

Item Nos. 10 to 12

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 530/2023

Anuj Kumar Applicant

Versus

State of Uttarakhand & Ors. Respondent(s)
WITH

Original Application No. 495/2023

Mohd Amjad & Ors. Applicant(s)

Versus

State of Uttar Pradesh & Ors. Respondent(s)
WITH

Original Application No. 369/2024

Monika (Sarpanch) Applicant

Versus

State of Uttarakhand & Ors. Respondent(s)

Date of hearing: 29.07.2024

**CORAM: HON’BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON’BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON’BLE DR. A. SENTHIL VEL, EXPERT MEMBER
HON’BLE DR. AFROZ AHMAD, EXPERT MEMBER**

Applicant: Mr. Prakash Pandey, Adv. for Applicant in OA 530/2023 (Through VC)
Mr. Rahul Khurana, Mr. Hasil Jain, Mr. Satish Kumar, Advs. for
Applicant in OA 495/2023 (Through VC)
Ms. Sweksha Prakash, Adv. for Applicant in OA 369/2024 (Through VC)

Respondents: Mr. Manish Singhvi, Senior Advocate with Mr. Manish Jain, Mr. Jugul
Kishore Gupta & Mr. Vikash Kumar Verma, Advs. for R - 7 & 8
Mr. Neeraj, Mr. Rudra Paliwal & Mr. Sanjay Pal, Advs. for the State of
Uttarakhand (Through VC)
Mr. Mukesh Verma & Ms. Vatsala Tripathi, Advs with Dr. Parag
Madhukar Dhakate, Member Secretary, UKPCB
Mr. Pradeep Misra & Mr. Daleep Dhyani, Advs. for UPPCB (Through VC)
Mr. Vikrant Pachnanda, Adv. for MoEF & CC in OA 530/2023 (Through
VC)
Mr. Saurabh Balwani, Adv. for CPCB (Through VC)

ORDER

1. In these original applications, the grievance is in respect of non-compliance of the environmental norms by the Respondents – M/s. RBNS Sugar Mill Private Limited and M/s RBNS Distillery Private Limited.

2. In terms of the earlier direction of the Tribunal, the report dated 22.07.2024 has been filed by the Central Pollution Control Board (CPCB) disclosing the status of compliance/non-compliance by the Respondent units as under:

S. No. as per reply submitted by project proponent	Recommendations made in the Joint inspection reports dated 21.11.2023 & 24.01.2024, Compliance submitted by project proponent, and factual status observed by CPCB team during visit on 24 th – 25 th June, 2024
1.	<u>Recommendation</u> <i>Provision of laying out a closed conduit pipe line at Laksar drain (which is currently flowing as open channel) starting from 500 meters upstream (u/s) to 500 meter downstream (d/s) of unit shall be made by the unit under supervision of UKPCB to rule out any possibility of discharge of treated/untreated effluent into drain.</i> <u>Compliance submitted by project proponent:</u> - Unit will make perfect provision fully covered RCC slab upto end of June, 2024 to avoid any possibility of any discharge of effluent into Laksar Drain. It is a Nagar Panchayat Drain. - Laksar is a flood prone area and conduit pipes obstruct flow of the uncounted water in rainy session. - Unit written letter dated 31.03.2024 to seek permission from Local body administration for installation of Conduit Pipe, however Local administration denied on 15.04.2024. <u>Factual status observed by CPCB team on recent visit:</u> - The unit has not provided closed conduit pipe line at Laksar drain. Unit representative informed that this drain is in jurisdiction of Nagar Panchayat, Laksar. - Unit vide letter dated 31.03.2024 sought permission from district administration regarding construction/laying of closed conduit (pipe) over Laksar drain. - District administration (i.e. Nagar palika parishad) vide letter dated 15.04.2024 communicated to the unit that considering the fact that unit falls under flood prone area, construction/laying of closed conduit pipe is not advisable. Copy of unit's letter dated 31.03.2024 is attached as Annexure – 10. Copy of letter dated 15.04.2024 from District administration (i.e. Nagar palika parishad) is attached as Annexure – 11.
2., 4	<u>Recommendation:</u> - It shall be the responsibility of the unit to maintain the quality of Laksar drain at downstream of the unit in sync with the quality at upstream of the unit. - Based on the analysis results, the quality of Laksar drain near Akhoda Kalan village (1.68 Kms*) shows Deteriorated Condition, therefore, the possibility of effluent mixing with sewage in drain cannot be ruled out. <u>Compliance submitted by project proponent:</u> - UKPCB is monitoring water quality of Laksar Drain regularly on monthly basis.

	- As per 2nd Joint Committee inspection on 13/14 Dec 2023 Relevant Portion of Report Table No. 20 on Page 647-48 upstream Result is pH-7.4, BOD-35, COD-112, TDS- 1404 & TSS-53, And Downstream result near Akoda Kalan Village is pH-7.0, BOD-108, COD-232, TDS-1804 & TSS-60. 1st JT Report table 11 on page no. 88-90. Laksar drain d/s R.B.N.S BOD-11 mg/L, COD-66 mg/L, TSS-18 mg/L & TDS-396 mg/L. - The analysis result of samples collected from drain at U/s and D/s locations indicate the characteristics of domestic sewage. However, quality of Laksar drain near Akhoda Kalan village (1.68 Kms*) shows Deteriorated condition of drain, which indicate the possibility of effluent mixing with sewage in drain however, no bypass of industrial effluent (sugar/distillery) was observed from the unit during inspection”. - Akoda Kalan is about 1.68 km from sugar mill. Untreated Discharge from Khera, Kharanja & Akoda Kala village merge in the Laksar drain. Untreated sewage from More than 7-8 nalas falls into the Laksar Drain. <u>Factual status observed by CPCB team on recent visit:</u> - To verify the quality of Laksar drain, the inspection team collected samples from the Laksar drain at different locations (Refer Photo 1, 2 & 3). Details are mentioned below in Table 1: <u>Table 1: Analysis results of samples collected from Laksar drain</u> <table><tr><th>Parameters</th><th>Laksar drain upstream of unit</th><th>Laksar drain downstream of unit</th><th>Laksar drain near Akhoda Kalan village (1.68 Kms downstream of unit)</th></tr><tr><td>pH</td><td>7.7</td><td>8</td><td>7.9</td></tr><tr><td>BOD (mg/l)</td><td>20</td><td>05</td><td>41</td></tr><tr><td>COD (mg/l)</td><td>75</td><td>38</td><td>129</td></tr><tr><td>TSS (mg/l)</td><td>27</td><td>29</td><td>47</td></tr><tr><td>TDS (mg/l)</td><td>216</td><td>944</td><td>796</td></tr><tr><td>NO³⁻ (mg/l)</td><td>0.8</td><td>4.6</td><td>BDL</td></tr><tr><td>SO₄²⁻ (mg/l)</td><td>36</td><td>68</td><td>144</td></tr></table> - The analysis results of samples collected from drain at above mentioned locations indicate no impact of industrial discharge and reflect characteristics of surface run-off. <u>Compliance status: Complying</u>	Parameters	Laksar drain upstream of unit	Laksar drain downstream of unit	Laksar drain near Akhoda Kalan village (1.68 Kms downstream of unit)	pH	7.7	8	7.9	BOD (mg/l)	20	05	41	COD (mg/l)	75	38	129	TSS (mg/l)	27	29	47	TDS (mg/l)	216	944	796	NO ³⁻ (mg/l)	0.8	4.6	BDL	SO ₄ ²⁻ (mg/l)	36	68	144
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3.	<u>Recommendation:</u> - The unit shall install flow meters at the abstraction points on both the bore wells of sugar and distillery unit. <u>Compliance submitted by project proponent:</u> - The unit has installed water flow meters at bore wells of sugar mill and distillery unit. <u>Factual status observed by CPCB on recent visit:</u> <table><tr><th>Borewell Location</th><th>Permitted no. of borewells as per NOC from CGWA</th><th>Actual no. of borewells installed</th><th>Flow meter installed (Yes/No)</th><th>Functional status</th></tr><tr><td>Sugar unit</td><td>01</td><td>01</td><td>Yes</td><td>Functional</td></tr><tr><td>Distillery unit</td><td>01</td><td>*Nil as on date of visit</td><td>Not relevant</td><td>Not relevant</td></tr></table> Remark: a. Flow meter with totalizer found installed at the delivery line of the Borewell within sugar unit (Refer Photo 18). This borewell was found operational. Reading noted during visit: Instantaneous reading – 42.0 m³/hr; Totalizer reading – 028276 m³ b. *Borewell (distillery unit) was in dismantled condition as the submersible motor collapsed (Refer Photo 8) and the unit was in process of setting up of new Borewell (Refer Photo 9) within premises (Latitude: 29.748056, Longitude: 78.032222)	Borewell Location	Permitted no. of borewells as per NOC from CGWA	Actual no. of borewells installed	Flow meter installed (Yes/No)	Functional status	Sugar unit	01	01	Yes	Functional	Distillery unit	01	*Nil as on date of visit	Not relevant	Not relevant																	
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Distillery unit	01	*Nil as on date of visit	Not relevant	Not relevant																													

	Pending Action: Unit shall install flow meter with totalizer at the new borewell (distillery unit) when it becomes functional and logbook regarding groundwater withdrawal on daily basis. Compliance status: <u>Partial compliance. To be complied as &when new Borewell becomes functional</u>												
5. 6. & 7	Recommendation: • The unit had 3 lagoons of total capacity of 5222 m³ which were found fully filled with raw spent wash/ bio-methanated spent wash having total solids percentage less than 17% even during monsoon season and as these lagoons are located adjacent to Laksar drain hence there is potential of spillage/ overflow/ discharge of spent wash in the Laksar drain. This is the violation of CPCB direction dated 07.12.2015. • The unit shall consume the concentrate spent wash stored in lagoons of capacity 1925m³ and 1375 m³ in dryer in environmentally sound manner thereafter, unit shall dismantle 02 lagoons. • As per the consent, w.e.f. 01.01.2024 the unit is permitted to have lagoon capacity only to store 07 days equivalent of concentrated spent wash generated, however the unit is having excess lagoon capacity in violation of Consent condition. • The unit was storing Bio-methanated spent wash (BMSW)/ raw spent wash in lagoons with solid content <30%, which is in violation of CPCB direction dated 07.12.2015. Compliance submitted by project proponent: • In Rainy session heavy rain fall was recorded as 1300 mm which is huge quantity of rain water. • During December 2023 by inspection solid % is 37 to 46 % found. (during time of Distillery was operational) which is as per directions of CPCB dated 07.12.2015. • One lagoon capacity 1372 m³ has been dismantled and 2nd 1925 m³ lagoon will be dismantled upto end of June, 2024. • Lagoon capacity is 1925, which is equivalent of 7 days' capacity of concentrated spent wash as per consent. Factual status observed by CPCB on recent visit: The unit has filled/levelled 02 nos. of lagoons of capacity 1925 m³ and 1375 m³(located adjacent to Laksar drain) with boiler ash. (Refer Photo 10) • The unit has now retained only one lagoon (settling tank) of capacity 1925 m³ which is dedicated for storage of bio-methanated spent wash and the same was found empty (Refer Photo 11). Hence currently available capacity is equivalent to 03 days' storage capacity (considering typical raw spent wash generation rate - 7 KL/KL of product, production capacity of 120 KLPD, therefore spent wash generation per day = 120 * 7 = 840 KLD or 840 m³/day, hence available storage capacity equivalence in no. of days = 1925 m³/ 840 m³ per day = 2.29 i.e. 03 days), which is in compliance of CPCB direction dated 07.12.2015. • No overflow/spillage/discharge of spent wash/effluent from distillery unit found in the Laksar drain. • Logbooks were collected by the inspection team regarding following for duration 01.01.2024 – 30.04.2024 (plant closed from 30.04.2024 till date of visit) for verification of consumption of legacy spent wash in dryer (ZLD system): a. raw spent wash generation from old & new distillation plant, b. feed to old MEE & new MEE c. concentrated spent wash generation from old MEE & new MEE d. feed to dryer-1 (old) & dryer-2 (new) • Details of data from above mentioned logbooks are mentioned in table 2 below: Table 2: Details of raw spent wash generation, feed to MEE, concentrated spent wash generation and spent wash feed to dryer <table><tr><th></th><th>Raw Spent wash generation (MT)</th><th>Feed to MEE (MT)</th><th>Concentrated Spent wash from MEE (MT)</th><th>Condensate from MEE (MT)</th><th>Concentrated Spent wash feed to Dryer (MT)</th></tr><tr><td>Old plant</td><td>37764.48</td><td>37764.71</td><td>11193.42</td><td>26571.29</td><td>11840.72</td></tr></table>		Raw Spent wash generation (MT)	Feed to MEE (MT)	Concentrated Spent wash from MEE (MT)	Condensate from MEE (MT)	Concentrated Spent wash feed to Dryer (MT)	Old plant	37764.48	37764.71	11193.42	26571.29	11840.72
	Raw Spent wash generation (MT)	Feed to MEE (MT)	Concentrated Spent wash from MEE (MT)	Condensate from MEE (MT)	Concentrated Spent wash feed to Dryer (MT)								
Old plant	37764.48	37764.71	11193.42	26571.29	11840.72								

	<table><tr><td>New plant</td><td>30551.81</td><td>30550.88</td><td>9071.72</td><td>21479.16</td><td>8953.93</td></tr><tr><td>Total</td><td>68316.29</td><td>68315.59</td><td>20265.14</td><td>48050.45</td><td>20794.65</td></tr></table> Difference between quantity of concentrated spent wash generated from both MEE and feed to dryers = 20265.14 MT – 20794.65 MT = - 529.51 MT - It is evident from the above data that unit has consumed 529.51 MT of legacy spent wash that was found stored in lagoons during last visit (13th – 14th Dec, 2023) - Unit has installed Condensate Polishing Unit (CPU) for treatment of low strength effluents (i.e. MEE condensate, spent lees, boiler blowdown, cooling tower blowdown and floor washings), and as per the effluent management scheme the treated effluent from CPU is being reused in molasses dilution, floor washing and as make up water in cooling tower. <u>Compliance status: Complying</u>	New plant	30551.81	30550.88	9071.72	21479.16	8953.93	Total	68316.29	68315.59	20265.14	48050.45	20794.65
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Total	68316.29	68315.59	20265.14	48050.45	20794.65								
8.	<u>Recommendation:</u> - The unit is discharging its distillery effluent from bio-composting/lagoons and sugar effluent in to the Laksar drain, which is the violation to Zero Liquid Discharge (ZLD)/discharge condition resulting in high pollution level of BOD (626 mg/l) and COD (1638 mg/l) which is about 17% higher than the upstream water quality of the drain. <u>Compliance submitted by project proponent:</u> - No effluents discharged by the distillery. Unit has complied with ZLD norms as per CPCB. see details of UKPCB Affidavit on page No. 772. - Bio-composting has been stopped since 01.01.2024 as per CCA of UKPCB dated 06.10.2023. Page no. 667. - Due to non-operation of Bio-composting, Unit is facing huge loss in terms of Money and 14.02 Acre Land, Machinery etc. <u>Factual status observed by CPCB team on recent visit:</u> - No bio-composting activities were going on and the infrastructure such as covered shed (including truss structure) was being dismantled. (Refer Photo 12 & 13) - The unit has filled/levelled 02 nos. of lagoons of capacity 1925 m³ and 1375 m³ with boiler ash and one lagoon of capacity 1925 m³ was found empty. - No discharge of distillery effluent from bio-composting/lagoons observed in to the Laksar drain. - Treated effluent from ETP (sugar unit) was being discharged in to the Laksar drain. Samples were collected from ETP outlet and analysis results show BOD – 05 mg/l (against the norm of 30 mg/l); COD – 29 mg/l (against the norm of 250 mg/l); TSS – 16 mg/l (against the norm of 30 mg/l); TDS – 884 mg/l (against the norm of 2100 mg/l); Oil & grease – BDL mg/l (against the norm of 10 mg/l). These results indicate compliance w.r.t. stipulated discharge norms except pH – 8.7 which is marginally exceeding the norm of 8.5. - The analysis result of samples collected from drain (details in Table 1 above) indicate no impact of industrial discharge and reflect characteristics of surface run-off (BOD in the range of 05 – 41 mg/l & COD in the range of 38 – 129 mg/l). Details of samples collected from laksar drain are mentioned above in table – 1. <u>Compliance status: Complying</u>												
9., 10. & 11.	<u>Recommendation:</u> - In bio-compost yard, the covered shed was damaged and improper. Ready bio-compost was found stored in damaged covered shed. Also, the leachate collection drain and pits were not observed around the periphery of bio-compost yard for leachate management. Also, the unit had not constructed any boundary wall near the compost yard. This is the violation of CPCB bio-compositing SOP. - The unit shall dispose all the stored ready bio-compost and press mud in bio-compost yard by adapting appropriate scientific method under the supervision of UKPCB within two months and after that the unit shall clean the bio-compost area and shall submit photographic evidence to UKPCB.												

	<u>Compliance submitted by project proponent:</u> • Total sale of Bio-compost will be achieved up to the end of June, 2024. • No need for covered shed required in future. • Unit had constructed Boundary walls since 2014 to protect Bio-compost yard. • During rainy season 2023, a piece of Boundary wall about 20-25 meters was damaged at the time of Flood. • Damaged wall has already been constructed • Unit will make all efforts to dispose stored Bio-Compost upto end of June, 2024. • Unit will definitely submit photographic as evidence to UKPCB. • NSI team visited on 19/20.12.2023. At the time of inspection New Dryer was under trial. Both (2) spent wash dryers are in working condition and compatible to achieve the ZLD norms in Distillery unit. see details of CPCB Affidavit. • Unit has complied with ZLD norms as per CPCB. see details of UKPCB Affidavit <u>Factual status observed by CPCB team on recent visit:</u> • Since 01.01.2024, the unit has stopped bio-composting activities in compliance to the conditions mentioned in the CCA dated 06.10.2023 issued by UKPCB, hence, now there is no relevance of covered shed, leachate collection drain & pits and the applicability of SOP for bio-composting operations is also not relevant. (Refer Photo 12 & 13) • Unit has constructed boundary wall near the bio-compost yard. (Refer Photo 14) • Cleaning of bio-compost yard was under process. Though, no bio-compositing activity was taking place and the covered shade were being dismantled. • Around 70000 – 80000kg of ready bio-compost found stored in the yard in form of heaps, and unit representative informed that they will sell this bio-compost till 15th July, 2024. (Refer Photo 13) <u>Pending Action:</u> Unit shall clear up all the ready bio-compost stored in compost yard at the earliest and submit photographic evidence to CPCB & UKPCB. Also to avoid leachate run-off discharge in drain, the unit shall ensure to keep the stored ready bio-compost covered till it is completely removed from the bio-compost yard. <u>Compliance status: Partial compliance</u>
12.	<u>Recommendation:</u> • The unit shall prepare adequacy and performance assessment report of ZLD scheme for molasses based distillery as unit has expanded its production capacity from 60 KLPD to 120 KLPD and has installed spray dryers as ZLD system. <u>Compliance submitted by project proponent:</u> • NSI team visited on 19/20.12.2023. At the time of inspection New Dryer was under trial. Both (2) spent wash dryers are in working condition and compatible to achieve the ZLD norms in Distillery unit. • Unit has complied with ZLD norms as per CPCB <u>Factual status observed by CPCB team on recent visit:</u> • The unit has provided a copy of “Adequacy and performance assessment report of ZLD scheme for molasses based distillery” prepared by National Sugar Institute, Kanpur (NSI), which is based on the old scheme of ZLD through bio-composting route. • However, since 01.01.2024 the unit has stopped the bio-composting route permanently, and commissioned 02 nos. of dryers of capacity 45 TPH to achieve ZLD. Adequacy and performance assessment report of ZLD for current scheme is not provided. Copy of “Adequacy and performance assessment report of ZLD scheme for molasses based distillery” is attached as Annexure – 12 <u>Pending Action:</u> The unit shall submit the “Adequacy and performance assessment report of ZLD scheme for molasses based distillery”, as per new scheme clearly mentioning about the details of

	02 nos. of dryers. <u>Compliance status: Non – compliance</u>																																							
13.	<u>Recommendation:</u> • The unit shall comply with the consent conditions issued by UKPCB and shall ensure that no fresh concentrated spent wash shall be disposed through bio-composting and entire spent wash shall be totally disposed through spray dryer. <u>Compliance submitted by project proponent:</u> • Spent wash dryers are in working condition and compatible to achieve the ZLD norms in Distillery unit. • Unit has complied with ZLD norms as per CPCB <u>Factual status observed by CPCB team on recent visit:</u> • As per the consent conditions, unit is complying for following: a. The unit has stopped bio-composting since 01.01.2024 and shifted to dryer technology for achieving ZLD b. The unit has restricted the lagoon capacity to 03 days (<07 days) c. The unit has filled/levelled 02 nos. of lagoons of capacity 1925 m³ and 1375 m³ with boiler ash. • As per the details mentioned in Table 2 at S. No. 5, 6 & 7, it is evident that unit has not disposed any fresh concentrated spent wash through bio-composting. Entire quantity of spent wash has been disposed through 02 nos. of spray dryers. <u>Compliance status: Complying</u>																																							
14.	<u>Recommendation:</u> • Analysis results of samples collected from Bore well (sugar unit), piezo well located within molasses based distillery plant and hand pump located outside of the unit showed high value of COD in the range of 6 to 33 mg/l, which indicate posing potential threat to ground water and need urgent attention towards improvement of housekeeping, prevention of seepage, spillage etc. <u>Compliance submitted by project proponent:</u> • The sample was taken by the Joint Committee just after heavy rains and floods in this area. • Housekeeping is proper; there is no seepage and spillage etc. NSI Report in Dec 20123 of Bore well are as per standard norms as pH-7.2, BOD-BDL, COD-BDL, TDS-426 ppm & TSS-BDL <u>Factual status observed by CPCB team on recent visit:</u> • Samples were collected from the Borewell (sugar unit) and analysis results are mentioned in table 3 below: <u>Table 3: Analysis results of samples collected from Borewell (Sugar unit)</u> <table><tr><th>Parameters</th><th>Borewell (Sugar Unit)</th><th>BISIS10500:2012(Permissible limit in absence of alternative source)</th></tr><tr><td>pH</td><td>7.9</td><td>6.5-8.5</td></tr><tr><td>Conductivity (µmho/cm)</td><td>982</td><td>-</td></tr><tr><td>TDS</td><td>550</td><td>2000</td></tr><tr><td>COD</td><td>10</td><td>-</td></tr><tr><td>Total Hardness</td><td>379</td><td>600</td></tr><tr><td>Chloride</td><td>32</td><td>1000</td></tr><tr><td>Phosphate</td><td>0.1</td><td>-</td></tr><tr><td>Fluoride</td><td>0.39</td><td>1.5</td></tr><tr><td>Colour (Hazen)</td><td>BDL</td><td>15</td></tr><tr><td>Sulphate</td><td>59</td><td>400</td></tr><tr><td>Nitrate</td><td>0.57</td><td>45</td></tr><tr><td>Total Alkalinity</td><td>410</td><td>600</td></tr></table>	Parameters	Borewell (Sugar Unit)	BISIS10500:2012(Permissible limit in absence of alternative source)	pH	7.9	6.5-8.5	Conductivity (µmho/cm)	982	-	TDS	550	2000	COD	10	-	Total Hardness	379	600	Chloride	32	1000	Phosphate	0.1	-	Fluoride	0.39	1.5	Colour (Hazen)	BDL	15	Sulphate	59	400	Nitrate	0.57	45	Total Alkalinity	410	600
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	Note: All values are in mg/l except pH, colour, and conductivity - Analysis results of samples collected from Borewell located in unit premise was found within the permissible limit as per BIS IS 10500:2012 except COD (10 mg/l). - The unit has sealed the piezowell (located near molasses tanks within distillery plant) with concrete to avoid the possibility of contamination of groundwater in piezowell due to seepage or spillage. - Housekeeping found satisfactory. - No seepage, spillage of effluent observed within and outside of premise. - It was recommended in the earlier report dated 21.11.2023 that UKPCB shall carry out detailed assessment of groundwater quality including ground water sampling & analysis in and around the unit to ascertain the groundwater contamination, if any, and need for remediation. Depending on such study, detailed remedial action plan be also prepared and executed by UKPCB in time bound manner. However, the detailed assessment of groundwater quality is yet to be initiated by UKPCB. <u>Compliance status: Non-Compliance</u>																
15.	<u>Recommendation:</u> - The unit should get evaluation of its Effluent Treatment Plant (ETP) for its performance from Expert Institute of Repute/Experts in the field. <u>Compliance submitted by project proponent:</u> - All water samples taken by NSI and found that the results are as per Standard norms including Ground water. - Except MGF and ACF, all the observation has been complied with, - regarding ACF and MGF order has been placed <u>Factual status observed by CPCB team on recent visit:</u> - The unit has submitted adequacy assessment report of ETP (sugar plant) prepared by NSI, Kanpur for the crushing season 2023 – 2024. - As per the claim made by the unit regarding recent modifications in the ETP, the inspection team observed: a. The unit has relocated the oil & grease skimmer equipment. b. The unit has installed a perforated pipeline inside the equalization tank and connected it with a blower (capacity 170 m³ /H.P) as an air mixing system. c. Additional newly purchased Multi Grade Filter (MGF) & Activated Carbon Filter (ACF) were under installation, and expected to be made operational before starting of upcoming cane crushing season 2024 – 2025. Copy of ETP validation report is attached at Annexure – 13. <u>Compliance status: Complying</u>																
16.	<u>Recommendation:</u> - The unit does not properly operate the effluent treatment plant installed in sugar unit as it was found NON COMPLIANT w.r.t. the notified discharge norms. <u>Compliance submitted by project proponent:</u> - Complied with all the recommendations. - As per NSI and UKPCB, ETP treated water reports as per prescribed norms. Therefore, ETP performance is up-to the mark. pH - 7.1, BOD - 29 mg/Ltr., COD - 120 mg/Ltr., TSS - 22 mg/Ltr., TDS - 560 mg/Ltr <u>Factual status observed by CPCB team on recent visit:</u> - During visit, the inspection team collected samples from ETP inlet, aeration tank, ETP outlet and lagoon (for sugar unit). Analysis results are mentioned in table 4 below: Table 4: Analysis results of samples collected from inlet, outlet & aeration tank of ETP, and lagoon in the Sugar unit <table><tr><td>Location</td><td>pH</td><td>BOD</td><td>COD</td><td>TSS</td><td>TDS</td><td>SO₄²⁻</td><td>Oil & grease</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	Location	pH	BOD	COD	TSS	TDS	SO ₄ ²⁻	Oil & grease								
Location	pH	BOD	COD	TSS	TDS	SO ₄ ²⁻	Oil & grease										

	<table><tr><td>ETP Inlet</td><td>7.7</td><td>179</td><td>568</td><td>207</td><td>1480</td><td>380</td><td>-</td></tr><tr><td>ETP Outlet</td><td>8.7</td><td>05</td><td>29</td><td>16</td><td>884</td><td>121</td><td>BDL</td></tr><tr><td>Lagoon (Sugar unit)</td><td>8.8</td><td>20</td><td>132</td><td>25</td><td>700</td><td>109</td><td>-</td></tr><tr><td>Norms as per consent</td><td>6.5 – 8.5</td><td>30</td><td>250</td><td>30</td><td>2100</td><td>-</td><td>10</td></tr></table> Aeration Tank: MLSS – 3043 mg/l & MLVSS – 1449 mg/l All values are in mg/l except pH Analysis results of samples collected from outlet of ETP (sugar unit) & lagoon (sugar unit) indicates compliance w.r.t. stipulated discharge norms except pH – 8.7 & 8.8. Compliance status: <u>Partial non-compliance as pH (8.7 & 8.8)</u> was found marginally exceeding the prescribed norm of 6.5-8.5 in treated effluent from ETP outlet & lagoon which require proper chemical dosing.	ETP Inlet	7.7	179	568	207	1480	380	-	ETP Outlet	8.7	05	29	16	884	121	BDL	Lagoon (Sugar unit)	8.8	20	132	25	700	109	-	Norms as per consent	6.5 – 8.5	30	250	30	2100	-	10
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17., 18., 19. & 20.	Recommendation: - The unit shall install air mixing system in Equalization Tank for proper homogenization of effluent. - The unit shall relocate the oil and skimmer belt at appropriate place to collect the entire Oil & Grease content of the effluent. - The unit shall ensure proper functioning of lime dosing system. - The unit shall operate Primary Clarifier properly to avoid anaerobic condition in the tank. Compliance submitted by project proponent: <u>Complied</u> Factual status observed by CPCB team on recent visit: - The unit has installed a perforated pipeline inside the equalization tank and connected it with a blower (capacity 170 m³ /H.P) as an air mixing system. (Refer Photo 17) - The unit has relocated the oil & grease skimmer equipment (Refer Photo 18) - Since unit is non-operational, hence no trade effluent was being generated during visit, however wastewater is being generated from cleaning activities only within plant which was being treated in ETP. Compliance status: <u>Complying</u>																																
21.	Recommendation: - As per consent provided by UKPCB, unit has to install the sewage treatment plant (STP) in their premises for treatment of generated sewage. However, as per the joint inspection report dated 21.11.2023, no STP is installed by the unit thus violating the consent condition. Compliance submitted by project proponent: <u>Complied</u> Factual status observed by CPCB team of recent visit: - Unit has installed 03 nos. of STPs of capacity 15 KLD each for treatment of sewage generated from residential dwellings in Officers colony, Gurudwara colony & New colony. All 03 nos. of STPs were found operational during visit. (Refer Photo 23 to 28) - STPs receive wastewater from majorly two sources: - Wastewater generated from kitchens, washrooms, etc. (except toilets) - Overflow of septic tanks provided for storage of wastewater generated from toilets - The treatment scheme observed during visit is as below: Raw Sewage→ Screen chamber & Collection tank → MBBR tank (02 nos.) → Tube settler → Clear water tank → MGF → ACF → Outlet to gardening. - Filter press has been installed for mechanical dewatering of raw sludge collected from the bottom of tube settler. - Flow meters have been installed at outlet of all 03 nos. of STPs. - Samples were collected from inlet and outlet of all 03 nos. of STPs and analysis results are mentioned in table 5 below:																																

	Table 5: Analysis results of samples collected from inlet & outlet of 03 nos. of STPs installed in residential colony of Sugar unit <table><tr><th>Location</th><th>pH</th><th>BOD</th><th>COD</th><th>TSS</th><th>TDS</th><th>NO₃⁻</th><th>SO₄²⁻</th></tr><tr><td colspan="8">STP – 1 (Officers colony)</td></tr><tr><td>Inlet</td><td>7.7</td><td>25</td><td>94</td><td>24</td><td>908</td><td>BDL</td><td>94</td></tr><tr><td>Outlet</td><td>8.2</td><td>05</td><td>19</td><td>11</td><td>544</td><td>11</td><td>78</td></tr><tr><td colspan="8">STP – 2 (Gurudwara colony)</td></tr><tr><td>Inlet</td><td>7.5</td><td>11</td><td>33</td><td>22</td><td>380</td><td>BDL</td><td>63</td></tr><tr><td>Outlet</td><td>8.4</td><td>03</td><td>17</td><td>BDL</td><td>476</td><td>11</td><td>104</td></tr><tr><td colspan="8">STP – 3 (New colony)</td></tr><tr><td>Inlet</td><td>7.7</td><td>28</td><td>85</td><td>83</td><td>884</td><td>BDL</td><td>71</td></tr><tr><td>Outlet</td><td>7.4</td><td>12</td><td>67</td><td>BDL</td><td>296</td><td>BDL</td><td>45</td></tr><tr><td>Standards as per MoEF&CC notification dated 13.10.2017</td><td>6.5 – 9.0</td><td>30</td><td>-</td><td>100</td><td>-</td><td>-</td><td>-</td></tr></table> Analysis results of samples collected from outlet of all 03 nos. of STPs indicates compliance w.r.t. stipulated discharge norms. Compliance status: Complying	Location	pH	BOD	COD	TSS	TDS	NO ₃ ⁻	SO ₄ ²⁻	STP – 1 (Officers colony)								Inlet	7.7	25	94	24	908	BDL	94	Outlet	8.2	05	19	11	544	11	78	STP – 2 (Gurudwara colony)								Inlet	7.5	11	33	22	380	BDL	63	Outlet	8.4	03	17	BDL	476	11	104	STP – 3 (New colony)								Inlet	7.7	28	85	83	884	BDL	71	Outlet	7.4	12	67	BDL	296	BDL	45	Standards as per MoEF&CC notification dated 13.10.2017	6.5 – 9.0	30	-	100	-	-	-
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22.	Recommendation: - The unit has not yet prepared a comprehensive irrigation management plan validated by SPCB/ Agricultural Universities for utilizing the treated effluent in irrigation as per notified treated irrigation protocol for sugar industries. Compliance submitted by project proponent: - NSI visited unit on 09/10 April 2024 for assessment of irrigation management plan Factual status observed by CPCB team on recent visit: - Unit has submitted irrigation management plan prepared by NSI, Kanpur dated 9-10 April, 2024. The report stated that the unit has adequate land area for utilization of treated effluent generated @ 200 litres/ton of cane crushed. Copy of irrigation management plan is attached at Annexure – 14 Compliance status: Complying																																																																																								
23.	Recommendation: - The unit shall maintain the proper record of ash disposal in low lying area. Logbooks were collected by the inspection team regarding Ash generation and disposal for duration 01.12.2024 – 30.04.2024. The details are as follows; <table><tr><th>Months</th><th>Cane Crush (MT)</th><th>Bagasse Generation (MT)</th><th>Bagasse Consumption (MT)</th><th>Ash Generation (MT)</th><th>Ash at Bio-compost (MT)</th><th>Ash at Low Land RBNS Area (MT)</th></tr><tr><td>Total (Dec, 2023 to April, 2024)</td><td>763985</td><td>209976</td><td>173973</td><td>1400</td><td>140.0</td><td>1252.2</td></tr></table> Compliance submitted by project proponent: Complied Factual status observed by CPCB team on recent visit: - The unit has maintained proper record of ash disposal and provided logbooks of the same. (Refer Annexure – 15) Compliance status: Complying	Months	Cane Crush (MT)	Bagasse Generation (MT)	Bagasse Consumption (MT)	Ash Generation (MT)	Ash at Bio-compost (MT)	Ash at Low Land RBNS Area (MT)	Total (Dec, 2023 to April, 2024)	763985	209976	173973	1400	140.0	1252.2																																																																										
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24.	<u>Recommendation:</u> • Unit must ensure regular water sprinkling in and around the boiler and near bagasse storage area of the unit to minimize the dust dispersion in the ambient environment. <u>Compliance submitted by project proponent:</u> <i>Complied</i> <u>Factual status observed by CPCB team on recent visit:</u> • The unit has covered the stored bagasse with HDPE sheets. Boiler was found non-operational, hence no ash generation. • Unit has provided water sprinkling arrangement by installation of hydro-jets. <u>Compliance status:</u> <i>Complying</i>
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3. A perusal of the above chart indicates that so far as the recommendations 3, 9, 10 and 11 are concerned, there is part compliance and so far as the recommendations 12 and 14 are concerned, there is non-compliance by the unit. The report further reflects that the CCA issued by the Uttarakhand Pollution Control Board (UKPCB) under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 to the distillery unit and sugar Unit has expired on 31.03.2024. It has been pointed out that an application for renewal is pending. Submission of the Project Proponent is that both sugar and distillery units are lying closed being off season as they operate from November to April/May.

4. Learned Counsel appearing for the Respondent - PPs submits that so far as the compliance which can be done during the non-operational period, the same will be done within a period of one month and the compliance requiring operational unit, will be done as soon as the unit becomes operational. Hence, the time has been prayed for by the PPs for filing the compliance report. Let the same be filed at least one week before the next date of hearing.

5. Learned Counsel for Applicant in OA 530/2023 has objected to the report of the CPCB and has submitted that the material is available with

him to contradict the findings recorded in the report. Hence, we permit Counsel for the Applicant in OA 530/2023 or any other concerned party to file objection to the report of the CPCB dated 22.07.2024 at least one week before the next date of hearing.

6. List on 04.11.2024.

Prakash Shrivastava, CP

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

Dr. Afroz Ahmad, EM

July 29, 2024
Original Application No. 530/2023,
Original Application No. 495/2023,
Original Application No. 369/2024
DV