKL/Sr. VP (P)/519

Date :- 17.10.2022

To,
Executive Engineer,
U.P. Ground Water Department,
B-161/4, Jigar Vihar Colony,
Civil Lines, Moradabad – 244001 (U.P.)
Mob. No. - 9639927278

Subject:- Compliance of UPGWD NOC (Borewell Registration No.: 202108000378, Registration No.: 202108000274 and Registration No.: 202108000304) for ground water withdrawal to M/S Radico Khaitan Limited, Brailley Road, Rampur U.P.-244901

Dear Sir,

In reference of UPGWD valid NOC (Borewell Registration No.: 202108000378, Registration No.: 202108000274 and Registration No.: 202108000304) for ground water withdrawal to M/S Radico Khaitan Limited, Brailley Road, Rampur U.P.-244901 of dated 09th, 10th and 12th September, 2021, We are hereby submitting the compliance report from July.-2022 to Sep.-2022 along with report of piezometers data, borewell monitoring report and ground water quality report analysed by NABL Accredited laboratory. We are committed to comply with all the condition stipulated in the NOC issued to us

With Regards,

For Radico Khaitan Limited, Rampur

Devendra Singh

Authorized Signatory

CC :- Regional Director, Central Ground Water Board, Northern Region, Bhujal Bhawan,
Sector- B, Sitapur Road Yojana, Lucknow – 226021 (U.P.)

Enclosed:-

1. Borewells 03 nos log sheet from July.-2022 to Sep.-2022.
2. Piezometers 06 nos log sheet from July.-2022 to Sep.-2022.
3. Ground water quality report pre monsoon Sep-2022.
4. Ground water audit report vetted by IIT Roorkee 2021-2022.

Radico Khaitan Limited

ISO 9001 : 2015 & 22000 : 2005 Certified Company

Regd. Office : Bareilly Road, Rampur-244901 (U.P.)

Tel. : EPABX (0595) 2350601, 2350602, Fax : (0595) 2350009

Head Office : Plot No. J-1, Block B-1, Mohan Co-op. Industrial Area,

Mathura Road, New Delhi-110044

Tel : (91-11) 40975400/444/500/555, Fax : (91-11) 41678841-42, 41676718 [Exports]

e-mail : info@radico.co.in

website : www.radicoKhaitan.com

CIN No. L26941UP1983PLC027278

Borewell Registration No.: 202108000304

Conditions

- 1. 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

Compliance Status:- Digital Water Flow meter is installed. Borewell Log sheet for last three months is attached as Annexure – 1.

- 2. 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.

Compliance Status:- Digital Water recorder is installed. Piezometer Log sheet for last three Month attached as Annexure – 2.

- 3. 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".

O.K.

- 4. No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

O.K.

S.No	Quantum of Ground water withdrawal (cum/day)
1	< 10
2	11 - 50
3	50- 500
4	> 500

- 5. The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter up to two decimals.

O. K.

- 6. 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.

O.K.

- 7. 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.K.

- 7. 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.

Compliance Status:- Ground Water quality report is attached as Annexure – 3.

- 8. 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.K.

- **SPECIFIC CONDITIONS:**

- For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.

Compliance Status:- Effective water recharging system is adopted in surrounding areas.

- ii) 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.

Compliance Status:- Complied. Water audit report is attached as annexure -4.

- iii) 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.

Compliance Status:- Digital Water recorder is installed. Piezometer Log sheet for last three Month attached as Annexure – 2.

- iv) 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.

Compliance Status:- Complied.

- v) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.

N.A.

- 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.

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Monthly water level data shall be submitted online to the Ground Water Department, UP.

Compliance Status:- Digital Water recorder is installed. Piezometer Log sheet for last three Month attached as Annexure – 2.

- iv) 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.

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O.K.

(Annexure-1)

Borewells Log Book - Radico Khaitan Limited, Rampur

BOREWELL NO.1		BOREWELL NO.2		BOREWELL NO.3		Total Water Generation
Date	Difference (m3)	Date	Difference (m3)	Date	Difference (m3)	
01-Jul-22	734	01-Jul-22	0	01-Jul-22	1109	1843
02-Jul-22	641	02-Jul-22	0	02-Jul-22	1115	1756
03-Jul-22	649	03-Jul-22	0	03-Jul-22	1156	1805
04-Jul-22	547	04-Jul-22	0	04-Jul-22	1198	1745
05-Jul-22	584	05-Jul-22	0	05-Jul-22	1129	1713
06-Jul-22	612	06-Jul-22	0	06-Jul-22	1189	1801
07-Jul-22	657	07-Jul-22	0	07-Jul-22	1195	1852
08-Jul-22	548	08-Jul-22	0	08-Jul-22	1143	1691
09-Jul-22	543	09-Jul-22	0	09-Jul-22	1189	1732
10-Jul-22	734	10-Jul-22	0	10-Jul-22	1025	1759
11-Jul-22	748	11-Jul-22	0	11-Jul-22	1194	1942
12-Jul-22	469	12-Jul-22	0	12-Jul-22	1103	1572
13-Jul-22	586	13-Jul-22	0	13-Jul-22	1114	1700
14-Jul-22	219	14-Jul-22	0	14-Jul-22	1148	1367
15-Jul-22	219	15-Jul-22	0	15-Jul-22	1158	1377
16-Jul-22	649	16-Jul-22	0	16-Jul-22	1145	1794
17-Jul-22	442	17-Jul-22	0	17-Jul-22	1187	1629
18-Jul-22	244	18-Jul-22	0	18-Jul-22	1174	1418
19-Jul-22	586	19-Jul-22	0	19-Jul-22	1073	1659
20-Jul-22	458	20-Jul-22	0	20-Jul-22	1145	1603
21-Jul-22	579	21-Jul-22	0	21-Jul-22	1181	1760
22-Jul-22	684	22-Jul-22	0	22-Jul-22	1187	1871
23-Jul-22	542	23-Jul-22	0	23-Jul-22	1149	1691
24-Jul-22	654	24-Jul-22	0	24-Jul-22	1154	1808
25-Jul-22	549	25-Jul-22	0	25-Jul-22	1168	1717
26-Jul-22	527	26-Jul-22	0	26-Jul-22	1101	1628
27-Jul-22	632	27-Jul-22	0	27-Jul-22	1189	1821
28-Jul-22	621	28-Jul-22	0	28-Jul-22	1185	1806
29-Jul-22	629	29-Jul-22	0	29-Jul-22	1159	1788
30-Jul-22	705	30-Jul-22	0	30-Jul-22	1195	1900
31-Jul-22	677	31-Jul-22	0	31-Jul-22	1184	1861
	17668		0		35741	53409
					Daily Average In M3/Day	1723

Borewells Log Book - Radico Khaitan Limited, Rampur						
BOREWELL NO.1		BOREWELL NO.2		BOREWELL NO.3		Total Water Generation
Date	Difference (m3)	Date	Difference (m3)	Date	Difference (m3)	
01-Aug-22	628	01-Aug-22	0	01-Aug-22	1187	1815
02-Aug-22	457	02-Aug-22	0	02-Aug-22	1154	1611
03-Aug-22	398	03-Aug-22	0	03-Aug-22	1049	1447
04-Aug-22	344	04-Aug-22	0	04-Aug-22	1092	1436
05-Aug-22	452	05-Aug-22	0	05-Aug-22	1148	1600
06-Aug-22	549	06-Aug-22	0	06-Aug-22	1086	1635
07-Aug-22	197	07-Aug-22	0	07-Aug-22	1187	1384
08-Aug-22	217	08-Aug-22	0	08-Aug-22	1192	1409
09-Aug-22	511	09-Aug-22	0	09-Aug-22	1098	1609
10-Aug-22	521	10-Aug-22	0	10-Aug-22	1189	1710
11-Aug-22	443	11-Aug-22	0	11-Aug-22	1084	1527
12-Aug-22	511	12-Aug-22	0	12-Aug-22	1097	1608
13-Aug-22	449	13-Aug-22	0	13-Aug-22	1059	1508
14-Aug-22	512	14-Aug-22	0	14-Aug-22	1158	1670
15-Aug-22	418	15-Aug-22	0	15-Aug-22	1097	1515
16-Aug-22	487	16-Aug-22	0	16-Aug-22	1142	1629
17-Aug-22	543	17-Aug-22	0	17-Aug-22	969	1512
18-Aug-22	549	18-Aug-22	0	18-Aug-22	1118	1667
19-Aug-22	457	19-Aug-22	0	19-Aug-22	984	1441
20-Aug-22	345	20-Aug-22	0	20-Aug-22	1138	1483
21-Aug-22	439	21-Aug-22	0	21-Aug-22	1192	1631
22-Aug-22	541	22-Aug-22	0	22-Aug-22	957	1498
23-Aug-22	0	23-Aug-22	0	23-Aug-22	1132	1132
24-Aug-22	0	24-Aug-22	0	24-Aug-22	1042	1042
25-Aug-22	0	25-Aug-22	0	25-Aug-22	1154	1154
26-Aug-22	0	26-Aug-22	0	26-Aug-22	1098	1098
27-Aug-22	131	27-Aug-22	0	27-Aug-22	1187	1318
28-Aug-22	369	28-Aug-22	0	28-Aug-22	1196	1565
29-Aug-22	357	29-Aug-22	0	29-Aug-22	1197	1554
30-Aug-22	255	30-Aug-22	0	30-Aug-22	1091	1346
31-Aug-22	125	31-Aug-22	0	31-Aug-22	1188	1313
	11205		0		34662	45867
					Daily Average in M3/Day	1480

Borewells Log Book - Radico Khaitan Limited, Rampur						
BOREWELL NO.1		BOREWELL NO.2		BOREWELL NO.3		Total Water Generation
Date	Difference (m3)	Date	Difference (m3)	Date	Difference (m3)	
01-Sep-22	699	01-Sep-22	0	01-Sep-22	1147	1846
02-Sep-22	682	02-Sep-22	0	02-Sep-22	1048	1730
03-Sep-22	711	03-Sep-22	0	03-Sep-22	1154	1865
04-Sep-22	648	04-Sep-22	0	04-Sep-22	1173	1821
05-Sep-22	621	05-Sep-22	0	05-Sep-22	1184	1805
06-Sep-22	664	06-Sep-22	0	06-Sep-22	1145	1809
07-Sep-22	683	07-Sep-22	0	07-Sep-22	1027	1710
08-Sep-22	592	08-Sep-22	0	08-Sep-22	864	1456
09-Sep-22	538	09-Sep-22	0	09-Sep-22	945	1483
10-Sep-22	702	10-Sep-22	0	10-Sep-22	1043	1745
11-Sep-22	529	11-Sep-22	0	11-Sep-22	1152	1681
12-Sep-22	624	12-Sep-22	0	12-Sep-22	1112	1736
13-Sep-22	630	13-Sep-22	0	13-Sep-22	1184	1814
14-Sep-22	546	14-Sep-22	0	14-Sep-22	1029	1575
15-Sep-22	630	15-Sep-22	0	15-Sep-22	857	1487
16-Sep-22	539	16-Sep-22	0	16-Sep-22	1129	1668
17-Sep-22	670	17-Sep-22	0	17-Sep-22	1143	1813
18-Sep-22	723	18-Sep-22	0	18-Sep-22	1124	1847
19-Sep-22	622	19-Sep-22	0	19-Sep-22	1068	1690
20-Sep-22	603	20-Sep-22	0	20-Sep-22	1195	1798
21-Sep-22	581	21-Sep-22	0	21-Sep-22	1143	1724
22-Sep-22	647	22-Sep-22	0	22-Sep-22	1149	1796
23-Sep-22	681	23-Sep-22	0	23-Sep-22	1154	1835
24-Sep-22	670	24-Sep-22	0	24-Sep-22	1192	1862
25-Sep-22	736	25-Sep-22	0	25-Sep-22	1067	1803
26-Sep-22	702	26-Sep-22	0	26-Sep-22	985	1687
27-Sep-22	576	27-Sep-22	0	27-Sep-22	1197	1773
28-Sep-22	606	28-Sep-22	0	28-Sep-22	1111	1717
29-Sep-22	722	29-Sep-22	0	29-Sep-22	1142	1864
30-Sep-22	698	30-Sep-22	0	30-Sep-22	1048	1746
	19275		0		32911	52186
					Daily Average in M3/Day	1740

(Annexure-2)

Month	Average Ground Water Level of All Six RKL Piezometers	MRP_1 Water Level (mWC)	MRP_2 Water Level (mWC)	COGEN2_1 Water Level (mWC)	COGEN2_2 Water Level (mWC)	GSP_1 Water Level (mWC)	WEIGHT BRIDGE Water Level (mWC)
Jul-22	-7.2	-7.8	-6.9	-7.4	-7.3	-6.8	-6.5
Aug-22	-7.3	-7.7	-6.7	-7.4	-7.7	-6.9	-6.4
Sep-22	-7.4	-7.8	-6.8	-7.5	-7.7	-7.1	-6.5



GLOBAL ENVIRO Laboratories

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
0TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD.
Sample Identification No.	:	BAREILLY ROAD, RAMPUR (U.P.) DW-220909/01
Test Report No. & Date	:	GEL-2209/316, DATE : 13.09.2022
ULR Number	:	TC-718622000000675F
Sampling Method	:	GEL/SOP-01/W
Sample Description	:	GROUND WATER
Sample Collection Date	:	09.09.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	BOREWELL NO. 1
Date of Sample Receipt	:	09.09.2022
Sample Condition	:	SEALED
Analysis Duration	:	09.09.2022 To 13.09.2022

ANALYSIS RESULT

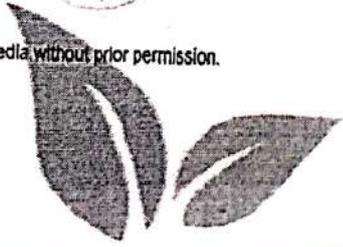
S No.	Parameters	Results	Unit	IS:10500:2012 LIMIT (Acceptable Limit)	IS:10500:2012 LIMIT (Max. Permissible Limit)	Protocol
1.	Colour	BDL	Hazen	5	15	IS:3025(part-4)
2.	Odour	Agreeable	—	Agreeable	Agreeable	IS:3025(part-5)
3.	Turbidity	<1	NTU	1	5	IS:3025(part-10)
4.	pH	7.36	—	6.5 to 8.5	No Relaxation	IS:3025(part-11)
5.	Residual Free Chlorine (as Cl ₂)	ND	mg/L	0.2 (min)	1.0 (min)	IS:3025(part-26)
6.	Total Dissolved Solids	352	mg/L	500	2000	IS:3025(part-16)
7.	Total Hardness (as CaCO ₃)	154	mg/L	200	600	IS:3025(part-21)
8.	Calcium (as Ca)	33.6	mg/L	75	200	IS:3025(part-40)
9.	Magnesium (as Mg)	17.0	mg/L	30	100	IS:3025(part-46)
10.	Chloride (as Cl)	66.5	mg/L	250	1000	IS:3025(part-32)
11.	Sulphate (SO ₄)	34.2	mg/L	200	400	IS:3025(part-24)
12.	Iron (as Fe)	0.24	mg/L	1	No Relaxation	IS:3025(part-53)
13.	Fluoride (as F)	0.16	mg/L	1.0	1.5	IS:3025(part-60)

BDL: Below Detection Limits (mg/L)
N.D: Not Detected

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

- Note:
1. The result listed refer only to the tested samples and applicable parameters.
 2. Perishable samples will be destroyed after 15 days of sampling.
 3. This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission.
 4. Subject to Ghaziabad Jurisdiction





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PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
 8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD - 201003 (U.P.)
 MOBILE : +91-9810317145, +91-8826028116
 E-mail : global_enviro@rediffmail.com, globalenvirotab@gmail.com
 MoEF&CC Recognized Environmental Laboratory

Test Report No. & Date: GEL-2209/316, DATE: 13.09.2022

S No.	Parameters	Results	Unit	IS:10500:2012 LIMIT (Acceptable Limit)	IS:10500:2012 LIMIT (Max. Permissible Limit)	Protocol
1.	Total Coliform	Absent	Per100ml		Not Specified	IS: 15185(RA 2019)
2.	E. Coli	Absent	Per100ml		Not Specified	IS: 15185(RA 2019)

BDL: Below Detection Limits (mg/L)
 N.D.: Not Detected

[Signature]

(Checked By)
INTEKHAB KHAN (Technical Manager)

[Signature]

(Checked by)
ANURADHA RANI (Jr. Microbiologist)



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 4. Subject to Ghaziabad Jurisdiction.

END OF REPORT

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD, BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	DW-220909/02
Test Report No. & Date	:	GEL-2209/317, DATE : 13.09.2022
ULR Number	:	TC-718622000000676F
Sampling Method	:	GEL/SOP-01/W
Sample Description	:	GROUND WATER
Sample Collection Date	:	09.09.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	BOREWELL NO. 2
Date of Sample Receipt	:	09.09.2022
Sample Condition	:	SEALED
Analysis Duration	:	09.09.2022 To 13.09.2022

ANALYSIS RESULT

S No.	Parameters	Results	Unit	IS:10500:2012 LIMIT (Acceptable Limit)	IS:10500:2012 LIMIT (Max. Permissible Limit)	Protocol
1.	Colour	BDL	Hazen	5	15	IS:3025(part-4)
2.	Odour	Agreeable	—	Agreeable	Agreeable	IS:3025(part-5)
3.	Turbidity	<1	NTU	1	5	IS:3025(part-10)
4.	pH	7.40	—	6.5 to 8.5	No Relaxation	IS:3025(part-11)
5.	Residual Free Chlorine (as Cl ₂)	ND	mg/L	0.2 (min)	1.0 (min)	IS:3025(part-26)
6.	Total Dissolved Solids	374	mg/L	500	2000	IS:3025(part-16)
7.	Total Hardness (as CaCO ₃)	168	mg/L	200	600	IS:3025(part-21)
8.	Calcium (as Ca)	39.2	mg/L	75	200	IS:3025(part-40)
9.	Magnesium (as Mg)	17.3	mg/L	30	100	IS:3025(Part-46)
10.	Chloride (as Cl)	62.4	mg/L	250	1000	IS:3025(part-32)
11.	Sulphate (SO ₄)	36.3	mg/L	200	400	IS:3025(part-24)
12.	Iron (as Fe)	0.18	mg/L	1	No Relaxation	IS:3025(part-53)
13.	Fluoride (as F)	0.14	mg/L	1.0	1.5	IS:3025(part-60)

Below Detection Limits (mg/L)
Not Detected

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

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 MoEF&CC Recognized Environmental Laboratory

Test Report No. & Date: GEL-2209/317, DATE: 13.09.2022

S No.	Parameters	Results	Unit	IS:10500:2012 LIMIT (Acceptable Limit)	IS:10500:2012 LIMIT (Max. Permissible Limit)	Protocol
1.	Total Coliform	Absent	Per100ml		Not Specified	IS: 15185(RA 2019)
2.	E. Coll	Absent	Per100ml		Not Specified	IS: 15185(RA 2019)

BDL: Below Detection Limits (mg/L)
 N.D.: Not Detected

(Signature)

(Checked By)
INTEKHAB KHAN (Technical Manager)

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END OF REPORT

(Signature)
 (Checked by)
ANURADHA RANI (Jr. Microbiologist)

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD.
Sample Identification No.	:	BAREILLY ROAD, RAMPUR (U.P.) DW-220909/03
Test Report No. & Date	:	GEL-2209/318, DATE : 13.09.2022
ULR Number	:	TC-718622000000677F
Sampling Method	:	GEL/SOP-01/W
Sample Description	:	GROUND WATER
Sample Collection Date	:	09.09.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	BOREWELL NO. 3
Date of Sample Receipt	:	09.09.2022
Sample Condition	:	SEALED
Analysis Duration	:	09.09.2022 To 13.09.2022

ANALYSIS RESULT

S No.	Parameters	Results	Unit	IS:10500:2012 LIMIT (Acceptable Limit)	IS:10500:2012 LIMIT (Max. Permissible Limit)	Protocol
1.	Colour	BDL	Hazen	5	15	IS:3025(part-4)
2.	Odour	Agreeable	---	Agreeable	Agreeable	IS:3025(part-5)
3.	Turbidity	<1	NTU	1	5	IS:3025(part-10)
4.	pH	7.59	---	6.5 to 8.5	No Relaxation	IS:3025(part-11)
5.	Residual Free Chlorine (as Cl ₂)	ND	mg/L	0.2 (min)	1.0 (min)	IS:3025(part-26)
6.	Total Dissolved Solids	395	mg/L	500	2000	IS:3025(part-16)
7.	Total Hardness (as CaCO ₃)	183	mg/L	200	600	IS:3025(part-21)
8.	Calcium (as Ca)	36.0	mg/L	75	200	IS:3025(part-40)
9.	Magnesium (as Mg)	22.8	mg/L	30	100	IS:3025(Part-46)
10.	Chloride (as Cl)	71.4	mg/L	250	1000	IS:3025(part-32)
11.	Sulphate (SO ₄)	36.3	mg/L	200	400	IS:3025(part-24)
12.	Iron (as Fe)	0.25	mg/L	1	No Relaxation	IS:3025(part-53)
13.	Fluoride (as F)	0.20	mg/L	1.0	1.5	IS:3025(part-60)

Low Detection Limits (mg/L)
 Detected


 (Checked By)
INTEKHAB KHAN (Technical Manager)


SHIKHA BHATIYA
 (Authorized Signatory)

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MoEF&CC Recognized Environmental Laboratory

Test Report No. & Date: GEL-2209/318, DATE: 13.09.2022

S No.	Parameters	Results	Unit	IS:10500:2012 LIMIT (Acceptable Limit)	IS:10500:2012 LIMIT (Max. Permissible Limit)	Protocol
1.	Total Coliform	Absent	Per100ml		Not Specified	IS: 15185(RA 2019)
2.	E. Coll	Absent	Per100ml		Not Specified	IS: 15185(RA 2019)

BDL: Below Detection Limits (mg/l)

N.D.: Not Detected

(Checked By)

INTEKHAB KHAN (Technical Manager)

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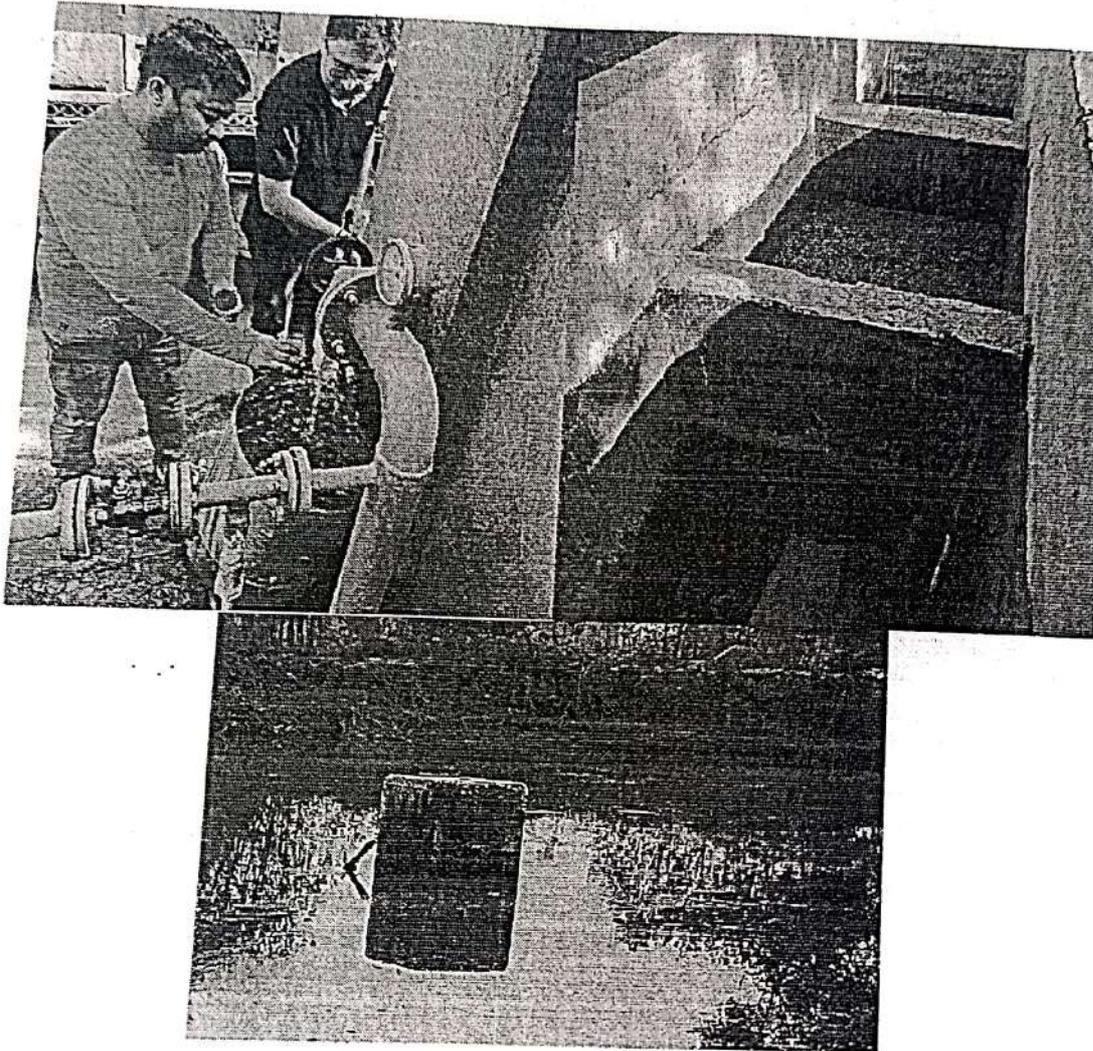
END OF REPORT

(Checked by)

ANURADHA RANI (Jr. Microbiologist)

EVALUATION REPORT
ON
IMPACTS OF GROUNDWATER ABSTRACTION AND
GROUNDWATER RECHARGE ON GROUNDWATER SCENARIO
FOR RADICO KHAITAN LIMITED, DISTRICT RAMPUR, UTTAR
PRADESH

Submitted To-
RadicoKhaitan Ltd, Rampur



DEPARTMENT OF CIVIL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY
ROORKEE-247 667
November 2021



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1.0 INTRODUCTION:

RadicoKhaitan Limited distillery is located east of Rampur town. It produces high-grade Extra Neutral Alcohol ("ENA") from molasses, grains, and Scottish design malt spirit from barley malt.

Based on the order of the National Green Tribunal (NGT) and Central Groundwater Authority, RadicoKhaitan carried out impact assessment studies on groundwater abstraction and conservation and recharge measures adopted by the industry.

RadicoKhaitan contacted IIT Roorkee to evaluate the report on "Impacts of Ground Water Abstraction and Ground Water Recharge on Ground Water Scenario for RadicoKhaitan Limited, District Rampur, Uttar Pradesh."

2.0 METHODOLOGY ADOPTED IN EVALUATION

The methodology adopted in evaluation is based on the desk work and field visit. A field visit was conducted on 30th Oct. 2021 to the distillery unit to check the groundwater recharge structures; piezometers and groundwater samples were collected from borewells to cross-check the groundwater quality. In addition, STP performance was also checked, and a field visit was also conducted to verify nearby pond recharge structures.

3.0 GROUNDWATER LEVEL

- a) Groundwater levels inside the premises of the RadicoKhaitan Ltd. and outside the premises are constantly recorded two times in a day with an automatic pressure-based water level recorder. Earlier, six piezometers were installed – two inside the premises at Ajeetpur and Hitachi and four outside the premises at Deeper, Hariyal, Milak Chicken, and Madhaiya- and measurements were taken. In the year 2020, six more piezometers were installed on the premises to assess the fairly accurate spatial variation of the groundwater level. All the piezometers are fitted with Digital Water Level Recorder (DWLR) with a telemetry system. Online data of the groundwater level at all the piezometers are available. Groundwater data of the earlier six piezometers are available from 2017 and of the new piezometers from 2020.
- b) The pre-monsoon water level map prepared from the data collected from the State Ground Water Department, Government of Uttar Pradesh, Lucknow, indicate that water level in the study area (Chamraua block) varies from 3.98 to 7.72 mbgl in pre-monsoon and while 3.45 to 6.82 mbgl in the monsoon period during period 2019-2020. The deepwater level is observed near Bhont, Chamraua, Deenpur, and MadhaiyaUdairaj. It is pertinent to note that the groundwater table has improved in the monsoon period, which indicates favorable soil conditions for recharge.

- c) Record of water level from 2017 to 2021 at all the six piezometers at Ajeetpur, Hitachi, Deeper, Hariyal, Milak Chicken, and Madhaiya show a rising water level trend a rate of about 0.20 m/year.
- d) Historical groundwater table data, collected by State Ground Water Department from 2008 to 2020 at ten stations, indicates a falling trend at eight stations and a rising trend at two stations. However, data analysis from 2017 to 2020 shows a rising trend at all the stations, which can be attributed to the groundwater recharge system implemented in the year 2017.
- e) It is suggested that infiltration tests shall be carried out at some location to quantify groundwater recharge due to rain.
- f) Before the year 2017 in the Chamraua block, the percentage stage of groundwater withdrawal was of the order of 133%, but after implementing the recharge systems, it is now less than 100%; thus, the area will not be categorized as "Over Exploited."
- g) The groundwater table at Piezometer No. 1 inside the premises and Milak Chicken was measured using a Groundwater measuring instrument during the site visit. At Piezometer No. 1, the Groundwater level was at 5.8 m below the ground level, and at Milak Chicken, the level was at 2.75 m below the ground level. Such values were cross-checked with the recorded groundwater level by DWLR, which was available online, and found that both levels are almost the same.
- h) Historical recorded groundwater level of some Piezometers was examined and found that groundwater levels have improved from 2017 to 2021.
- i) It is suggested that reference ground level be marked on the ground near the installed Piezometers, and groundwater level shall be reported with that reference level. Some photographs of the Piezometers are shown in Figs. 1-5.



Fig.1 Piezometer No. 1 located inside the campus

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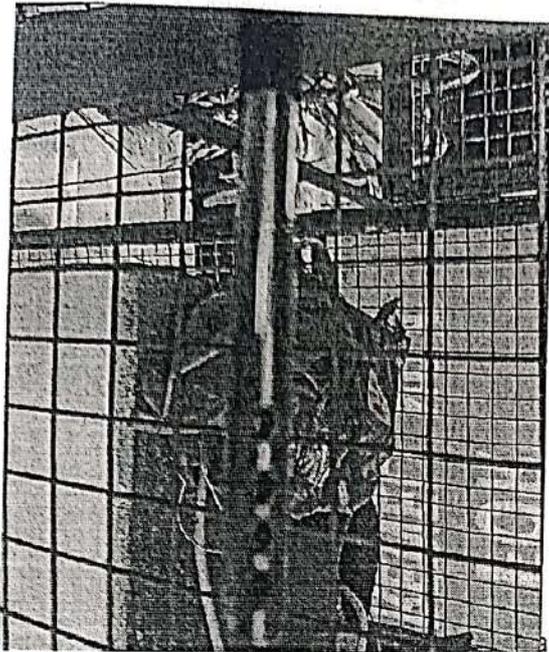


Fig.2 In water level.



Fig.3 Measurement of groundwater table during the visit in Piezometer No.1



Fig. 4 Piezometer located at MilakChickna



Fig.5 Measurement of groundwater table during the visit in Piezometer located at Milak Chicken

4. GROUNDWATER RECHARGE

- a) For recharging the groundwater, 156 rainwater harvesting systems (RWHS) are installed at various locations inside and outside Radico Khaitan Ltd. Out of 156 RWHS, 27 systems are in the premises, and 129 systems are located outside and nearby the premises.
- b) Mostly the outside RWHS is located in the existing rain-fed ponds for maximizing the recharge of the groundwater.
- c) The constructed RWHS has successfully improved the groundwater level in the premises and outside from their construction, i.e., 2017. At all the six earlier piezometers, the water level is rising at a rate of about 0.20 m/year.
- d) The RadicoKhaitan Limited Having permission to withdraw groundwater for various uses and claims to recharge the groundwater to a tune of 5200 KLD through 156 installed RWHS. However, an actual measurement of the recharge has not been carried out. It is suggested that the recharging capacity of some of the RWHS shall be obtained through experimentation during monsoon and non-monsoon periods to assess the volume of recharged water.
- e) The recharging capacity of the RWHS can be obtained following the steps mentioned below:

2. As time passes, the water level in the chamber will go down, a known volume of water shall be added to the chamber to ensure the water level close to the specified level.
 3. After 12 or 24 hours, depending on the recharge rate, the volume of water added in the chamber is to be calculated, say it is V_r .
 4. Recharge rate = $V_r/\text{duration of filling water (12 hr or 24 hr)}$
- f) Over time, the coarse sand-gravel filter provided in the chamber covering the recharge pipe gets choked with fine material coming with rainwater. This results in a decrease in the porosity of the filter and a reduction in the recharge rate. It is suggested that re-laying the filter after washing it or a new filter shall be carried out after a certain time to ensure a high recharging rate. Photographs of some of the RHWS and their locations are shown in Figs. 6-8.



Fig.6 Rainwater harvesting shaft No. 8 located on the campus

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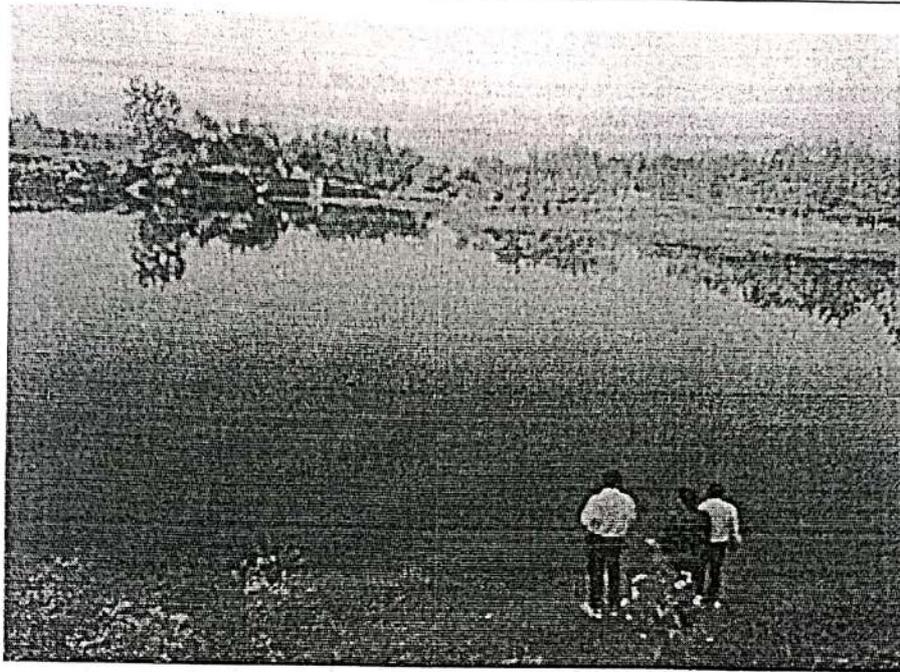


Fig. 7 Four Rainwater harvesting systems are installed in the pond at Village Agapur

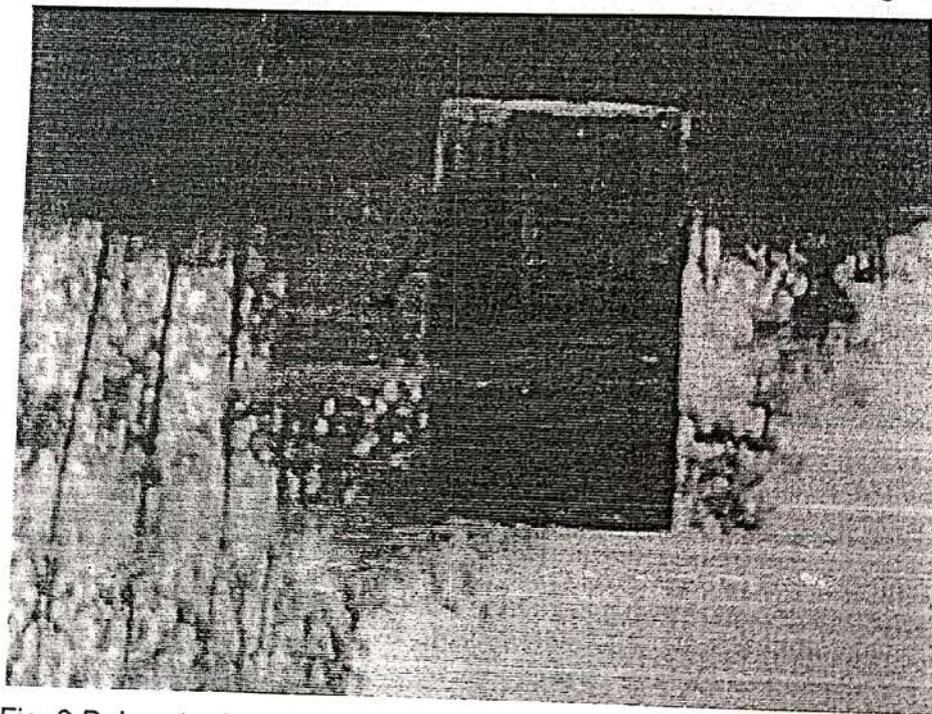


Fig. 8 Rainwater harvesting systems at $28^{\circ}44'27.39''N$ & $79^{\circ} 1'21.82''E$

5.0 GROUNDWATER QUALITY

IIT Roorkee performed water quality sampling from Tubewell 1 and 2 inside the distillery premises (Figure 9). The main objective is to check the groundwater contamination due to industrial activities. For common Physico-chemical water quality parameters and heavy metals, water samples were collected from each source in clean PVC bottles of 0.5 L capacity; the samples were collected in 100 ml sterilized glass bottles for bacteriological parameters.

For heavy metals, the samples are preserved by adding HNO₃ to reduce the pH to 2.0. While for other parameters, it is cooled at 4°C in the icebox and transported to IIT Roorkee. All analyses were carried out as per methodologies in Standard Methods for the examination of water and wastewater APHA (2005). E Coli and Fecal coliforms were estimated by using mTEC agar medium and standard Multiple Tube Fermentation Technique.

The results are summarized in Table 1, and the values are compared with the acceptable and permissible limits of IS IS-10500: 2012.

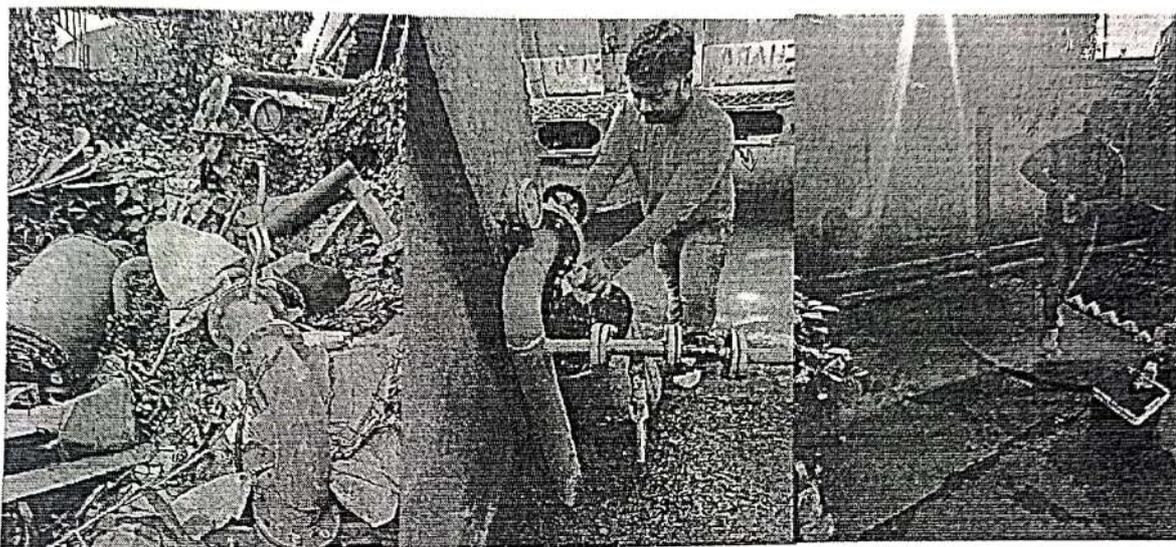


Figure 9: Groundwater Sampling from Borewell 1 & 2

Table 1: Water Quality of Borewells 1 & 2

S. No.	Parameters	Units	Borewell No. 2	Borewell No. 3	BIS Standard IS 10500: 2012	
					Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
1	pH	-	7.5	7.6	6.5 - 8.5	No relaxation
2	Electrical Conductivity (EC)	µS/cm	514	840	-	-
3	Total Dissolved Solid (TDS)	mg/L	212	347	500	2000
4	Total Hardness	NTU	228	284	200	600
5	Total Alkalinity	mg/L	212	180	200	600
6	Sulphates (as SO ₄),	mg/L	54	66	200	400

	mg/L, Max					
7	Chloride (as Cl), mg/L, Max	mg/L	88	92	250	1000
8	Fluoride (as F), mg/L, Max	mg/L	0.31	0.62	1	1.5
9	Iron (as Fe), mg/L, Max	mg/L	0.05	0.04	0.3	No relaxation
10	Manganese (as Mn), mg/L, Max	mg/L	0.002	0.002	0.1	0.3
11	Total Coliforms	MPN/ 100 mL	NIL	NIL	-	-
12	Fecal Coliforms	MPN/ 100 mL	NIL	NIL	-	-
13	Total arsenic (as As), mg/L, Max	mg/L	BD	BD	-	-
14	Cadmium (as Cd), mg/L, Max	mg/L	BD	BD	0.003	No relaxation
15	Total chromium (as Cr), mg/L, Max	mg/L	0.001	0.002	0.05	No relaxation
16	Total copper (as Cu), mg/L, Max	mg/L	0.002	0.002	0.05	1.5
17	Zinc (as Zn), mg/L, Max	mg/L	0.152	0.153	5	15
18	Nickel (as Ni), mg/L, Max	mg/L	0.004	0.004	0.02	No relaxation
19	Aluminium (as Al), mg/L, Max	mg/L	0.002	0.002	0.03	0.2
20	Lead (as Pb), mg/L, Max	mg/L	0.003	0.004	0.01	No relaxation
21	Molybdenum (as Mo), mg/L, Max	mg/L	0.002	0.003	0.07	No relaxation

It has been observed that the groundwater is of excellent water quality, there is no sign of groundwater pollution, no heavy metals or fecal coliforms are observed, and the groundwater can be used directly for drinking.

6.0 PERFORMANCE EVALUATION OF STP

A 150 KLD STP is installed in the distillery premises to treat sewage generated by workers (Figure 10). Treated effluent was collected, preserved in an icebox at 4 °C before the analysis, and transported to the laboratory at IIT Roorkeewithin 24 h of samples collection. Samples collected from the STP site were analyzedfor physicochemical analysisasper Standard Methods (APHA, 2012), and the data is summarized in Table 2.

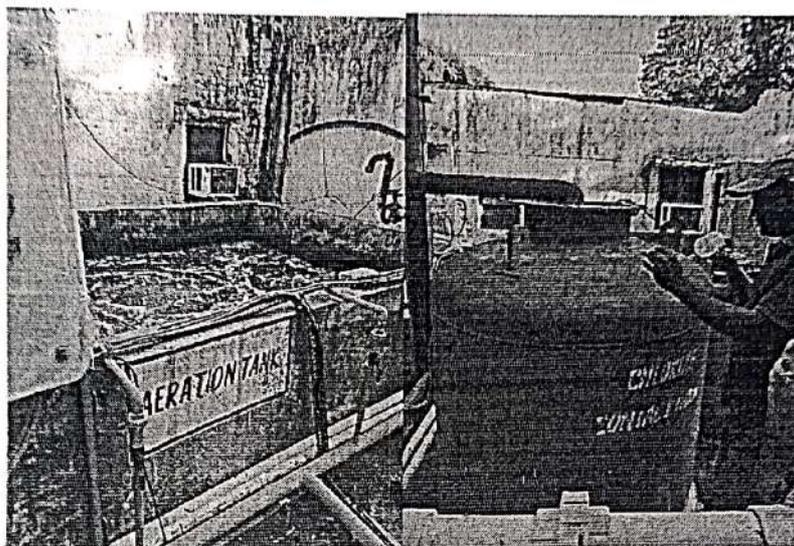


Figure 10: 150 KLD STP at RadicoKhaitan

Table 2: Effluent Quality of STP

S. No.	Parameter	Units	STP Outlet	Effluent Standards (NGT 2019)
1	Temp.	°C	26	26
2	pH	-	7.7	5.5 – 9
3	Color	-	Colourless	Colourless
4	Odor	-	Aseptic	Aseptic
5	Turbidity	NTU	5.3	-
6	Alkalinity	mg/L	320	-
7	COD	mg/L	32	50
8	BOD	mg/L	18	10
9	TSS	mg/L	16	10
10	Total Coliforms	MPN/ 100 mL	4.2x10 ³	-
11	Fecal Coliforms	MPN/ 100 mL	930	Desirable-100 Permissible-230

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It has been observed that STP is working well and producing the desired effluent quality for discharge.

7.0 CONCLUDING REMARKS & SUGGESTIONS

- a) Historical groundwater table data from the year 2008 to 2017 shows a falling trend at almost all stations. However, a rising trend at all the stations from 2017 is observed, which can be attributed to the groundwater recharge system implemented in 2017.
- b) The constructed RWHS has successfully improved the groundwater level in and outside of the premises from the year of their construction.
- c) It is suggested that infiltration tests shall be carried out at some location to quantify groundwater recharge due to rain.
- d) It is suggested that reference ground level be marked on the ground near the installed Piezometers, and groundwater level shall be reported with that reference level.
- e) Details of groundwater recharge from sources other than the rainfall shall be provided.
- g) It is suggested that the recharging capacity of some of the RWHS shall be obtained through experimentation during monsoon and non-monsoon periods to assess the volume of recharged water.
- h) The recharging capacity of the RWHS can be obtained following the steps mentioned below:
 - Fill the water up to a specified level in the chamber, and time is to be noted.
 - As time passes, the water level in the chamber will go down, a known volume of water shall be added to the chamber to ensure the water level close to the specified level.
 - After 12 or 24 hours, depending on the recharge rate, the volume of water added in the chamber is calculated, say it is V .
 - Recharge rate = $V/\text{duration of filling water (12 hr or 24 hr)}$
- i) Over time, the coarse sand-gravel filter provided in the chamber covering the recharge pipe gets choked with fine material coming with rainwater. This results in a decrease in the porosity of the filter and a reduction in the recharge rate. It is suggested that re-laying the filter after washing it or a new filter shall be carried out after a certain time to ensure a high recharging rate.
- j) It has been observed that the groundwater is of excellent water quality, there is no sign of groundwater pollution, no heavy metals or fecal coliforms are observed, and the groundwater can be used directly for drinking.
- k) It has been observed that STP is working well and producing the desired effluent quality for discharge. It is recommended to conduct an adequacy report of the STP for the improvement of water quality.



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E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADIGO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SL-221207/05
Test Report No. & Date	:	GEL-2212/1353, DATE : 13.12.2022
Sampling Method	:	GEL/SOP-01/NOISE
Sample Description	:	NOISE LEVEL
Monitoring Date	:	07.12.2022
Monitored by	:	GEL STAFF
Monitoring site	:	NEAR BGG ROOM
Monitoring Time & Duration	:	11:59 HR TO 12:09 HR

1	2	3	4	5	6	7	8	9	10
71.4	72.5	71.9	72.6	71.9	70.4	72.5	73.4	71.9	72.6

NOISE LEVEL			STANDARD		
MAXIMUM SOUND LEVEL	dB(A)	73.4	CPCB STANDARD (FOR DAY TIME)		AS PER FACTORIES ACT - 1948
MINIMUM SOUND LEVEL	dB(A)	70.4	INDUSTRIAL AREA	75 dB(A)	90 dB(A)
AVERAGE VALUE	dB(A)	72.1	RESIDENTIAL AREA	55 dB(A)	
			COMMERCIAL AREA	65 dB(A)	
			SILENCE ZONE	50 dB(A)	

Remarks : 1. Average Noise Level is well within the limits as per CPCB and Factories Act - 1948

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

- Note
1. The result listed refer only to the tested samples and applicable parameters
 2. Perishable samples will be destroyed after 15 days of sampling.
 3. This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission
 - Subject to Ghaziabad Jurisdiction

END OF REPORT

VIRO



GLOBAL ENVIRO Laboratories 211

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
 8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
 MOBILE : +91-9810317145, +91-8826028116
 E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD.
Sample Identification No.	:	BAREILLY ROAD, RAMPUR (U.P.)
Test Report No. & Date	:	SL-221207/04
Sampling Method	:	GEL-2212/1352, DATE : 13.12.2022
Sample Description	:	GEL/SOP-01/NOISE
Monitoring Date	:	NOISE LEVEL
Monitored by	:	07.12.2022
Monitoring site	:	GEL STAFF
Monitoring Time & Duration	:	NEAR GSP BOILER
	:	11:37 HR TO 11:47 HR

1	2	3	4	5	6	7	8	9	10
70.1	69.5	71.4	69.9	72.5	68.5	71.6	70.5	72.4	70.9

NOISE LEVEL			STANDARD	
MAXIMUM SOUND LEVEL	dB(A)	72.5	CPCB STANDARD (FOR DAY TIME)	
MINIMUM SOUND LEVEL	dB(A)	68.5	INDUSTRIAL AREA	75 dB(A)
AVERAGE VALUE	dB(A)	70.7	RESIDENTIAL AREA	55 dB(A)
			COMMERCIAL AREA	65 dB(A)
			SILENCE ZONE	50 dB(A)
				AS PER FACTORIES ACT - 1948
				90 dB(A)

Remarks : Average Noise Level is well within the limits as per CPCB and Factories Act - 1948

(Checked By)
 INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
 (Authorized Signatory)

- The result listed refer only to the tested samples and applicable parameters
- Pensable samples will be destroyed after 15 days of sampling
- This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission
- Subject to Ghaziabad Jurisdiction

END OF REPORT

VIRO



GLOBAL ENVIRO Laboratories

212

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
 8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
 MOBILE : +91-9810317145, +91-8826028116
 E-mail : global_enviro@rediffmail.com, globalenvirotab@gmail.com

TEST REPORT

ISSUED-TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SL-221207/03
Test Report No. & Date	:	GEL-2212/1351, DATE : 13.12.2022
Sampling Method	:	GEL/SOP-01/NOISE
Sample Description	:	NOISE LEVEL
Monitoring Date	:	07.12.2022
Monitored by	:	GEL STAFF
Monitoring site	:	BACK SIDE AREA OF FACTORY
Monitoring Time & Duration	:	11:10 HR To 11:20 HR

1	2	3	4	5	6	7	8	9	10
62.5	64.6	61.9	63.6	65.2	62.8	64.9	65.1	63.7	62.8

NOISE LEVEL			STANDARD		
MAXIMUM SOUND LEVEL	dB(A)	65.2	CPCB STANDARD (FOR DAY TIME)		AS PER FACTORIES ACT - 1948
MINIMUM SOUND LEVEL	dB(A)	61.9	INDUSTRIAL AREA	75 dB(A)	90 dB(A)
AVERAGE VALUE	dB(A)	63.7	RESIDENTIAL AREA	55 dB(A)	
			COMMERCIAL AREA	65 dB(A)	
			SILENCE ZONE	50 dB(A)	

Remarks : 1. Average Noise Level is well within the limits as per CPCB and Factories Act - 1948

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
 (Authorized Signatory)

- Note:
- The result listed refer only to the tested samples and applicable parameters
 - Pershable samples will be destroyed after 15 days of sampling.
 - This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission.
 - Subject to Ghaziabad Jurisdiction

END OF REPORT

GLOBAL ENVIRO Laboratories 213

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
 BTH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
 MOBILE : +91-9810317145, +91-8826028116
 E-mail : global_enviro@rediffmail.com, globalenviroiab@gmail.com

TEST REPORT

ISSUED TO	M/S. RADICO KHAITAN LTD.
Sample Identification No.	BAREILLY ROAD, RAMPUR (U.P.) SL-221207/02
Test Report No. & Date	GEL-2212/1350, DATE : 13.12.2022
Sampling Method	GEL/SOP-01/NOISE
Sample Description	NOISE LEVEL
Monitoring Date	07.12.2022
Monitored by	GEL STAFF
Monitoring site	NEAR ADMIN BLOCK
Monitoring Time & Duration	10:40 HR TO 10:50 HR

1	2	3	4	5	6	7	8	9	10
61.5	62.6	66.3	64.8	61.9	69.8	64.1	66.5	64.2	62.8

NOISE LEVEL			STANDARD		
MAXIMUM SOUND LEVEL	dB(A)	69.8	CPCB STANDARD (FOR DAY TIME)		AS PER FACTORIES ACT - 1948
MINIMUM SOUND LEVEL	dB(A)	61.5	INDUSTRIAL AREA	75 dB(A)	90 dB(A)
AVERAGE VALUE	dB(A)	64.5	RESIDENTIAL AREA	55 dB(A)	
			COMMERCIAL AREA	65 dB(A)	
			SILENCE ZONE	50 dB(A)	

Remarks 1. Average Noise Level is well within the limits as per CPCB and Factories Act - 1948

(Checked By)
 INTEKHAB KHAN (Technical Manager)

(Authorized Signatory)
 SHIKHA BHATIYA

- Note
- 1 The result listed refer only to the tested samples and applicable parameters.
 - 2 Perishable samples will be destroyed after 15 days of sampling.
 - 3 This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission.
 - 4 Subject to Ghaziabad Jurisdiction

END OF REPORT



GLOBAL ENVIRO Laboratory 214

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO-KHAITAN LTD.
Sample Identification No.	:	BAREILLY ROAD, RAMPUR (U.P.)
Test Report No. & Date	:	SL-221207/01
Sampling Method	:	GEL-2212/1349, DATE: 13.12.2022
Sample Description	:	GEL/SOP-01/NOISE
Monitoring Date	:	NOISE LEVEL
Monitored by	:	07.12.2022
Monitoring site	:	GEL STAFF
Monitoring Time & Duration	:	NEAR FACTORY GATE
	:	10:25 HR To 10:35HR

1	2	3	4	5	6	7	8	9	10
66.2	69.6	68.7	69.1	63.9	69.4	66.4	62.9	64.1	66.2

NOISE LEVEL			STANDARD		
MAXIMUM SOUND LEVEL	dB(A)	69.6	CPCB STANDARD (FOR DAY TIME)		AS PER FACTORIES ACT - 1948
MINIMUM SOUND LEVEL	dB(A)	62.9	INDUSTRIAL AREA	75 dB(A)	90 dB(A)
AVERAGE VALUE	dB(A)	66.7	RESIDENTIAL AREA	55 dB(A)	
			COMMERCIAL AREA	65 dB(A)	
			SILENCE ZONE	50 dB(A)	

Remarks: 1. Average Noise Level is well within the limits as per CPCB and Factories Act - 1948

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

- Note
1. The result listed refer only to the tested samples and applicable parameters.
 2. Perishable samples will be destroyed after 15 days of sampling.
 3. This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission.
 4. Subject to Ghaziabad Jurisdiction.

END OF REPORT



GLOBAL ENVIRO Laboratories 215

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	M/S. RADICO KHAITAN LTD.
Sample Identification No.	BAREILLY ROAD, RAMPUR (U.P.) SL-221207/06
Test Report No. & Date	GEL-2212/1354, DATE : 13.12.2022
Sampling Method	GEL/SOP-01/NOISE
Sample Description	NOISE LEVEL
Monitoring Date	07.12.2022
Monitored by	GEL STAFF
Monitoring site	NEAR GSP BOTTLING HALL
Monitoring Time & Duration	12:14 HR TO 12:24 HR

1	2	3	4	5	6	7	8	9	10
72.5	71.6	72.5	71.6	70.9	74.6	70.9	72.4	71.9	70.5

NOISE LEVEL			STANDARD		
MAXIMUM SOUND LEVEL	dB(A)	74.6	CPCB STANDARD (FOR DAY TIME)		AS PER FACTORIES ACT - 1948
MINIMUM SOUND LEVEL	dB(A)	70.5	INDUSTRIAL AREA	75 dB(A)	90 dB(A)
AVERAGE VALUE	dB(A)	71.9	RESIDENTIAL AREA	55 dB(A)	
			COMMERCIAL AREA	65 dB(A)	
			SILENCE ZONE	50 dB(A)	

Remarks : 1. Average Noise Level is well within the limits as per CPCB and Factories Act - 1948

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

- Note
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 - 4 Subject to Ghaziabad Jurisdiction

END OF REPORT

RKL/ SR VP(P)/206



Radico

(Office copy) 216

To,

Regional Officer
 UPPCB, I-A/ INS-1,
 Avas Vikas Colony, Buddhi Vihar,
 Delhi Road, Moradabad, U.P.

22.06.2022

SUB: Hazardous waste consent compliance – Annual return form IV - Radico Khaitan Limited,
 Panwaria, Bareilly Road, Rampur, U.P.-244901.

Dear Sir,

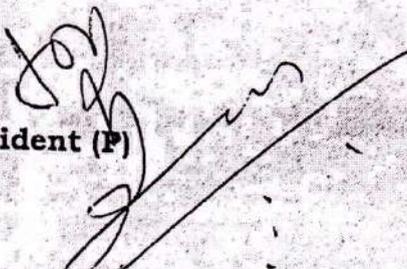
This is in reference to hazardous waste consent 178 / UPPCB / Moradabad (UPPCBRO) / HWM /
 RAMPUR / 2017 dated 04.04.2018 of M/s Radico Khaitan Ltd, Rampur, U.P. -244901, We are hereby
 humbly submitting compliance of hazardous waste consent – annual return form iv under cover of
 this letter.

Kindly acknowledge the receipt.

Thanking you,

With regards,

For **RADICO KHAITAN LIMITED, RAMPUR**


Devendra Singh
 Senior Vice President (P)

Encls- As Above

CC: Member Secretary ; U.P. Pollution Control Board , TC-12V , Vibhuti Khand , Gomati Nagar ,
 Lucknow - 226010

Radico Khaitan Limited

ISO 9001 : 2015 & 22000 : 2005 Certified Company

Regd. Office : Bareilly Road, Rampur-244901 (U.P.)

Tel. : EPABX (0585) 2350601, 2350602, Fax : (0585) 2350009

Head Office : Plot No. J-1, Block B-1, Mohan Co-op. Industrial Area,
 Mathura Road, New Delhi-110044

Tel : [91-11] 40975400/444/500/555, Fax : [91-11] 41678841-42, 41676718 (Exports)

e-mail : info@radico.co.in

website : www.radicokhaitan.com

CIN No. L26941UP1983PLC027278

FORM 4

[See rules 6(5), 13(8), 16(6) and 20 (2)]

FORM FOR FILING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30th day of June of every year for the preceding period April to March]

1. Name and address of facility: Radico Khaitan Limited, Panwaria , Bareilly Road , Rampur, U.P.-244901
2. Authorization No. and Date of issue: 178 / UPPCB / Moradabad (UPPCBRO) / HWM / RAMPUR / 2017 dated 04.04.2018
3. Name of the authorized person and full address with telephone, fax number and e-mail: Mr Krishan Pal Singh, Radico Khaitan Limited, Panwaria , Bareilly Road , Rampur, U.P.-244901, Phone:- 0595 -2350601, 02, fax:- 0595-235009
4. Production during the year (product wise), wherever applicable: - Used Mobile Oil - Nil

Part A. To be filled by hazardous waste generators

1. Total quantity of waste generated category wise:- Used Mobil Oil - Nil.
2. Quantity dispatched: - Nil
 - (i) to disposal facility
 - (ii) to recycler-processors or pre-processor
 - (iii) others
3. Quantity utilized in-house, if any- Nil
4. Quantity in storage at the end of the year— Nil

Part B. To be filled by Treatment, storage and disposal facility operators

1. Total quantity received - N.A.
2. Quantity in stock at the beginning of the year - N.A.
3. Quantity treated— N.A.
4. Quantity disposed in landfills as such and after treatment— N.A.
5. Quantity incinerated (if applicable) - N.A.
6. Quantity processed other than specified above - N.A.
7. Quantity in storage at the end of the year- N.A.



Part C. To be filled by recyclers or co-processors or other users

Quantity of waste received during the year— N.A.

(i) domestic sources N.A.

(ii) imported (if applicable) N.A.

Quantity in stock at the beginning of the year— N.A.

Quantity recycled or co-processed or used — N.A.

Quantity of products dispatched (where as applicable)— N.A.

Quantity of waste generated - N.A.

Quantity of waste disposed - N.A.

Quantity re-exported (whereas applicable)- N.A.

Quantity in storage at the end of the year- N.A.

Date. 22.06.2022

Place. Rampur.





GLOBAL ENVIRO Laboratories

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	DW-221207/01
ULR Number	:	TC-71862200000998F
Test Report No. & Date	:	GEL-2212/1340, DATE : 13.12.2022
Sample Description	:	GROUND WATER
Sampling Method	:	GEL/SOP-01/W
Sample Collection Date	:	07.12.2022
Sample Provided by	:	GEL STAFF
Sampling Site	:	FROM BOREWELL NO - 01
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

ANALYSIS RESULT

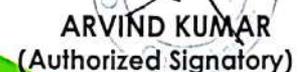
Organoleptic & Physical Parameters						
S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS: 10500:2012)	
					Acceptable Limit	Permissible Limit
1	Colour	HZN	IS:3025 Part 4	<5	5 (max.)	15 (max.)
2	Odour	---	IS:3025 Part 5	Agreeable	Agreeable	No relaxation
3	pH	---	IS:3025 Part 11	7.46	6.5-8.5	No relaxation
4	Turbidity	NTU	IS:3025 Part 10	<1	1(max.)	5(max.)
5	Total Dissolved Solids (TDS)	mg/L	IS:3025 Part 16	398	500 (max.)	2000 (max.)
General Parameters						
S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS:10500: 2012)	
					Acceptable Limit	Permissible Limit
6	Calcium	mg/L	IS 3025 Part 40	29.2	75(max.)	200(max.)
7	Chloride	mg/L	IS 3025 Part 32	64.1	250(max.)	1000(max.)
8	Fluoride (F)	mg/L	IS 3025 Part 60	0.18	1.0 (max.)	1.5 (max.)
9	Residual, Free Chlorine(RFC)	mg/L	IS 3025 Part 26	N.D.	0.2 (max.)	1.0(max.)
10	Magnesium (Mg)	mg/L	IS 3025 Part 46	17.6	30(max.)	100(max.)
11	Sulphate (SO ₄)	mg/L	IS 3025 Part 24	30.2	200 (max.)	400 (max.)
12	Total Hardness	mg/L	IS 3025 Part 21	146	200 (max.)	600 (max.)
Residue in Water (Heavy Metal)						
S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS:10500:2012)	
					Acceptable Limit	Permissible Limit
13	Iron (Fe)	mg/L	IS 3025 Part 53	0.22	1.0(max.)	No Relaxation

N.D - Not Detected.


(Checked By)

INTEKHAB KHAN (Technical Manager)

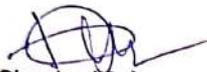
- Note: 1. The result listed refer only to the tested samples and applicable parameters.
2. Perishable samples will be destroyed after 15 days of sampling.
3. This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission.
4. Subject to Ghaziabad Jurisdiction.


ARVIND KUMAR
(Authorized Signatory)



Test Report No. & Date: GEL-2212/1340, DATE : 13.12.2022

Bacteriological Parameters					
S. No.	Parameter	Unit	Protocol	Result	Limit
1	E-Coli	Per100ml	IS:15185	Absent	Not Detected in 100 ml Sample
2	Total Coliform	Per100ml	IS:15185	Absent	Not Detected in 100 ml Sample


(Checked By)
INTEKHAB KHAN (Technical Manager)

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3. This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission.
4. Subject to Ghaziabad Jurisdiction.


SHIKHA BHATIYA
(Authorized Signatory)

END OF REPORT

JOIN HANDS TO SAVE ENVIRONMENT



TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	DW-221207/02
ULR Number	:	TC-71862200000999F
Test Report No. & Date	:	GEL-2212/1341, DATE : 13.12.2022
Sample Description	:	GROUND WATER
Sampling Method	:	GEL/SOP-01/W
Sample Collection Date	:	07.12.2022
Sample Provided by	:	GEL STAFF
Sampling Site	:	FROM BOREWELL NO - 02
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

ANALYSIS RESULT

Organoleptic & Physical Parameters

S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS: 10500:2012)	
					Acceptable Limit	Permissible Limit
1	Colour	HZN	IS:3025 Part 4	<5	5 (max.)	15 (max.)
2	Odour	---	IS:3025 Part 5	Agreeable	Agreeable	No relaxation
3	pH	---	IS:3025 Part 11	7.42	6.5-8.5	No relaxation
4	Turbidity	NTU	IS:3025 Part 10	<1	1(max.)	5(max.)
5	Total Dissolved Solids (TDS)	mg/L	IS:3025 Part 16	369	500 (max.)	2000 (max.)

General Parameters

S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS:10500: 2012)	
					Acceptable Limit	Permissible Limit
6	Calcium	mg/L	IS 3025 Part 40	30.4	75(max.)	200(max.)
7	Chloride	mg/L	IS 3025 Part 32	59.8	250(max.)	1000(max.)
8	Fluoride (F)	mg/L	IS 3025 Part 60	0.16	1.0 (max.)	1.5 (max.)
9	Residual, Free Chlorine(RFC)	mg/L	IS 3025 Part 26	N.D.	0.2 (max.)	1.0(max.)
10	Magnesium (Mg)	mg/L	IS 3025 Part 46	18.3	30(max.)	100(max.)
11	Sulphate (SO ₄)	mg/L	IS 3025 Part 24	34.4	200 (max.)	400 (max.)
12	Total Hardness	mg/L	IS 3025 Part 21	152	200 (max.)	600 (max.)

Residue in Water (Heavy Metal)

S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS:10500:2012)	
					Acceptable Limit	Permissible Limit
13	Iron (Fe)	mg/L	IS 3025 Part 53	0.18	1.0(max.)	No Relaxation

N.D - Not Detected.


(Checked By)

INTEKHAB KHAN (Technical Manager)

- Note: 1. The result listed refer only to the tested samples and applicable parameters.
2. Perishable samples will be destroyed after 15 days of sampling.
3. This report cannot be used as evidence in the court of law and cannot be used in part or full in any media without prior permission.
4. Subject to Ghaziabad Jurisdiction.


ARVIND KUMAR
(Authorized Signatory)





GLOBAL ENVIRO Laboratories

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD - 201003 (U.P.)

MOBILE : +91-9810317145, +91-8826028116

E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

MoEF&CC Recognized Environmental Laboratory

Test Report No. & Date: GEL-2212/1341, DATE : 13.12.2022

Bacteriological Parameters					
S. No.	Parameter	Unit	Protocol	Result	Limit
1	E-Coli	Per100ml	IS:15185	Absent	Not Detected in 100 ml Sample
2	Total Coliform	Per100ml	IS:15185	Absent	Not Detected in 100 ml Sample

(Checked By)

INTEKHAB KHAN (Technical Manager)

- Note:
1. The result listed refer only to the tested samples and applicable parameters.
 2. Perishable samples will be destroyed after 15 days of sampling.
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 4. Subject to Ghaziabad Jurisdiction.

END OF REPORT

SHIKHA BHATIYA
(Authorized Signatory)

JOIN HANDS TO SAVE ENVIRONMENT



TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	DW-221207/03
ULR Number	:	TC-718622000001000F
Test Report No. & Date	:	GEL-2212/1342, DATE : 13.12.2022
Sample Description	:	GROUND WATER
Sampling Method	:	GEL/SOP-01/W
Sample Collection Date	:	07.12.2022
Sample Provided by	:	GEL STAFF
Sampling Site	:	FROM BOREWELL NO - 03
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

ANALYSIS RESULT

Organoleptic & Physical Parameters						
S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS: 10500:2012)	
					Acceptable Limit	Permissible Limit
1	Colour	HZN	IS:3025 Part 4	<5	5 (max.)	15 (max.)
2	Odour	---	IS:3025 Part 5	Agreeable	Agreeable	No relaxation
3	pH	---	IS:3025 Part 11	7.12	6.5-8.5	No relaxation
4	Turbidity	NTU	IS:3025 Part 10	<1	1(max.)	5(max.)
5	Total Dissolved Solids (TDS)	mg/L	IS:3025 Part 16	384	500 (max.)	2000 (max.)
General Parameters						
S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS:10500: 2012)	
					Acceptable Limit	Permissible Limit
6	Calcium	mg/L	IS 3025 Part 40	33.6	75(max.)	200(max.)
7	Chloride	mg/L	IS 3025 Part 32	70.9	250(max.)	1000(max.)
8	Fluoride (F)	mg/L	IS 3025 Part 60	0.20	1.0 (max.)	1.5 (max.)
9	Residual, Free Chlorine(RFC)	mg/L	IS 3025 Part 26	N.D.	0.2 (max.)	1.0(max.)
10	Magnesium (Mg)	mg/L	IS 3025 Part 46	20.1	30(max.)	100(max.)
11	Sulphate (SO ₄)	mg/L	IS 3025 Part 24	32.6	200 (max.)	400 (max.)
12	Total Hardness	mg/L	IS 3025 Part 21	168	200 (max.)	600 (max.)
Residue in Water (Heavy Metal)						
S. No.	Parameter	Unit	Protocol	Result	Drinking Water Standards/Limit (IS:10500:2012)	
					Acceptable Limit	Permissible Limit
13	Iron (Fe)	mg/L	IS 3025 Part 53	0.24	1.0(max.)	No Relaxation

N.D - Not Detected.

(Checked By)

INTEKHAB KHAN (Technical Manager)

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4. Subject to Ghaziabad Jurisdiction.

ARVIND KUMAR
(Authorized Signatory)



GLOBAL ENVIRO Laboratories 224

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE
 8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
 MOBILE : +91-9810317145, +91-8826028116
 E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com
 MoEF&CC Recognized Environmental Laboratory

Test Report No. & Date: GEL-2212/1342, DATE : 13.12.2022

Bacteriological Parameters					
S. No.	Parameter	Unit	Protocol	Result	Limit
1	E-Coli	Per100ml	IS:15185	Absent	Not Detected in 100 ml Sample
2	Total Coliform	Per100ml	IS:15185	Absent	Not Detected in 100 ml Sample


 (Checked By)

INTEKHAB KHAN (Technical Manager)

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SHIKHA BHATIYA
 (Authorized Signatory)

END OF REPORT

JOIN HANDS TO SAVE ENVIRONMENT



GLOBAL ENVIRO Laboratories

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	M/S. RADICO KHAITAN LTD.
Sample Identification No.	A-221207/06
Test Report No & Date	GEL-2212/1348, DATE : 13.12.2022
Sample Description	AMBIENT AIR
Sampling Method	GEL/SOP-01/AA
Sample Collection Date	06.12.2022
Sample Collected by	GEL STAFF
Sampling Site	NEAR GSP BOTTLING HOUSE
Ambient Temperature (°K)	298
Weather Condition	CLEAR
Date of Sample Receipt	07.12.2022
Sample Condition	SEALED
Analysis Duration	07.12.2022 To 13.12.2022

ANALYSIS RESULTS

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	SUSPENDED PARTICULATE MATTER	[$\mu\text{g}/\text{m}^3$]	152	NOT SPECIFIED	IS:5182(part-4) RA:2019
1.	PARTICULATE MATTER (Size <10 μm)	[$\mu\text{g}/\text{m}^3$]	94	100*	IS:5182(part-23) 2006- RA:2017
2.	OXIDES OF NITROGEN (as NO_2)	[$\mu\text{g}/\text{m}^3$]	50.7	80*	IS:5182(part-6) 2006- RA :2017
3.	SULPHUR DIOXIDE (as SO_2)	[$\mu\text{g}/\text{m}^3$]	16.3	80*	IS:5182(part-2) 2001- RA :2017
4	CARBON MONOXIDE (CO)	[mg/m^3]	0.92	4**	IS:5182(part-10)1999- RA:2019

*CPCB'S specification for Ambient Air Quality for 24 hours.

**CPCB'S specification for Ambient Air Quality for 1.0 hours.

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

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END OF REPORT

GLOBAL ENVIRO Laboratories

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
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E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com



TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identificallon No.	:	A-221207/05
Test Report No & Date	:	GEL-2212/1347, DATE : 13.12.2022
Sample Description	:	AMBIENT AIR
Sampling Method	:	GEL/SOP-01/AA
Sample Collection Date	:	06.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	NEAR BGG ROOM
Ambient Temperature (°K)	:	301
Weather Condition	:	CLEAR
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

ANALYSIS RESULTS

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	SUSPENDED PARTICULATE MATTER	[µg/m ³]	148	NOT SPECIFIED	IS:5182(part-4) RA:2019
1	PARTICULATE MATTER (Size <10 µm)	[µg/m ³]	90	100*	IS:5182(part-23) 2006- RA:2017
2.	OXIDES OF NITROGEN (as NO ₂)	[µg/m ³]	44.9	80*	IS:5182(part-6) 2006- RA :2017
3	SULPHUR DIOXIDE (as SO ₂)	[µg/m ³]	18.8	80*	IS:5182(part-2) 2001- RA :2017
4.	CARBON MONOXIDE (CO)	[mg/m ³]	0.96	4**	IS:5182(part-10)1999- RA:2019

*CPCB'S specification for Ambient Air Quality for 24 hours.
**CPCB'S specification for Ambient Air Quality for 1.0 hours.

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

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END OF REPORT



GLOBAL ENVIRO Laboratories

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
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E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	A-221207/04
Test Report No & Date	:	GEL-2212/1346, DATE : 13.12.2022
Sample Description	:	AMBIENT AIR
Sampling Method	:	GEL/SOP-01/AA
Sample Collection Date	:	06.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	NEAR GSP BOILER
Ambient Temperature (°K)	:	300
Weather Condition	:	CLEAR
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

ANALYSIS RESULTS

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	SUSPENDED PARTICULATE MATTER	[$\mu\text{g}/\text{m}^3$]	172	NOT SPECIFIED	IS:5182(part-4) RA:2019
2.	PARTICULATE MATTER (Size <10 μm)	[$\mu\text{g}/\text{m}^3$]	88	100*	IS:5182(part-23) 2006- RA:2017
3.	OXIDES OF NITROGEN (as NO_2)	[$\mu\text{g}/\text{m}^3$]	50.7	80*	IS:5182(part-6) 2006- RA :2017
4.	SULPHUR DIOXIDE (as SO_2)	[$\mu\text{g}/\text{m}^3$]	20.8	80*	IS:5182(part-2) 2001- RA :2017
5.	CARBON MONOXIDE (CO)	[mg/m^3]	1.01	4**	IS:5182(part-10)1999- RA:2019

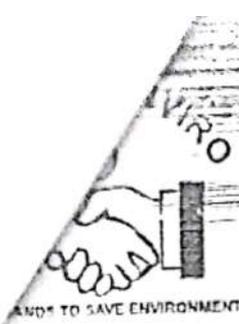
*CPCB'S specification for Ambient Air Quality for 24 hours.
**CPCB'S specification for Ambient Air Quality for 1.0 hours.

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

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END OF REPORT



GLOBAL ENVIRO Laboratories 228s

PLOT NO. 4, KHASRA NO. 15, OPPOSITE SHREE MANAN DHAM TEMPLE,
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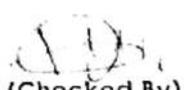
TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	A-221207/03
Test Report No & Date	:	GEL-2212/1345, DATE : 13.12.2022
Sample Description	:	AMBIENT AIR
Sampling Method	:	GEL/SOP-01/AA
Sample Collection Date	:	06.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	NEAR TBW BOILER
Ambient Temperature (°K)	:	299
Weather Condition	:	CLEAR
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

ANALYSIS RESULTS

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	SUSPENDED PARTICULATE MATTER	[µg/m³]	144	NOT SPECIFIED	IS:5182(part-4) RA:2019
2.	PARTICULATE MATTER (Size <10 µm)	[µg/m³]	92	100*	IS:5182(part-23) 2006- RA:2017
3.	OXIDES OF NITROGEN (as NO₂)	[µg/m³]	47.2	80*	IS:5182(part-6) 2006- RA :2017
4.	SULPHUR DIOXIDE (as SO₂)	[µg/m³]	17.6	80*	IS:5182(part-2) 2001- RA :2017
5.	CARBON MONOXIDE (CO)	[mg/m³]	0.99	4**	IS:5182(part-10)1999- RA:2019

*CPCB'S specification for Ambient Air Quality for 24 hours.
**CPCB'S specification for Ambient Air Quality for 1.0 hours.


(Checked By)
INTEKHAB KHAN (Technical Manager)


SHIKHA BHATIYA
(Authorized Signatory)

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END OF REPORT



GLOBAL ENVIRO Laboratories

PLOT NO- 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM- TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	A-221207/02
Test Report No & Date	:	GEL-2212/1344, DATE : 13.12.2022
Sample Description	:	AMBIENT AIR
Sampling Method	:	GEL/SOP-01/AA
Sample Collection Date	:	06.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	NEAR ADMIN BLOCK
Ambient Temperature (°K)	:	298
Weather Condition	:	CLEAR
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

ANALYSIS RESULTS

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	SUSPENDED PARTICULATE MATTER	[µg/m³]	158	NOT SPECIFIED	IS:5182(part-4) RA:2019
2.	PARTICULATE MATTER (Size <10 µm)	[µg/m³]	89	100*	IS:5182(part-23) 2006- RA:2017
3.	OXIDES OF NITROGEN (as NO ₂)	[µg/m³]	46.5	80*	IS:5182(part-6) 2006- RA :2017
4.	SULPHUR DIOXIDE (as SO ₂)	[µg/m³]	19.3	80*	IS:5182(part-2) 2001- RA :2017
5.	CARBON MONOXIDE (CO)	[mg/m³]	1.02	4**	IS:5182(part-10)1999- RA:2019

*CPCB'S specification for Ambient Air Quality for 24 hours.
**CPCB'S specification for Ambient Air Quality for 1.0 hours.

AKK
(Checked By)
INTEKHAB KHAN (Technical Manager)

Shikha Bhatiya
SHIKHA BHATIYA
(Authorized Signatory)

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END OF REPORT



GLOBAL ENVIRO Laboratories

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 8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
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 E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	A-221207/01
Test Report No & Date	:	GEL-2212/1343, DATE : 13.12.2022
Sample Description	:	AMBIENT AIR
Sampling Method	:	GEL/SOP-01/AA
Sample Collection Date	:	06.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	NEAR FACTORY GATE
Ambient Temperature (°K)	:	299
Weather Condition	:	CLEAR
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

ANALYSIS RESULTS

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	SUSPENDED PARTICULATE MATTER	[µg/m ³]	164	NOT SPECIFIED	IS:5182(part-4) RA:2019
2.	PARTICULATE MATTER (Size <10 µm)	[µg/m ³]	90	100*	IS:5182(part-23) 2006- RA:2017
3.	OXIDES OF NITROGEN (as NO ₂)	[µg/m ³]	50.6	80*	IS:5182(part-6) 2006- RA :2017
4.	SULPHUR DIOXIDE (as SO ₂)	[µg/m ³]	18.2	80*	IS:5182(part-2) 2001- RA :2017
5.	CARBON MONOXIDE (CO)	[mg/m ³]	0.97	4**	IS:5182(part-10) 1999- RA:2019

*CPCB'S specification for Ambient Air Quality for 24 hours.
 **CPCB'S specification for Ambient Air Quality for 1.0 hours.

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
 (Authorized Signatory)

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END OF REPORT



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 MOBILE : +91-9810317145, +91-8826028116
 E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/01
Test Report No. & Date	:	GEL-2212/1355, DATE : 13.12.2022
Sample Description	:	EMISSION FROM: BOILER-TBW - 26.0 TPH
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	BIO GAS:- 81000 NM ³ /DAY APPROX)
Stack Height (From Ground level)	:	45.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Material of Construction	:	MS
Stack Diameter (at Port Hole)	:	1200 mm
Stack Temperature. (°K)	:	396
Ambient Temperature (°K)	:	300
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	5.8
Flow Rate of SPM [LPM]	:	16.0
Flow Rate of Gases [LPM]	:	2.6
Quantity Of Emission(m ³ /Hr)	:	23602.752
Attached APCS	:	NIL

ANALYSIS RESULT

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	[mg/Nm ³]	68	150*	IS:11255(part-01)
2.	OXIDE OF NITROGEN	[mg/Nm ³]	54	NOT SPECIFIED	IS:11255(part-07)
3.	SULPHUR DIOXIDE	[mg/Nm ³]	30	NOT SPECIFIED	IS:11255(part-02)
4.	CARBON MONOXIDE	% BY VOLUME	0.22	1*	IS:13270

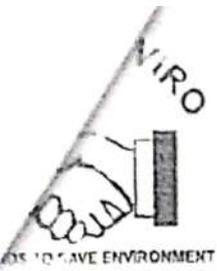
*CPCB's General Emission Standard.

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
 (Authorized Signatory)

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END OF REPORT



GLOBAL ENVIRO Laboratory 232

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/02
Test Report No. & Date	:	GEL-2212/1356, DATE : 13.12.2022
Sample Description	:	EMISSION FROM: BOILER-CBL - 30.0 TPH
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	RICE HUSK/ BIO GAS:- 131 MT/DAY APPROX)
Stack Height (From Ground level)	:	45.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Material of Construction	:	MS
Stack Diameter (at Port Hole)	:	1200 mm
Stack Temperature. (°K)	:	394
Ambient Temperature (°K)	:	301
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	6.4
Flow Rate of SPM [LPM]	:	18.2
Flow Rate of Gases [LPM]	:	2.5
Quantity Of Emission[m ³ /Hr]	:	26044.416
Attached APCS	:	NIL

ANALYSIS RESULT

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	[mg/Nm ³]	118	150*	IS:11255(part-01)
2.	OXIDE OF NITROGEN	[mg/Nm ³]	74	NOT SPECIFIED	IS:11255(part-07)
3.	SULPHUR DIOXIDE	[mg/Nm ³]	40.5	NOT SPECIFIED	IS:11255(part-02)
4.	CARBON MONOXIDE	% BY VOLUME	0.32	1*	IS:13270

*CPCB'S General Emission Standard.

NOTE: At The Time Of Monitoring Boiler Was Running Using Rice Husk As A Fuel.

(Checked By)

INTEKHAB KHAN (Technical Manager)

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4. Subject to Ghaziabad Jurisdiction.

SHIKHA BHATIYA
(Authorized Signatory)



GLOBAL ENVIRO Laboratories

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)

MOBILE : +91-9810317145, +91-8826028116

E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/03
Test Report No. & Date	:	GEL-2212/1357, DATE : 13.12.2022
Sample Description	:	EMISSION FROM : D.G. SET - 750 KVA
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	H.S.D- 70.0 -75.0Ltr/Hr (APPROX)
Stack Height (From Ground level)	:	12.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Stack Diameter (at Port Hole)	:	150 mm
Stack Temperature. (°K)	:	402
Ambient Temperature (°K)	:	300
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	16.8
Flow Rate of SPM [LPM]	:	22.0
Flow Rate of Gases [LPM]	:	2.1
Quantity of emission(m ³ /Hr)	:	1068.228

ANALYSIS RESULT

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	[g/kw-hr]	0.16	0.2	IS:11255(part-01)
2.	OXIDE OF NITROGEN	[g/kw-hr]	1.10	4.0	IS:11255(part-07)
3.	HYDROCARBON	[g/kw-hr]	0.86		GEL/SOP-HC-SE
4.	CARBON MONOXIDE	[g/kw-hr]	1.32	3.5	IS:13270

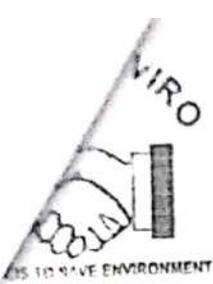
*CPCB'S Emission Standard for Diesel Generator Sets (Engine rating < 800 KW).

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

- Note
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 - Subject to Ghaziabad Jurisdiction

END OF REPORT



GLOBAL ENVIRO Laboratories

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PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	M/S. RADICO KHAITAN LTD.
	BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	SE-221207/04
Test Report No. & Date	GEL-2212/1358. DATE : 13.12.2022
Sample Description	EMISSION FROM : D.G. SET - 700 KVA
Sampling Method	GEL/SOP-01/SE
Sample Collection Date	07.12.2022
Sample Collected by	GEL STAFF
Sampling Site	PORT HOLE
Date of Sample Receipt	07.12.2022
Sample Condition	SEALED
Analysis Duration	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	H.S.D- 70.0 -75.0Ltr/Hr (APPROX)
Stack Height (From Ground level)	12.0 meter
Stack Height (From Roof level)	-
Stack Diameter (at Bottom)	-
Stack Diameter (at Port Hole)	150 mm
Stack Temperature. (°K)	405
Ambient Temperature (°K)	300
Sampling Duration	3600 Sec
Average Velocity (m/sec.)	17.1
Flow Rate of SPM (LPM)	21.0
Flow Rate of Gases (LPM)	2.5
Quantity of emission(m ³ /Hr)	1087.304

ANALYSIS RESULT

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	[g/kw-hr]	0.15	0.2	IS:11255(part-01)
2.	OXIDE OF NITROGEN	[g/kw-hr]	1.09	4.0	IS:11255(part-07)
3.	HYDROCARBON	[g/kw-hr]	0.78		GEL/SOP-HC-SE
4.	CARBON MONOXIDE	[g/kw-hr]	1.26	3.5	IS:13270

*CPCB'S Emission Standard for Diesel Generator Sets (Engine rating < 800 KW)

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

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 - 4 Subject to Ghaziabad Jurisdiction.



GLOBAL ENVIRO Laboratories 235

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
MOBILE : +91-9810317145, +91-8826028116
E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/05
Test Report No. & Date	:	GEL-2212/1359, DATE : 13.12.2022
Sample Description	:	EMISSION FROM : D.G. SET - 625 KVA
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	H.S.D- 45.0 -55.0Ltr/Hr (APPROX)
Stack Height (From Ground level)	:	12.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Stack Diameter (at Port Hole)	:	150 mm
Stack Temperature. (°K)	:	394
Ambient Temperature (°K)	:	299
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	16.4
Flow Rate of SPM [LPM]	:	21.0
Flow Rate of Gases [LPM]	:	2.2
Quantity of emission(m ³ /Hr)	:	1042.794

ANALYSIS RESULT

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	[g/kw-hr]	0.14	0.2	IS:11255(part-01)
2.	OXIDE OF NITROGEN	[g/kw-hr]	1.05	4.0	IS:11255(part-07)
3.	HYDROCARBON	[g/kw-hr]	0.64		GEL/SOP-HC-SE
4.	CARBON MONOXIDE	[g/kw-hr]	1.10	3.5	IS:13270

* CPCB'S Emission Standard for Diesel Generator Sets (Engine rating < 800 KW).

(Checked By)
INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
(Authorized Signatory)

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 4. Subject to Ghaziabad Jurisdiction.

GLOBAL ENVIRO Laboratories

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
 8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
 MOBILE : +91-9810317145, +91-8826028116
 E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com



TC-7186

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/06
Test Report No. & Date	:	GEL-2212/1360, DATE : 13.12.2022
Sample Description	:	EMISSION FROM : D.G. SET - 380 KVA
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	H.S.D- 45.0 -55.0ltr/Hr (APPROX)
Stack Height (From Ground level)	:	12.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Stack Diameter (at Port Hole)	:	150 mm
Stack Temperature. (°K)	:	384
Ambient Temperature (°K)	:	300
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	16.2
Flow Rate of SPM [LPM]	:	22.0
Flow Rate of Gases [LPM]	:	2.3
Quantity of emission(m ³ /Hr)	:	1030.077

ANALYSIS RESULT

S. No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	[g/kw-hr]	0.12	0.2	IS:11255(part-01)
2.	OXIDE OF NITROGEN	[g/kw-hr]	1.05	4.0	IS:11255(part-07)
3.	HYDROCARBON	[g/kw-hr]	0.68		GEL/SOP-HC-SE
4.	CARBON MONOXIDE	[g/kw-hr]	1.10	3.5	IS:13270

*CPCB'S Emission Standard for Diesel Generator Sets (Engine rating < 800 KW)

(Checked By)
 INTEKHAB KHAN (Technical Manager)

SHIKHA BHATIYA
 (Authorized Signatory)

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END OF REPORT

VIRO



TC-7186

GLOBAL ENVIRO Laboratory 2037

PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)

MOBILE : +91-9810317145, +91-8826028116

E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/07
Test Report No & Date	:	GEL-2212/1361, DATE : 13.12.2022
Sample Description	:	EMISSION FROM: D.G. SET NO. 1-1250 KVA
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	H.S.D. -130 -140 Ltr/Hr (APPROX)
Stack Height (From Ground level)	:	12.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Stack Diameter (at Port Hole)	:	150 mm
Stack Temperature. (°K)	:	410
Ambient Temperature (°K)	:	298
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	17.5
Flow Rate of SPM [LPM]	:	22.0
Flow Rate of Gases [LPM]	:	2.1
Quantity of omission [m³/Hr]	:	1112.738

ANALYSIS RESULT

S No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	mg/Nm ³	70	75	IS:11255(part-01)
2.	OXIDE OF NITROGEN	ppmv	548	710	IS:11255(part-07)
3.	CARBON MONOXIDE	mg/Nm ³	72.5	150	IS:13270
4.	OXYGEN	%	10.9	NOT SPECIFIED	IS:13270
5.	NMHC (as C)	mg/Nm ³	25.1	100	GC METHOD

*CPCB'S Emission Standard for Diesel Generator Sets (Engine rating >800 KW)

(Checked By)

INTEKHAB KHAN (Technical Manager)

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4 Subject to Grievance Jurisdiction

END OF REPORT

SHIKHA BHATIYA
(Authorized Signatory)



GLOBAL ENVIRO Laboratories 238

PLOT NO. 47-KHASRA-NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE,
 8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)
 MOBILE : +91-9810317145, +91-8826028116
 E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/08
Test Report No & Date	:	GEL-2212/1362, DATE : 13.12.2022
Sample Description	:	EMISSION FROM: D.G. SET NO. 2-1250 KVA
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	H.S.D. -130 -140 Ltr/Hr (APPROX)
Stack Height (From Ground level)	:	12.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Stack Diameter (at Port Hole)	:	150 mm
Stack Temperature. (°K)	:	406
Ambient Temperature (°K)	:	300
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	18.4
Flow Rate of SPM [LPM]'	:	23.0
Flow Rate of Gases [LPM]	:	2.6
Quantity of emission(m ³ /Hr)	:	1169.964

ANALYSIS RESULT

S No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	mg/Nm ³	60	75	IS:11255(part-01)
2.	OXIDE OF NIITROGEN	ppmv	432	710	IS:11255(part-07)
3.	CARBON MONOXIDE	mg/Nm ³	66.3	150	IS:13270
4.	OXYGEN	%	11.9	NOT SPECIFIED	IS:13270
5.	SO ₂ (as S)	mg/Hm ³	20.4	100	GC METHOD

*CPCB'S Emission Standard for Diesel Generator Sets (Engine rating >800 KW)

(Checked By)
INTEKHAB KHAN (Technical Manager)

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SHIKHA BHATIYA
 (Authorized Signatory)

END OF REPORT



PLOT NO. 4, KHASRA NO. 45, OPPOSITE SHREE MANAN DHAM TEMPLE, 8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD-201003 (U.P.)

MOBILE : +91-9810317145, +91-8826028116

E-mail : global_enviro@rediffmail.com, globalenvirolab@gmcil.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/09
Test Report No & Date	:	GEL-2212/1363, DATE : 13.12.2022
Sample Description	:	EMISSION FROM: BIO GAS ENGINE NO. 2 (1200 KVA)
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	BIO GAS. -330 Nm ³ /Hr (APPROX)
Stack Height (From Ground level)	:	12.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Stack Diameter (at Port Hole)	:	150 mm
Stack Temperature. (°K)	:	399
Ambient Temperature (°K)	:	299
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	18.5
Flow Rate of SPM [LPM]	:	23.0
Flow Rate of Gases [LPM]	:	2.7
Quantity of emission(m ³ /Hr)	:	1176.323

ANALYSIS RESULT

S No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	mg/Nm ³	69	75	IS:11255(part-01)
2.	OXIDE OF NITROGEN	ppmv	488	710	IS:11255(part-07)
3.	CARBON MONOXIDE	mg/Nm ³	70.2	150	IS:13270
4.	OXYGEN	%	10.9	NOT SPECIFIED	IS:13270
5.	NMHC (as C)	mg/Nm ³	18.4	100	CC METHOD

*C.P.C.B'S Emission standard for Diesel Generator Sets (Engine rating >800 KW)

(Checked By)

INTEKHAB KHAN (Technical Manager)

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END OF REPORT

SHIKHA BHATIYA
(Authorized Signatory)



TC-7186

GLOBAL ENVIRO Laboratories 240

PLOT NO. 4, KHASRA NO. 15, OPPOSITE SHREE MANAN DHAM TEMPLE,
8TH K.M. MILE STONE, INDUSTRIAL AREA, MEERUT ROAD, GHAZIABAD -201003 (U.P.)

MOBILE : +91-9810317145, +91-8826028116

E-mail : global_enviro@rediffmail.com, globalenvirolab@gmail.com

TEST REPORT

ISSUED TO	:	M/S. RADICO KHAITAN LTD. BAREILLY ROAD, RAMPUR (U.P.)
Sample Identification No.	:	SE-221207/10
Test Report No & Date	:	GEL-2212/1364, DATE : 13.12.2022
Sample Description	:	EMISSION FROM: BIO GAS ENGINE NO. 3 (1200 KVA)
Sampling Method	:	GEL/SOP-01/SE
Sample Collection Date	:	07.12.2022
Sample Collected by	:	GEL STAFF
Sampling Site	:	PORT HOLE
Date of Sample Receipt	:	07.12.2022
Sample Condition	:	SEALED
Analysis Duration	:	07.12.2022 To 13.12.2022

SAMPLE SOURCE DETAILS

Type & Consumption of Fuels	:	BIO GAS. -328 Nm ³ /Hr (APPROX)
Stack Height (From Ground level)	:	12.0 meter
Stack Height (From Roof level)	:	-
Stack Diameter (at Bottom)	:	-
Stack Diameter (at Port Hole)	:	150 mm
Stack Temperature. (°K)	:	408
Ambient Temperature (°K)	:	300
Sampling Duration	:	3600 Sec
Average Velocity [m/sec.]	:	18.0
Flow Rate of SPM [LPM]	:	22.0
Flow Rate of Gases [LPM]	:	2.6
Quantity of emission(m ³ /Hr)	:	1144.530

ANALYSIS RESULT

S No.	PARAMETERS	UNIT	RESULTS	STANDARD	PROTOCOL
1.	PARTICULATE MATTER	mg/Nm ³	71	75	IS:11255(part-01)
2.	OXIDE OF NITROGEN	ppmv	544	710	IS:11255(part-07)
3.	CARBON MONOXIDE	mg/Nm ³	70.9	150	IS:13270
4.	OXYGEN	%	11.6	NOT SPECIFIED	IS:13270
5.	NMHC (as C)	mg/Nm ³	18.2	100	GC METHOD

* C.P.C.B.'s Emission Standard for Diesel Generator Sets (Engine rating >800 KW)

(Checked By)

INTEKHAB KHAN (Technical Manager)

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SHIKHA BHATIYA
(Authorized Signatory)

*** END OF REPORT ***

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड
UTTAR PRADESH POLLUTION CONTROL BOARD

संदर्भ संख्या:
सेवा में,

H-87865/सी-7/जल-40/2023

दिनांक: 27-1-2023

मै0 रेडिको खेतान लि0,
बरेली रोड,
रामपुर।

विषय:—माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा ओ0ए0 सं0-324/2016 (ई0ए0 सं0-23/2022) शैलेश सिंह बनाम उ0प्र0 राज्य व अन्य में पारित आदेश दिनांक 16.09.2022 के अनुपालन में संयुक्त समिति द्वारा किये गये निरीक्षण दिनांक 17.01.2023 में की गयी संस्तुतियों के अनुपालन में जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 की धारा-33ए के अन्तर्गत निर्देश।

यह कि उद्योग मै0 रेडिको खेतान लि0, रामपुर की उत्पादन क्षमता एल्कोहल 374 कि0ली0/दिन (1224.6 ली0/वर्ष) है। उद्योग की मोलासिस आधारित आसवनी इकाई की उत्पादन क्षमता 200 कि0ली0/दिन का उत्पादन किया जाता है।

यह कि माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा ओ0ए0 सं0-324/2016 (ई0ए0 सं0-23/2022) शैलेश सिंह बनाम उ0प्र0 राज्य व अन्य में पारित आदेश दिनांक 16.09.2022 में निम्न निर्देश जारी किये गये :-

“.....4. In the present Application, it is stated that as per photographs taken on 24.07.2022, the PP - Rampur Distillery (Radico Khaitan) is discharging effluent into the drain which finally joins the river. Directions in the order dated 18.03.2021 are still not being followed. This is disputed by learned counsel appearing for the PP.

5. In view of above, we consider it appropriate to ascertain factual position by requiring the Additional Chief Secretary, Agriculture, U.P and the State PCB to furnish a factual report in the matter with regard to compliance status by the PP, particularly mode of disposal of effluents vis a vis CTO conditions within two months by email at judicialngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The Applicant and the PP may give their respective versions to Additional Chief Secretary, Agriculture, U.P and the State PCB within two weeks from today. The State PCB will be the nodal agency for compliance.

List for further consideration on 03.02.2023. ...”

यह कि माननीय अधिकरण द्वारा पारित आदेशों के क्रम में क्षेत्रीय कार्यालय, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, मुरादाबाद द्वारा संयुक्त कृषि निदेशक, मुरादाबाद के साथ संयुक्त निरीक्षण दिनांक 17.01.2023 को उद्योग का निरीक्षण किया गया।

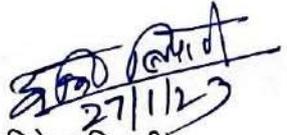
यह कि संयुक्त निरीक्षण दिनांक 17.01.2023 में निम्न तथ्य पाये गये :-

1. The leakage observed in treated condensate Line. It was directed to rectify the same on top priority at the time of inspection.
2. The pipelines of spent wash lying in the drain upto the lagoon of Ajeetpur site shall be replaced outside/underground to avoid any mixing of spent wash with the drain water in case of any leakage.

यह कि संयुक्त समिति द्वारा उक्त निरीक्षण में पाये गये तथ्यों को दृष्टिगत रखते हुए सक्षम अधिकारी की अनुमति से जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 की धारा-33ए के अन्तर्गत उद्योग मै0 रेडिको खेतान लि0, बरेली रोड, रामपुर को निम्न निर्देश जारी किये जाते हैं :-

1. यह कि उद्योग मै0 रेडिको खेतान लि0, बरेली रोड, रामपुर द्वारा स्पेण्टवॉश को अजीतपुर साइट स्थित लैगून में सम्प्रेषित किये जाने हेतु पाइपलाइन को हटाते हुए नई पाइपलाइन तैयार की जाए जिससे किसी भी दशा में स्पेण्टवॉश का निस्तारण नाले में न हो सके।
2. यह कि उद्योग मै0 रेडिको खेतान लि0, बरेली रोड, रामपुर में स्थित ट्रीटेड कन्डनसेट लाइन को तत्काल प्रभाव से ठीक कराया जाना सुनिश्चित करें।

आपको निर्देशित किया जाता है कि उक्त के संबंध में कार्यवाही करते हुए 01 सप्ताह के अन्दर आख्या बोर्ड मुख्यालय, लखनऊ एवं क्षेत्रीय कार्यालय, मुरादाबाद को प्रेषित करना सुनिश्चित करें अन्यथा की दशा में आपके उद्योग के विरुद्ध पर्यावरणीय अधिनियमों के अन्तर्गत कार्यवाही प्रारम्भ कर दी जाएगी जिसका संपूर्ण उत्तरदायित्व स्वयं उद्योग को होगा।


27/1/23
(अभिषेक त्रिपाठी)
प्रभारी, वृत्त-7

प्रतिलिपि :- क्षेत्रीय अधिकारी उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, मुरादाबाद को इस निर्देश के साथ की उक्त निर्देशों के क्रम आवश्यक कार्यवाही करना सुनिश्चित करे।


प्रभारी, वृत्त-7