IN THE HON'BLE NATIONAL GREEN TRIBUNAL,

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 492 OF 2025

IN THE MATTER OF:

Kapil Kumar Singh … Applicant

Versus

M/s Dhampur Sugar Mills Ltd. and Ors. … Respondent

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Filed By:

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Date: 31.10.2025
New Delhi

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Original Application No. 492/2025

In the matte of:

Kapil Kumar Singh — Applicant

Vs.

M/s Dhampur Sugar Mills Ltd. &Ors. — Respondents

SHORT REPLY ON BEHALF OF RESPONDENT NO. 02 i.e. CENTRAL POLLUTION CONTROL BOARD (CPCB)

1. That the Hon'ble National Green Tribunal (hereinafter referred to as the "Hon'ble NGT"), Principal Bench, New Delhi vide Order dated 25.09.2025 in Original Application (hereinafter referred to as "OA") No. 492/2025 and Notice dated 07.10.2025 has sought the reply of Central Pollution Control Board (hereinafter referred as CPCB) in the instant matter. Thereby the reply is made in the succeeding paragraphs.

2. That, at the outset, the answering respondent denies all claims, contentions, allegations and averments against answering respondent CPCB in the referred O.A. contrary to anything stated or submitted in this reply. Nothing in the O.A. may be deemed to have been accepted or admitted by the answering Respondent for want of a specific denial or on the ground of non-traverse, save and except any averment which has been expressly admitted hereinafter.

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3. That, it is humbly submitted that CPCB is a statutory Board constituted under Section 3 of The Water (Prevention and Control of Pollution) Act, 1974. It performs the functions under The Water (Prevention and Control of Pollution) Act, 1974, The Air (Prevention and Control of Pollution) Act, 1981, and The Environment(Protection) Act, 1986.

4. That, the present matter is related to alleged water and air pollution being caused by sugar and distillery units of M/s Dhampur Sugar Mills Ltd., Sugar unit, Dhampur, Bijnor and M/s Dhampur Sugar Mills Ltd., Distillery Unit, Dhampur, Bijnor.

5. That, this Tribunal vide its order dated 25.09.2025 has directed the following:

"*.....6. Issue notice to the respondents for filing their reply by way of affidavit atleast one week before the next date of hearing.*"

A copy of the order is placed at **Annexure I.**

6. That the respondent no. 2, CPCB has carried out the inspection of the said units on several occasions in compliance of orders passed by this Hon'ble Tribunal and the Hon'ble Supreme Court of India in a similar matter of O.A No. 539/ 2019 titled as *Adil Ansari vs M/s Dhampur Sugar Mills Ltd. & Ors*. The details of such inspections along with their findings are given in the paras herein below.

7. That, the joint inspection of the units was carried out by CPCB and Uttar Pradesh Pollution Control Board (UPPCB) on 27-28.11.2019 in compliance of this Hon'ble Tribunal's order dated 14.08.2019 passed in the aforesaid matter. The detailed joint inspection report has already been submitted before the Hon'ble Tribunal vide report dated 31.01.2020. The same is annexed at **Annexure II.**

8. That, the units were again inspected during 02.02.2021- 03.02.2021 by a joint team of CPCB and UPPCB in compliance of this Hon'ble Tribunal's order dated 09.11.2020 in O.A. No. 539/2019 in the matter of Adil *Ansari vs M/s Dhampur Sugar Mills Ltd. & Ors*. The team surveyed the domestic drain all along the boundary wall of the unit and its confluence with the Ikra drain with upstream and downstream stretches, visited the premises of the unit as well as carried out

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the inspection of the unit. The joint inspection report was submitted before the Hon'ble Tribunal on 26.03.2021. The same is annexed as **Annexure III.**

9. That this Hon'ble Tribunal vide its order dated 01.09.2021 imposed an Environmental Compensation (EC) of Rs. 05 crores each in view of the gross violations caused by both the aforesaid units.

10. That, the concerned industrial units filed a Civil Appeal (C.A. No. 5975/2021) before Hon'ble Supreme Court of India on 20.09.2021 against this Hon'ble Tribunal's order dated 01.09.2021. The Hon'ble Supreme Court of India passed an order dated 08.10.2021 directing for conduct of a detailed study as directed in this Hon'ble Tribunal's order dated 01.09.2021. In compliance of the Hon'ble Supreme Court of India's order dated 08.10.2021, a joint team from CPCB, UPPCB and the concerned District Administration carried out a detailed study during Nov-Dec 2021 to assess the extent of damage caused to the environment by the concerned industrial units and report titled "Detailed study report on Extent of damage caused to the environment" was submitted before Hon'ble Supreme Court of India in Jan 2023. A copy of the report is annexed as **Annexure IV.**

11. That, the Hon'ble Supreme Court of India vide order dated 06.09.2024 further directed CPCB and SPCB to file a joint report indicating compliances of directions passed by this Hon'ble Tribunal, subsequent committee reports and conditions specified in environmental clearances.

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12. That, in compliance of the above mentioned order, inspection report dated 19.12.2024 was filed before the Hon'ble Supreme Court of India. As per the report, the joint committee of CPCB & UPPCB carried out inspection of the units during October 2024. During the inspection, the team collected samples from aeration tanks of effluent treatment plants (ETPs), Sewage Treatment Plant (STP), bore wells and recipient drain and checked logbooks for ETPs, STPs,

bore wells, ash & sludge generation, energy consumption. The team also verified the compliance status on the recommendation of past reports namely a) detailed report Jan 2023, b) joint inspection report dated 26.03.2021, c) this Hon'ble Tribunal's order dated 01.09.2021 and d) specific conditions in environmental clearance. A copy of the report is placed at **Annexure V**.

13. The Hon'ble Supreme Court vide its order dated 07.01.2025 disposed off the civil appeal with the following directions:" *...5. It is evident from the above that there are certain directions of the National Green Tribunal which have been complied and some directions are not yet complied with. We are of the opinion that it would be appropriate if we direct the Tribunal to monitor the compliances and ensure that its judgment dated 01.09.2021 is fully implemented. After ensuring implicit compliances of the directions, the Tribunal may revisit the directions with respect to payment of compensation and pass such orders as may be necessary.* "A copy of the order is placed at **Annexure VI**.

14. That, in light of the above submission, it is respectfully submitted that this answering respondent i.e. CPCB shall abide by all the order(s) or direction(s) passed by this Hon'ble Tribunal in this original application.

15. That, the answering respondent craves leave of the Hon'ble Tribunal to file additional replies if required in future.

16. That, in light of the above submissions, it is respectfully submitted that this answering respondent, i.e., CPCB, shall abide by any order(s) or direction(s) passed by this Hon'ble Tribunal in this Original Application

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(Dinabandhu Gouda)
Scientist 'F'
Central Pollution Control Board
31.10.2025

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Original Application No. 492/2025

In the matte of:

Kapil Kumar Singh — Applicant

Vs.

M/s Dhampur Sugar Mills Ltd. &Ors. — Respondents

AFFIDAVIT

I, **Dinabandhu Gouda**,in the capacity of Scientist 'F', having office at the Delhi, Central Pollution Control Board, PariveshBhawan, East Arjun Nagar, Delhi, do hereby solemnly affirm and sincerely state on oath as follows: -

1. That I the deponent herein is well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent to verify, sign and swear this affidavit on behalf of the Respondent CPCB.

2. That the accompanying reply may be read part and parcel of the present affidavit as I am competent to swear this affidavit.

3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof are true and correct on the basis of the record maintained during ordinary course of business of CPCB and available records and documents and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.

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DEPONENT

दीनबन्धु गौड़ा / Dinabandhu Gouda
प्रभागीय प्रमुख, डब्ल्यू क्यू एम-II / Division Head, WQM-II
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)
(M/o Environment, Forest & Climate Change, Govt. of India)
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली-110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

VERIFICATION

Verified at Delhi on this day of 31 OCT 2025 that the contents of the above reply are correct and true on the basis of the records of the case as mentioned in the day-to-day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.

DEPONENT

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R.L. Chaudhary
N.C.T. of Delhi
Regd. No. 1513
GOVT. OF INDIA

दीनबन्धु गौड़ा / Dinabandhu Gouda
प्रभागीय प्रमुख, डबल्यू क्यू एम–II / Division Head, WQM-II
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
(पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)
(M/o Environment, Forest & Climate Change, Govt. of India)
परिवेश भवन, पूर्वी अर्जुन नगर, दिल्ली–110032
Parivesh Bhawan, East Arjun Nagar, Delhi-110032

ATTESTED
NOTARY PUBLIC
GOVT. OF INDIA
31 OCT 2025

Annexure I

Item No.04 Court No. 1

BEFORE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No.492/2025

Kapil Kumar Singh Applicant

Versus

Dhampur Sugar Mills Ltd. & Ors. Respondent(s)

Date of hearing: 25.09.2025

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Applicant: Mr. Kapil Kumar Singh, Applicant in Person

ORDER

1. In this original application, applicant has made an allegation against respondent no.1-Dhampur Sugar Mills Ltd. at Dhampur, District Bijnor, Uttar Pradesh.

2. Allegation of the applicant is that respondent no.1 is located very close to the populated area and is directly discharging its industrial effluents in the nearby storm water drain known as Ikhda Nallah.

3. Further allegation of the applicant is in respect of air pollution being caused by respondent no.1.

4. Applicant alleges that respondent no.1 is emitting poisonous smoke.

5. OA raises substantial issue relating to compliance of environmental norms.

6. Issue notice to the respondents for filing their reply by way of affidavit alelast one week before the next date of hearing.

7. Applicant is directed to serve the respondents and file affidavit of service atleast one week before the next date of hearing.

8. List on 06.11.2025.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

September 25, 2025
Original Application No.492/2025
JG.

Annexure II

BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

O.A No. 539 OF 2019

IN THE MATTER OF:

ADIL ANSARI — **APPLICANT(S)**

VERSUS

M/s DHAMPUR SUGAR MILLS LTD. & ORS. — **RESPONDENT(S)**

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Adit Kumar Vidyarthi

(A.K. VIDYARTHI)
SCIENTIST-'E'
CENTRAL POLLUTION CONTROL BOARD
PARIVESH BHAWAN
EAST ARJUN NAGAR,
DELHI-110032

PLACE: DELHI
DATED: 31.01.2020

Compliance Report in the matter of Adil Ansari Vs. M/S Dhampur Sugar Mills Ltd. & Ors., O.A. No. 539/2019

The present matter is related to operation of sugar and distillery units of M/s Dhampur Sugar Mills Ltd. (Sugar Division), District Sambhal, Bijnor and Bareilly and Distillery Unit in District.

2. Hon'ble NGT vide its order dated 14.08.2019 **(Annexure R1)** has directed:

"3. Let the CPCB and State PCB furnish a further joint factual and action taken report with regard to all the four Units (three sugar mills and one distillery unit) by 30.11.2019 by e-mail at judicial-ngt@gov.in."

3. In compliance to the order of Hon'ble NGT, joint inspection of the four units was carried out from 27.11.2019 to 29.11.2019 by a team of officials from CPCB and UPPCB. The list of the units inspected is as follows:

1-Dhampur Sugar Mills, Sugar Unit, Asmoli, Sambhal
2-Dhampur Sugar Mills, Sugar Unit, Dhampur, Bijnore
3-Dhampur Sugar Mills, Distillery Unit, Dhampur, Bijnore
4-Dhampur Sugar Mills, Sugar Unit, Meerganj, Bareilly

Joint Inspection report having factual status and action taken by CPCB and UPPCB of the four units is attached as **Annexure R2**.

4. Now, this Compliance Report is submitted in compliance of Hon'ble NGT directions.

Annexure R-1

Item No. 13 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 539/2019

Adil Ansari Applicant(s)

Versus

M/s Dhampur Sugar Mills Ltd. & Ors. Respondent(s)

Date of hearing: 14.08.2019

CORAM: **HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON**
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Applicant(s): None

For Respondent (s): Mr. A. A. Aron, Advocate for R-1,2&3
Dr. Sandeep Singh, Advocate for R-4,5&6
Mr. Rajkumar, Advocate for CPCB
Mr. Pradeep Misra and Mr. Daleep Dhyani, Advocates for UPPCB

ORDER

1. Grievance in this application is that M/s Dhampur Sugar Mills Ltd. (Sugar Division), District Sambhal and sugar mill units in District Bijnor and District Bareilly and Distillery in District Bareilly were operating in violation of environmental norms. The unit at Dhampur was directed to be closed earlier vide order dated 23.04.2015 passed by this Tribunal and was allowed to reopen by subsequent order subject to certain conditions, including payment of Rs. 1 Crore towards environmental compensation and furnishing a bank guarantee of Rs. 10 lakhs. However, the pollution still continues to operate without compliance of conditions. Other units in

Bijnor and Bareilly Districts are also operating illegally and so is the Distillery unit in Bareilly District.

2. On 27.06.2019, Notice was issued by this Tribunal with reference to the allegations in the application. Reply has been filed by the UP State PCB which is practically of no value. Reply has been filed by the CPCB is that the closure directions have been issued in respect of Dhampur unit of Sugar Mill. Besides, show cause notices have been issued to other two Sugar Mills at Bareily and Sambhal. Distillery unit at Bareilly is non-functional on account of off season.

3. Let the CPCB and State PCB furnish a further joint factual and action taken report with regard to all the four Units (three sugar mills and one distillery unit) by 30.11.2019 by e-mail at judicial-ngt@gov.in.

List for further consideration on 11.12.2019.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

Dr. Nagin Nanda, EM

August 14, 2019
Original Application No. 539/2019
A

Annexure R2

JOINT INSPECTION REPORT

OF

1. M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor
2. M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnor
3. M/s Dhampur Sugar Mills Ltd. (Sugar Unit), Asmoli, Sambhal and
4. M/s Dhampur Sugar Mills Ltd., Meerganj, Bareilly

IN THE MATTER

OF

ADIL ANSARI VS. M/s DHAMPUR SUGAR MILLS LTD. & Ors.

[O.A. NO. 539/2019]

Date of inspection: 27.11.2019 to 29.11.2019

- Prepared by -

Joint team of CPCB and UPPCB

S.F. CPCB

(Shashi Vaidkar) AEE UPPCB, RO Bareilly

AEE Moradabad (S.S. Sahu)

Sc'D' CPCB

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JOINT INSPECTION REPORT OF M/S DHAMPUR SUGAR MILLS LTD. (THREE SUGAR MILLS AND ONE DISTILLERY UNIT) AS PER HON'BLE NGT ORDER DATED 14.08.2019 CARRIED OUT BY CPCB AND UPPCB DURING NOVEMBER 27-29, 2019

1.0 Subject Matter

Matter: Adil Ansari Vs. M/s Dhampur Sugar Mills Ltd. & Ors., O.A. No. 539/2019

Subject: Violation of environmental norms by four Units of M/s Dhampur Sugar Mills Ltd. (Three sugar mills and one distillery Unit) in Bijnor, Sambhal and Bareilly.

2.0 Order of Hon'ble NGT dated 14.08.2019

Hon'ble NGT vide its order dated 14.08.2019 in the matter of Adil Ansari versus M/s Dhampur Sugar Mills Ltd. and ors OA No. 539/2019 has directed:

1. *Grievance in this application is that M/s Dhampur Sugar Mills Ltd. (Sugar Division), District Sambhal and sugar mill units in District Bijnor and District Bareilly and Distillery in District Bareilly were operating in violation of environmental norms. The unit at Dhampur was directed to be closed earlier vide order dated 23.04.2015 passed by this Tribunal and was allowed to reopen by subsequent order subject to certain conditions, including payment of Rs. 1 Crore towards environmental compensation and furnishing a bank guarantee of Rs. 10 lakhs. However, the pollution still continues to operate without compliance of conditions. Other units in Bijnor and Bareilly Districts are also operating illegally and so is the Distillery unit in Bareilly District.*
2. *On 27.06.2019, Notice was issued by this Tribunal with reference to the allegations in the application. Reply has been filed by the UP State PCB which is practically of no value. Reply has been filed by the CPCB is that the closure directions have been issued in respect of Dhampur unit of Sugar Mill. Besides, show cause notices have been issued to other two Sugar Mills at Bareily and Sambhal. Distillery unit at Bareilly is non-functional on account of off season.*
3. *Let the CPCB and State PCB furnish a further joint factual and action taken report with regard to all the four Units (three sugar mills and one distillery unit) by 30.11.2019 by e-mail at judicial-ngt@gov.in."*

Although, the Hon'ble NGT in its order has directed to carry out inspection of three sugar units at Asmoli (Sambhal); Dhampur (Bijnore) and

Meerganj (Bareilly) and distillery in Bareilly but on perusal of the appeal it was observed that in the present case respondent units are M/S Dhampur Sugar Mills Ltd. (Sugar unit) at Asmoli, Sambhal; Dhampur Sugar Mills Ltd. (Sugar unit), Dhampur, Bijnore; Dhampur Sugar Mills Ltd. (Distillery unit), Dhampur, Bijnore and Dhampur Sugar Mills Ltd. (Sugar units), Meerganj, Bareilly.

Also, the UPPCB vide its email dated 22nd November, 2019 has sent the list of the following units to be inspected:

1-Dhampur Sugar Mills, Sugar Unit, Asmoli, Sambhal

2-Dhampur Sugar Mills, Sugar Unit, Dhampur, Bijnore

3-Dhampur Sugar Mills, Distillery Unit, Dhampur, Bijnore

4-Dhampur Sugar Mills, Sugar Unit, Meerganj, Bareilly

It is also informed that there is no distillery unit in Bareilly.

Therefore, in compliance to the order of Hon'ble NGT, joint inspection of the above said four units were carried out from 27.11.2019 to 29.11.2019 by a team of officials from CPCB and UPPCB.

2.1 Earlier National Green Tribunal Order:

Hon'ble NGT in its order dated 14.08.2019 in the matter of Adil Ansari versus M/s Dhampur Sugar Mills Ltd., OA No. 539/2019 has also referred to another distillery unit in District Asmoli which was closed down vide its order dated 23.04.2015 in the matter of Shailesh Singh vs. M/s D.S.M Sugar Distillery Division, O.A. No. 35 of 2015.

Subsequently, vide its judgement dated 10th December, 2015 in Review Application No. 13 of 2015 in OA No. 35 of 2015 in the matter of M/s. DSM Sugar Distillery Division, Asmoli, District Sambhal, Uttar Pradesh Versus Shailesh Singh Hon'ble NGT held the unit to be liable to pay the Environmental Compensation of Rs. 1 Crore within one month to UPPCB and furnish a bank guarantee as well to the extent of Rs.10 lakh. It was also directed that the amount of Rupees One Crore paid to the UPPCB shall be spent upon taking preventive measures, removing of the various materials, pollutants lying in the area, as well as steps for restoring of the environment and ecology as per the records of this file and ensure that no sludge spent wash, fly ash or other pollutants generated by this industry is permitted to remain in the soil, ground water and even on the land of the industry.

The EC of Rs. One crore and the bank guarantee of Rs. 10 lacs levied on the unit by Hon'ble NGT was deposited by the said unit to the UPPCB vide Demand Drafts dated 7th January, 2016.

3.0 The Joint Inspection team and its execution

In compliance of the directions of Hon'ble NGT, inspection of M/s Dhampur Sugar Mills Ltd. (Three sugar mills and one distillery Unit) in Bijnor, Sambhal and Bareilly (hereinafter referred as 'the Unit') was carried out during November 27-29, 2019 by joint team comprising the officials from UPPCB (RO Bijnor, RO Moradabad, RO Bareilly) and CPCB Delhi. The team has inspected all the four Units of M/s Dhampur Sugar Mills Ltd.

The team visited the Dhampur Sugar Mills Ltd. Group of Industries which is consisting of the following industries:

a) M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor, UP
b) M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnor, UP
c) M/s Dhampur Sugar Mills Ltd. (Sugar Unit), Asmoli, Sambhal, UP
d) M/s Dhampur Sugar Mills Ltd., Meerganj-Sindhauli Road, Meerganj, Bareilly, UP

Unit wise inspection and action taken report are as follows:

4.0 M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor - Inspected on 27.11.2019 and 28.11.2019

M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor, UP-246761 is an integrated sugar plant with installed capacity of 14000 TCD. During visit the plant was operating at 10954 TCD. The crushing for the year 2019-2020 was started on 06-11-2019. The Unit has obtained valid consent to operate (CTO) under water Act 1974 and Air Act 1981 from Uttar Pradesh Pollution Control Board (UPPCB), CTO having validity upto 31-12-2019 **(Annexure 1a and 1b)**. The Unit has also obtained the authorization under Hazardous & other Waste management rules 2016 from UPPCB having validity upto 21.09.2020 (**Annexure 1c**).

4.1 Sources of Fresh Water:

- The Unit has total of 4 nos. of bore wells located at different places within the campus. The NOC from CGWA for the abstraction of ground water of 1500 KLD has been expired on 27-04-2019.
- The Unit has applied for renewal of the NOCs to abstract groundwater to CGWA in March 2019 and August 2019.
- The detail of the locations of the Borewells along with co-ordinates provided by the Unit are as below:

Table 1 Details of borewell

Borewell Details				
Sr. No.	Borewell No.	Borewell Meter reading.	Coordinates	
			Latitude	Longitude
1	Borewell No. 1	47793.15 M^3	29.291368	78.512334
2	Borewell No. 2	51871.00 M^3	29.289957	78.512882
3	Borewell No. 3	10124.00 M^3	29.289944	78.511713
4	Borewell No. 4	643487.50 M^3	29.290144	78.514657

4.2 Fresh Water Consumption:

As per the record of borewell meters provided by the Unit, the total freshwater consumption from Novermber 06-26, 2019 in sugar plant is 9975 KL, which is equivalent to average 383.65 KL/day and the fresh water consumption for co-generation is 1192 KL/day. Total fresh water consumption is 1575.65 KL/day.

4.3 Samples Collection

Joint team of CPCB & UPPCB has collected effluent and water samples from various utilities, ETP and water sources during inspection and samples have been analyzed in CPCB laboratory w.r.t the notified parameters relevant to Sugar manufacturing sector.

The Joint team also collected groundwater sample from handpump near the main gate of the Unit. The samples have been analyzed in CPCB Delhi laboratory following specified methods as per American Public Health Association (APHA) and the guidelines/SOPs certified by the National Accreditation Board for Testing and Calibration Laboratories (NABL).

The detail of the collected samples and analysis results are mentioned in the following sections.

4.4 Wastewater Generation and Treatment Facility:

- The Unit has installed Effluent Treatment Plant (ETP) of capacity 4500 KLD for treatment of trade effluent from Mill house, boiling house and Spray Pond Overflow etc.
- The ETP consists of Screen chamber, Oil & grease trap, Equalization tank, Primary clarifier, Aeration tanks (3 nos), Secondary clarifier, Sludge filter beds & geo tube, Clear water tank and PSF & ACF.
- The Unit has provided separated treatment system for Spray Pond Overflow upto secondary treatment.

- Spray Pond Overflow treatment system consists of Holding tank, Lime stablisation tank, Primary clarifier, Aeration tank and Secondary clarifier. After Secondary clarifier the treated effluent sent to Clear water Tank, which is commonly used for the ETP and spray pond overflow treatment system.
- The final treated effluent is stored in lagoon of capacity 4000 KLD equivalent to <2 days for use in irrigation.
- As reported by Unit represenatative and the logbook provided, the Wastewater generation form mill house, boiling house etc. is approx.. 1981 KLD and generation of wastewater from spray pond overflow/cooling tower overflow is approx. 126 KLD.
- Total waste water generation from the different process is approx. 2107 KLD.
- The Unit has provided flow meter at inlet and outlet of ETP and OCEMS is installed at the oulet of ETP.
- During the inspection, unit was generating effluent of 192 l/t of cane crushed.

4.5 Charactesristics of the collected Ground Water samples

The analysis result of samples collected from the handpump near the main gate of the Unit is as below:

Table 2 Characteristics of Ground water sample

Sample Location	pH	TDS (mg/l)	COD (mg/l)	Sulphate (mg/l)	Total alkalinity as $CaCO_3$ (mg/l)	Total hardness as $CaCO_3$ (mg/l)	Colour (Hazen)
Handpump (Near Main Gate of Unit)	7.0	618	BDL	61	300	428	BDL

4.6 Characteristics of Wastewater:

The team collected the sample of effluent from the ETP to check the compliance status of ETP.

Table 3 Characteristics of Wastewater

Locations	Sulphur/ Sulphate (mg/l)	pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	O & G (mg/l)	MLSS/MLVSS (mg/l)
ETP Inlet	71	11.38	2656	1290	127	1820	--	--
ETP Outlet	62	7.07	70	11	**BDL**	688	BDL	--
Aeration tank	--	--	--	--	--	--	--	2193/ 1989
Spray pond overflow	150	6.76	1629	265	462	1092	-	-
Aeration tank for spray pond overflow	--	--	--	--	--	--	--	1927/ 1610
Treated water Lagoon	82	6.88	60	11	14	644	--	--

4.7 Co-generation:

- The Units has co-generation power plant (30 MW x2) for power generation as well as steam generation facility.
- Baggase is used as a fuel in two boilers of 170 TPH capacity each.
- The stack of the boiler is equipped with Electro Static Precipitator (ESP).
- The flue gas of the stack is partially used in dryer (4 Nos.) for drying the baggase.
- The plant officials informed that the boiler and ESP ash is being sent to the distillery Unit of M/s Dhampur Sugar Mills Ltd., Dhampur for its utilization in Bio-composting. This was verified at Biocompost yard of distillery Unit.
- The record of fly ash generation sent to distillery unit is not available.

4.8 Observations

i. The Unit and ETP were found operational during the inspection.

ii. The Unit have valid consent to operate issued by UPPCB, under of Water Act and Air Act till 31.12.2019.

iii. The primary clarifier was found non-operational during inspection. However, as per analysis report of sample collected from ETP outlet, TSS was below detectable limit, therefore the possibility of dilution cannot be ruled out.

iv. The Unit has not installed flow meters at Mill Fibrizer, Mescuite cooling and RO reject as it was recommended in validation report of ETP for session 2018-19 by National Sugar Institute (NSI), Kanpur.

v. The Unit has not installed the Hazardous tank in the boiling house.

vi. The treated effluent is stored in lagoon of 4000 KL capacity for utilization for irrigation purposes.

vii. The Unit has provided Kachcha lagoon (for storage of treated effluent) having lining of PVC sheets, which is not proper and it may result in leaching under wear & tear condition.

viii. The Unit has installed two dryers (for baggase), using the flue gases from stack of the boiler. The utilization of boiler ash at biocompost site was observed and transport receipts were verified and found matching.

ix. The Unit has not yet installed the Condensate Polishing Unit (CPU) for high pressure boilers (105 Kg/cm^2).

x. The Unit has installed additional MGF and ACF for tertiary treatment as the installed capacity of MGF and ACF was inadequate.

xi. The mechanical sludge handling system for better management of sludge waste is not provided by the Unit. As reported by

representative of the Unit, the purchase order has been issued for Decanter of 6 m^3 per hour capacity.

xii. The Unit has not provided and did not maintained the logbook for the generation and disposal of ETP sludge, Boiler ash and other solid wastes.

xiii. The unit is yet to comply with CPCB direction dated 01.07.2019 by dismantling the bypass provision. However, during visit the discharge of effluent was not observed by the team.

Pic.-1: Provision for by-pass of effluent

xiv. The team also collected the wastewater sample from the local drain (Ikara Nalla) flowing adjacent to the Unit premises. The characteristic of the wastewater is as:

Table 4 **Characteristics of Wastewater flowing through Ikara drain**

Sampling point	**Latitude/ Longitude**	**pH**	**COD (mg/L)**	**BOD (mg/L)**	**Sulphate (mg/L)**	**TSS (mg/L)**	**TDS (mg/L)**	**NH_3-N (mg/L)**	**Phosphate (mg/L)**
Ikara Drain at u/s of the Unit	29.292038/ 78.510125	6.88	438	122	137	1200	500	34	3
Ikara Drain at d/s of the Unit	29.290151/ 78.5088303	7.11	776	177	73	1435	468	35	3.1

xv. The value of COD in the drain waste water is more than that for raw sewage, which shows the addition of industrial effluent in to drain.

xvi. The Unit does not have STP facility for the treatment of domestic wastewater. The domestic waste water is collected,Treated in septic tank and disposed through Soak pits installed in the Units premises.

4.9 Recommendations:

1. The Unit must dismantle the by-pass line provided within the premises and ensure that only treated effluent shall be discharged outside the premises.
2. The Unit shall maintain the log-book for the generation and disposal of ETP sludge, Boiler Ash and other solid wastes.
3. The Unit shall ensure to implement the recommendation made by National Sugar Institute (NSI), Kanpur in validation report of ETP (for season 2018-19).
4. The Unit shall install Condesate Polishing Unit (CPU) for high pressure boilers (105 Kg/cm^2).
5. The Unit shall explore the possibility of maximum utilization of treated effluent in different process.
6. The lagoon must be properly lined to prevent leaching/ contamination of ground water.
7. Domestic waste water (sewage) generated within the premises and colony shall be discharged after proper treatment. The Unit shall install Sewage Tretment Plant (STP) for the treatment of Sewage.
8. The Unit shall obtain NOCs from CGWA for withdrawal of groundwater at earliest, as the NOC has already expired in April, 2019.
9. The Unit's NOC from CGWA expired on 27.04.2019, but Unit has continued to withdraw groundwater without valid NOC. The CGWA may be requested to verify the status of ground water reacharge by the unit and accordingly EC may be calculated.

4.10 Action taken status

1. In crushing season 2016-17, unit was non-operational during the inspection due to off- season. CPCB issued compliance direction dated 02.11.2017 under section 5 of the Environment (Protection) Act, 1986 for carrying out adequacy assessment of ETP through govt. repute institutions.
2. In crushing season 2017-18, CPCB issued show cause notice dt.07.05.2018 under section 5 of the Environment (Protection) Act, 1986 to the unit for non-compliance of BOD-53 mg/l against norms of 30 mg/l with surface water discharge norms prescribed under Environment (Protection) Rules,1986.
3. CPCB issued compliance direction dated 16.11.2018 under section 5 of the Environment (Protection) Act, 1986 for implementation of charter.
4. In crushing season 2018-19, unit was found non-complying w.r.t. bypass of untreated effluent. BOD- 56 mg/l, TSS-35 mg/l and CPCB issued

closure direction dated 23.04.2019 and 01.07.2019 under section 5 of the Environment (Protection) Act, 1986 and levied Environmental Compensation (EC) of Rs 57,30,000/-.

5. CPCB issued compliance direction dated 06.11.2019 under section 5 of the Environment (Protection) Act, 1986 and levied EC of Rs 16,20,000/. As per the revised policy dated 04.09.2019 and 01.11.2019.
6. The unit deposited EC in ESCROW account and submitted action plan for utilization of the EC amount. Action plan has been evaluated by CPCB and approved for execution.

4.11 Photogallery of M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor

Pic.-2: Drain along the premises

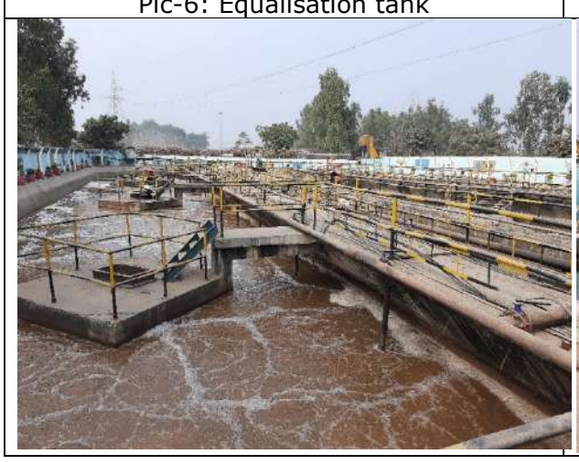
Pic-3: Main gate of the Unit

Pic-4: Flowmeter at inlet of ETP

Pic-5: Inlet of ETP

Pic-6: Equalisation tank

Pic-7: Primary Clarifier



Pic-8: Aeration Tank	Pic-9: Secondary Clarifier
Pic-10: Media Filters	Pic-11: Sludge Drying Bed
Pic-12: Lagoon for treated effluent	Pic-13: OCEMS display
Pic-14: Drain u/s of the Unit	Pic-15: Drain d/s of the Unit

5.0 M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnor - Inspected on 27.11.2019 and 28.11.2019

- The Unit is a molasses based distillery Unit, located at Dhampur District, Bijnor (latitude-29.285330°N, longitude-78.514015°E) having installed and consented production capacity of 200 KLPD of alcohol.
- The Unit has Consent to operate under Water Act and Air Act issued by Uttar Pradesh Pollution Control Board (UPPCB) having validity upto 31-12-2019 (**Annex.2a and 2b**). As per the Consent condition, the Unit can produce 200 KLPD of rectified spirit/ENA/absolute alcohol using molasses as raw material.

5.1 Installed Production Capacity and Product Details

- The distillery plant is based on batch type fermentation and Multi Pressure Distillation technology to produce rectified spirit or Extra neutral alcohol (ENA) and absolute alcohol.
- The Unit has twelve fermenters with variable capacities- 1.25 lakh litres (2 nos), 2.5 lakh litres (6 nos), 5 lakh litres (3 nos) and 6 lakh litres (1 no) along with two distillation plants, one having 80 KLPD capacity while another is 120 KLPD capacity with integrated evaporator.
- The 80 KLPD distillation plant produces absolute alcohol while the 120 KLPD new plant is manufacturing ENA and absolute alcohol.

5.2 Sources of Fresh Water & Daily Consumption.

- The Unit has total of three bore-wells out of which two are in operation.
- The NOC issued by CGWA to the Unit expired on 07.04.2019 and it has applied for renewal of NOC vide application dated 17.02.2019. As per the expired NOC, maximum abstraction of ground water was 2400 KL/Day.
- The bore-well meter reading at the time of inspection and geo-coordinates are represented below:

Table 5 ***Details of bore-well in distillery Unit***

Bore-well No.	Bore-well Meter reading.	Coordinates	
		Latitude	Longitude
Bore-well No. 1	2105385.0 M^3	29.287773°N	78.515716°E
Bore-well No. 2	2637431.7 M^3	29.288261°N	78.5149301°E

- As per water balance data provided by Unit, fresh water requirement is 1726 KLPD.

5.3 Characteristics of Ground Water Sample

Groundwater sample was collected from handpump near the biocompost yard and its characterstics as per analysis in CPCB Laboratory, are presented below:

Table 6: ***Characteristics of Ground water in distillery Unit***

Location	pH	COD (mg/L)	TDS (mg/L)	Colour (Hz)	Total alkalinity as$CaCO_3$ (mg/L)	Total hardness as $CaCO_3$ (mg/L)	Sulphate (mg/L)
Handpump at Bio-compost site	7.7	BDL	268	BDL	233	232	BDL
Standard	6.5-8.5	-	2000	-	600	600	400

5.4 Existing Systems for Spent Wash Management and Other Effluents.

- For management of spent wash, the Unit has installed the following systems:
  i. Five stage standalone Multi Effect Evaporator (SMEE) along with four stage finisher, connected with 80 KLPD distillation plant
  ii. Eight stage integrated Multi Effect Evaporator (IMEE), integrated with 120 KLPD distillation plant.
  iii. Biocomposting with active area of 16 acres.
  iv. Incineration (incineration boiler of 75 TPH capacity).
- The Unit has a Condensate Polishing Unit (CPU) having three stage RO system for treatment of MEE condensate, spent lees, boiler blow down and cooling tower blowdown.RO reject is recirculated back into MEE feed.
- The raw spent wash generated from 80 KLPD distillation plant is stored in buffer/settling tank of capacity 1500 M3, and then treated in a 1100 KLPD capacity five stage (4+1) SMEE plant. After third stage of the forced circulation SMEE, approximately 250-300 KLPD of concentrated spentwash having 30°Brix is utilized in biocomposting while concentrated spent wash with 55 to 60 °Brix is incinerated in an incineration boiler (slop furnace) of 75 TPH capacity and feed capacity of 26 MT/hr.
- The raw spent wash generated from 120 KLPD plant is treated in eight effect (7+1) falling film IMEE having capacity of 1250 KLPD. After third stage of IMEE, concentrated spentwash having 30°Brix is utilized in biocomposting while concentrated spent wash with 55 to 60 °Brix is incinerated in the incineration boiler.

- Total biocompost yard area is 21 acres with active area of 16 acres. There are a total of three biocompost yards of active area 10.0 acres, 3.0 acres and 3.0 acres.

The flow diagram for management of spent wash is as follows:

A. For 80 KLD

SMEE --→ After stage 3---→Biocomposting

↓

stage 4

↓

Finisher

↓

Incineration

B. **For 120 KLD**

IMEE --→ After stage 3---→Biocomposting

↓

stage 4,5,6,7

↓

Incineration

5.5 Details of ZLD system installed,for spent wash management and other effluents.

Table 7: ***Details of the installed ZLD system***

S. No.	Particulars	Nos.	Size /capacity / feed rate	Type of operation
1.	SMEE (5 stage forced film)	01	1100 m^3/day	Continuous
2.	Finisher (4 stage)	01	-	Continuous
3.	Settling/buffer tank for raw spent wash	01	1500 m^3	Continuous
4.	Settling tanks	02	2200 m^3 and 3000 m^3	Continuous
5.	IMEE (8 stage falling film)	01	1250 m^3/day	Continuous
6.	Lagoon for storage of concentrated spent wash, raw spent wash, lees, RO reject etc	02	Lagoon I-6000 m^3 Lagoon II-10000 m^3	In operation Vacant,kept as stand by for cleaning of other lagoon.
7.	Tank for storage of concentrated spent wash (30% total solids) for biocomposting	01	300 m^3	In use.

8.	Tank for storage of concentrated spent wash for incineration	01	207 m^3	In use
9.	Incinerator	01	Steam Capacity-75TPH. Feed capacity - 26MT/Hr	In operation
10.	Condensate Polishing Unit (3 stage RO)	01	2600 m^3/day	In operation
11.	Tank for storage of conc.spent wash at Biocompost yard	01	400 m^3	In use
12.	Biocompost yard(uncovered)	01	Total area-21 acres. Active area-16 acres	In operation during non monsoon season

5.6 Observations:

i. On the day of inspection, the distillery unit and spent wash management system were found operational.

ii. The Unit has consent to operate at 200 KLPD under Water Act, 1974 and Air Act, 1981 both having validity up to 31.12.2019. **(Annexure 2a, 2b).**

iii. The Unit has three bore-wells to meet the water requirement of production and domestic consumption. Out of three bore-wells, only two are in use, as per information provided by industry officials. Flow meters have been installed on each bore well. Average daily water consumption is calculated as 1234.44 KLPD based on three months (Sept, 2019-Nov, 2019) logbook data of flowmeters.However, as per water balance data provided by Unit, fresh water requirement is 1726 KLPD.

iv. The Unit's NOC for groundwater abstraction has expired on 07.04.2019 and it has applied for renewal of NOC on 17.02.2019.

v. Total alcohol production during last six months (May, 2019- Oct, 2019) was 36429.06 KL. Therefore the average production is 6071.51 KL/month i.e. 202.38 KLPD.

vi. The Unit has provided production data certified by Excise department, data of raw spent wash generation, details of MEE- concentrate and condensate generation, utilization; as well as spent wash consumption for bio-composting and incineration.

vii. As per adequacy report of April,2019 prepared by NSI,Kanpur, the adequacy of ZLD system has been certified for 250 KLPD.

viii. The Unit has installed mass flow meters with totalizer at inlet and outlet of SMEE as well as inlet and outlet of IMEE. All mass flow meters are

connected to CPCB server. Mass flow meter readings at the time of inspection is presented below:

Table 8: ***Details of mass flow meters***

Sl.No	Mass flow meter	Totalizer reading at inlet	Totalizer reading at outlet
1.	SMEE	1218230.02 MT	278455.46 MT
2.	IMEE	107701 MT	33854 MT.

ix. The raw spent generation as per mass flow meter data during last six months (May, 2019- Oct, 2019) was 3,52,943 MT while concentrated spent wash generation for 6 months is 28736 MT (for 30 °Bx) and 86492 MT (for 58 °Bx) against consumption of 27682 MT in biocomposting and 86442 MT in incineration respectively.

x. As per logbook data of six months, overall average spentwash generation is 9.59 KL per KL of alcohol produced.

xi. As per information provided by industry officials, the average efficiency achieved through SMEE and IMEE is 67.35%.

xii. The concentrated spent wash after third stage evaporator having 30°Bx is utilized for bio composting while concentrated spent wash after the finisher evaporation having 55-60°Bx is incinerated and process condensate is treated in the Condensate-Polishing Unit (CPU).

xiii. At the time of inspection, 120 KLPD distillation Unit with integrated Multi Effect Evaporator(IMEE) was not in operation due to power tripping on 27.11.2019 morning as informed by industry officials. It could only restart on 28.11.2019 afternoon.

xiv. At the time of inspection, the density of spent wash at inlet and outlet of the stand alone MEE was 1026.87 Kg/m^3 and 1226.89 Kg/m^3 respectively.

xv. As per logbook data, average feed to SMEE is 1044 KLPD while average quantity withdrawn after third stage is 287.8 KLPD and average conc. spentwash from SMEE after fifth stage is 277.7 m^3/day.

xvi. The Unit has installed Condensate Polishing Unit(CPU) consisting of three stage RO technology. As per information provided by the industry, the design capacity of the CPU is 2600 m^3/day whereas as per revalidated adequacy report dated 29.05.2019, the design capacity of the CPU is 2500 m^3/day. The sources of effluent coming into CPU include MEE condensate (2100 m^3/day), spent lees (300 m^3/day), cooling tower and boiler blowdowns (200 m^3/day). While the RO permeate (2000 m^3/day) is used in process and non-process activities like molasses dilution, cooling tower make up as well as non-process activities like fire

safety and gardening, the RO reject (600 m^3/day) is circulated back to the MEE.

xvii. There are total of seven tanks/lagoons of which six tanks for spentwash management are within the Unit premises and one at the biocompost yard site. Details of the tanks within premise and in biocompost yard are given below

Table 9: ***Details of lagoons for spentwash management***

Sl. No.	Identification	Condition during inspection	Capacity (as provided by the Unit)	Purpose
1.	Settling tank	Filled	2492KL	Used as Settling Tank
2.	Settling tank	Filled	3396KL	Used as Settling Tank
3.	Tank 1	Completely filled	1500KL	Used as buffer tank before SMEE
4.	Lagoon 3	Half filled	6050KL	Storage of conc. spent wash, raw spent wash, RO reject
5.	Lagoon 4	Empty	10,000KL	Used as standby for storage of spentwash in case of sudden breakdown of operations.
6.	Tank 2	60% filled	400KL	Storage of MEE concentrate before biocomposting
7.	Tank 3	Closed tank. Conc. Spent wash (slop) .	207KL	Storage-cum- Pump sump of MEE concentrate before incineration.

On the day of inspection, settling tank-1 (2492 KL) and settling tank-2 (3396 KL) were observed to be full with raw spentwash combined with RO reject and stormwater accumulated in open drains in the industry premises.

Based on above data, total raw spent wash plus CPU (RO) reject stored in all tanks work out to be 10413KL (2492+3396+1500+0.5*6050).

xviii. There was a 10,000 KL capacity empty lagoon which was informed to be used for storage of effluent in cases of emergency breakdown of ZLD system.

xix. The Consent to Operate does not indicate the amount of spentwash to be utilized in biocomposting and amount to be incinerated. As per revalidated adequacy report submitted in May,2019, 10.56 M^3/hr of 30°Bx concentrated spentwash is utilized in biocomposting while 22.5 M^3/hr of 57.9°Bx is incinerated in incineration boiler while based on logbook data in May,2019, 36.86% is utilized in biocomposting while 63.14% is used in incineration, similarly, in June, 2019, 46.93% is used in biocomposting and 53.67% is incinerated. For the the period from July, 2019 to October, 2019, 10% of concentrated spentwash is utilized in biocomposting while 89% of the spentwash is incinerated in slop furnace (as boiler fuel).

xx. The existing active area for bio-composting is 16 acres while required area for 4 cycles of biocomposting is 14.6 acres.

xxi. The Unit has installed only one piezowell/piezometer in the bio-compost yard of 10 acres area.

xxii. Incinerator design capacity is 75 TPH with maximum feed rate of 26 MT/hr and at the time of inspection it was operating at feed rate of 18TPH.

xxiii. The Unit uses 25.5 TPH of MEE slop with 13-15 TPH of bagasse as fuel for the incinerator boiler. Flowmeter is installed at the feedline of the slop boiler. At the time of inspection, flowmeter reading was 1088.77 kg/hr. Around 30 MT/day of ash is generated from the incinerator, which is utilized for mixing with bio-compost and for land filling within the Units premises.

xxiv. The Unit has installed mass flow meters at inlet and outlet of SMEE as well as inlet and outlet of IMEE. Also, PTZ camera is installed at the bio-compost area.

xxv. The Unit has a bottling plant and sample was collected from its final outlet.The effluent from bottling plants collected, pumped and reused into cooling tower. Cooling tower blow down is treated through CPU.

xxvi. At the time of inspection, samples were collected from various locations of the distillery unit to verify the efficiency of the ZLD system. Analysis results are represented below:

Table 10: ***Characteristics of spent wash and other effluents in distillery Unit.***

S.No.	Sample location	Parameters					
		pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	TS (mg/l)
1.	Raw spentwash	4.72	154776	-	-	-	167330
2.	MEE feed	5.42	121967	-	-	-	120590
3.	MEE concentrate	5.2	283353	-	-	-	485910
4.	Conc. spentwash in storage tank	5.04	494155	-	-	-	496010
5.	SW in buffer tank	4.73	192825	-	-	-	196390
6.	SW in lagoon of biocompost yard	4.85	280935	-	-	-	260610
7.	Feed to incinerator	4.85	471987	-	-	-	444270
8.	CPU feed	4.77	2697	1230	15	1548	-
9.	CPU permeate	4.3	1013	323	<10	164	-
10.	CPU reject	4.98	9332	5083	<10	4000	-
11.	MEE condensate	3.52	16076	9750	-	756	840
12.	Spent lees	3.76	5668	3200	-	400	488
13.	Final outlet of bottling plant	5.41	333	234	-	-	164

xxvii. As per the analysis report, raw spentwash has COD of 154776 mg/l and total solids 167330 mg/l while raw spentwash stored in buffer tank has COD of 192825 mg/l and total solids of 196390 mg/l.

xxviii. Analysis report indicates that feed to SMEE has COD and TS of 121967 mg/l and 120590 mg/l respectively while concentrated spentwash has COD of 283353mg/l and TS of 485910 mg/l.

xxix. Samples collected from lagoons for concentrated spentwash and spentwash in the lagoon in biocompost yard indicated TS of 496010 mg/l and 260610 mg/l respectively.

xxx. As per the analysis report, CPU permeate has **pH of 4.3, COD- 1013 mg/l, BOD-323 mg/l** and TDS of 164 mg/l and is reported to be used for both process and non-process activities including fire safety and gardening. The quality of treated condensate indicate non compliance w.r.t land discharge norms.

xxxi. The analysis report indicate acidic characteristic of CPU permeate, reject, MEE condensate and final effluent from bottling plant.

xxxii. Analysis report of sample collected from final outlet of bottling plant indicated pH 5.41, BOD of 234 mg/l and COD 333 mg/l. It was informed that effluent from bottling plant is stored in a tank and further pumped as cooling tower makeup water.

xxxiii. The team also collected wastewater sample from the local drain (Ikara Nalla) flowing adjacent to the unit premises. The characteristic of the wastewater is as follows:

Sampling point	Latitude/ Longitude	pH	COD (mg/L)	BOD (mg/L)	Sulphate (mg/L)	TSS (mg/L)	TDS (mg/L)	NH_3-N (mg/L)	Phosphate (mg/L)
Drain at u/s of the unit	29.292038/ 78.510125	6.88	438	122	137	1200	500	34	3
Drain at D/s of the unit	29.290151/ 78.5088303	7.11	776	177	73	1435	468	35	3.1

5.7 Recommendations.

1. The utilization of CPU permeate having pH of 4.3, COD- 1013 mg/l against 250 mg/l and BOD-323 mg/l against 100 mg/l in non process activities like gardening, is a violation of ZLD norms and should be stopped immediately.
2. The Unit's NOC from CGWA expired on 07.04.2019, but Unit has continued to withdraw groundwater without valid NOC. The CGWA may be requested to verify the status of ground water reacharge by the unit and accordingly EC may be calculated.

3. Based on the available active area for biocomposting (16 acres), Unit can have lagoon capacity of ≈9675 M^3 for 30 days' storage of conc. spentwash (30°Bx) and 3116 $M^3$for seven days' storage of concentrated spentwash (55 °Bx) in compliance to CPCB direction dated 07.12.2015.

The extra lagoon of capacity 10,000 m^3 shall remain vacant and not be used without obtaining permission from UPPCB

4. The Unit should install three piezowells around biocompost yard as per SOP for distilleries.

5.8 Action taken status of CPCB on M/s Dhampur Sugar Ltd (Distillery Sector), Bijnor

1. The Unit was issued Show Cause Notice dated 06.02.2018 for non-compliance to direction dated 14.06.2017 issued under Section 5 of Environment (Protection) Act, 1986.

2. The Show Cause Notice was revoked on 08.08.2018 following compliance to CPCB direction dated 06.02.2018.

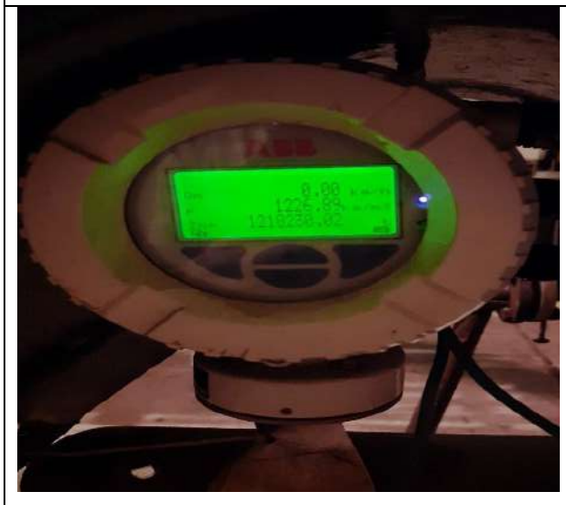
5.9 Action taken status of UPPCB on M/s Dhampur Sugar Ltd (Distillery Sector), Bijnor, U.P

1. Based on inspection carried out by UPPCB officials on 02.08.2019, a Show cause notice dated 13.08.2019 along with imposition of environmental compensation of Rs. - 6,75,000/- has been issued to the Unit for violation of ZLD norms, illegal disposal of spentwash in agricultural fields of nearby village-Fena, Chandpur.

5.10 Photogallery of M/s Dhampur Sugar Mills Ltd (distillery Unit), Dhampur, Bijnor

Pic-16: Raw spent wash

Pic-17: Buffer tank for storage of raw spentwash



Pic-18: Mass flowmeter at inlet of standalone MEE

Pic-19: Mass flowmeter at outlet of standalone MEE

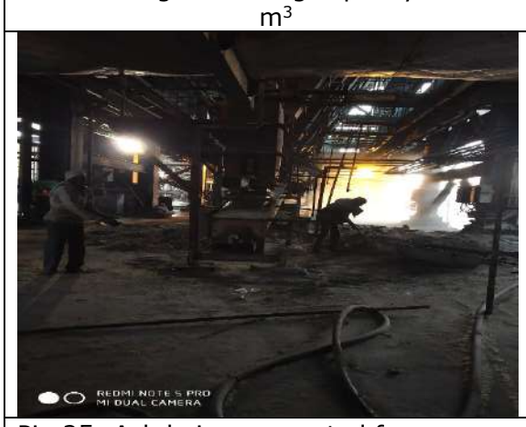
Pic-20: Mass flowmeter data from integrated MEE

Pic-21: Flowmeter at CPU outlet

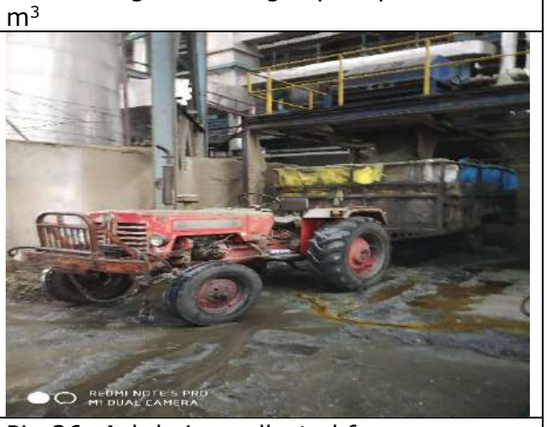
Pic-22: Empty lagoon of 10000 m3

Pic-23: Lagoon having capacity of 6050 m^3

Pic-24: Lagoon having capacity of 2495 m^3



Pic-25: Ash being generated from incinerator



Pic-26: Ash being collected from incinerator

Pic-27: Ikra drain upstream of the Unit

Pic-28: Ikra drain downstream of the Unit

Name of the inspecting officers	Designation	Signature
1. Sh. C. B. Chourasia	Scientist- 'E', CPCB	
1. Sh. J. P. Maurya	RO, UPPCB, Bijnor	
3. Dr. R. K. Singh	Scientist-'D', CPCB	
4. Dr. Anu Chetal	Scientist-'B', CPCB	
5. Mahir Husain	AEE, UPPCB, Bijnor	

6.0 M/s Dhampur Sugar Mills Ltd (Sugar Unit), Asmoli, Sambhal

- inspected on 28-11-2019

M/s Dhampur Sugar Mills Ltd (Sugar Unit), Village- Asmoli, Distt Sambhal, UP, herein referred as 'the Unit' is a sugar mill having installed capacity of 9000 TCD and power co-generation Unit. The crushing for the year 2019-2020 was started on 01-11-2019. The Unit has obtained Consent to Operate (CTO) under water Act, 1974 and Air Act, 1981 from Uttar Pradesh Pollution Control Board (UPPCB). Both CTO have validity upto 31-12-2019 (**Annexure 3a & 3b**). The Unit has also obtained Haz. Waste Authorization, issued by UPPCB, having validity upto 26.12.2022 (**Annexure 3c**). During visit the plant was operated on 7456 TCD capacity.

6.1 Sources of Fresh Water:

- The Unit has total of 3 nos. bore wells located at different places within the campus. The NOCs from CGWA, for the abstraction of 900 KLD ground water was been expired on 02-05-2019.
- The Unit has applied for renewal of the NOCs to abstract groundwater to CGWA.
- The detail of the locations of the Borewells along with co-ordinates is as below:

Table 11 :Details of borewells at M/s Dhampur Sugar Mills Ltd., Asmoli

Borewell Details				
Sr. No.	Borewell No.	Borewell Meter reading.	Coordinates	
			Latitude	Longitude
1	Borewell No. 1	92741.2 M^3	28.707433	78.54254
2	Borewell No. 2	18573.7 M^3	28.705089	78.543034
3	Borewell No. 3	19750.7M^3	28.70483	78.542684

6.2 Fresh Water Consumption:

As per the record of borewell meters provided by the Unit, the average daily freshwater consumption from Novermber 01-27, 2019 in sugar plant is 285KL and for co-generation plant is 441 KL/day. Total fresh water consumption is 727 KL/day.

6.3 Samples Collection

Joint team of CPCB and UPPCB has collected effluent and water samples from various utilities and water sources during inspection and samples have been analyzed in CPCB, Delhi laboratory w.r.t the notified parameters relevant to sugar manufacturing Unit.

The team has also collected one groundwater sample from a handpump near the main gate of the Unit. The samples have been analyzed in CPCB, Delhi laboratory (EPA recognized) following specified methods as

per American Public Health Association (APHA) and the guidelines/SOPs certified by the National Accreditation Board for Testing and Calibration Laboratories (NABL).

The detail of the samples collected and analysis result are mentioned in the following sections.

6.4 Wastewater Generation and Treatment Facility:

- The Unit has installed Effluent Treatment Plant (ETP) of designed capacity 2500 KLPD (as reported by the Unit's representative) for the treatment of trade effluent from Mill house, boiling house, Spray Pond Overflow etc.
- The ETP consists of Screen chamber, Oil & grease trap, Equalization tank with aeration, Primary clarifier, Aeration tanks (2 Nos.) with diffused aeration system, Secondary clarifier, Treated water tank, Multi grade filter and Activated carbon filter, Sludge filter beds/geo tube.
- The Unit has provided separated treatment system for Spray Pond Overflow upto secondary treatment.
- The Spray Pond Overflow treatment system consists of Holding tank, Lime mixing and reaction/stabilization tank, lamella clarifier which discharged into a common treated water tank.
- The final treated effluent is discharged into Lagoon for the Irrigation purposes. A part of treated effluent from lagoon is pumped into a channel, which joins Sot River, observed dry on u/s of the Unit.
- As per logbook provided, the average daily wastewater generation from mill house, boiling house etc. is 762.5 KL and average daily wastewater generation from spray pond overflow/cooling tower overflow is 323.5KL.
- Total waste water generation from the different processes is 1086 KL per day and 145 liters/tonne of cane crushed.
- The Unit has provided flow meters at inlet and outlet of ETP and OCEMS is installed at the oulet of ETP.
- The Unit has provided impermeable lagoon of 16000 KL capacity for the storage of treated effluent. The permissible storage (for 15 days) is 27,000 KL.

6.5 Characteristics of the collected Ground Water samples

The analysis result of samples collected from the handpump near the main gate of the Unit is as below:

Table 12: **Characteristic of Ground water in M/s Dhampur Sugar Mills Ltd., Asmoli**

Sample Location	pH	TDS (mg/l)	COD (mg/l)	Sulphate (mg/l)	Total alkalinity as $CaCO_3$ (mg/l)	Total hardness as $CaCO_3$ (mg/l)	Colour (Hazen)
Handpump (Near Main Gate of Unit)	7.7	228	BDL	BDL	198	188	BDL

6.6 Charateristics of Wastewater:

The team collected the sample of effluent from the ETP to check the compliance status of ETP.

Table 13: **Waste water characteristics of M/s Dhampur Sugar Mills Ltd., Asmoli**

Locations	pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	Sulphates (mg/l)	O & G (mg/l)	MLSS/MLVSS (mg/l)
ETP Inlet	4.09	1935	917	185	1936	29	--	--
ETP Outlet	7.30	68	14	13	1040	47	BDL	--
Aeration tank-I	--	--	--	--	--	--	--	3236/2438
Aeration tank-I	--	--	--	--	--	--	--	4397/3158
Spray pond overflow	7.78	822	178	252	852	14	--	--
Treated water Lagoon	8.37	37	08	14	1060	40	--	--

6.7 Co-generation:

- The Unit has co-generation power plant (40 MW) for power generation as well as steam generation facility.
- Baggase is used as a fuel for the boilers of 170 TPH, 70 TPH and 50 TPH capacity.
- Boiler of 170 TPH is used for co-generation.
- Boiler of 70 TPH was working and 50 TPH Boiler was not working (standby).
- Both Boilers 70 TPH and 50 TPH are attached to a wet scrubber which was not in working condition.
- The stack of the boiler 170 TPH is equipped with Electro Static Precipitator (ESP).
- The flue gas of the stack is partially used in dryers (2 Nos.) for drying the baggase.
- The plant officials informed that the ash from boiler and ESP are collected and sent to bio-compost yard of distillery Unit of M/s Dhampur Sugar Mills Ltd., Asmoli for its utilization in Bio-composting. Boiler ash from 70 TPH Boiler is sent to filling yard within Unit's premises.

6.8 Observations

i. The manufacturing unit and ETP were found operational during the inspection.

ii. The Unit have CTO (Consent to Operate) under Water Act, 1974 and Air Act, 1981 valid till 31.12.2019.

iii. The Unit has installed flow meters at fresh water, cold water and hot water consumptions points as recommended by National Sugar Institute (NSI), Kanpur.

iv. The Unit has installed three (3Nos) of Hazardous tanks with capacity of $43m^3$, $27m^3$ and $36m^3$ for collecting of wash water generated during chemical /mechanical cleaning of evaporators.

v. The treated effluent from ETP is stored in a lagoon of 16000 KL capacity for utilization for irrigation purposes.

vi. The Unit has installed two dryers (for baggase), using the flue gases from stack of the boiler. Dryers were found operational.

vii. Wet scrubber (common to 70 TPH & 50 TPH boilers) was not in working condition.

viii. The Unit has installed two stage, 2Nos Reverse osmosis (RO) plants for the treatment of 2 nos boilers blow down.

ix. A new MGF (Multigrade Filter) and ACF (Activated Carbon Filter) for tertiary treatment was under installation as the installed capacity of existing MGF and ACF was inadequate.

x. The Unit has not provided/maintained the logbook for the generation and disposal of ETP sludge and other solid wastes. However, for boiler ash disposal, documents of transportation and receipts were shown and verified with logbook at Bio-compost yard site of distillery of M/s Dhampur group.

xi. The team also collected the sample from drain (Lat. 28.711214, Long. 78.544426) flowing adjacent to the Unit premises. The characteristic of the wastewater is as:

Table 14: **Characteristic of wastewater flowing through drain adjacent to M/s Dhampur Sugar Mills Ltd., Asmoli**

Sampling point	pH	COD (mg/L)	BOD (mg/L)	Sulphates (mg/L)	TSS (mg/L)	TDS (mg/L)
Drain after mixing	7.85	70	15	238	44	1236
Drain /sewage	7.45	195	97	16	99	700
Ponding, in Sot river	7.82	73	12	127	39	1204

xiii. The Unit does not have facility for the treatment of domestic wastewater and untreated sewage is discharged and mixed with treated effluent of the sugar Unit.

6.9 Recommendations:

1. Unit shall maintain the log-book for the generation and disposal of ETP sludge and other solid wastes including boiler ash generation.
2. Unit should install Condensate Polishing Unit (CPU) for high pressure boilers (105 Kg/cm^2) to treat process condensate for reuse in process. This will help in reduction of fresh water consumption.
3. The Unit must ensure the maximum reuse of treated effluent in process.
4. Wet scrubber (attached to Boilers 70TPH & 50TPH) should be made operational before start of the attached boiler.
5. All domestic waste water generated within the Unit's premises and residential colony shall be discharged after proper treatment. The Unit shall install Sewage Tretment Plant (STP) of adequate capacity for the treatment of domestic wastewater.
6. The Unit shall obtain NOCs from CGWA for withdrawal of groundwater at earliest as the CGWA NOC has already been expired in May, 2019.
7. The Unit's NOC from CGWA expired on 02.05.2019, but Unit has continued to withdraw groundwater without valid NOC. The CGWA may be requested to verify the status of ground water reacharge by the unit and accordingly EC may be calculated.

6.10 Action taken status

1. In crushing season 2016-17, unit was found non- complying w.r.t. discharge standard and CPCB issued show cause notice dt.16.01.2017 under section 5 of the Environment (Protection) Act, 1986.
2. CPCB issued direction dated.29.06.2017 under section 5 of the Environment (Protection) Act, 1986 for carrying out adequacy assessment of ETP through govt. repute institutions.
3. CPCB issued compliance direction dated 02.11.2017 under section 5 of the Environment (Protection) Act, 1986 for carrying out adequacy assessment of ETP through govt. repute institutions.
4. In crushing season 2017-18, unit was found non-complying w.r.t. bypass of untreated effluent and CPCB issued closure dt.07.02.2018 under section 5 of the Environment (Protection) Act, 1986.
5. CPCB issued compliance direction dated 22.10.2018 under section 5 of the Environment (Protection) Act, 1986.
6. In crushing season 2018-19, unit was found complying and CPCB issued compliance direction dt.20.05.2018 under section 5 of the Environment (Protection) Act, 1986.

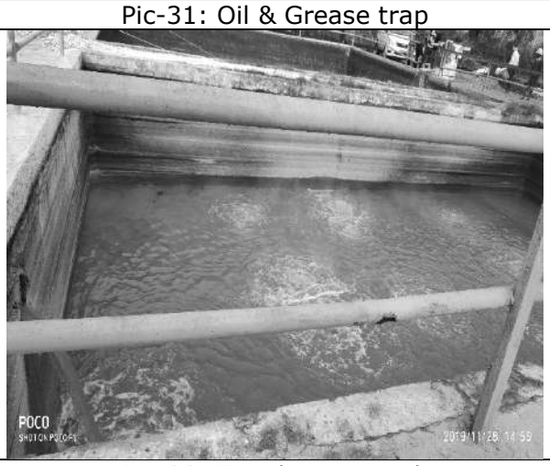
6.11 Photographs of M/s Dhampur Sugar Mills Ltd (Sugar Unit), Asmoli, Sambhal

Pic-29: Inlet of ETP

Pic-30: Flow meter at inlet of ETP

Pic-31: Oil & Grease trap

Pic-32: Lime stablisation tank



Pic-33: Equalisation tank

Pic-34: Primary Clarifier

Pic-35: Aeration Tank

Pic-36 Secondary Clarifier

Pic-37: Equalization tank for spray pond overflow

Pic-38: Lamella clarifier

Pic-39: Media Filters (New MGF & ACF)

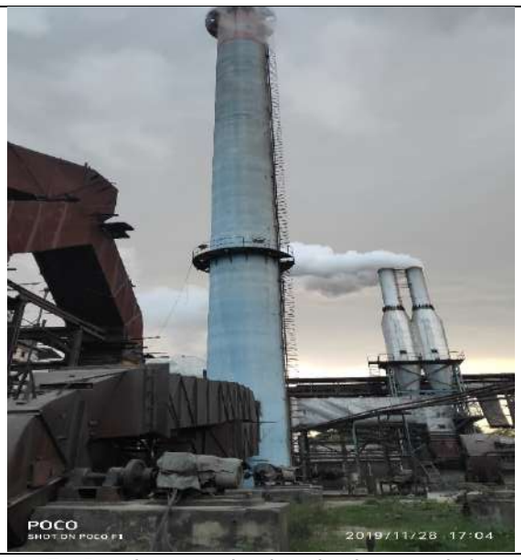
Pic-40: Sludge Drying Bed

Pic-41: Lagoon for treated effluent

Pic-42: OCEMS display

Pic-43: Drain behind the Unit

Pic-44: Drain along the boundary of the Unit



Pic-45: Stacks attached to boilers and dryers

Name of the inspecting officers	Designation	Signature
1. Sh. C. B. Chourasia	Scientist- 'E', CPCB	
2. Dr. R. K. Singh	Scientist-'D', CPCB	
3. Sh. S. S. Singh	AEE, UPPCB Moradabad	
4. Dr. Anu Chetal	Scientist-'B', CPCB	

7.0 M/s DSM Sugar Meerganj, Sidhauli Road, Meerganj, Bareilly, UP- inspected on 29-11-2019

M/s DSM Sugar Meerganj, Sidhauli Road, Meerganj, Bareilly, UP is an standalone sugar plant with installed capacity of 5000 TCD. The cane crushing started on 11th November, 2019. The Unit has consent to operate under the Water Act, 1974 and The Air Act, 1981 issued by Uttar Pradesh Pollution Control Board (UPPCB), having validity upto 31-12-2019 (**Annexure 4a & 4b**). The Unit has also obtained Hazardous Waste Authorization from UPPCB with validity upto 19.06.2022 (**Annexure 4c**). During visit (date 29.11.2019), the sugar mill plant was operated at 4414 TCD.

7.1 Sources of Fresh Water:

The Unit has total of 4 nos. bore wells located at different places within the premises. The CGWA NOC is valid upto 07.06.2020 for the abstraction of ground water from 4 tubewells of total quantity 743 cu.m/day (not exceeding 99,356 cu.m/year) (**Annexure 4d**).

Table 15: **Details of borewells at M/s Dhampur Sugar Mills Ltd., Meerganj**

Borewell Details				
Sr. No.	Borewell No.	Meter reading	Coordinates	
			Latitude	Latitude
1	Borewell No. 1	157377 M^3	28.5502343	79.2129414
2	Borewell No. 2	303798 M^3	28.5502717	79.214153
3	Borewell No. 3	19080 M^3	28.55263	79.215370
4	Borewell No. 4	118010 M^3	28.5513166	79.2220848

7.2 Fresh Water Consumption:

As per the record (logbook data) of borewell meters provided by the Unit, the total freshwater consumption during November 01-26, 2019 is 13842 KL, equivalent to average value of 494.35 KL/day.

7.3 Samples Collection

The joint team of CPCB & UPPCB collected effluent and water samples from utilities, ETP and water sources samples were analyzed for the notified parameters relevant to sugar manufacturing sector.

Two samples from the bypass of the Unit, and two samples from river Peelakhar upstream and downstream w.r.t. bypass discharge and groundwater sample from handpump inside the premises of the Unit were also collected. The samples have been analyzed in CPCB, Delhi laboratory.

Detail of the samples collected and analysis results are mentioned in the following sections.

UPPCB Bareilly

7.4 Wastewater Generaton and Treatment Facility:

- The Unit has installed Effluent Treatment Plant (ETP) of designed capacity 1000 KLD (as reported by the Unit's representative) for the treatment of trade effluent from Mill house, boiling house, Spray Pond Overflow etc.
- The ETP consists of Screen chamber, Oil & grease trap, Equalization tank, Primary clarifier, Aeration tank, Secondary clarifier, Clear water tank, MGF & ACF (2 nos.) followed by lagoon for treated effluent storage and its use for irrigation.
- The Unit has provided separate treatment system for Cooling Tower Overflow upto secondary treatment.
- The Cooling Tower Overflow treatment system consists of Holding tank, Chemical Dosing tank, Flocculator, Lamella Clarifier and Primary clarifier. After Primary clarifier the treated effluent is treated into a common Aeration Tank, which is used for the ETP and Cooling Tower overflow treatment.
- The final treated effluent is stored in Lagoons and used for Irrigation purposes. The Unit has 2 lagoons of capacity 5200 KL (in use) & 2000 KL (empty), which is within permissible capacity (15000 KL) for 15 days storage of treated effluent.
- Treated Effluent is used for irrigation purpose of command area about 128 acres and has agreement with farmers. The land on which effluent is disposed off is within radius of about 5 kms from the Unit. The Unit is having pipe line network for Irrigation.
- As reported by the unit represenatative the Wastewater generation from mill house, boiling house etc. is approx. 400 KLD i.e., 80 litres/ tonne of cane crushing and from spray pond overflow/cooling tower overflow is 300 KLD i.e., 60 litres/ tonne of cane crushing. Overall effluent generated is 140 litres/ tonne of cane crushing against 200 litres/ tonne of cane crushing.
- The Unit has provided flow meters at inlet and outlet of ETP and OCEMS is installed at the oulet of ETP, however, not provided the logbooks for the same.
- Sludge generated from the ETP is being dried in sludge drying beds and is distributed to farmers. However, the unit has not provided any records for the same. No mechanical sludge dewatering/handling system is installed at the ETP of the Unit.

7.5 Characteristics of Ground Water samples

- The analysis result of sample collected from the borewell inside the Unit's premises is as follows:

Table 16: **Characteristic of Groundwater in M/s Dhampur Sugar Mills Ltd., Meerganj**

Sampling point	pH	COD (mg/L)	BOD (mg/L)	Color (Hazen)
Ground water sample from the borewell near ETP	6.9	6.0	1.3	BDL

- The presence of BOD and COD in sample collected from borewell indicates that the ground water is contaminated.

7.6 Charateristics of wastewater:

The joint team collected the sample of effluent from the ETP to check the compliance status of ETP.

Table 17: **Characteristics of Wastewater at M/s Dhampur Sugar Mills Ltd., Meerganj**

Location	pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	O & G (mg/l)	Sulphate (mg/l)	Color (Hazen)	MLSS/MLVSS (mg/l)
ETP Inlet	4.72	2874	1830	539	2560	--	175	165	--
ETP Outlet	7.12	89	29	23	964	14	348	82	--
Aeration tank	--	--	--	--	--	--	--	--	2346/2054
Cooling Tower overflow	6.97	1142	657	378	2168	--	85	96	--
Lagoon	7.38	63	30	30	844	--	208	75	--

- As per analysis of treated effluent (outlet) of ETP pH-7.12 (norms 5.5-8.5), BOD- 29mg/l (norms 100mg/l), COD-89 mg/l (norms 250mg/l),TSS 23mg/l (norms 100mg/l), and TDS 964 mg/l (norms 2100mg/l) which indicates compliance w.r.t land discharge norms notified under of Environment (Protection) Rules,1986.
- As per analysis of treated effluent stored in lagoon, pH-7.38 (norms 5.5-8.5), BOD- 30 mg/l (norms 100 mg/l), COD-63 mg/l (norms 250 mg/l), TSS 30 mg/l (norms 100 mg/l), and TDS 844 mg/l (norms 2100 mg/l) indicates compliance w.r.t discharge norms for land/irrigation notified under of Environment (Protection) Rules,1986.

7.7 Boilers

- The Unit is standalone Unit having low pressure boilers (80 TPH and 55 TPH) for steam generation facility.
- Baggase is used as a fuel for the boiler of less than 42 kg/cm^2 working pressure.

- The stack of the boiler is equipped with wet scrubber for control of air pollution.
- The plant officials informed that the boiler ash is being used for land filling within the Unit's premises. However, no record for the same is provided by the Unit.

7.8 Observations

i. The manufacturing unit and ETP were found operational during the inspection. The inflow to ETP (flowmeter reading) during the inspection was observed 34.0 m^3/hour which is equivalent to 616 KLD against the installed capacity of 1000 KLD ETP.

ii. The oil skimmer in oil grease trap was not properly installed and the level of effluent was at bottom/ below the belt.

Pic-46: Belt above the level of Effluent

iii. MLSS growth in Aeration tank was observed satisfactory.

iv. The Unit has not installed flow meters at power turbine cooling, boiler, wet scrubber, B & C Massecuite cooling as it was recommended by National Sugar Institute (NSI), Kanpur in validation report of ETP for season 2018-19.

v. The Unit has installed MGF and ACF for tertiary treatment.

vi. The mechanical sludge dewatering/handling system for better management of wet sludge is not provided by the Unit.

vii. The Unit has not provided/maintained logbook for daily effluent generation and treatment, disposal of ETP sludge, Boiler ash and other solid wastes.

viii. A part of Cooling Tower overflow is being mixed with raw effluent and the rest is being treated in lamella through a separate channel. The channel carrying Cooling Tower overflow to raw effluent channel should be regulated by valve or sluice gate which may be controlled once Unit starts making refined sugar using Double Sulphitation Process.

Pic-47: Cooling Tower overflow being mixed with raw effluent

ix. The Unit was bypassing the untreated effluent through a pipeline laid underground up to Peelakhar River in Sindholi Village (Lat: 28.556169 and Long: 79.241446) which ultimately meets River Ramganga. This was shown to the Unit's representatives, who accepted the discharge of wastewater and they explained that the PVC pipeline is laid for disposal of storm/rain water from the mill premises to Peelakhar.

Pic-48: Bypass of untreated effluent through PVC pipe

x. Samples of untreated effluent bypassed through PVC pipe and flowing through a drain were collected by the CPCB team. The characteristics of the effluent are is given below:

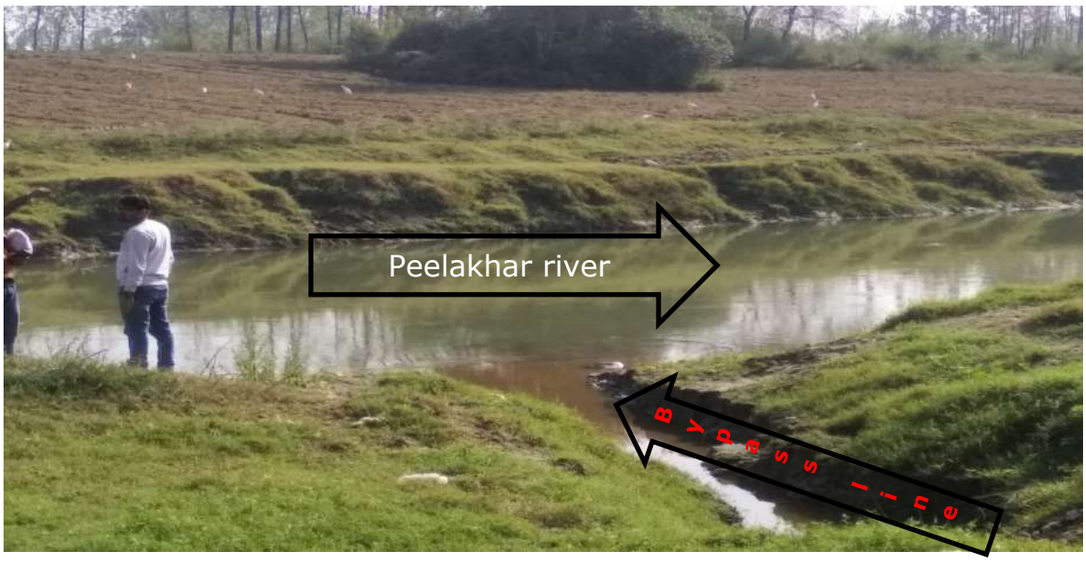
Table 18: **Characteristics of by-passed effluent by M/s Dhampur Sugar Mills Ltd., Meerganj**

Sample Analysis	pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	Sulphate (mg/l)	Color (Hazen)
Multiple outlet/bypass **(drain)**	5.40	1306	890	248	2464	274	216
Multiple outlet/bypass **(pipe)**	5.33	1640	967	212	2412	220	237

xi. Samples were also collected from the upstream and downstream of the Peelakhar river where the effluent from the bypass line was meeting with the river water. Analysis results of the water are provided in the following table. The high value of BOD and COD in down stream of the confluence point of bypass line and river shows the impact of untreated effluent being discharged by the Unit.

Table 19: **Water quality of river Peelakhar**

Sampling point	**pH**	**COD (mg/L)**	**BOD (mg/L)**	**Color (Hazen)**
River Peelakhar at u/s bypass line	8	BDL	BDL	BDL
River Peelakhar at u/s bypass line	7.7	37	5.3	BDL



Pic-49: Bypass to river Peelakhar

xii. The Unit does not have facility for the treatment of domestic wastewater. Untreated domestic effluent was found being discharged outside the premises of the Unit through a hole in the wall of the Unit.

Pic-50: Domestic waste being discharged without treatment.

7.9 Recommendations:

1. It is proposed that direction under section 18(1)(b) shall be issued to UPPCB to take appropriate action to stop discharge of wastewater in river Peelakhar and to levy environmental compensation of suitable amount to the Unit for illegal discharge/bypass of untreated effluent.
2. The Unit must dismantle the bypass line (PVC pipe) from the premises to the river Peelakhar and ensure that the untreated/partially treated effluent shall not be discharged outside the premises in any case.
3. Unit must take corrective measures to prevent the leaching of untreated effluent into the soil/ ground water.
4. Unit shall maintain the logbook for the generation and disposal of ETP effluent, sludge, Boiler Ash, hazardous waste and other solid wastes.
5. Unit shall ensure to implement the recommendations made by National Sugar Institute (NSI), Kanpur in validation report of ETP for session 2018-19.
6. Unit shall install the flow meters at the places as recommended by the National Sugar Institute (NSI), Kanpur.
7. All domestic wastewater generated within the premises and colony shall be discharged after proper treatment. The Unit shall install Sewage Tretment Plant (STP) for the treatment of domestic wastewater.

7.10 Action taken status

1. In crushing season 2016-17, unit was found complying and CPCB issued compliance direction dated 08.11.2017 under section 5 of the Environment (Protection) Act, 1986 for carrying out adequacy assessment of ETP through govt. repute institutions.
2. In crushing season 2017-18, unit was found non-complying and CPCB issued show cause notice dt.15.03.2018 under section 5 of the Environment (Protection) Act, 1986 for non-compliance w.r.t. BOD-31.2 mg/l, TSS- 111 mg/l, MLSS- 684mg/l.
3. CPCB issued compliance direction dated 26.10.2018 under section 5 of the Environment (Protection) Act, 1986 for charter implementation.
4. In crushing season 2018-19, CPCB issued show cause notice dt.14.06.2018 under section 5 of the Environment (Protection) Act, 1986 for low MLSS-1291mg/l in aeration tank and BOD at outlet was found BDL and TSS-27.4 mg/l which showed chances of dilution.
5. CPCB issued compliance direction dated 09.08.2019 under section 5 of the Environment (Protection) Act, 1986.

6. In crushing season 2019-2020, unit was found non-complying w.r.t. bypass of untreated effluent and CPCB issued direction under section 18 (1) (b) on 02.01.2020 to UPPCB. In compliance, UPPCB has imposed EC of Rs. 17,70,000/- vide letter dated 21-01-2020 to the unit.

7.11 Photographs of M/s Dhampur Sugar Mills Ltd (Sugar Unit), Meerganj, Bareilly

Pic-51: Oil Grease tap at ETP inlet

Pic-52: Biological (ASP) and tertiary treatment (PSF & ACF)

Pic-53: Air Pollution control system and Ash-slurry

Pic-54: Ash disposal on own land

Name of the inspecting officers	Designation	Signature
1. Sh. C. B. Chourasia	Scientist- 'E', CPCB	
2. Dr. R. K. Singh	Scientist-'D', CPCB	
3. Sh. Shashi Vindkar	AEE, UPPCB Bareilly	
4. Dr. Anu Chetal	Scientist-'B', CPCB	

Annexure III

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
Principal Bench, New Delhi

Original Application No 539/2019

In the matter of:-

Adil Ansari — Applicant(s)

Vs.

M/S Dhampur Sugar Mills Ltd. & Ors. — Respondent(s)

Index

S.No.	Particulars	Page No.
1.	**Compliance report** in the matter O.A. No. 539/2019 titled as Adil Ansari Vs. M/s Dhampur Sugar Mills Ltd. & Ors. in compliance to the Hon'ble NGT order dated 09.11.2020.	
2.	**ANNEXURE**-I A copy of Hon'ble NGT order dated 09.11.2020.	
3.	**ANNEXURE** -II A copy of Joint inspection report prepared by CPCB and UPPCB.	

(Reena Satavan)
Scientist-D
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
Delhi- 110032.

Date: 26.03.2021
Place: Delhi

Compliance Report in the matter of Adil Ansari Vs. M/S Dhampur Sugar Mills Ltd. & Ors., O.A. No. 539/2019

The present matter is related to operation of sugar and distillery units of M/s Dhampur Sugar Mills Ltd. (Sugar Division), Asmoli, Sambhal, Moradabad, M/s Dhampur Sugar Mills Ltd., Sugar unit, Dhampur, Bijnor and M/s Dhampur Sugar Mills Ltd., Sugar unit, Meerganj, Bareilly and M/s Dhampur Sugar Mills Ltd., Distillery Unit, Dhampur, Bijnor.

Hon'ble NGT vide order dated 09.11.2020 **(Annexure-I)** considered the Compliance Report filed by CPCB on 05.10.2020 and has further directed:

"State PCB to take further appropriate action by way of prohibiting any activity in violation of law, initiating prosecution and recovering compensation as per applicable norms, following due process of law. The State PCB may also respond to the IA filed by the applicant with particulars in the table annexed to the application, reproduced above and file an action taken report before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The CPCB and State PCB may undertake necessary inspection for the purpose."

In pursuance of the above order of Hon'ble NGT, joint inspection of M/s Dhampur Sugar Mills Ltd. (hereinafter referred as 'the Unit') was carried by team of officials from CPCB and UPPCB (RO Bijnore, RO Moradabad & RO Bareilly). The team has inspected following units of M/s Dhampur Sugar Mills Ltd;

1) M/s Dhampur Sugar Mills Ltd. (Sugar Unit), Asmoli, Sambhal, UP on 13.01.2021
2) M/s Dhampur Sugar Mills Ltd. (Sugar Unit), Meerganj, Bareilly, UP on 14.01.2021
3) M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnor, UP on 02.02.2021
4) M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor, UP on 03.02.2021

Joint inspection report has been prepared considering the observations made during the inspection and the compliance status of the recommendations given in previous inspection report dated 29.11.2019. The report has been finalized in consultation with representatives from UPPCB. The detailed joint inspection report comprising the observations and recommendations of joint committee is attached at **Annexure-II.**

Following are the major observations and recommendations made by the Joint Committee during the inspection:

1) M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnore, UP

Observations

1. The analysis result of sample collected from drain coming from colony along front boundary wall of sugar unit shows **pH- 4.6**, **COD-2448 mg/l** , **BOD-1604 mg/l**, which are on higher side of typical sewage characteristics i.e. **pH** in range of 6.5 to 8.5, BOD in range of 200 mg/l -300 mg/l, COD in range of 400 mg/l -550 mg/l which indicates that the Sugar effluent got mixed with the domestic sewage drain, however no bypass of effluent/waste water was observed from the boundary wall into the drain as the drain was covered.
2. The unit has not installed Sewage Treatment Plant (STP) for sewage generated from colony located inside the unit premises; however, the unit provided purchase order of STP (P.O. No.-4100007977) dated 16.10.2020 with capacity of 220 KLD, which was under installation.
3. The unit had two lagoons for storage of treated effluent. One with impermeable base having capacity of 10000 m^3 and second having PVC sheets with 4000 m^3 capacity and retention time of 15 days. The second lagoon was a Kachcha lagoon with improper lining of PVC sheets also mentioned in previous finding. Treated effluent is being used for irrigation purpose.

Observations w.r.t. previous findings:

1. Primary clarifier was found operational during the inspection.
2. The unit has installed seven hazardous tanks for storing the effluent generated during hydrojet tube cleaning/ chemical cleaning by caustic and sulfamic acid (2- caustic solution storage tank and 2 -sulfamic acid solution storage tank and 3- wash storage tank) in the boiling house.
3. The unit has provided purchase order (P.O. - No.-4100007975, dated 16.10.2020) for the installation of Condensate Polishing Unit (CPU) with RO membrane for high pressure boilers (105 kg/cm^2).
4. The unit has installed decanter for better management of sludge handling system.
5. The unit has maintained proper logbook for the generation and disposal of ETP sludge, boiler ash, and other solids.
6. No bypass arrangement in the unit premises was observed during the inspection.

Recommendations

The unit shall take measures to stop discharge of spillage/surface runoff containing wastewater from industrial premises into drain (Ikra drain and drain coming from city along boundaries of sugar unit) and shall maintain water quality of the drain.

1. The unit shall maintain and calibrate the flow meter installed at Spray pond overflow.
2. The unit shall install the CPU for high-pressure boiler at earliest.
3. The unit shall install the Sewage Treatment Plant (STP) for sewage generated from colony at the earliest.
4. The unit shall convert the 4000 m^3 capacity storage lagoon in to lined impermeable lagoon to avoid any possibility of leakages and must ensure the compliance of stored treated effluent w.r.t. notified discharge standards under E(P) Rules, 1986.
5. The unit shall dismantle the sump having capacity of 100 KL located in bio-compost yard of 10 acres.
6. Unnecessary lines for ETP feed near falling structure shall be dismantled immediately.
7. Abandoned old pumping station along with connecting line shall be dismantled.
8. Filter backwashing tank of suitable design capacity shall be installed for filter backwashing. Existing fresh water line in ETP area shall be dismantled.
9. Provision shall be made for DM plant CIP reject shall be treated in ETP only.
10. Unit shall ensure the proper marking of electromechanical items and connected pipeline. Proper color-coding shall be adopted.

2) M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnore, UP

Observations

1. The unit has dismantled its 02 lagoon of capacity 10173 m3 and 6159 m3. The supply pipeline of spent wash to these tanks has also been dismantled and disconnected. The unit has filled both the lagoons with distillery boiler ash.
2. Previously, the unit had opted bio composting as well as incineration boiler for achieving Zero Liquid Discharge (ZLD), however as informed by the unit representative that the process of bio-composting has been discontinued from June-2020 and presently the unit has opted for concentration incineration system. During joint inspection, the bio-composting operation was found not in operation.

3. The unit has informed that to achieve ZLD, previously the system consisted of Bio-methanation followed by MEE followed by Incineration and bio composting both. However, from last 4-5 years the unit has stopped the use of bio-digesters and directly feeding the raw spent wash to SMEE and IMEE for concentration.
4. The unit is planning to dismantle these bio-digesters. As informed by the unit representative, these bio-digester contains approx. 30000 KL of bio-methanated sludge containing spent wash. The unit is planning to completely exhaust/utilize this bio-methanated sludge containing spent wash in bio composting by 30, June 2021. In this context, the unit has submitted a letter dated 04.01.2021 to MS, UPPCB requesting for temporary permission of bio-composting upto 30 June 2021 for utilization of surplus of bio-methanated sludge containing spent wash, which is stored in the bio-digester of the distillery.
5. For treatment of domestic wastewater generating from the residential colony, sugar plant and distillery plant, the unit is going to install a Sewage Treatment Plant (STP) of 220 KLD capacity and during joint inspection, the STP construction work was found under progress.

Recommendations

1. The unit has total 03 nos. of tube wells against 02 nos. of permitted tube wells as per CGWA NOC. The unit shall dismantle the 3rd no. of non-operational tube well.
2. The unit shall complete the construction work of STP at the earliest and shall treat the sewage generating from the residential colony as well as industrial plants in STP only.
3. The unit shall ensure complete filling of both the lagoons of capacity 6159.60 KL and 101753 KL with ash.
4. If the concerned state pollution control board allows the unit to carry out temporary bio-composting for utilization of bio-methanated sludge, in that case the unit shall comply with the following;
    a) The unit shall ensure to consume the bio-methanated spent wash in bio composting before monsoon season.
    b) After completion of the temporary bio composting, the unit shall completely dismantle the pump sump of MEE concentrate, which is located at bio-compost yard of 10 acres.
    c) After completion of the temporary bio composting, the unit shall completely dismantle the newly built pipeline.

3) M/s Dhampur Sugar Mills Ltd. (Sugar Unit), Asmoli, Sambhal, UP

Observations

1. The NOC for ground water withdrawal has expired on 02/05/2019, however, the unit has applied for the same to be obtained from Ground Water Department, Uttar Pradesh on 30.11.2020.
2. Decanter is also installed but is still to be commissioned for mechanical sludge handling. The unit has provided Proforma Invoice/Purchase Order (P.O. No.-4100007358) dated 30.07.2020.
3. The lagoon capacity of 16000 m^3 is adequate for 10-11 days, which is less than the 15 days of holding capacity of treated effluent storage during no demand of period for irrigation purpose. However, it is also mentioned in validation of ETP performance report performed by National Sugar Institute, Kanpur, submitted of 14.10.2020.
4. Analysis result of sample collected from ETP outlet (pH-7.2 against 5.5-8.5, COD- 128 mg/l against 250 mg/l, BOD- 36 mg/l against 100 mg/l, TSS- 64 against 100 mg/l, TDS- 732 mg/l against 2100 mg/l, O & G- 06 against 10 mg/l and Lagoon outlet (pH-7.4 against 5.5-8.5, COD- 76 mg/l against 250 mg/l, BOD- 21 mg/l against 100 mg/l, TSS- 25 against 100 mg/l, TDS- 896 mg/l against 2100 mg/l) shows that ETP is complying w.r.t the discharge standards for land disposal.
5. The team has observed that the unit is discharging domestic sewage into the Sot River through a channel, which was also connected with the treated effluent storage lagoon for irrigation.
6. The retention capacity of lagoon is around 10 days (i.e. 16000m3 capacity of lagoon and treated effluent discharge is 1561.45 KL), thus, the lagoon capacity is less than the maximum permissible storage of 15 days.
7. The unit has not installed Sewage Treatment Plant (STP) for treatment of sewage generated from residential colony, however, the unit is in the process of setting up of STP having capacity 60 KLD, for sewage treatment of residential area. The unit has provided the Purchase Order for the same.

Recommendations

1. The unit shall provide suitable capacity dosing pump for dosing of chemicals like lime and polyelectrolyte solution for optimum utilization of chemical as per feed flow condition.
2. The unit shall safely dispose scrap/metal.
3. The unit shall commission Decanter for better sludge management.
4. The unit shall repair partition wall sludge drying bed.
5. The unit shall install Condensate Polishing Unit (CPU).
6. The unit shall install Sewage Treatment Plant (STP) for treatment of sewage generated from residential colony as soon as possible.
7. The unit shall restrict the drainage of domestic sewage into irrigation channel coming from residential area.
8. The unit shall obtain the NOC from Ground Water Department, Uttar Pradesh as soon as earliest.

4) M/s Dhampur Sugar Mills Ltd. (Sugar Unit), Meerganj, Bareilly, UP

Observations

1. NOC issued by CGWA was valid up to 07.06.2020 for the abstraction of ground water from 04 tube wells of total quantity 743 m^3/day (not exceeding 99,356 m^3/year). The unit has applied for renewal of CGWA NOC dated 28.04.2020. Apart from 04 permitted borewells, one additional bore-well was observed near residential colony of the unit, which is violation of CGWA NOC conditions, however the unit has provided the photographic evidence of this dismantled borewell.
2. The unit is engaged in production of sugar with consented capacity of 5000 TCD using sugarcane. On the day of inspection, the unit was found operational. The unit started cane crushing on 3rd November, 2020. On the date of 13.01.2021, the sugar plant was operated at 5350 TCD. The ETP was reported to be operational from 27.09.2020.
3. The earlier reported bypass of untreated effluent through a pipeline laid underground up to Peelakhar river in Sindholi Village, found removed and a slope joining Peelakhar river also found dry during the inspection.
4. Previously, the unit had two lagoons of 5000 m^3 and 2200 m^3 capacity for storage of final treated effluent. However, during joint inspection, it was found that, the unit has kept only one lagoon of 5000 m3 capacity for storage of final treated

effluent and the second lagoon of 2200 m3 capacity converted into aeration tank for spray pond overflow treatment.

5. The lagoon capacity of 5000 m3 is adequate for only 6-7 days, which is less than the maximum permissible storage of 15. However, it is also mentioned in validation of ETP performance report performed by National Sugar Institute, Kanpur in the month of March, 2020.
6. Treated effluent as claimed by unit was being provide to farmers via fixed HDPE pipeline but unit was not able to make the line operational and no flow was observed at the point of treated effluent supply to farm land. After about 3-4 hours, the flow was observed at the point in farmland in the HDPE line from where sample was collected. This indicates that unit is not providing regularly for irrigation via HDPE pipeline. Sample analysis also shows high BOD (122 mg/l) and COD (196 mg/l) indicates no supply of treated effluent for irrigation regularly.
7. To treat the domestic wastewater generated from this colony, the unit has installed 50 KLD Sewage Treatment Plant (STP) and laying of the pipeline connection was under progress. STP was not operational at the time of inspection.
8. Ponding of untreated sewage observed besides the boundary wall of the sugar mill.

Observations w.r.t. previous findings:

S.No.	Recommendations in previous inspection dated 29.11.2019	Observations w.r.t. previous recommendations/findings
1	The unit must dismantle the bypass line (PVC pipe) from the premises to the river Peelakhar and ensure that the untreated/partially treated effluent shall not be discharged outside the premises in any case.	The bypass line of PVC pipe from the unit premises to the river Peelakhar is now being used as irrigation line for providing treated effluent to farmers by giving points at various locations.
2	Unit shall maintain the logbook for the generation & disposal of ETP effluent, sludge, Boiler ash, hazardous	The unit has maintained the logbook for the generation & disposal of ETP effluent, sludge, boiler ash (Avg. 224.5 Quintal/day as per logbook

	waste and other solid wastes.	record from 03.11.2020 to 30.11.2020), hazardous waste (Avg. 0.40 kg/day as per logbook record from 01.11.2020 to 31.12.2020) and other solid wastes.
3	Unit shall install the flow meters at the places as recommended by National Sugar Institute (NSI), Kanpur.	The Unit has installed flow meters at power turbine cooling, boiler, wet scrubber, B & C Massecuite cooling as recommended by NSI, Kanpur in validation report of ETP for season 2018-19. The same has been verified by the joint inspection team on 14.01.2021.
4	All domestic wastewater generated within the premises and colony shall be discharged after proper treatment. The unit shall install Sewage Treatment Plant (STP) for the treatment of domestic wastewater.	The installation of Sewage Treatment Plant (STP for the treatment of domestic waste water generated from the colony was under progress on the day of joint inspection, however the unit has provided photographic evidence of operational STP via email dated 22.01.2021).

Recommendations

1. ETP inlet flowmeter should be installed at the main inlet of ETP.
2. Periodic removal of sludge shall be ensured.
3. Flow meter shall be installed at mill house and boiling house outlet for monitoring of generated effluent.
4. The oil skimmer shall be installed within a tank having approximate retention time of 45 min.
5. The treated effluent discharges for irrigation shall comply with MOEFF&CC Notification dated 14.01.2016 (G.S.R. (35E)) for land disposal.

6. Installed STP shall be made operational for treatment of generated sewage. Treated sewage shall be utilized for irrigation & other purposes.
7. The unit shall keep only single arrangement to pump the treated effluent from the lagoon to irrigation supply.
8. Unit shall obtain amended Hazardous waste authorization from UPPCB to handle and safe disposal of discarded containers, oily rags, cotton waste, O&G and spray pond ETP sludge.
9. All possible efforts shall be made to ensure consistent compliance of the standards referred.

The Tribunal vide the same order also directed UPPCB to respond to the IA no.376/2020 filed by applicant in the concerned matter. However, as requested by UPPCB, CPCB has prepared the response to the IA no.376/2020 in compliance to Hon'ble NGT order to be filed separately in the Hon'ble Tribunal.

Now, this Compliance Report is submitted in compliance of Hon'ble NGT order dated 09.11.2020.

ANNEXURE-I

Item No. 09 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 539/2019
(I.A. No. 376/2020)

(With report dated 05.10.2020)

Adil Ansari Applicant

Versus

M/s Dhampur Sugar Mills Ltd. & Ors. Respondent(s)

Date of hearing: 09.11.2020

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

Applicant: Ms. Preeti Singh, Advocate

Respondent(s): Mr. Rajkumar, Advocate for CPCB
Mr. Pradeep Misra and Mr. Daleep Dhyani, Advocates for UPPCB
Mr. Sandeep Singh, Advocate for State of UP
Mr. A.A. Aron, Advocate for M/s Dhampur Sugar Mills Ltd.

ORDER

1. The issue for consideration is the remedial action for violation of environmental norms by M/s Dhampur Sugar Mills Ltd. (Sugar Division), District Sambhal, sugar mill units in District Bijnor and District Bareilly and Distillery in District Bareilly.

2. The matter has been earlier considered by several orders including orders dated 14.08.2019, 04.02.2020 and 03.07.2020. It will be suffice to reproduce the relevant part from the said orders. Order dated 14.08.2019 is as follows:-

> *"1. Grievance in this application is that M/s Dhampur Sugar Mills Ltd. (Sugar Division), District Sambhal and sugar mill units in District Bijnor and District Bareilly and Distillery in District Bareilly were operating in violation of environmental norms. The unit at Dhampur was directed to be closed earlier vide*

order dated 23.04.2015 passed by this Tribunal and was allowed to reopen by subsequent order subject to certain conditions, including payment of Rs. 1 Crore towards environmental compensation and furnishing a bank guarantee of Rs. 10 lakhs. However, the pollution still continues to operate without compliance of conditions. Other units in Bijnor and Bareilly Districts are also operating illegally and so is the Distillery unit in Bareilly District.

2. *On 27.06.2019, Notice was issued by this Tribunal with reference to the allegations in the application. Reply has been filed by the UP State PCB which is practically of no value. Reply has been filed by the CPCB is that the closure directions have been issued in respect of Dhampur unit of Sugar Mill. Besides, show cause notices have been issued to other two Sugar Mills at Bareily and Sambhal. Distillery unit at Bareilly is non-functional on account of off season.*

3. *Let the CPCB and State PCB furnish a further joint factual and action taken report with regard to all the four Units (three sugar mills and one distillery unit) by 30.11.2019 by e-mail at judicial-ngt@gov.in."*

3. Order dated 04.02.2020 is as follows:-

"4.0 M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor -

4.8 Observations

i. *The Unit and ETP were found operational during the inspection.*
ii. *The Unit have valid consent to operate issued by UPPCB, under of Water Act and Air Act till 31.12.2019.*
iii. *The primary clarifier was found non-operational during inspection. However, as per analysis report of sample collected from ETP outlet, TSS was below detectable limit, therefore the possibility of dilution cannot be ruled out.*
iv. *The Unit has not installed flow meters at Mill Fibrizer, Mescuite cooling and RO reject as it was recommended in validation report of ETP for session 2018-19 by National Sugar Institute (NSI), Kanpur.*
v. *The Unit has not installed the Hazardous tank in the boiling house.*
vi. *The treated effluent is stored in lagoon of 4000 KL capacity for utilization for irrigation purposes.*
vii. *The Unit has provided Kachcha lagoon (for storage of treated effluent) having lining of PVC sheets, which is not proper and it may result in leaching under wear & tear condition.*
viii. *The Unit has installed two dryers (for baggase), using the flue gases from stack of the boiler. The utilization of boiler ash at bio-compost site was observed and transport receipts were verified and found matching.*

ix. *The Unit has not yet installed the Condensate Polishing Unit (CPU) for high pressure boilers (105 Kg/cm²).*

x. *The Unit has installed additional MGF and ACF for tertiary treatment as the installed capacity of MGF and ACF was inadequate.*

xi. *The mechanical sludge handling system for better management of sludge waste is not provided by the Unit. As reported by representative of the Unit, the purchase order has been issued for Decanter of 6 m³ per hour capacity.*

xii. *The Unit has not provided and did not maintained the logbook for the generation and disposal of ETP sludge, Boiler ash and other solid wastes.*

xiii. *The unit is yet to comply with CPCB direction dated 01.07.2019 by dismantling the bypass provision. However, during visit the discharge of effluent was not observed by the team.*

xiv. *The team also collected the wastewater sample from the local drain (Ikara Nalla) flowing adjacent to the Unit premises. The characteristic of the wastewater is as:*

Table 4 ***Characteristics of Wastewater flowing through Ikara drain***

Sampling point	Latitude/ Longitude	pH	COD (mg/L)	BOD (mg/L)	Sulphate (mg/L)	TSS (mg/L)	TDS (mg/L)	NH3-N (mg/L)	Phosphate (mg/L)
Ikara Drain at u/s of the Unit	29.292038/ 78.510125	6.88	438	122	137	1200	500	34	3
Ikara Drain at d/s of the Unit	29.290151/ 78.5088303	7.11	776	177	73	1435	468	35	3.1

xv. *The value of COD in the drain waste water is more than that for raw sewage, which shows the addition of industrial effluent in to drain.*

xvi. *The Unit does not have STP facility for the treatment of domestic wastewater. The domestic waste water is collected, Treated in septic tank and disposed through Soak pits installed in the Units premises.*

4.9 Recommendation:

1. ***The Unit must dismantle the by-pass line provided within the premises and ensure that only treated effluent shall be discharged outside the premises.***
2. ***The Unit shall maintain the log-book for the generation and disposal of ETP sludge, Boiler Ash and other solid wastes.***
3. ***The Unit shall ensure to implement the recommendation made by National Sugar Institute (NSI), Kanpur in validation report of ETP (for season 2018-19).***

4. *The Unit shall install Condensate Polishing Unit (CPU) for high pressure boilers (105 Kg/cm^2).*
5. *The Unit shall explore the possibility of maximum utilization of treated effluent in different process.*
6. *The lagoon must be properly lined to prevent leaching/ contamination of ground water.*
7. *Domestic waste water (sewage) generated within the premises and colony shall be discharged after proper treatment. The Unit shall install Sewage Treatment Plant (STP) for the treatment of Sewage.*
8. *The Unit shall obtain NOCs from CGWA for withdrawal of groundwater at earliest, as the NOC has already expired in April, 2019.*
9. *The Unit's NOC from CGWA expired on 27.04.2019, but Unit has continued to withdraw groundwater without valid NOC. The CGWA may be requested to verify the status of ground water recharge by the unit and accordingly EC may be calculated.*

4.10 Action taken status

1. *In crushing season 2016-17, unit was non-operational during the inspection due to off- season. CPCB issued compliance direction dated 02.11.2017 under section 5 of the Environment (Protection) Act, 1986 for carrying out adequacy assessment of ETP through govt. repute institutions.*

2. *In crushing season 2017-18, CPCB issued show cause notice dt.07.05.2018 under section 5 of the Environment (Protection) Act, 1986 to the unit for non-compliance of BOD-53 mg/I against norms of 30 mg/I with surface water discharge norms prescribed under Environment (Protection) Rules,1986.*

3. *CPCB issued compliance direction dated 16.11.2018 under section 5 of the Environment (Protection) Act, 1986 for implementation of charter.*

4. *In crushing season 2018-19, unit was found non-complying w.r.t. bypass of untreated effluent. BOD- 56 mg/I, TSS-35 mg/I and CPCB issued closure direction dated 23.04.2019 and 01.07.2019 under section 5 of the Environment (Protection) Act, 1986 and levied Environmental Compensation (EC) of Rs 57,30,000/-.*

5. *CPCB issued compliance direction dated 06.11.2019 under section 5 of the Environment (Protection) Act, 1986 and levied EC of Rs 16,20,000/. As per the revised policy dated 04.09.2019 and 01.11.2019.*

6. *The unit deposited EC in ESCROW account and submitted action plan for utilization of the EC amount. Action plan has been evaluated by CPCB and approved for execution.*

B. 5.0 M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnor

5.6 Observations:

i. *On the day of inspection, the distillery unit and spent wash management system were found operational.*

ii. *The Unit has consent to operate at 200 KLPD under Water Act, 1974 and Air Act, 1981 both having validity up to 31.12.2019.* ***(Annexure 2a, 2b).***

iii. *The Unit has three bore-wells to meet the water requirement of production and domestic consumption. Out of three bore-wells, only two are in use, as per information provided by industry officials. Flow meters have been installed on each bore well. Average daily water consumption is calculated as 1234.44 KLPD based on three months (Sept, 2019-Nov, 2019) logbook data of flow meters. However, as per water balance data provided by Unit, fresh water requirement is 1726 KLPD.*

iv. *The Unit's NOC for groundwater abstraction has expired on 07.04.2019 and it has applied for renewal of NOC on 17.02.2019.*

v. *Total alcohol production during last six months (May, 2019-Oct, 2019) was 36429.06 KL. Therefore the average production is 6071.51 KL/month i.e. 202.38 KLPD.*

vi. *The Unit has provided production data certified by Excise department, data of raw spent wash generation, details of MEE- concentrate and condensate generation, utilization; as well as spent wash consumption for bio-composting and incineration.*

vii. *As per adequacy report of April,2019 prepared by NSI, Kanpur, the adequacy of ZLD system has been certified for 250 KLPD.*

viii. *The Unit has installed mass flow meters with totalizer at inlet and outlet of SMEE as well as inlet and outlet of IMEE. All mass flow meters are connected to CPCB sever. Mass flow meter readings at the time of inspection is presented below:*

Table 8: Details of mass flow meters

SI.No	Mass flow meter	Totalizer reading at inlet	Totalizer reading at outlet
1.	SMEE	1218230.02 MT	278455.46 MT
2.	IMEE	107701 MT	33854 MT.

ix. The raw spent generation as per mass flow meter data during last six months (May, 2019- Oct, 2019) was 3,52,943 MT while concentrated spent wash generation for 6 months is 28736 MT (for 30 °Bx) and 86492 MT (for 58 °Bx) against consumption of 27682 MT in bio-composting and 86442 MT in incineration respectively.

x. As per logbook data of six months, overall average spent wash generation is 9.59 KL per KL of alcohol produced.

xi. As per information provided by industry officials, the average efficiency achieved through SMEE and IMEE is 67.35%.

xii. The concentrated spent wash after third stage evaporator having 30°Bx is utilized for bio composting while concentrated spent wash after the finisher evaporation having 55-60°Bx is incinerated and process condensate is treated in the Condensate-Polishing Unit (CPU).

xiii. At the time of inspection, 120 KLPD distillation Unit with integrated Multi Effect Evaporator (IMEE) was not in operation due to power tripping on 27.11.2019 morning as informed by industry officials. It could only restart on 28.11.2019 afternoon.

xiv. At the time of inspection, the density of spent wash at inlet and outlet of the standalone MEE was 1026.87 Kg/m^3 and 1226.89 Kg/m^3 respectively.

xv. As per logbook data, average feed to SMEE is 1044 KLPD while average quantity withdrawn after third stage is 287.8 KLPD and average conc. Spent wash from SMEE after fifth stage is 277.7 m^3/day.

xvi. The Unit has installed Condensate Polishing Unit (CPU) consisting of three stage RO technology. As per information provided by the industry, the design capacity of the CPU is 2600 m^3/day whereas as per revalidated adequacy report dated 29.05.2019, the design capacity of the CPU is 2500 m^3/day. The sources of effluent coming into CPU include MEE condensate (2100 m^3/day), spent lees (300 m^3/day), cooling tower and boiler blow downs (200 m^3/day). While the RO permeate (2000 m^3/day) is used in process and non-process activities like molasses dilution, cooling tower make up as well as non-process activities like fire safety and gardening, the RO reject (600 m^3/day) is circulated back to the MEE.

xvii. There are total of seven tanks/lagoons of which six tanks for spent wash management are within the Unit premises and one at the bio-compost yard site. Details of the tanks within premise and in bio-compost yard are given below:

Table 9: **Details of lagoons for spent wash management**

Sl. No.	Identification	Condition during inspection	Capacity (as provided by the Unit)	Purpose
1.	Settling tank	Filled	2492KL	Used as Settling Tank
2.	Settling tank	Filled	3396KL	Used as Settling Tank
3.	Tank 1	Completely filled	1500KL	Used as buffer tankbefore SMEE
4.	Lagoon 3	Half filled	6050KL	Storage of conc. spent wash, raw spent wash, RO reject
5.	Lagoon 4	Empty	10,000KL	Used as standby for storage of spent wash in case of sudden breakdown of operations.
6.	Tank 2	60% filled	400KL	Storage of MEE concentrate before bio composting
7.	Tank 3	Closed tank. Conc.Spent wash (slop).	207KL	Storage-cum- Pump sump of MEE concentrate before incineration.

On the day of inspection, settling tank-1 (2492 KL) and settling tank-2 (3396 KL) were observed to be full with raw spentwash combined with RO reject and stormwater accumulated in open drains in the industry premises.

Based on above data, total raw spent wash plus CPU (RO) reject stored in all tanks work out to be 10413KL (2492+3396+1500+0.5*6050).

xviii. There was a 10,000 KL capacity empty lagoon which was informed to be used for storage of effluent in cases of emergency breakdown of ZLD system.

xix. The Consent to Operate does not indicate the amount of spentwash to be utilized in biocomposting and amount to be incinerated. As per revalidated adequacy report submitted in May,2019, 10.56 M^3/hr of 30°Bx concentrated spentwash is utilized in biocomposting while 22.5 M^3/hr of 57.9°Bx is incinerated in incineration boiler while based on logbook data in May,2019, 36.86% is utilized in biocomposting while 63.14% is used in incineration, similarly, in June, 2019, 46.93% is used in biocomposting and 53.67% is incinerated. For the the period from July, 2019 to October, 2019, 10% of concentrated spentwash is utilized in biocomposting while 89% of the spentwash is incinerated in slop furnace (as boiler fuel).

xx. The existing active area for bio-composting is 16 acres while required area for 4 cycles of biocomposting is 14.6 acres.

xxi. The unit has installed only one piezowell/piezometer in the bio-compost yard of 10 acres area.

xxii. *Incinerator design capacity is 75 TPH with maximum feed rate of 26 MT/hr and at the time of inspection it was operating at feed rate of 18TPH.*

xxiii. *The Unit uses 25.5 TPH of MEE slop with 13-15 TPH of bagasse as fuel for the incinerator boiler. Flowmeter is installed at the feedline of the slop boiler. At the time of inspection, flowmeter reading was 1088.77 kg/hr. Around 30 MT/day of ash is generated from the incinerator, which is utilized for mixing with bio-compost and for land filling within the Units premises.*

xxiv. *The Unit has installed mass flow meters at inlet and outlet of SMEE as well as inlet and outlet of IMEE. Also, PTZ camera is installed at the bio-compost area.*

xxv. *The Unit has a bottling plant and sample was collected from its final outlet.The effluent from bottling plants collected, pumped and reused into cooling tower. Cooling tower blow down is treated through CPU.*

xxvi. *At the time of inspection, samples were collected from various locations of the distillery unit to verify the efficiency of the ZLD system. Analysis results are represented below:*

Table 10: ***Characteristics of spent wash and other effluents in distillery Unit.***

S.No.	Sample location	Parameters					
		pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	TS (mg/l)
1.	Raw spentwash	4.72	154776	-	-	-	167330
2.	MEE feed	5.42	121967	-	-	-	120590
3.	MEE concentrate	5.2	283353	-	-	-	485910
4.	Conc. Spentwash in storage tank	5.04	494155	-	-	-	496010
5.	SW in buffer tank	4.73	192825	-	-	-	196390
6.	SW in lagoon of biocompost yard	4.85	280935	-	-	-	260610
7.	Feed to incinerator	4.85	471987	-	-	-	444270
8.	CPU feed	4.77	2697	1230	15	1548	-
9.	CPU permeate	4.3	1013	323	<10	164	-
10	CPU reject	4.98	9332	5083	<10	4000	-
11.	MEE condensate	3.52	16076	9750	-	756	840
12.	Spent lees	3.76	5668	3200	-	400	488
13.	Final outlet of bottling plant	5.41	333	234	-	-	164

xxvii. *As per the analysis report, raw spentwash has COD of 154776 mg/l and total solids 167330 mg/l while raw*

spentwash stored in buffer tank has COD of 192825 mg/I and total solids of 196390 mg/I.

xxviii. *Analysis report indicates that feed to SMEE has COD and TS of 121967 mg/I and 120590 mg/I respectively while concentrated spentwash has COD of 283353mg/I and TS of 485910 mg/I.*

xxix. *Samples collected from lagoons for concentrated spentwash and spentwash in the lagoon in biocompost yard indicated TS of 496010 mg/I and 260610 mg/I respectively*

xxx. *As per the analysis report, CPU permeate has* ***pH of 4.3, COD- 1013 mg/I, BOD-323 mg/I*** *and TDS of 164 mg/I and is reported to be used for both process and non-process activities including fire safety and gardening. The quality of treated condensate indicate non compliance w.r.t land discharge norms.*

xxxi. *The analysis report indicate acidic characteristic of CPU permeate, reject, MEE condensate and final effluent from bottling plant.*

xxxii. *Analysis report of sample collected from final outlet of bottling plant indicated pH 5.41, BOD of 234 mg/I and COD 333 mg/I. It was informed that effluent from bottling plant is stored in a tank and further pumped as cooling tower makeup water.*

xxxiii. *The team also collected wastewater sample from the local drain (Ikara Nalla) flowing adjacent to the unit premises. The characteristic of the wastewater is as follows:*

Sampling point	Latitude/ Longitude	pH	COD (mg/L)	BOD (mg/L)	Sulphate (mg/L)	TSS (mg/L)	TDS (mg/L)	NH_3_N (mg/L)	Phosphate (mg/L)
Drain at u/s of the unit	29.292038/ 78.510125	6.88	438	122	137	1200	500	34	3
Drain at D/s of the unit	29.290151/ 78.5088303	7.11	776	177	73	1435	468	35	3.1

5.7 Recommendations.

1. ***The utilization of CPU permeate having pH of 4.3, COD- 1013 mg/I against 250 mg/I and BOD-323 mg/I against 100 mg/I in non process activities like gardening, is a violation of ZLD norms and should be stopped immediately.***

2. ***The Unit's NOC from CGWA expired on 07.04.2019, but Unit has continued to withdraw groundwater without valid NOC. The CGWA may be requested to verify the status of ground water recharge by the unit and accordingly EC may be calculated.***

3. ***Based on the available active area for biocomposting (16 acres), Unit can have lagoon capacity of ~9675 M³ for 30 days' storage of conc. spentwash (30°Bx) and 3116 M³for seven days' storage of concentrated spentwash (55 °Bx) in compliance to CPCB direction dated 07.12.2015. The extra lagoon of capacity 10,000 m³ shall remain vacant and not be used without obtaining permission from UPPCB.***

4. ***The Unit should install three piezowells around biocompost yard as per SOP for distilleries.***

5.8 *Action taken status of CPCB on M/s Dhampur Sugar Ltd (Distillery Sector), Bijnor*

1. *The Unit was issued Show Cause Notice dated 06.02.2018 for noncompliance to direction dated 14.06.2017 issued under Section 5 of Environment (Protection) Act, 1986.*

2. *The Show Cause Notice was revoked on 08.08.2018 following compliance to CPCB direction dated 06.02.2018.*

5.9 *Action taken status of UPPCB on M/s Dhampur Sugar Ltd (Distillery Sector), Bijnor, U.P*

1. *Based on inspection carried out by UPPCB officials on 02.08.2019, a Show cause notice dated 13.08.2019 along with imposition of environmental compensation of Rs. - 6,75,000/- has been issued to the Unit for violation of ZLD norms, illegal disposal of spentwash in agricultural fields of nearby village-Fena, Chandpur.*

C. *6.0 M/s Dhampur Sugar Mills Ltd (Sugar Unit), Asmoli, Sambhal*

6.8 *Observations*

i. *The manufacturing unit and ETP were found operational during the inspection.*

ii. *The Unit have CTO (Consent to Operate) under Water Act, 1974 and Air Act, 1981 valid till 31.12.2019.*

iii. *The Unit has installed flow meters at fresh water, cold water and hot water consumptions points as recommended by National Sugar Institute (NSI), Kanpur.*

iv. *The Unit has installed three (3Nos) of Hazardous tanks with capacity of 43m³, 27m³ and 36m³ for collecting of wash water generated during chemical /mechanical cleaning of evaporators.*

v. *The treated effluent from ETP is stored in a lagoon of 16000 KL capacity for utilization for irrigation purposes.*

vi. *The Unit has installed two dryers (for baggase), using the flue gases from stack of the boiler. Dryers were found operational.*

vii. *Wet scrubber (common to 70 TPH & 50 TPH boilers) was not in working condition.*

viii. *The Unit has installed two stage, 2Nos Reverse osmosis (RO) plants for the treatment of 2 nos boilers blow down.*

ix. *A new MGF (Multigrade Filter) and ACF (Activated Carbon Filter) for tertiary treatment was under installation as the installed capacity of existing MGF and ACF was inadequate.*

x. *The Unit has not provided/maintained the logbook for the generation and disposal of ETP sludge and other solid wastes. However, for boiler ash disposal, documents of transportation and receipts were shown and verified with logbook at Bio-compost yard site of distillery of M/s Dhampur group.*

xi. *The team also collected the sample from drain (Lat. 28.711214, Long. 78.544426) flowing adjacent to the Unit premises. The characteristic of the wastewater is as:*

Table 14: ***Characteristic of wastewater flowing through drain adjacent to M/s Dhampur Sugar Mills Ltd., Asmoli***

Sampling point	***pH***	***COD (mg/L)***	***BOD (mg/L)***	***Sulphates (mg/L)***	***TSS (mg/L)***	***TDS (mg/L)***
Drain after mixing	*7.85*	*70*	*15*	*238*	*44*	*1236*
Drain /sewage	*7.45*	*195*	*97*	*16*	*99*	*700*
Ponding,in Sot river	*7.82*	*73*	*12*	*127*	*39*	*1204*

xii. *The Unit does not have facility for the treatment of domestic wastewater and untreated sewage is discharged and mixed with treated effluent of the sugar Unit.*

6.9 Recommendations:

1. ***Unit shall maintain the log-book for the generation and disposal of ETP sludge and other solid wastes including boiler ash generation.***
2. ***Unit should install Condensate Polishing Unit (CPU) for high pressure boilers (105 Kg/cm^2) to treat process condensate for reuse in process. This will help in reduction of fresh water consumption.***
3. ***The Unit must ensure the maximum reuse of treated effluent in process.***
4. ***Wet scrubber (attached to Boilers 70TPH & 50TPH) should be made operational before start of the attached boiler.***
5. ***All domestic waste water generated within the Unit's premises and residential colony shall be discharged after proper treatment. The Unit shall install Sewage Tretment Plant (STP) of adequate capacity for the treatment of domestic wastewater.***
6. ***The Unit shall obtain NOCs from CGWA for withdrawal of groundwater at earliest as the CGWA NOC has already been expired in May, 2019.***
7. ***The Unit's NOC from CGWA expired on 02.05.2019, but Unit has continued to withdraw groundwater without valid NOC. The CGWA may be requested to verify the status of ground water recharge by the unit and accordingly EC may be calculated.***

6.10 Action taken status

1. *In crushing season 2016-17, unit was found non-complying w.r.t. discharge standard and CPCB issued show cause notice dt.16.01.2017 under section 5 of the Environment (Protection) Act, 1986.*
2. *CPCB issued direction dated.29.06.2017 under section 5 of the Environment (Protection) Act, 1986 for carrying out adequacy assessment of ETP through govt. repute institutions.*
3. *CPCB issued compliance direction dated 02.11.2017 under section 5 of the Environment (Protection) Act, 1986 for carrying out adequacy assessment of ETP through govt. repute institutions.*
4. *In crushing season 2017-18, unit was found non-complying w.r.t. bypass of untreated effluent and CPCB issued closure dt.07.02.2018 under section 5 of the Environment (Protection) Act, 1986.*
5. *CPCB issued compliance direction dated 22.10.2018 under section 5 of the Environment (Protection) Act, 1986.*
6. *In crushing season 2018-19, unit was found complying and CPCB issued compliance direction dt.20.05.2018 under section 5 of the Environment (Protection) Act, 1986.*

D. 7.0 M/s DSM Sugar Meerganj, Sidhauli Road, Meerganj, Bareilly,

7.8 Observations

i. *The manufacturing unit and ETP were found operational during the inspection. The inflow to ETP (flowmeter reading) during the inspection was observed 34.0 m³/hour which is equivalent to 616 KLD against the installed capacity of 1000 KLD ETP.*

ii. *The oil skimmer in oil grease trap was not properly installed and the level of effluent was at bottom/ below the belt.*

iii. *MLSS growth in Aeration tank was observed satisfactory.*

iv. *The Unit has not installed flow meters at power turbine cooling, boiler, wet scrubber, B & C Massecuite cooling as it was recommended by National Sugar Institute (NSI), Kanpur in validation report of ETP for season 2018-19.*

v. *The Unit has installed MGF and ACF for tertiary treatment.*

vi. *The mechanical sludge dewatering/handling system for better management of wet sludge is not provided by the Unit.*

vii. *The Unit has not provided/maintained logbook for daily effluent generation and treatment, disposal of ETP sludge, Boiler ash and other solid wastes.*

viii. *A part of Cooling Tower overflow is being mixed with raw effluent and the rest is being treated in lamella through a separate channel. The channel carrying Cooling Tower overflow to raw effluent channel should be regulated by valve or sluice gate which may be controlled once Unit starts making refined sugar using Double Sulphitation Process.*

ix. *The Unit was bypassing the untreated effluent through a pipeline laid underground up to Peelakhar River in Sindholi Village (Lat: 28.556169 and Long: 79.241446) which ultimately meets River Ramganga. This was shown to the Unit's representatives, who accepted the discharge of wastewater and they explained that the PVC pipeline is laid for disposal of storm/rain water from the mill premises to Peelakhar.*

x. *Samples of untreated effluent bypassed through PVC pipe and flowing through a drain were collected by the CPCB team. The characteristics of the effluent are is given below:*

Table 18: ***Characteristics of by-passed effluent by M/s Dhampur Sugar Mills Ltd., Meerganj***

Sample Analysis	pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	Sulphate (mg/l)	Color (Hazen)
Multiple outlet/bypass (drain)	5.40	1306	890	248	2464	274	216

Multiple outlet/bypass ***(pipe)***	*5.33*	*1640*	*967*	*212*	*2412*	*220*	*237*

xi. Samples were also collected from the upstream and downstream of the Peelakhar river where the effluent from the bypass line was meeting with the river water. Analysis results of the water are provided in the following table. The high value of BOD and COD in down stream of the confluence point of bypass line and river shows the impact of untreated effluent being discharged by the Unit.

Table 19: ***Water quality of river Peelakhar***

Sampling point	***pH***	***COD (mg/L)***	***BOD (mg/L)***	***Color (Hazen)***
River Peelakhar at u/s bypass line	*8*	*BDL*	*BDL*	*BDL*
River Peelakhar at u/s bypass line	*7.7*	*37*	*5.3*	*BDL*

xii. The Unit does not have facility for the treatment of domestic wastewater. Untreated domestic effluent was found being discharged outside the premises of the Unit through a hole in the wall of the Unit.

7.9 Recommendations:

1. ***It is proposed that direction under section 18(1)(b) shall be issued to UPPCB to take appropriate action to stop discharge of wastewater in river Peelakhar and to levy environmental compensation of suitable amount to the Unit for illegal discharge/bypass of untreated effluent.***
2. ***The Unit must dismantle the bypass line (PVC pipe) from the premises to the river Peelakhar and ensure that the untreated/partially treated effluent shall not be discharged outside the premises in any case.***
3. ***Unit must take corrective measures to prevent the leaching of untreated effluent into the soil/ ground water.***
4. ***Unit shall maintain the logbook for the generation and disposal of ETP effluent, sludge, Boiler Ash, hazardous waste and other solid wastes.***
5. ***Unit shall ensure to implement the recommendations made by National Sugar Institute (NSI), Kanpur in validation report of ETP for session 2018-19.***
6. ***Unit shall install the flow meters at the places as recommended by the National Sugar Institute (NSI), Kanpur.***

7. ***All domestic wastewater generated within the premises and colony shall be discharged after proper treatment. The Unit shall install Sewage Tretment Plant (STP) for the treatment of domestic wastewater.***

7.10 Action taken status

1. *In crushing season 2016-17, unit was found complying and CPCB issued compliance direction dated 08.11.2017 under section 5 of the Environment (Protection) Act, 1986 for carrying out adequacy assessment of ETP through govt. repute institutions.*
2. *In crushing season 2017-18, unit was found non-complying and CPCB issued show cause notice dt.15.03.2018 under section 5 of the Environment (Protection) Act, 1986 for non-compliance w.r.t. BOD-31.2 mg/I, TSS- 111 mg/I, MLSS-684mg/I.*
3. *CPCB issued compliance direction dated 26.10.2018 under section 5 of the Environment (Protection) Act, 1986 for charter implementation.*
4. *In crushing season 2018-19, CPCB issued show cause notice dt.14.06.2018 under section 5 of the Environment (Protection) Act, 1986 for low MLSS-1291mg/I in aeration tank and BOD at outlet was found BDL and TSS-27.4 mg/I which showed chances of dilution.*
5. *CPCB issued compliance direction dated 09.08.2019 under section 5 of the Environment (Protection) Act, 1986.*
6. *In crushing season 2019-2020, unit was found non-complying w.r.t. bypass of untreated effluent and CPCB issued direction under section 18 (1) (b) on 02.01.2020 to UPPCB. In compliance, UPPCB has imposed EC of Rs. 17,70,000/- vide letter dated 21-01-2020 to the unit."*

4. Last order dated 03.07.2020 is as follows:-

"4. Accordingly, a further report has been filed by the CPCB on 19.06.2020 concluding as follows:

"Compliance status of the units are as follows:

a. ***UPPCB has imposed Environmental Compensation of Rs. 17,70,000/-on M/s Dhampur Sugar Mills, Sugar Unit, Meerganj, Bareilly.*** *Unit has deposited the same and by-pass line has been permanently removed.*

b. *UPPCB has issued directions to M/s Dhampur Sugar Mills (Distillery Unit) Dhampur, Bijnore vide letter dated 17-06- 2020 under Section 33A of Water (Prevention and Control of Pollution) Act, 1974 as amended to utilize the excess stored 1100 KLD and also submit time bound action plan for dismantling the excess storage capacity.*

c. ***UPPCB vide letter dated 17-06-2020 has issued directions to M/s Dhampur Sugar Mills, Sugar Unit, Dhampur, Bijnore to deposit the EC amount of Rs. 16,20,000/-*** *imposed by CPCB immediately in the account of UPPCB in compliance of directions of Hon'ble NGT.*

d. *UPPCB vide letter dated 17-06-2020 has* ***asked CGWA for imposition of EC on M/s Dhampur Sugar Mills, Sugar Unit, Asmoli, Sambhal due to withdrawal of Ground Water without NOC.***

e. *The M/s Dhampur Sugar Mills Ltd. (Sugar unit), Asmoli, Sambhal Moradabad was not found by passing the effluent in the joint inspection.*

f. *The status of NOC from CGWA is as follows:*

- *M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor has obtained NOC from CGWA.*
- *M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnor has obtained NOC from CGWA.*
- *M/s DSM Sugar Meerganj, Sidhauli Road, Meerganj, Bareilly has obtained NOC from CGWA.*
- *M/s Dhampur Sugar Mills Ltd (Sugar Unit), Asmoli, Sambhal applied NOC from CGWA. UPPCB vide letter dated 17-06- 2020 has asked CGWA for imposition of EC on M/s Dhampur Sugar Mills, Sugar Unit, Asmoli, Sambhal due to withdrawal of Ground Water without NOC."*

5. ***The above shows that while for two units, compensation has been assessed by the State PCB, for the other two units, compensation has been left to be determined by the CGWA. There is no consistency. If in two cases, the State PCB has assessed compensation, there is no reason why for other two units it should not have done so. It is also not clear whether the compensation is as per norms and covers the entire period of illegal drawl of ground water and whether the deterrence factor has been taken into account.***

6. Let the State PCB take further action which may be overseen by the CPCB. The CPCB may after coordination with the State PCB furnish a further action taken report before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF."

5. Accordingly, the CPCB has filed its report dated 05.10.2020:-

"Based on the deliberations held in meeting, following decisions were made:

1. UPPCB would request District Collector and CGW A for calculating and levying EC as per the Hon'ble NGT order dated 28.08.2019 in the matter of Paryavaran Suraksha Samiti & Anr. Versus Union of India & Ors, OA. No. 593 of 2017, which authorizes District Collector/ CGW A to levy EC for illegal extraction of ground water.

2. UPPCB was requested to give a statement to CPCB mentioning that UPPCB has not assessed or levied EC on these units.

3. UPPCB was requested to incorporate their stand/opinion about levying of EC for ground water extraction and also the referred Hon'ble NGT order dated 28.08.2019 which authorizes COW Al District Collector to assess and levy EC in the point-wise compliance report (as per the recommendations of the committee) to be submitted by them to CPCB by 25.09.2020.

4. UPPCB was requested to update CPCB about the deposition status of the levied Environmental Compensation as per the compliance report.

As decided in the meeting, UPPCB sent its comments on the issue raised in the meeting submitting that UPPCB had sent two letters to CGW A, dt 17.06.2020 (Annexure-lV) and 21.09.2020 (Annexure-V) requesting to levy EC on M/s Dhampur Sugar Mills Ltd (Sugar Unit), Asmoli, Sambhal for extraction of ground water without obtaining NOC as CGW A is the authority to levy EC for illegal extraction of ground water. Also, UPPCB submitted updated compliance status report of the units as per the recommendations of joint inspection team to CPCB, which is annexed as Annexure-VI. As per the aforementioned report, all 04 units have complied with the recommendations of the Joint Inspection Team.

CPCB respectfully submits that out of 04 units in the matter, only Mis Dhampur Sugar Mills Ltd (Sugar Unit), Asmoli, Sambhal has not obtained NOC from CGW A. Rest all three units have already obtained NOC from CGW A for extraction of ground water. ***Therefore, EC for the illegal extraction of ground was is to be levied on the sugar unit, M/s Dhampur Sugar Mills Ltd (Sugar Unit), Asmoli, Sambhal for which CGW A is required to calculate the amount. The EC already levied on the two units (Mis Dhampur Sugar Mills Ltd (Sugar Unit), Meerganj, Bareilly and M/s Dhampur Sugar Mills Ltd (Sugar Unit), Dhampur, Bijnor) as mentioned above was for noncompliance with respect to environmental norms. Now, this Compliance Report is submitted in compliance of Hon'ble NGT order dated 03.07.2020."***

6. I.A. No. 376/2020 has been filed on behalf of the applicant on 06.11.2020 *inter-alia* as follows:-

A. M/s Dhampur Sugar Mills (Sugar Unit), Dhampur, District – Bijnor

"1 to 7. xxx.....xxx.....xxx

(8) That some of the major violations / non-compliances committed by the said unit as observed by the said joint inspection team during the said Joint Inspection are as follows:

(i). The unit has not installed flow meters at Mill Fibrizer, Mescuite Cooling and RO Reject as it was recommended in validation report of ETP for session 2018-19 by National Sugar Institute (NSI), Kanpur;
(ii). The Unit has not installed the Hazardous Tank in the boiling house;
(iii). The unit has provided kachcha lagoon (for storage of treated effluent) having lining of PVC sheets, which is not proper and it may result in leaching under wear & tear condition;
(iv). The unit has not yet installed the Condensate Polishing Unit (CPU) for high pressure boilers (105 kg/cm2);
(v). The Mechanical Sludge handling system for better management of sludge waste is not provided by the unit.;
(vi). The unit has not provided and did not maintained the log book for the generation and disposal of ETP sludge, Boiler ash and other solid waste;
(vii). The unit is yet to comply with CPCB direction dated 01.07.2019 by dismantling the by-pass provision.

9. That as per the aforesaid Compliance Report dated 19.06.2020 submitted by the CPCB before this Hon'ble Tribunal, the so called "Action Taken" by the statutory authorities i.e. the CPCB as well as the UPPCB against the said unit of the Respondent No.1 is to impose an Environmental Compensation of Rs.16,20,000/- (Rupees Sixteen Lakhs and Twenty Thousand only) for 54 days (28.03.2019 to 20.05,2019).

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11. That said Letter dated 06.11.2019 issued by the CPCB is a follow-up Letter of the previous Letters dated 23.04.2019 and 01.07.2019 issued by the CPCB. That a perusal of the aforesaid Letters i.e. Letter dated 23.04.2019; Letter dated 01.07.2019 and Letter dated 06.11.2019 issued by the CPCB reveals the below-mentioned facts:

(i). That all the aforesaid Letters i.e. Letter dated 23.04.2019; Letter dated 01.07.2019 and Letter dated 06.11.2019 issued by the CPCB pertains for the "Crushing Season — 2018-2019";

(ii). That said Unit starts its operation / production during the said "Crushing Season — 2018 -2019" on 11.11.2018;

(iii). That inspection of the said unit was conducted by the team of CPCB officials on 28.03.2019 i.e. after approximately 3.5 months after the start of the operation / production by the said unit;

(iv). That during the said inspection conducted on 28.03.2019 by the team of CPCB officials, ***the said unit was found by-passing the untreated effluent through a separate channel into the outside drains adjacent to the premises of the mill;***

(v). That despite the fact that the said unit was found indulged in such a serious violation of "by-passing the untreated effluent", the officials of the CPCB instead of immediately dismantling and sealing the said by-pass arrangement of the said unit, allow the said unit to continue its operation /production and also allow the said unit to continue the by-passing of the untreated effluent during the said crushing season 2018-19 which was initially supposed to end on 15.04.2019;

(vi). That CPCB firstly issued Closure Notice vide the said Letter dated 23.04.2019 i.e. after the initial date of the end of the crushing season 2018-19 which was 15.04.2019 for the said Unit. That the major directions issued by the CPCB vide the said Letter dated 23.04.2019 are as under:

a) The unit shall close down its sugar manufacturing operations with immediate effect and shall not resume its operation;
b) The Unit shall dismantle the bypass arrangements and stop discharge of untreated /partially treated effluent discharge immediately;

That, further, the CPCB, vide the said Letter dated 23.04.2019, has initially levied an Environmental Compensation of Rs.46,80,000/- (Rupees Forty Six Lakhs and Eighty Thousand only) [for time period from 11.11.2018 to 15.04.2019];

(vii). That although the direction to close down the manufacturing process issued by the CPCB vide the said Letter dated 23.04.2019 after the end of the crushing season (which was initially on 15.04.2019 for the said Unit) is merely a paper formality, however, the said Unit, in utter violation of the said direction issued by the CPCB, continues its operation /production till 20.05.2019;

(viii). That not only the said Unit, in utter violation of the said direction issued by the CPCB vide Letter dated 23.04.2019, continues its operation /production till 20.05.2019, but also the said Unit did not dismantled the said by-pass arrangement and keeps on discharging its untreated effluent through the said by-pass arrangement;

ix) That despite the gross violation of the directions issued by the CPCB vide the said Letter dated 23.04.2019 committed by the said Unit, the only action taken by the CPCB is to issue a second Letter dated 01.07.2019 by which the CPCB has increased the Environmental Compensation to Rs.57,30,000/- (Rupees Fifty Seven Lakh and Thirty Thousand only) [for time period from 11.11.2018 to 20.05.2019];

(x). That once again the CPCB, vide the said Letter dated 01.07.2019, issued direction to dismantle the said bypass arrangement. That, however, the said Unit once again made the

mockery of the directions issued by the CPCB and did not dismantled the said by-pass arrangement;

(xi). That, thereafter, the CPCB issued the said Letter dated 06.11.2019 by means of which the CPCB has taken the so called action against the said Unit. That some of the important "Action Taken" against the said Unit by the CPCB vide the said Letter dated 06.11.2019 are mentioned here-in-under:

(a). The CPCB, vide the said Letter dated 06.11.2019, reduced the said Environmental Compensation from Rs.57,30,000/- (Rupees Fifty Seven Lakh and Thirty Thousand only) to Rs.16,20,000/- (Rupees Sixteen Lakhs and Twenty Thousand only);

(b). The CPCB, vide the said Letter dated 06.11.2019, allow the said Unit to resume its operation for the "Crushing Season — 2019-20"

(xii) That the CPCB has, vide its said Letter dated 06.11.2019, reduced the Environmental compensation levied on the said Unit on the pretext that the CPCB vide Office Order dated 04.09.2019 has issued a policy for levying Environmental Compensation of industries which prescribe that EC for closure direction issued on the ground on non-compliance of prescribed discharge /emission norms shall be levied for the period between the date of inspection and monitoring to the date of closing of manufacturing operation;

(xiii). That on the pretext of the aforesaid reasoning, the CPCB educed the Environmental Compensation to be levied on the said Unit by reducing the time period of violation /noncompliance i.e. from 191 days (11.11.2018 to 20.05.2019) to 54 days (28.03.2019 to 20.05.2019);

(xiv). That, however, the act of reducing the Environmental Compensation by the CPCB, as aforesaid, on the pretext of its aforesaid Office Order dated 04.09.2019 is illegal, arbitrary and without any basis. That the said Office Order dated 04.09.2019 of the CPCB deals with "EC for closure direction issued on the ground on non-compliance of prescribed discharge /emission norms" which is not the case of the said Unit. That the said Unit was, at the time of inspection held on 28.03.2019, found directly discharging its untreated effluent into the outside drain through by pass arrangement, which is a very serious offence and posses a direct threat to the local Environment and also to the life & health of the local /nearby residents;

(xv). That not only the CPCB has reduced the Environmental Compensation levied on the said unit, as aforesaid, but also the CPCB has not found the said act of directly discharging its untreated effluent into the outside drain through by pass arrangement committed by the said Unit serious enough to include "Deterrent Factor" while calculating the Environmental Compensation to be levied on the said unit. That the CPCB has simply imposed the reduced Environmental Compensation for 54 days (28.03.2019 to 20.05.2019) without "Deterrent Factor" on the said unit;

(xvi). That moreover, the CPCB vide the said Letter dated 06.11.2019 allowed the said Unit to operate /start manufacturing for the "Crushing Season - 2019-20", as aforesaid. That, however, the CPCB, while allowing the said Unit to operate /start manufacturing for the "Crushing Season - 2019-20" vide the said Letter dated 06.11.2019, has not even bothered to inspect the said unit so as to ensure that whether the said by-pass arrangement has been dismantled by the said Unit or not.

(xvii). That a perusal of the said Letter dated 06.11.2019 issued by the CPCB shows that the CPCB has not even issued direction to dismantle the said by-pass arrangement while allowing the said Unit to operate /start manufacturing for the "Crushing Season - 2019-20" vide the said Letter dated 06.11.2019;

(xviii). That apparently the said by-pass arrangement continued in existence till 03.12.2019 (as mentioned in the said Compliance Report dated 19.06.2020 filed by the CPCB before this Hon'ble Tribunal). That, however, both the statutory authorities i.e. CPCB and UPPCB has not bothered to levy the Environmental Compensation on the said Unit for the time period from 28.03.2019 (date of observation) to 03.12.2019 (date of compliance).

Copies of the Letter dated 23.04.2019, Letter dated 01.07.2019 and Letter dated 06.11.2019 issued by the CPCB (downloaded from the web-site of the CPCB) is annexed as Annexure: A (Cony).

(12). That the other major violation /non-compliance committed by the said Unit, as observed by the said joint inspection team during the said Joint Inspection of the said unit held on 27.11.2019 and 28.11.2019 was to store the treated effluent in a permeable lagoon /kachcha lagoon which may result in the penetration of the said treated effluent through the ground /soil below and may result in the contamination of the ground water of the area concerned. That in this context this Hon'ble Tribunal may take note of the below-mentioned submissions of the Applicant:

i. That the said violation /non-compliance committed by the said Unit (to store the treated effluent in a permeable lagoon /kachcha lagoon) was observed by the officials of the CPCB during the inspection of the said Unit held on 22.03.2018;

ii. That the recommendation to store the treated effluent in an impermeable lagoon was made by the NSI, Kanpur in its revalidated adequacy assessment report which was submitted by the said Unit vide Letter dated 10.10.2018;

iii. That the CPCB, vide Letter dated 16.11.2018, issued direction to implement the observations and recommendations made by the NSI, Kanpur in its aforesaid revalidated adequacy assessment report;

iv. That, however, apparently, the said Unit has not complied with the said direction of the CPCB issued vide Letter dated 16.11.2018 and therefore, the said Joint Inspection Team of the CPCB and UPPCB in its said Compliance Report dated 31.01.2020 filed before this Hon'ble Tribunal has observed that the said Unit has provided kachcha lagoon (for storage of treated effluent) having lining of PVC sheets, which is not proper and it may result in leaching under wear & tear condition.

v. *That, however, both the statutory authorities i.e. CPCB as well as UPPCB has not taken any action against the said unit for the said violation /non-compliance and the said statutory authorities has not even bothered to impose Environmental Compensation on the said Unit for the said violation /non-compliance.*

Copy of the Letter dated 16.11.2018 issued by the CPCB (downloaded from the web-site of the CPCB) is annexed as Annexure: B.

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13. That with respect to the other violations /non-compliances_ committed by the said Unit, as observed by the said joint inspection team during the said Joint Inspection of the said unit held on 27.11.2019 and 28.11.2019, it is submitted that the direction with respect to the said violations were issued by the CPCB vide its aforesaid Letter dated 16.11.2019, which apparently the said Unit has not complied with. That, however, both the statutory authorities i.e. CPCB as well as UPPCB has not taken any action against the said unit for the said violation /non-compliance and the said _statutory authorities has not even bothered to impose Environmental Compensation on the said Unit for the said violation /non-compliance.

14. It is submitted that while imposing the Environmental Compensation on the said Unit for the two major violations committed by the said Unit, namely, (a) by-passing the untreated effluent through a separate channel into the outside drains adjacent to the premises of the mill and (b) to store the treated effluent in a permeable lagoon /kachcha lagoon, the CPCB has violated its own Report / Guideline for EC Calculation"

B. Sambhal Unit-

"21 That the said Unit of the Respondent No.1 has a history of serious violations /non-compliances, however, neither any Environmental Compensation has ever been imposed on the said Unit nor any prosecution proceedings has been initiated against concerned officials of the said Unit by the statutory authorities i.e. CPCB as well as UPPCB.

22. That the inspection of the said Unit of the Respondent No.1 was conducted by the officials of the CPCB on ***08.12.2016.*** *That during the said inspection, the said Unit was found* ***discharging the spray pond overflow outside the premises*** *of the said Unit. That, moreover, during the said Inspection the said Unit was also found non-complying with respect to the prescribed standards of BOD of the ETP effluent sample. That, however, no action was taken against the said Unit by the statutory authorities i.e. CPCB as well as UPPCB and the said Unit was allowed to start its operation vide a letter dated 02.11.2017 issued by the CPCB. Copy of the Letter dated 02.11.2017 issued by the CPCB (downloaded from the web-site of the CPCB) is annexed as* ***Annexure: D.***

23. That again the inspection of the said Unit of the Respondent No.1 was conducted by the officials of the CPCB on ***10.01.2018.*** *That during the said inspection, the said Unit was again found* ***to be by-passing untreated effluent discharge from the spray pond overflow and cooling tower ',lowdown being discharged outside the premises region through the drain -connecting to SOT river which meets river Ganga.***

24. That, however, once again the officials of the CPCB neither bothered to dismantle and seal the said by-pass arrangement immediately nor bothered to immediately stop, the manufacturing process of the said Unit, rather the CPCB preferred to ..issue--the. direction to close down the manufacturing process and also the direction to dismantle the said by-pass arrangement on 07.02.2018 i.e. approximately after one month of the said inspection.

25. xxx.....xxx.....xxx

26. That, till date, the statutory authorities i.e. the CPCB as well as UPPCB, in gross violations of the aforesaid Report / Guidelines for EC Calculation issued by the CPCB, does not bother to conduct a detailed investigation from expert institution / organisation so as to know the actual extent of damage caused to the environment due to aforesaid violation / non-compliance committed by the said Unit, namely, (a) discharging the spray pond overflow outside the premises and (b) by-passing untreated effluent discharge from the spray pond overflow and cooling tower blow-down being discharged outside the premises region through the drain connecting to SOT river which meets river Ganga."

C. Bareilly Unit:-

27. That in compliance of the directions issued by this Hon'ble Tribunal, the joint inspection of the Sugar Unit of M/s Dhampur Sugar Mills situated at Meerganj, District - Bareilly (U.P.) was conducted by the Joint Inspection Team of the CPCB and UPPCB on 29.11.2019.

28. That some of the major violations / non-compliances committed by the said Unit as observed by the said Joint Inspection Team during the inspection of the said Unit conducted on 29.11.2019 are as under:

(i) The said Unit was found by-passing the untreated effluent through a pipeline laid underground up-to Peelakhar River in Sindholi Village which ultimately meets Ramganga River;
(ii) The said Unit was found discharging its untreated domestic effluent outside the premises of the said Unit through a hole in the wall of the said Unit.

29. That the so-called "Action taken" by the statutory authorities i.e. CPCB and UPPCB against the said Unit for committing such serious violations / non-compliances is to impose an Environmental Compensation of Rs.17,70,000/- (Rupees Seventeen Lakh and Seventy Thousand only). That in the case of this Unit of the

Respondent No.1 also, the statutory authorities i.e. CPCB and UPPCB does not find the illegal act of "discharging the untreated effluent directly into the River" serious enough to initiate the prosecution proceedings against the officials of the said Unit responsible for the said violation / non-compliance.

30. xxx.....xxx.....xxx

31. It is pertinent to mention here that the said Unit of the Respondent No.1 has also a history of violations / non-compliances. That during the inspection of the said Unit by the officials of the CPCB held on 10.01.2017, it was found that the said Unit has not integrated all process stream and route them to ETP. That during the inspection of the said Unit by the officials of the CPCB held on 25.01.2018, the treated effluent sample taken from the outlet of the ETP of the said Unit was found non-compliant with respect to BOD & TSS norms. That officials of the CPCB during the inspection held on 25.01.2018 observed that the aeration tank of the ETP system of the said Unit was not properly stabilised due to poor operation and maintenance of the ETP system and the treated effluent discharged does not meet the prescribed standards. That again during the inspection held on 28.03.2019, the officials of CPCB again observed that the aeration tank of the ETP system of the said Unit was not properly stabilised due to poor operation and maintenance of the ETP system and there is possibility of dilution of ETP system. Copies of the Letter dated 08.11.2017, Letter dated 15.03.2018 and Letter dated 14.06.2019 issued by the CPCB (downloaded from the web-site of the CPCB) is annexed as Annexure: F (Colly).

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37. That it is pertinent to bring to the notice of this Hon'ble Tribunal, that the case of the Units of the Respondent No.1 is not the only case where the CPCB has shown extreme leniency / favouritism towards the violator and despite serious violations, has reduced the Environmental Compensation to a great extent by reducing the time period / days of violation on the pretext of the aforesaid Office Order dated 04.09.2019. That the modus — operandi adopted by the officials of the CPCB is same in all such cases, which is as under:

a) Conduct the inspection of the unit of the violator after passing off substantial time period of the crushing season;

b) At first levy Environmental Compensation for whole crushing period on the unit of the violator;

c) Issue Closure Notice after the end of the crushing season;

d) After conducting meeting(s) with the representatives of the violators, reducing the Environmental Compensation substantially by reducing the time period / days of violation on the pretext of the aforesaid Office Order dated 04.09.2019;

e) Finally, resuming the operation / manufacturing of the units of the violators before the next crushing season."

7. No sufficient ground has been explained to meet out the irregularities nor environmental compensation have been calculated by the CPCB and UPPCB for which they are directed to submit a further action taken report on these points.

8. It is further argued that previously joint Committee calculated environmental compensation and later on it was re-examined and re-calculated as per Annexure 1 below which is lower than previous calculation and no sufficient reason has been explained. Either of the two calculations may be wrong. The environmental compensation and its calculation are intended to prevent the further mischief and irregularities by the industrial units and is penal in nature apart from recovering cost of restoration.

Table 1 has been annexed to the IA 376/2020 which is as follows:

S.No.	Industry Name	Operation Period (2018-19)	Date of Inspection and Main Observation	Closure Notice and E.0 Levied	2"1 Notice Date (Resume Operation) and Reduced E.C.	Previous Inspection Date and Main Observations
1.	Anamika Sugar Mills Limited, Bulandshashr (U.P.)	04.11.2018 to 12.05.2019	29.03.2019 1)Unit was found to **By-pass dark grey colour waste water /untreated effluent** through a cemented channel under the boundary wall. The **untreated effluent** was found **stored** in low-lying **non-lined permeable area,** across the road; 0) Mill was **discharging colony domestic sewage into road side low lying areas**	23.05.2019 Rs.57,60,00 0/-	06.11.2019 Rs.13,50,000/-	Date: 06.02.2018 Unit is**discharging untreated sewage** outside the premises **through a channel** and there is **possibility of discharging the untreated effluent** of the process or spray pond **through this channel**

2.	Avadh Sugar & Energy Limited, Shahjahanpur (U.P.)	11.11.2018 to 06.05.2019	29.03.2019 An **underground pipeline was traced carrying the industrial effluent from the unit which discharges into the drain behind the unit.** It was informed by the local people that the discharge from the said pipeline is made during the night;	30.05.2019 Rs.1,39,20, 000/-	07.11.2019 Rs.11,70,000/-	30.01.2018 **Spray pond overflow is partially bypassed and discharged directly outside the premisesthrough channel into drain which meets *Garra* River andultimately to Ganga River;**
3.	Bajaj Hindustan Limited, Shahjanpur (U.P.)	10.11.2018 to 22.04.2019	Date: 30.03.2019 Non-compliance with respect to the parameters, namely, BOD and COD of treated effluent samples from lagoon.	28.05.2019 Rs.1,28,40, 000/-	06.11.2019 Rs.7,20,000/-	08.03.2018 1) Non-compliance with respect to the parameters,namely, BOD, COD and TSS of treatedeffluent samples; 2) Non-compliance with respect to the parameters,namely, BOD, COD and TSS of treated effluent samples from lagoon.

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4.	Bisalpur Kisan Sahkari Chini Mills Limited, Bilaspur (U.P.)	27.11.2018 to 14.05.2019	26.03.2019 1) Unit has **multiple outlets for the discharge of treated /untreated effluents;** **2) Spray pond overflow is directly discharged** outside the unit's premises without any treatment;	24.05.2019 Rs.1,37,70,000/-	06.11.2019 Rs.16,50,000/-	01.02.2018 1) **Treated effluent** from secondary clarifier outlet was found to be **discharged directly** into the drain; 2) Inlet channel of ETP was found broken and **untreated effluent was bypassed to outside nallah;** 3) Spray pond tank was also found broken and **spray pond overflow was bypassed** without any treatment to outside nallah.
5.	Indian Potash Limited (Sugar Unit),Meerut (U.P.)	15.11.2018 to 28.04.2019	04.04.2019 1) Non-compliance with respect to the parameters, namely, BOD, COD and TSS of treated effluent samples; 2) Non-compliance with respect to the parameters, namely, BOD and COD of treated effluent samples from lagoon; 3) Unit used **a Kaccha Lagoon for storage of treated effluent.**	30.05.2019 Rs.1,34,10,000/-	07.11.2019 Rs.7,50,000/-	05.01.2018 1) Untreated spray pond overflow is stored in lagoon; 2) **Untreated effluent** from the storage is **discharged on land;** 3) Unit is having two outlets.

6.	Kisan Sahkari Chini Mill, Amroha (U.P.)	06.11.2018 to 12.05.2019	26.03.2019 1) Non-compliance with respect to the parameters, namely, BOD, COD and TSS of treated effluent samples; 2) Ponding of waste water was observed within the industry premises and analysis result of sample shows BOD — 805 m/l, COD — 1589 mg/l and TSS — 151 mg/l indicating discharge of untreated effluent; 3) Non-compliance with respect to the parameters, namely, COD and TSS of treated effluent samples from lagoon.	28.05.2019 Rs.1,51,20, 000/-	06.11.2019 Rs.14,40,000/-	17.01.2018 1) Non-compliance with respect to the parameters,namely, BOD, COD and TSS of treatedeffluent samples; 2) Operationand maintenance of ' aeration tank of ETP was poor as the MLSS of the aeration tank was 334 mg/l' 3) Tertiary treatment system was not in use and effluent was discharged from secondary clarifier

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7.	Kisan Sahkari Chini Mills Limited, Badaun (U.P.)	30.11.2018 to 13.04.2019	26.03.2019 1) **No valid CTO under Water & Air Acts and Hazardous Waste Authorization;** 2) The unit has **not made proper boundary wall to surround the ETP area to avoid the unauthorized encroachment and discharge of treated /untreated waste water;**	21.06.2019 Rs.40,50,000/-	07.11.2019 Rs.5,70,000/-	24.01.2018 1) Treated effluent discharge is 374 l/ton which is higher than permissible limit (200 l/ton); 2) MLSS inaeration tank was 918 mg/l which indicates unstablished ASP system operation and maintenance of ETP system;
8.	Kisan Sahkari Chini Mills Limited, Bareilly (U. P.)	28.11.2018 to 12.05.2019	28.03.2019 1) **No valid CTO under Water & Air Acts (CTO expired on 31.12.2017);** 2) **Spray pond overflow of unit was being directly discharged outside premises** of the unit without any treatment; 3) Non-compliance with respect to the parameters, namely, BOD and COD of effluent samples from lagoon.	24.05.2019 Rs.1,31,40,000/-	06.11.2019 Rs.13,80,000/-	24.01.2018 1) Unit has **bypass arrangement for untreatedeffluent** through drainage to local drain. Analysis of effluent sample collected from bypass drain showed BOD — 656 mg/l, TSS — 438 mg/l and COD — 1130 mg/l whichindicates discharge of **untreated effluent ;** 2) Final **waste water discharge is 235 l/ton which is higher than permissible limit**

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9.	Kisan Sahkari Chini Mills Limited, Najibabad (U.P.)	12.11.2018 to 14.05.2019	20.03.2019 1) Non-compliance with respect to the parameters, namely, BOD, and COD of treated effluent sample; 2) Unit has not installed mechanical sludge handling system as well as colour coding in the process pipeline;	23.05.2019 Rs.55,20,000/-	07.11.2019 Rs.15,00,000/-	08.03.2018 1) MLSS in aeration tank was 458 mg/I which indicates unstablished ASP system due topoor operation and maintenanceofETP system; 2) Sludge drying beds were overflowing in ETP plant
10.	Kisan Sahkari Chini Mills Limited, Pilibhit (U.P.)	25.11.2018 To 21.04.2019	25.03.2019 1) The Unit was found **by-passing untreated effluent into outside nallah;** 2) Inlet of the **ETP was found with provisions of bypass of the untreated effluent to outside nallah and during visit bypass was observed;** 4)The **spray pond overflow of the unit was being directly discharged outside premises of the unit without any treatment.**	24.07.2019 Rs.1,01,40,000/-	06.11.2019 Rs.37,20,000/-	**01.02.2018** 1) The **treated effluent** from secondary clarifier outlet was found to, be **discharged directly** into the drain; 2) The Unit has **by- pass arrangement for untreatedeffluent** from spray pond overflow outsidethe premises **19.12.2018** 1) Unit was found operations but the **ETP was foundnon- operational;** 2) InletLine (Open Channel) of the ETP was foundwith provision of **bypassing the untreated effluent** to outside nallah; 3) Thespray **pond verflow** was being **directlydischarged** outside the premises of the unit **without treatment.**

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11.	Kisan Sahkari Chini Mills Limited, Shahjahanpur **(U. P.)**	18.11.2018 To 12.05.2019	30.03.2019 1) **Spray pond overflow was discharged directly without any treatment out side the premises;** 2) **The unit has multiple outlets for discharge of effluent;** 3) **The unit has permission for one bore-well for ground water extraction from the CGWA but has two functional bore-well;** 4) **Boiler ash is dumped indiscriminately within the premises.**	06.06.2019 Rs. 1,40, 10,	06.11.2019 Rs. 13,20,000/-	29.01.2018 1) Analysis of treated effluent sample shows non-compliance with respect to BOD & COD 2) Analysisof underground water Total Hardness – 270 mg/I, Ca^{2+} - 75.2 and Alkalinity – 357 mg/I, which is higher than the permissible limit.
12.	Lakshmiji Sugar Mills Co. Ltd., Raja — ka — Sahaspur, Bilari, Moradabad (U. P.)	01.12.2018 To 18.04.2019	02.04.2019 1) Lagoon made forstoring treated effluent was found filled with molasses; 5) The unit discharges treated effluent into a drain (near railway track) outside the premises; 6) Unlined /permeable lagoon was also observed within the unit's premises near the main gate containing diluted molasses.	21.06.2019 Rs.41,70,00 0/-	06.11.2019 Rs.5,10,000/-	09.01.2018 1) The unit does not have valid authorization of HazardousWaste Management; 2) The treated effluent through the pipeline which opens outside into nearby drain; 3) At the time of visit, the drain was found carrying the hot effluent being discharged from the industrial premises. The drain shortly opens into the Sot River which is a tributary river of River Ganga.

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13.	P.B.S Foods (Sugar) Pvt. Ltd., Chandpur, District — Bijnor (U.P.)	25.11.2018 To 14.05.2019	18.03.2019 1) Channel carrying waste water was observed coming out of the unit's premises and discharging into nearby agricultural fields; 2) The unit has not installed the spray pond overflow treatment system	Rs.1,37,10,000/-	Rs.16,20,000/-	The unit does not have provision for the treatment of spray pond overflow. The unit has not installed flow meter at the overflow of the spray pond and overflow water is discharged through open drain into a kachcha pond which poses threat to ground water pollution.
14.	Rana Sugars Ltd., Rampur (U.P.)	15.11.2018 To 09.04.2019	03.04.2019 1) Untreated water was found logged at various places inside the premises of the unit; 2) Inlet channel was found full and overflowing; 3) Spray pond overflow was found mixing with the treated effluent which is directly connected to lagoon	30.05.2019 Rs.43,80,000/-	06.11.2019 Rs.2,10,000/-	07.03.2018 1) The unit was in operation. However, ETP was non-operational at the time of inspection; 2) The unit does not have provision for treatment of spray pond overflow.

15.	Rana Sugars Ltd., Moradabad (U.P.)	14.11.2018 To 15.04.2019	01.04.2019 1). Bypass arrangement was identified in ETP inlet line near sugar storage godown which was temporarily blocked by sand bangs. 2). Water logging of treated/untreated effluent on open land near industry premises was observed; 3) Temporary pumping arrangement with flexible pipelines were found inside the premises having outlet in a drain parallel to Industrial premises and along the roadside; 4) An opening was found in the secondary treated water collection chamber from clarifier which can be directly discharged into outlet slump without treating it from sand and activated carbon filter; 5) The unit has unlined permeable lagoon outside the premises; 6) Leakage /overflow from spray pond was observed to be accumulating in a kachcha channel near the spray pond boundary.	26.04.2019 & 21.06.2019 Rs.45,90,000/-	07.11.2019 Rs.4,50,000/-	

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16.	Rudra Bilas Kisan Sahkari Chini Mills Ltd., Bilaspur (U.P.)	30.11.2018 To 13.04.2019	03.04.2019 1) Treated effluent are stored in lagoon and utilized in cleaning and irrigation purposes; 2) Lagoon was found full of algae, no proper cleaning done;	12.06.2019 Rs.40,50,000/-	07.11.2019 Rs.3,30,000/-	08.03.2018 The unit does not have provision for treatment of spray pond overflow
17.	Wave Industries Pvt. Ltd., Bijnor (U.P.)	28.11.2019 To 12.04.2019	19.03.2019 The unit was bypassing the untreated effluent from inlet channel of ETP to nearby land and pond in nearby land;	06.05.2019 Rs.75,60,000/-	06.11.2019 Rs.14,40,000/	16.01.2018 Treated effluent is discharged into a municipal drain by the unit
18.	Wave Industries Pvt. Ltd., Bulandshahr (U.P.)	26.11.2018 To 15.04.2019	19.03.2019 The unit has not obtained valid consent to operate under Water Act, 1974 and Air Act, 1981.	14.06.2019 Rs.1,13,70,000/-	07.11.2019 Rs.8,40,000/-	05.02.2018 The unit was operational. However, ETP was functional and treated effluent was not flowing from outlet of ETP. Therefore, lagoon was empty and sample could not be taken from outlet of ETP due to non- availability of treated water

19.	Wave Industries Pvt. Ltd., Dhanaura, **J.P.** Nagar (U.P.)		25.03.2019 **A channel was found before inlet which should be emptied and dismantled and waste water should be treated through ETP**	24.06.2019 Rs.32,10,000/- (30.01.2018 to 16.05.2018) For crushing season 2017-18	28.11.2019 Nil	30.01.2018 1) Huge amount of water logging was found just outside the boundary wall of the industry in an unlined pool, on the north-west side, this area has an opening of pipelines coming from ETP, which as per industry representative is meant for irrigation purposes: 2) Analysis of sample collected from unlined pool adjacent to boundary wall as found non-compliant with respect to BOD, COD and TSS parameters.

20.	Mawana Sugar Mills, Mawana, (UP)	04.01.2018 To 16.05.2019	26.03.2019 The unit has open pipeline system for transferring effluent to the ETP and some effluent was seen accumulate in the sugar cane field near the ETP inlet drain.	21.06.2019 Rs. 39,90,000/-	22.11.2019 Nil	04.01.2018 1) the unit does not have provision for the treatment of spray pond overflow; 2) The unit was bypassing the untreated effluent from the process into the drain outside the premises of the unit in the front gate of the unit 28.02.2018 Bypass arrangements opening into outside drain (Municipal Drain was found blocked/closed at the time at inspection. However, an open unlined drain was observed which was opening outside boundary of industry situated around 150-200 meters from Ram Mandir towards the rear side boundary wall in the industry premises and was found discharging into the Mawana drain passing through the field.
21.	U.P. State Sugar Corporation Ltd. Meerut (UP)	11.11.2018 To 15.05.2019	02.04.2019 The unit was bypassing the untreated effluent from ETP inlet channel and equilisation tank of ETP to the adjacent drain (Shekhpur drain) which meet Kadrabad drains and ultimately falls into the East Kali	06.05.2019 Rs. 90,60,000/-	07.11.2019 Rs. 8,70,000/-	

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9. We have heard learned Counsel for the parties appearing before us. Learned Counsel for the applicant submitted that there is large scale violation of Environmental Law as shown by the above table but on account of collusion of the State PCB, no effective steps are taken.

10. Learned Counsel for the State PCB states that according to the understanding of the State PCB, if somebody has applied for extraction of ground water, earlier NOC continues. In the present case, the earlier NOC was upto 02.05.2019 and the unit applied for extension on 04.04.2019 and on that account no action has been taken for illegal extraction of ground water. Reliance has been placed on Notification dated 24.09.2020 issued by the Ministry of Jal Shakti stating as follows:-

> *"11(vi).* ***If the application for renewal is submitted in time and the CGWA/the respective State/UT Authority is unable to process the application in time, No Objection Certificate shall be deemed to be extended till the date of renewal of No Objection Certificate."***

11. As against above, learned Counsel for the applicant submits that this Tribunal has specifically held that ground water can be allowed to be extracted only in the light of water availability data and if water level is at safe levels. No general permission can be granted without evaluation and by default. In this regard, reliance has been placed on the order of this Tribunal dated 20.07.2020 in *Original Application No. 176/2015, Shailesh Singh v. Hotel Holiday Regency, Moradabad & Ors.* as follows:-

> *"1 to 38..xxx.....xxx.....xxx*
>
> *39. In the light of the above discussion, we direct as follows:*
>
> *a. MoJS may ensure requisite manning and effective functioning of CGWA so as to ensure* ***sustainable ground water management***

in terms of the Hon'ble Supreme Court mandate by which CGWA was created.

b. *Let CGWA and MoJS comply with the directions of this Tribunal in orders dated 3.1.2019, 7.5.2019 and 11.9.2019, to have a meaningful regulatory regime and institutional mechanisms for ensuring prevention of depletion and unauthorized extraction of ground water and sustainable management of groundwater in OCS areas.* ***Regard must be had to water availability and safe levels to which its drawal can be allowed, especially for commercial purposes, based on available and assessed data in each "Assessment unit".*** *Procedures for assessment of individual applications and institutional mechanism may be clearly laid down.*

c. *As per orders dated 3.1.2019, undertaking an impact study in light of projected data for the next 50 years (in phased manner with action plan decade-wise).*

d. *There must be* ***no general permission for withdrawal of ground water, particularly to any commercial entity, without environment impact assessment of such activity on individual Assessment units in cumulative terms covering carrying capacity aspects by an expert committee.*** *Such permission should as per Water Management Plans to be prepared in terms of this order based on mapping of individual assessment units. Any permission should be for specified times and for specified quantity of water and not in perpetuity, and be necessarily subject to digital flow meters which cannot be accessed by proponents, with mandatory annual calibration by authorized agency at proponents' cost.* ***An annual review by independent and expert evaluation must audit and record ground water levels as well as compliance with the conditions of the permission.*** *Such audits must be published online for transparency and to track compliance and year-on-year change in ground water levels, and swift action taken against those who fail audit, including withdrawal of permission, blacklisting, initiation of prosecution and recovery of deterrent compensation as per CPCB regime. Records must be maintained online and for a sufficient and reasonable time.*

e. *As observed in para* ***Error! Reference source not found.****(a) and* ***Error! Reference source not found.****(a) above,* ***all OCS assessment units must undergo water mapping. Water Management Plans need to be prepared for all OCS assessment units in the country based on the mapping data, starting with Over-exploited blocks. The Water Management Plans, data on water availability or scarcity and policy of CGWA must be uploaded on its website for transparency and public involvement. Such exercise may be done expeditiously, preferably within next three months."***

12. In view of above, learned Counsel for the applicant submitted that no order to the contrary can prevail in view of Section 33 of the National

Green Tribunal Act, 2010 under which the order of this Tribunal has overriding effect over any other order issued under any other law. No executive order can annul the orders of the Tribunal which are binding, unless set aside by a higher Judicial forum. The direction of this Tribunal under section 15 read with Section 20 of the NGT Act, 2010 is binding on the Ministry of Jalshakti which has to be followed by the State PCB. Moreover, the principle of sustainable development will have no value if ground water is allowed to be extracted merely on account of pendency of an application without evaluation of availability of adequate ground water and compliance of conditions which may be necessary to be laid down. This will also be failure of directions of the Hon'ble Supreme Court requiring the CGWA to regulate extraction of groundwater. We find merit in the contention.

13. Accordingly, we direct the State PCB to take further appropriate action by way of prohibiting any activity in violation of law, initiating prosecution and recovering compensation as per applicable norms, following due process of law. The State PCB may also respond to the IA filed by the applicant with particulars in the table annexed to the application, reproduced above and file an action taken report before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The CPCB and State PCB may undertake necessary inspection for the purpose.

List for further consideration on 11.02.2021.

A copy of this order be forwarded to the CPCB, the State PCB, the Secretary, Ministry of Jal Shakti and the CGWA by e-mail for compliance.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. S.S. Garbyal, EM

Dr. Nagin Nanda, EM

November 09, 2020
Original Application No. 539/2019
A

ANNEXURE - II

JOINT INSPECTION REPORT

OF

1. M/s Dhampur Sugar Mills Ltd. (Sugar unit), Asmoli, Sambhal
2. M/s Dhampur Sugar Mills Ltd. (Sugar unit), Meerganj, Bareilly
3. M/s Dhampur Sugar Mills Ltd. (Sugar unit), Dhampur, Bijnor &
4. M/s Dhampur Sugar Mills Ltd. (Distillery unit), Dhampur, Bijnor

IN THE MATTER OF

ADIL ANSARI VS. M/s DHAMPUR SUGAR MILLS LTD. & Ors.
O.A. NO. 539/2019
(I.A. NO. 376/2020)

Date of inspection: 13th & 14th Jan-2021, 02nd & 3rd Feb-2021

Prepared by
Joint team of CPCB and UPPCB

JOINT INSPECTION REPORT OF M/S DHAMPUR SUGAR MILLS LTD. (THREE SUGAR MILLS AND ONE DISTILLERY UNIT) *AS PER* HON'BLE NGT ORDER DATED 14.08.2019 CARRIED OUT BY CPCB AND UPPCB DURING NOVEMBER 27-29, 2019

1.0 Background

- Hon'ble NGT vide order dated 09.11.2020 in the matter of Adil Ansari vs M/s Dhampur Sugar Mills Ltd. & Ors, OA No. 539/2019, had directed following:

  "13. Accordingly, we direct that the State PCB to take further appropriate action by way of prohibiting any activity in violation of law, initiating prosecution and recovering compensation as per applicable norms, following due process of law. The State PCB may also respond to the IA filed by the applicant with particulars in the table annexed to the application, reproduced above and file an action taken report before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR support PDF and not in the form of image PDF. The CPCB and State PCB may undertake necessary inspection for the purpose."

2.0 The Joint team and its execution

- In compliance to the aforesaid direction of Hon'ble NGT, joint team of officials from Central Pollution Control Board (CPCB), Delhi and respective Regional Offices of Uttar Pradesh Pollution Control Board (UPPCB) i.e., RO-Bijnor, RO-Bareilly and RO-Moradabad inspected the following industrial units:

Sr. No.	Name of the Industrial Unit	Inspection team	Date of Joint Inspection
1.	Dhampur Sugar Mills Ltd., Sugar Unit, Asmoli, Sambhal, UP	CPCB, Delhi & RO-Moradabad	13.01.2021
2.	Dhampur Sugar Mills Ltd., Sugar Unit, Meerganj, Bareilly, UP	CPCB, Delhi & RO-Bareilly	14.01.2021
3.	Dhampur Sugar Mills Ltd., Sugar Unit, Dhampur, Bijnor, UP	CPCB, Delhi & RO-Bijnor	02.02.2021 & 03.02.2021
4.	Dhampur Sugar Mills Ltd., Distillery Unit, Dhampur, Bijnor, UP		

- The joint inspection team inspected the above mentioned industrial units as well as surveyed the domestic drains along the boundary wall of the units and its confluence with drain at upstream & downstream locations.

➢ Industrial unit wise joint inspection reports are placed as below:

Sr. No.	Name of the Industrial Unit	Annexure No.
1.	Dhampur Sugar Mills Ltd., Sugar Unit, Asmoli, Sambhal, UP	Annexure-1
2.	Dhampur Sugar Mills Ltd., Sugar Unit, Meerganj, Bareilly, UP	Annexure-2
3.	Dhampur Sugar Mills Ltd., Sugar Unit, Dhampur, Bijnor, UP	Annexure-3
4.	Dhampur Sugar Mills Ltd., Distillery Unit, Dhampur, Bijnor, UP	Annexure-4

Annexure-1

Joint Inspection Report

(13.01.2021)

of

M/s Dhampur Sugar Mill Ltd., Unit: Asmoli, Distt. Sambhal, U.P

In The Matter Of

Adil Ansari Vs M/s Dhampur Sugar Mills Ltd. and Ors.

O.A 539/2019 (I.A. No. 376/2020)

-Prepared by-
The Joint Committee of CPCB & UPPCB

Constituted by

Hon'ble National Green Tribunal

(Order dated 9th November, 2020)

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1. Background 2
2. Inspection of M/s Dhampur Sugar Mill Ltd., Unit: Asmoli, District- Sambhal (U.P.) on 13.01.2021 by Joint team of officials from CPCB and UPPCB. 2
3. Observations w.r.t. analysis results of ground water samples collected from industrial premises and surrounding areas 3
4. Observations 8
5. Conclusions 12
6. Recommendations 12
7. Photographs 13
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JOINT INSPECTION REPORT OF M/S DHAMPUR SUGAR MILL LTD., UNIT: ASMOLI, DISTRICT- SAMBHAL, U.P. ON 13/01/2021 IN COMPLIANCE TO DIRECTION ISSUED BY HON'BLE NATIONAL GREEN TRIBUNAL IN O.A. NO. 539/2019 (I.A. No. 376/2020), ADIL ANSARI Vs M/S DHAMPUR SUGAR MILLS LTD. AND ORS. – REG.

1. Background

Hon'ble NGT vide order dated 09/11/2020 in the matter of Adil Ansari Vs M/s Dhampur Sugar Mills Ltd. and Ors. in Original Application 539/2019 had directed following:

"We direct the State PCB to take further appropriate action by way of prohibiting any activity in violation of law, initiating prosecution and recovering compensation as per applicable norms, following due process of law. The State PCB may also respond to the IA filed by the applicant with particulars in the table annexed to the application, reproduced above and file an action taken report before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The CPCB and State PCB may undertake necessary inspection for the purpose."

In compliance to the aforesaid direction, a joint team of officials from Central Pollution Control Board, Delhi and Regional Office, Uttar Pradesh Pollution Control Board (UPPCB), Moradabad, carried out the joint inspection of the unit and interacted with the officials of the Unit on 13/01/2021.

2. Inspection of M/s Dhampur Sugar Mill Ltd., Unit: Asmoli, District- Sambhal (U.P.) on 13/01/2021 by Joint team of officials from CPCB and UPPCB.

- In compliance to the Hon'ble NGT order dated 09/11/2020 inspection of M/S DHAMPUR SUGAR MILL LTD., UNIT: ASMOLI, DISTRICT- SAMBHAL, U.P. (hereinafter referred as 'the unit') was carried out on 13th January, 2021 by a joint team comprising of the officials from Regional Office, Moradabad, Uttar Pradesh Pollution Control Board (UPPCB) and Central Pollution Control Board (CPCB) Delhi.
- Prior to the entry into the sugar mill premise, the joint team visited the surrounding areas and nearby fields around M/s Dhampur Sugar Mills Ltd., Asmoli, Sambhal (U.P.) and had interactions with the local residents of the area.
- The joint team observed a drain flowing from residential colony of the unit to outside wall of industrial premises. The team surveyed the area along the boundary of sugar mill till the interior locations in the adjoining agriculture field to trace any bypass/ effluent discharge point in the drain. The drain carrying domestic wastewater from unit's residential area discharges into Sot river. The Sot river was found dry at upstream of drain however, ponding was observed downstream after discharge of drain in Sot river. Sample was collected from the drain outside unit boundary and Sot river for further physico-chemical analysis. Analysis results are presented in **Table-5.**
- The joint team then visited unit's premises for performance evaluation of effluent management system and record keeping
- During inspection the unit was found operational and its ETP was found fully functional.
- The samples were collected from ETP Inlet, Spray pond overflow, Spray pond overflow treatment system, Primary clarifier Outlet, Secondary clarifier Outlet, Aeration tank 1, Aeration tank 2, ETP Outlet, and Lagoon. Analysis results are presented in **Table-4.**
- Detailed observation and recommendations of the joint inspection team are mentioned in subsequent pages.

3. **Observations w.r.t. analysis results of ground water samples collected from industrial premises and surrounding areas**

- The joint team also collected groundwater sample from the Bore-well from inside the mill and Hand-pump outside Unit's premises in front of the Unit's main gate. Analysis results are presented in Table 1.

Table-1 Groundwater Analysis Report

Sampling Point	Bore-well from inside the mill	Hand-pump outside the mill	Drinking water standards) IS 10500: 2012
Color	BDL	BDL	5
pH	7.4	7.3	6.5-8.5
Cond.	370	499	-
Total Alkalinity	227	281	-
Total Hardness	250	338	200
COD	BDL	BDL	-
TDS	234	300	500
Cl^-	13	13	-
F^-	0.4	0.3	-
NO_3^-	0.6	13.7	-
SO_4^-	11	9	200

(All values are in mg/l except pH & Color in Hazen)

- The analysis results of groundwater collected from the Bore-well inside the unit and Hand-pump outside the Unit's premises indicates total hardness **250 mg/l and 338 mg/l** against 200 mg/l respectively, therefore, exceeding the acceptable limit of Drinking Water Standards (BIS) IS 10500:2012.

cpcb

INSPECTION REPORT OF M/S DHAMPUR SUGAR MILLS LTD, VILLAGE & POST- ASMOLI, TEHSIL & DIST- SAMBHAL, U.P.- 244304

1. GENERAL INFORMATION

1.	Date of Inspection	13/01/2021	
2.	Name of the unit with complete postal address	M/s Dhampur Sugar Mills Ltd., Vill & Post-Asmoli, Tehsil & Dist-Sambhal, U.P.-244304	
3.	Spatial Co-ordinates Latitude and longitude (in Decimal format only)	28.705963 78.542789	
4.	Standalone/ integrated (with co-generation) Sugar/ sugar refinery	Integrated with cogeneration sugar refinery	
6.	License capacity of sugar Mill (TCD)	9000TCD as per Consent	
7.	Average actual crush rate (TCD)	8501.36 TCD (Avg. value as per DMR and RT-7C from 1st Nov, 2020 to 12th Jan, 2021)	
8.	Consent status & its Validity with date a. Air Consent b. Water consent c. Hazardous Waste Authorization	 Valid up to 31/12/2021, **Annexure-I** Valid up to 31/12/2021, **Annexure-II** Valid up to 27/12/2022, **Annexure-III**	
9.	NOC from CGWA & its Validity with date	Expired on 02/05/2019 (applied for NOC from Uttar Pradesh Ground Water Department) **Annexure-IV**	
10.	Start period of crushing season	30.10.2020	
11.	Operational status during visit	**Operational**	
12.	Name of contact person	Designation	Contact No & E- mail
	Shri Sanjay Sharma	Unit Head	7895003666 sanjaysharma@dhampur.com
	Shri Mukesh Kasyap	G.M. Commercial	9837888689 mukeshkashyap@dhampur.com

2. OPERATIONAL STATUS

Sr. No.	Particulars	
1.	Sources of fresh water	
	a. Bore well	03 No of Bore wells
	b. Flow meter Installation at wells	Yes
	c. Reading of Flow Meter during visit	Borewell-1 Σ= 217576.52 m^3 Borewell-2 Σ=20110.3 m^3 Borewell-3 Σ=27566.6 m^3

	d. Any Logbook maintained.	Yes	
	e. Quantity of water withdrawal (KLD)	Total=573.2 KLD (Avg. record fron 01/11/2020 to 12/01/2021)	
2.	**Fresh water consumption (KLD) - daily avg. from 01.11.2020 to 12.01.2021**		
	a. Sugar plant	529.89KLD (As per average withdrawal fror Borewell – 2 & 3 from 1st November, 2020 t 12th January, 2021)	
	b. co-generation		
	c. Residential etc.	35.30KLD (As per average withdrawal fron Borewell – 3 of residential area from 1 November, 2021 to 12th January, 2021)	
	d. Total fresh water Consumption (KLD)	565.19 KLD	
	e. Log book maintained (Yes/ No) If any, details to be collected	Yes, maintained	
3.	**Details of Hot & Cold-water recycling system**	**Number**	**Capacity**
	a. Details of Hot water UGR.	Not available	
	b. Cold water UGR and cooling towers	01 no. fan less cooling tower of 100 m^3/hr capacity	540 m^3 Cold water UGR
	c. **Hot water-** Location of flow meter & its Installation	**Flow rate (m^3/hr)**	**Totalizer reading (m^3)**
	1. Imbibition water at mills	163.92	952176.0
	2. Filter cake wash water at rotary vacuum filter	9.8	96666.5
	3. Sugar melting,	0.0	1773
	4. Pan boiling, molasses conditioning	0.0	80154
	5. Wash water at Centrifugal	30	357773.32
	d. **Cold water -**Location of flow meter & its Installation.	**Flow rate (m^3/hr)**	**Totalizer reading (m^3)**
	1. Power turbine cooling	118.2	154218.2
	2. Mills, fibrizer bearing, pumps cooling	46.43	351108.5
	3. Boiler, wet scrubber	9.124	23030.6
	4. Cooling tower of co-generation	1.89	182448.0
	5. B massecuite cooling	19.03	158852.5
	6. C massecuite cooling	17.9	2809.9
	7. Final molasses cooling	0.0	33653.0
	8. Make water for shortfall at any point operation including spray pond/process cooling tower.	cooling tower, make-up= 0.0 m^3/hr, Σ=2043 m spray pond makeup=0.0 m^3/hr, Σ=16989 m^3	
4.	**Waste water (Influent) generation- (Avg. record from 01/11/2020 to 12/01/2021)**		
	a. Effluent generation from spray pond overflow, boiler & cooling tower blow down & D.M./ R.O reject	1.Lamella clarifier inlet/ Spray Pond Overflo = 515.22 KLD 2. Effluent from cooling tower=48.31 KLD	
	b. Mills, boiling house, and co-generation etc.	1.Mills house effluent=173.27 KLD 2.Boiling house effluent=889.38 KLD	
	c. Common / total influent generation at ETP inlet	1062.25 KLD (Effluent generation from Mill House + Boilin House + Lamella Flow + Cooling Tower)	
5.	**Waste water generation, Liter/ton of cane (at ETP inlet)**	191.28 Liter/ton of cane	

6.	**Spray pond / IER wash water overflow**		
	a. Flow meter Installation	Yes,	
	b. Provision of separate spray pond overflow treatment	Yes	
	c. Brief description of spray pond over flow treatment process (mention technology as per charter) 1. Separate treatment of spray pond overflow through micro settlers followed by secondary aerobic treatment. 2. Combined treatment of entire effluent through micro settlers after removal of Oil & grease followed by secondary aerobic treatment. 3. Spray pond overflow treatment using anaerobic filters followed by secondary aerobic treatment. 4. Combined treatment of entire effluent using anaerobic filters followed by secondary aerobic treatment.	Lamella treatment (Spray pond overflow waste water collectio pit→ chemical dosing→ lamella clarifier– primary clarifier of main ETP)	
7.	**Details of Flow meters**	**Flow rate (m^3/hr)**	**Totalizer reading (m^3)**
	a. Outlet of mill house and boiling house.	Yes, Mill house: 3.5 Yes, Boiling house: 1.9	Σ= 44335.2 Σ= 226625.4
	b. Outlet of cooling tower/spray pond i.e. over flow	Yes, 15.3	Σ= 104145.0 m^3)
	c. At ETP outlet (The flow at ETP outlet was observed higher compare to the flow at ETP inlet as the treated effluent from spray pond overflow, which was treated in Flash Mixer Dosing Tank and Lamella Clarifier, was combining prior to reaching storage lagoon).	Yes, 74.63	Σ= 401088.2 m^3 **1561.45 KLD** (Avg record from 01/11/202 to 12/01/2021)
	d. At ETP Inlet	Yes, 50.6	Σ= 277722.1 m^3 **1062.25 KLD** (Avg record from 01/11/202 to 12/01/2021)
	e. Other places of effluent generation	-	
8.	**Details of tube cleaning method adopted (chemical/ hydrojet/ any other appropriate method if any), provide details**	Hydro jet tube cleaning/mechanical brush Chemical cleaning by Caustic & Sulfamic acid	
9.	**Availability of Hazardous tank to collect wash water generated during chemical/Mechanical cleaning of evaporator tubes. (Yes/No), if Yes give Details.**	Yes (02 nos.), capacity- 25m^3 and 36 m^3	
10.	**Total waste water (effluent) discharge (ETP outlet), (Liters/ton of cane)**	183.67 Liters/ton of cane	
11.	**Condensate polishing system adopted by the factory (for boilers >45 kg/cm^2 steam pressure)**	No	

	If yes, then provide the details of condensate polishing system	Unit is planning for installation of CPU fo condensate recycling	
12.	**Construction of small pits with smooth inner surface with ceramic tiles near to boiler feed pumps, condensate pumps, Injection pumps and RVF vacuum to collect gland cooling water. (Yes/No), give details**	Yes	
13.	**Aeration in equalization tank)**	Yes	
14.	**Type of aeration in aeration tank Diffused/ surface/ any other**	Diffused- air grid	
15.	**Tertiary treatment (Yes/No), give Details**	Yes, Dual media filter, activated carbon filter	
16.	**Schematic diagram of ETP (flow chart to be collected)**	Oil skimmer→ lime dosing→ equalization tan → primary clarifier→ aeration tank-1– aeration tank-2→ secondary clarifier→ dua medial filter→ activated carbon filter→ Lagoo **(Detailed flow chart is attached as Annexure V)**	
17.	**Rain water harvesting system adopted**	No.	
18.	**Treatment capacity of ETP (KLD)**	2200 KLD	
19.	**Retention time (Min or hr.)**	**Retention Time/Contact Time (Mentioned in CPCB charter)**	**As per Industry**
	1. Bar screen Chamber	30 minutes	45
	2. Oil & grease tank	45 minutes	60 minutes
	3. Equalization tank with aeration	6 hrs	6 hrs
	4. Primary Clarifier	5-6 hrs	9.0 hrs
	5. Aeration tank	24-28 hrs	33 hrs
	6. Secondary Clarifier	7-8 hrs	10 hrs
	7. Sand/multi grade filter	20-25 minutes	30 minutes
	8. Activated carbon filter	20-25 minutes	30 minutes
	9. Sludge drying bed	Not <0.03 m^3 per ton of cane	310.5 = 0.0345 m^3/ton
	10. Centrifuge	Decanter	
20.	**Any further treatment after ETP**	No.	
21.	**ETP Analysis (Performance Parameters)- As per sample taken during the visit**		
22.	**Number of Piezometric wells available in the unit premises: No**		

23.	**Storage of treated Effluent**	
	a. No. & size of lagoons	01 & size 16000 m^3
	b. Retention time	15 days
	c. Lagoon type- permeable/impermeable	Impermeable
24.	**Sludge Handling Process (Yes/No), gives details.**	
	a. Sludge Digestion Method	No
	b. Sludge Drying Process	Yes, sludge drying bed (10 nos.) 35m x 3n x1.5m
	c. Final Disposal of Sludge	Sludge is being mixed with press mud & boile ash and given to farmers to be used as manur by Farmers
	d. Whether mechanical sludge handling system installed	Sludge decanter of 5m^3/hr capacity installed bu yet to be commissioned
25.	**Any Hazardous Substances (Yes/No), if yes, give details. (Quantity & way of Disposal)**	Yes, Schedule I- Cat 5.1 (used oil & grease) Quantity= 5.33 Kg/day (as per log book fron 28th Dec-2020 to 12th Jan-2021) Disposal= Bharat Oil & Waste Managemen Ltd. (BOWML)
26.	**Manpower employed for ETP operation & maintenance.**	15
27.	**Details of irrigation system & treated effluent used quantity**	
	1. Own land area for irrigation	Yes
	2. Farmer land area and their agreement	Yes
	3. Net effluent generation left for Irrigation	1800 KLD as per irrigation management plan
	4. Flow meter to measure amount of water used for irrigation.	Yes, installed, Flow rate 2.89m^3/hr (Σ =103299.78 m^3)
	5. Distance of land Area from the Unit (Km)	7.0 hectare Farmer land within 1 km and 20 hectare including factory farm, lawn, green bel within factory premises
	6. Total Available Area	215 Hectare
	7. Soil Texture of land (Sandy, Sandy loam, Loam, Clay loam, Clay)	Sandy loam
	8. Crop area under effluent application	208
28.	**Cleaning mechanism at ETP and factory floor**	Dry cleaning
29.	**Color coding of pipelines for water distribution network**	Yes

4. Observations

1. The unit was found operational with consented capacity of 9000 TCD and the ETP was operational at the time of inspection. On the day of inspection, the unit was producing only raw sugar for export purpose.
2. As per Daily Manufacturing Reports (DMRs) and RT-7C from 1st Nov, 2020 to 12th Jan, 2021provided by the unit, average cane crushing is found 8501.36 TCD.
3. Unit is having valid Consent to Operate under section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 (as amended) and Water under section 25/26 (Prevention & Control of Pollution) Act, 1974 (as amended) for discharge, both valid up to 31st December, 2021.

4. 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 valid up to 27th December, 2022.
5. The NOC for ground water withdrawal is expired on 02.05.2019, however, the unit has applied the same from Ground Water Department, Uttar Pradesh on 30.11.2020.
6. The unit has generated used oil & grease as average of 5.33 Kg/day (as per log book from 28th Dec-2020 to 12th Jan-2021). Following are the details of the hazardous waste generation by the unit:

Table- 2. Details of Hazardous Waste generated as per log book record from 1st Nov-2020 to 12th Jan-2021

S.No.	Category of Hazardous Waste as per the Schedules I, II & III of these rules	Authorized mode of disposal or recycling or utilization or co-processing etc.	Permitted Quantity as per Annum	Quantity generated
1	5.1 (used Oil & Grease)	TSDF	1200 Ltr./Annum	5.33 Kg/day (as per log book from 28th Dec-2020 to 12th Jan-2021)

7. The unit is a registered member of Bharat Oil & Waste Management Ltd. (BOWML) for safe, legal & scientific disposal of hazardous waste. The unit has provided Form 10 dated 01.07.2021 as evident for safe disposal of used Oil & Grease.
8. The unit is having two Hazardous tanks with capacity of 36 m^3 and 25 m^3 to collect wash water generated during chemical cleaning of evaporators etc.
9. The team has observed huge quantity of scrap/metal near ETP area in the unit premises which shall be disposed through contractor as per representative of the unit.
10. Unit has total three bore-well to meet fresh water requirement of sugar unit and residential colony. Flowmeters were found installed at all the bore-wells.

Table- 3. Month wise details of fresh water abstraction (from 1st Nov-20 to 12th Jan-21)

Sr. No.	Bore-well No.	Month wise water abstraction (KLD) (as per logbook data from 1st Nov-20 to 12th Jan-21)			
		Nov-2020	Dec-2020	Jan-2021	Average
1	Bore-well No. 1	14788	17348	6546	529.89
2	Bore-well No. 2	0	0	0	0
3	Bore-well No. 3	1102	1082	393	35.30
	Total	**15890**	**18430**	**6939**	**565.19**

11. The unit has not installed Piezometer in the premises of sugar mill.
12. Unit has co-generation power plant (40 MW) for power generation. The unit has installed wet scrubber as Air Pollution Control Devices (APCDs) with Boiler.
13. The unit has provided 2 stream of DM plant having capacity 30 m^3/hr & 50 m^3/hr for water treatment for boiler use. Both units consist of MGF, RO unit, degasser, cationic and anionic resin unit. Regeneration reject from DM plant along with spray pond overflow & IBD & CBD goes to spray pond treatment system for treatment. The unit had single UGR of capacity 540 m^3 for Hot and Cold-water recirculation system.
14. The unit has provided separate physio-chemical treatment for spray pond overflow (Design capacity 60 m3/hr.) which comprises of equalization tank, flash mixer, flocculator and lamella clarifier. Manual dosing of lime observed in the equalization tank.

15. Manual dosing of Cationic coagulant in flash mixer & polyelectrolyte solution in flocculent tank observed. Clarified effluent then transferred to primary clarifier outlet of main ETP for further treatment.
16. The unit has installed the main ETP with design capacity of 2200 KLD which comprised of screen chamber→ Oil & Grease tank→ Lime mixing tank→ Equalization tank→ Primary clarifier→ Aeration tank→ Secondary clarifier→ Filtration system (MGF & ACF).
17. Average effluent discharge from ETP is 1561.45 KLD as per logbook data from 01.11.2020 to 12.01.2021, which is found higher as compare to average effluent generation at ETP inlet i.e. 1062.25 KLD, because the treated effluent from spray pond overflow was combining prior to reaching storage lagoon.
18. The unit has provided 2 parallel units of aeration tanks (AT-1 -1680 m^3 & AT-2- 577 m^3) provided for secondary treatment. AT-2 is in parallel cum series configuration with AT-1 and outlet of AT-2 again treated through AT-1.
19. Diffusers are provided for aeration in equalization tank & aeration tanks.
20. The unit has installed 02 nos. of multi-grade filter and 02 nos. of activated carbon filter having capacity of 100 m3/hr each, however they are used alternatively.
21. The unit has provided 1 no of irrigation sump for irrigation as well as filter backwashing.
22. The unit has provided 10 no. of sludge drying bed (SDB) common for handling of sludge from lamella clarifier, primary clarifier and secondary clarifier. However, only 4 no. SDB was found operational during inspection.
23. Average generation of sludge is found 601.77 kg/day (as per log book data from 1st Nov-2020 to 12th Jan-2021. ETP sludge is stored in sludge drying bed which is being mixed with press mud and provided to farmer as a manure, however partition wall of one bed was observed in damaged condition. Boiler ash is being used in filling of low land area.
24. Decanter is also installed but yet to commissioned for mechanical sludge handling. The unit has provided Proforma Invoice/Purchase Order (P.O. No.-4100007358) dated 30.07.2020.
25. Unit has provided OCEMS at outlet of ETP for continuous monitoring of treated effluent parameters and found connected with CPCB server. OCEMS reading w.r.t. flow-50.60 m3/hr, pH-7.91 COD-77.2 mg/l, BOD-17.7 mg/l and TSS-18.31 mg/l were recorded during inspection. The flow at outlet was 25 m^3/hr as measured by V-notch installed at outlet of channel.
26. MLSS in AT-I and AT-II measured 3155 mg/l & 2708 ml/L respectively which indicate that both aeration tanks were in stabilized condition.
27. MLVSS/MLSS ratio in AT-I and AT-II measured 0.87 & 0.86 respectively indicating that optimum active microbial consortium exists in both aeration tanks.
28. The lagoon capacity of 16000 m3 is adequate for 10-11 days, which is less than the 15 days of holding capacity of treated effluent storage during no demand of period for irrigation purpose. However, it is also mentioned in validation of ETP performance report performed by National Sugar Institute, Kanpur, submitted of 14.10.2020.
29. Flow meter for measuring generated effluent found installed at spray pond overflow, boiling house & mill house outlet. Effluent generated from spray pond overflow is treated by lamella filter/clarifier.
30. Flow meter at Lamella clarifier inlet, main ETP inlet, ETP outlet & lagoon outlet are also found installed for quantification of generated and disposal of effluent.
31. Unit is in the process of installation of 36 m3/hr Condensate Polishing Unit (CPU) for condensate recycling.

Table- 4. Analysis result of samples collected from ETP

Sampling Locations	Parameters (all values are in mg/l except pH & Color in Hazen)								
	pH	Color	Sulphur/ Sulphate	COD	BOD	TSS	TDS	MLSS/ MLVSS	O & G
ETP Inlet	5.9	83	72	2289	1397	332	1396	-	-
Spray pond overflow	6.3	33	BDL	1055	444	295	488	-	-
Spray pond Treated	6.7	13	BDL	553	303	70	596	-	-
Primary Outlet	6.3	23	11	1848	791	164	1292	-	-
Secondary Outlet	7.2	08	08	147	46	72	692	-	-
ETP Outlet	7.2	08	37	128	36	64	732	-	06
Aeration tank 1	-	-	-	-	-	-	-	3155/ 2731	-
Aeration tank 2	-	-	-	-	-	-	-	2708/ 2320	-
Lagoon	7.4	07	58	76	21	25	896	-	-
Sewage Drain from inside the premises	7.1	BDL	-	40	12	31	332	-	-
Prescribed standards *[as per notified standard for land disposal]*	**5.5 to 8.5**		-	**250**	**100**	**100**	**2100**	-	**10**

32. Analysis result of sample collected from ETP outlet (pH-7.2 against 5.5-8.5, COD- 128 mg/l against 250 mg/l, BOD- 36 mg/l against 100 mg/l, TSS- 64 against 100 mg/l, TDS- 732 mg/l against 2100 mg/l, O & G- 06 against 10 mg/l and Lagoon outlet (pH-7.4 against 5.5-8.5, COD- 76 mg/l against 250 mg/l, BOD- 21 mg/l against 100 mg/l, TSS- 25 against 100 mg/l, TDS- 896 mg/l against 2100 mg/l) shows that ETP is complying w.r.t the discharge standards for land disposal.
33. The analysis results of sample collected from Sewage Drain from inside the premises shows compliance w.r.t. to the discharge standards for land disposal.
34. The unit has installed two no. of Bagasse dryer, with capacity 170 TPH and 70 TPH.
35. The team has observed that the unit is discharging domestic sewage into the Sot river through a channel which was also connected with the treated effluent storage lagoon for irrigation.
36. The retention capacity of lagoon is around 10 days (i.e. 16000m3 capacity of lagoon and treated effluent discharge is 1561.45 KL), thus, the lagoon capacity is less than the maximum permissible storage of 15 days.
37. The unit has not installed Sewage Treatment Plant (STP) for treatment of sewage generated from residential colony, however, the unit is in the process of setting up of STP having capacity 60 KLD, for sewage treatment of residential area. The unit has provided the Purchase Order for the same.

Table- 5. Analysis result of samples collected from Sewage Drain coming from residential colony to outside the premises and Ponding in d/s of drain merging in Sot River

Sampling location	Parameters (all values are in mg/l except pH & Color in Hazen)						
	Color	pH	BOD	COD	TSS	TDS	Sulfate
Sewage Drain coming from residential colony to outside the premises	13	6.6	157	268	59	740	27
Ponding in d s of drain merging in Sot River	11	7.2	75	148	84	476	17

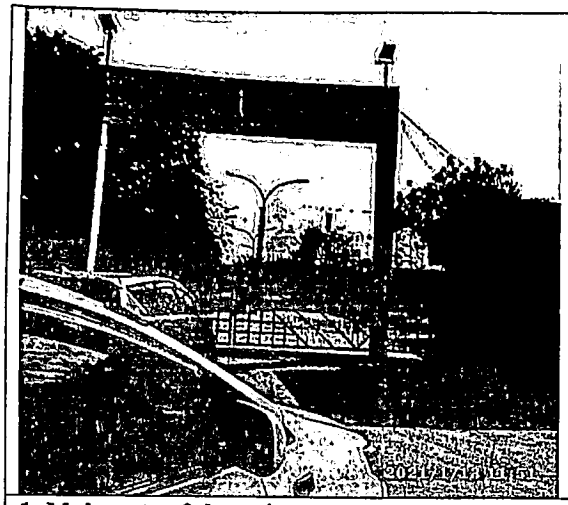
38. The analysis of sample taken from sewage drain coming from residential area discharging into irrigation channel outside the unit premises and ponding in downstream of drain merging in Sot river indicate the characteristics of untreated domestic sewage.

5. Conclusions

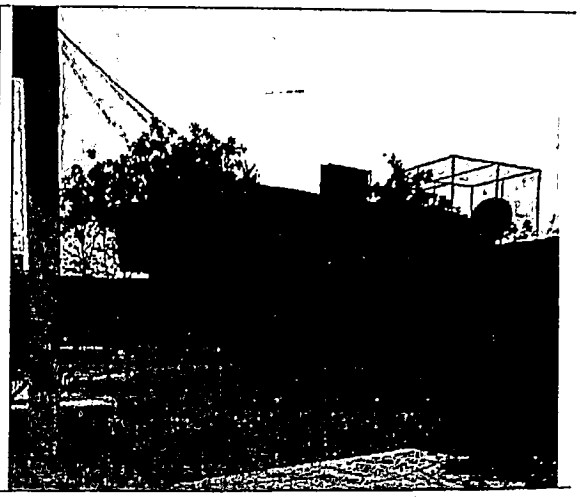
1. The unit is operating with valid Consent to Operate Authorization.
2. The unit has disposed huge quantity of scrap'metal near ETP in open area in the unit premises
3. Partition wall of one sludge drying bed was in damaged condition.
4. The unit has installed Decanter which is yet to be commissioned for sludge handling.
5. Storage lagoon of final treated effluent with capacity of 16000 m^3 is adequate for only 10-11 days which is less than maximum permissible storage of 15-days.
6. The unit is planning for installation of Condensate Polishing Unit (CPU) for condensate recycling.
7. Analysis result of sample collected from ETP outlet (pH-7.2 against 5.5-8.5, COD- 128 mg/l against 250 mg l, BOD- 36 mg l against 100 mg/l, TSS- 64 against 100 mg/l, TDS- 732 mg/l against 2100 mg l. O & G- 06 against 10 mg l and Lagoon outlet (pH-7.4 against 5.5-8.5, COD- 76 mg/l against 250 mg l, BOD- 21 mg l against 100 mg/l, TSS- 25 against 100 mg/l, TDS- 896 mg/l against 2100 mg l) are complying w.r.t the discharge standards for land disposal.
8. The unit has not installed Sewage Treatment Plant (STP) for treatment of sewage generated from residential colony.
9. The analysis of sample taken from sewage drain coming from residential area discharging into irrigation channel outside the unit premises and ponding in downstream of drain merging in Sot river indicates the characteristics of untreated domestic sewage.

6. Recommendations

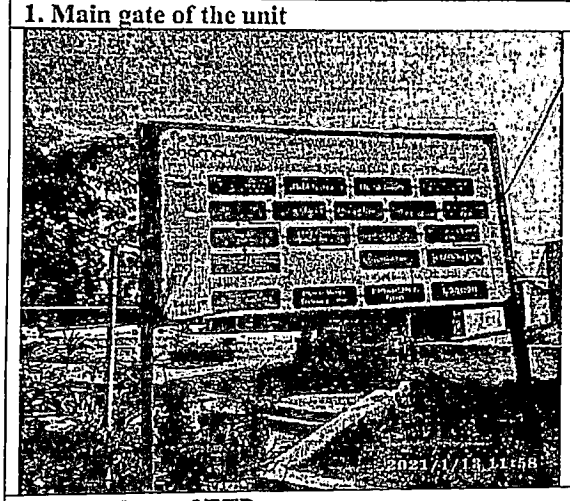
1. The unit shall provide suitable capacity dosing pump for dosing of chemicals like lime and polyelectrolyte solution for optimum utilization of chemical as per feed flow condition.
2. The unit shall safely dispose scrap'metal.
3. The unit shall commission Decanter for better sludge management.
4. The unit shall repair partition wall sludge drying bed.
5. The unit shall install Condensate Polishing Unit (CPU).
6. The unit shall install Sewage Treatment Plant (STP) for treatment of sewage generated from residential colony as soon as possible.
7. The unit shall restrict the drainage of domestic sewage into irrigation channel coming from residential area.
8. The unit shall obtain the NOC from Ground Water Department, Uttar Pradesh at the earliest.



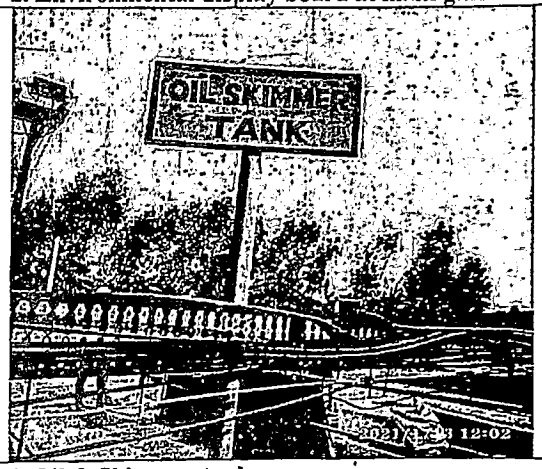
1. Main gate of the unit



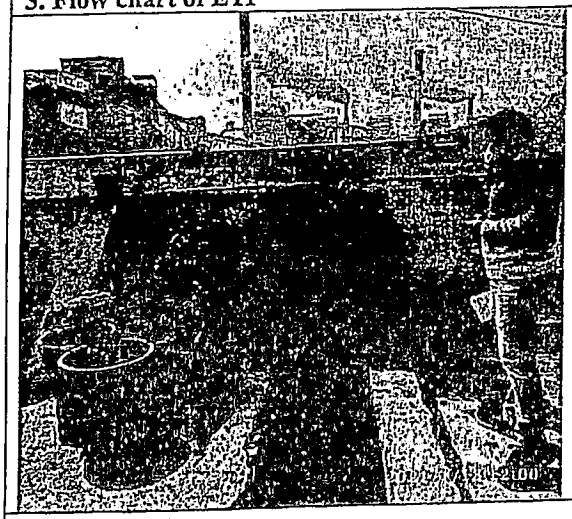
2. Environmental display board at main gate



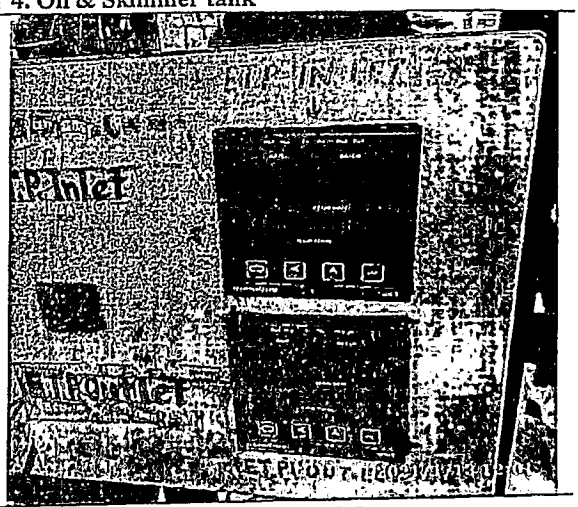
3. Flow chart of ETP



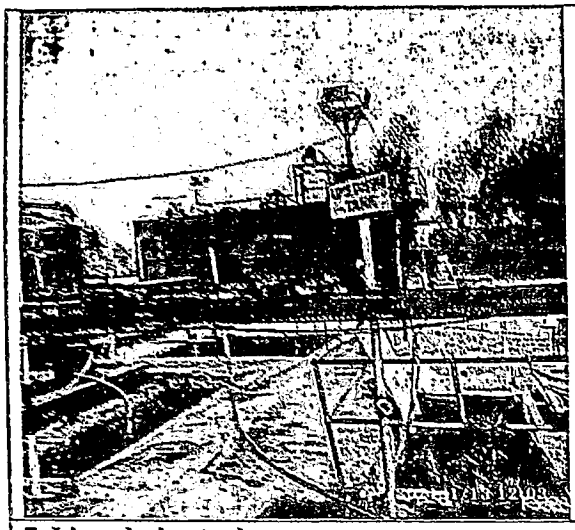
4. Oil & Skimmer tank



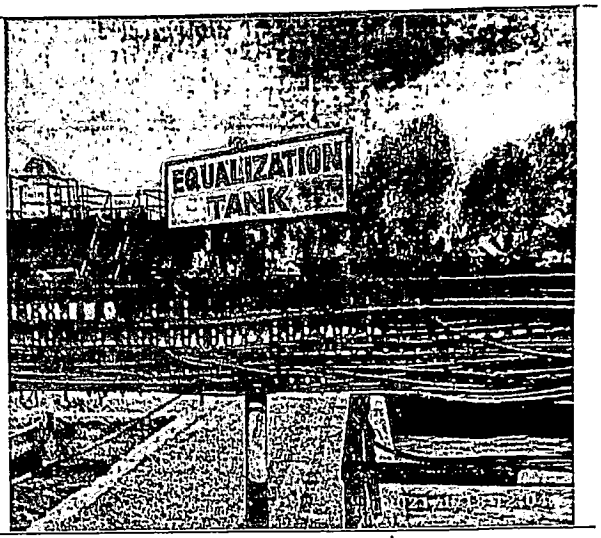
5. Inlet of ETP



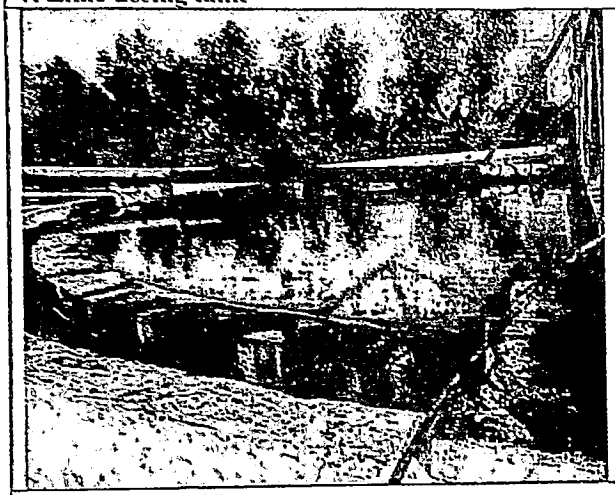
6. Flow meter reading of ETP inlet



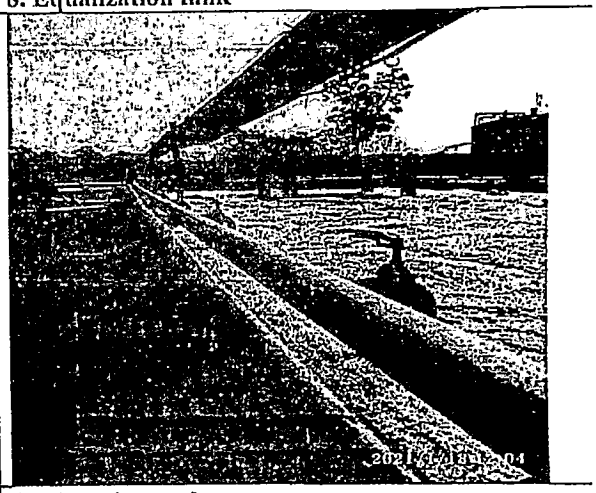
7. Lime dosing tank



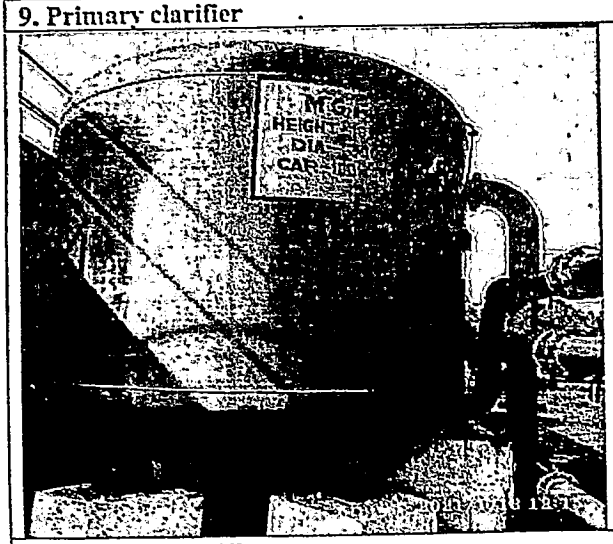
8. Equalization tank



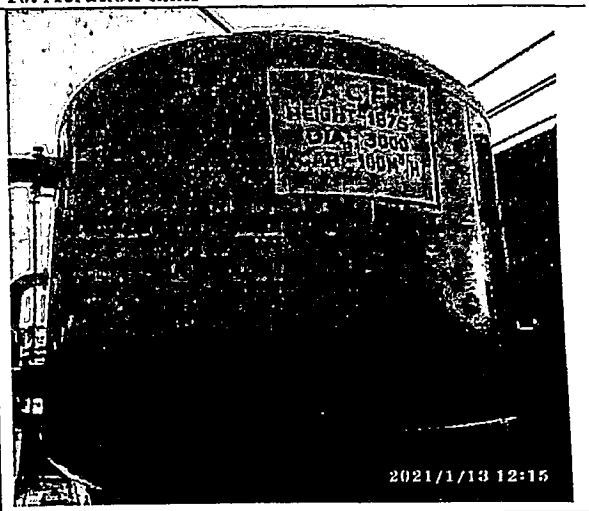
9. Primary clarifier



10. Aeration tank

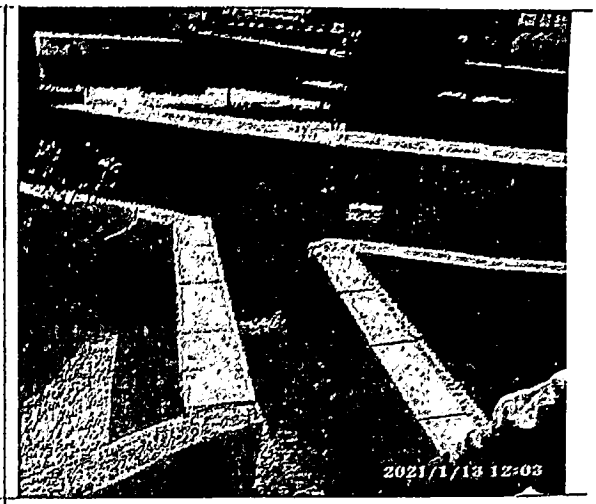


11. Multi Grade Filter

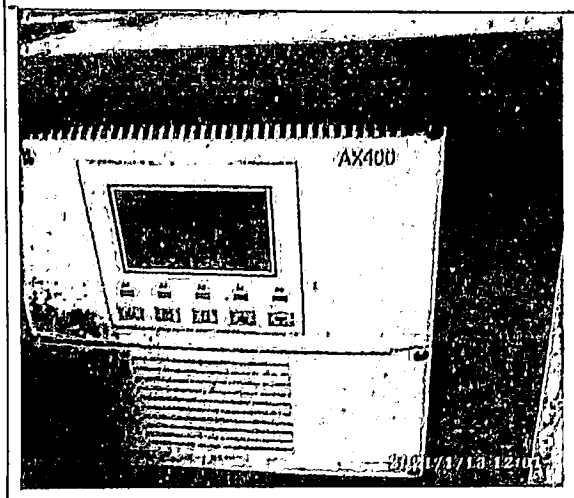


12. Activated Carbon Filter

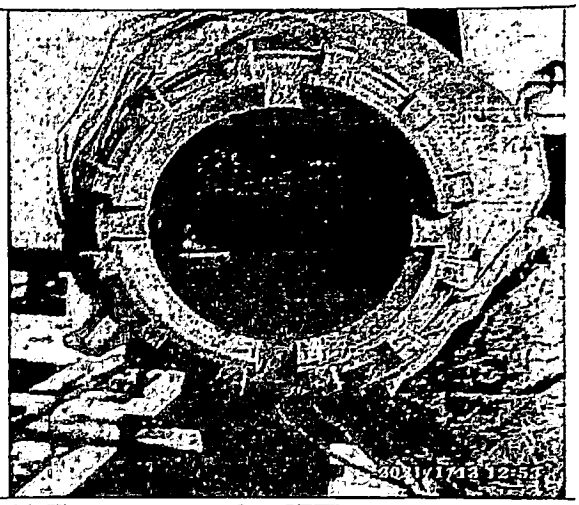
13. Lamella clarifier



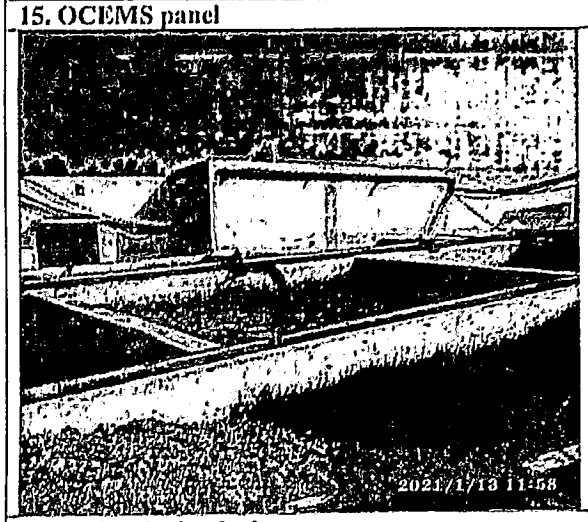
14. Final Outlet of ETP



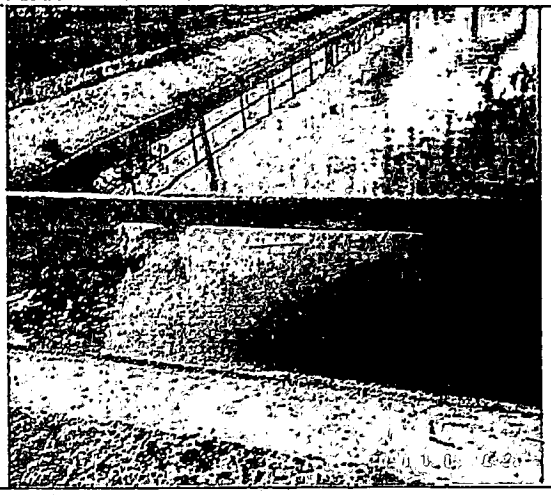
15. OCEMS panel



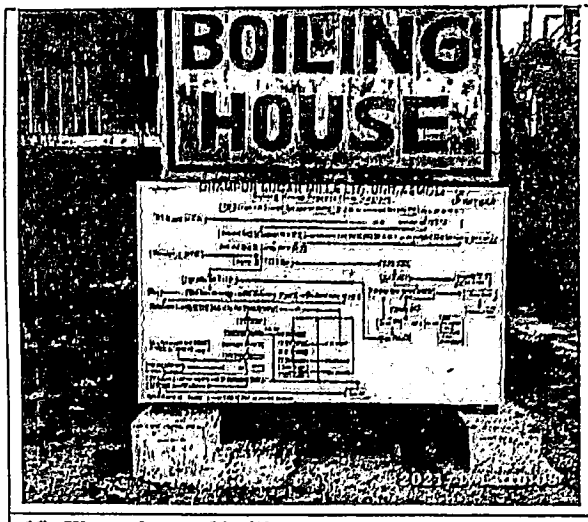
16. Flow meter at outlet of ETP



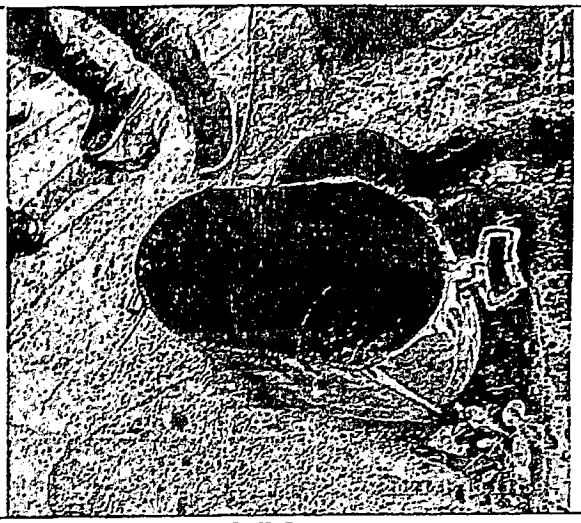
16. Sludge drying bed



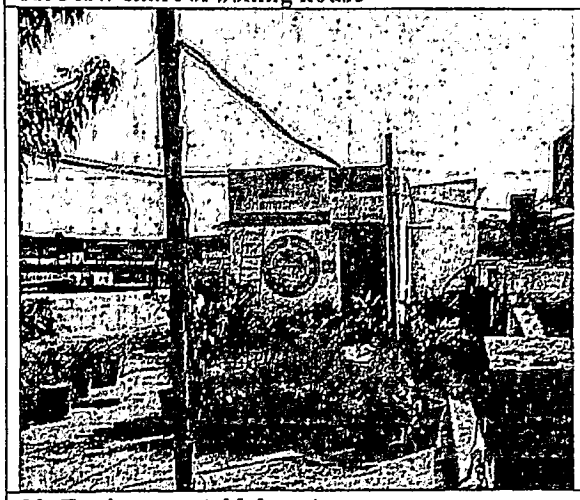
17. Lagoon



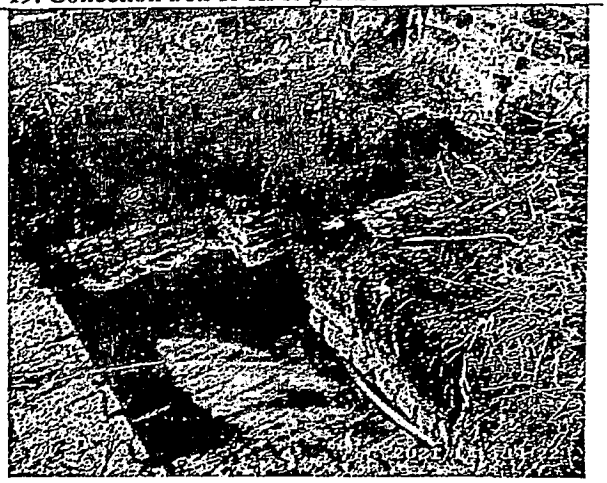
18. Flow chart of boiling house



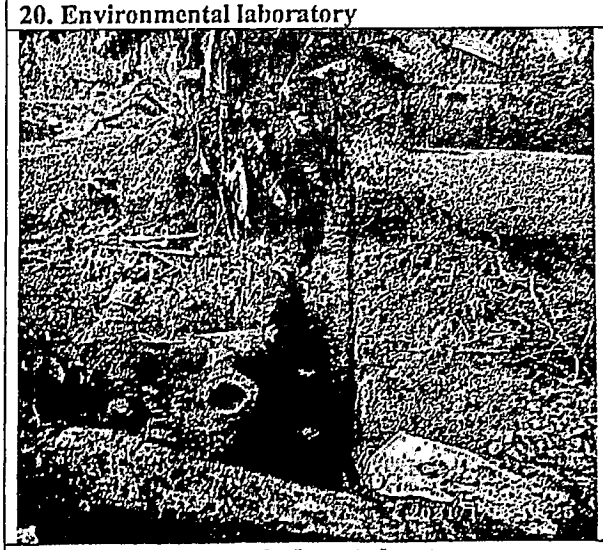
19. Collection box of oil & grease



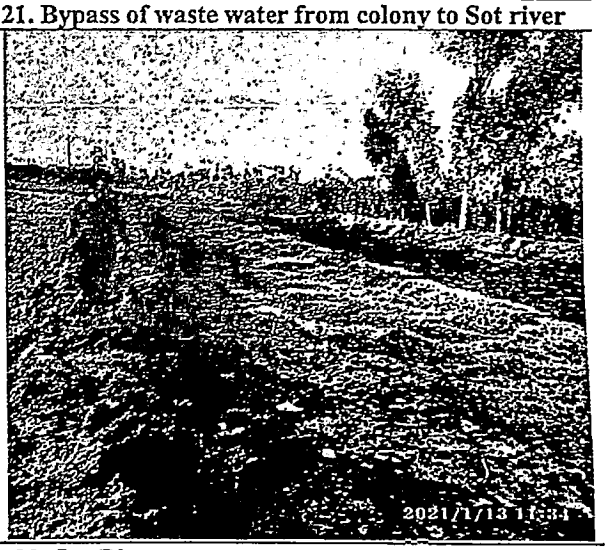
20. Environmental laboratory



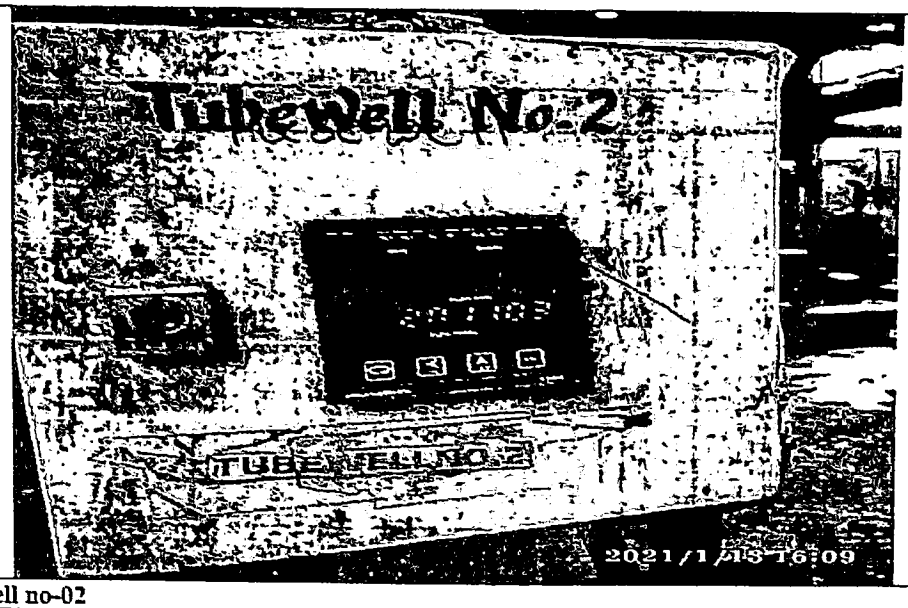
21. Bypass of waste water from colony to Sot river



22. Irrigation channel of treated water



23. Sot River



24. Tube-well no-02

8. Inspection Team

Sr. No.	Name of the inspecting officers	Signature
1.	Mrs. Reena Satavan, Sc. 'D' CPCB, Delhi	
2.	Shree S. S. Singh, Assistant Environment Engineer, RO-Moradabad, UPPCB	
3.	Dr. Prabhat Ranjan, Sc. 'B', CPCB, Delhi	
4.	Sh. Vipin Kumar, RA-III, CPCB, Delhi	
5.	Ms. Anshul Kumari, RA-III, CPCB, Delhi	
6.	Ms. Shivangi Goswami, RA-II, CPCB, Delhi	
7.	Sh. Ashwani K. Singh, RA-II, CPCB, Delhi	
8.	Sh. Muktesh Chaudhary, SRF, CPCB, Delhi	

Annexure - I

U.P. Pollution Control Board

CONSENT ORDER

Ref No. - 69306/UPPCB/Moradabad(UPPCBRO)/CTO/air/BHIM NAGAR/2019 **Dated : 27/03/2020**

To,

Shri MUKESH KASHYAP
M/s DSM SUGAR ASMOLI
DSM SUGAR ASMOLI (SUGAR UNIT)ASMOLI SAMBHAL,SHAMBHAL,244304
BHIM NAGAR

Sub : **Consent under section 21/22 of the Air (Prevention and control of Pollution) Act, 1981 (as amended) to M/s. DSM SUGAR ASMOLI**

Reference Application No. 6218203

Dated : 27/03/2020

1 With reference to the application for consent for emission of air pollutants from the plant of M/s DSM SUGAR ASMOLI. under Air Act 1981. It is being authorised for said emissions, as per the standards, in environment, by the Board as per enclosed conditions .

2 This consent is valid for the period from 01/01/2020 to 31/12/2021 .

3 Inspite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 21 (6) of the Air (Previntion and Controt of Pollution) Act, 1981 as amended.

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 17:16:19 +05'30'

For and on behalf of U.P. Pollution Control Board

Chief Environment Officer

Enclosed : As above
(condition of consent):

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 17:16:33 +05'30'

Chief Environment Officer

U.P. Pollution Control Board

Dated : 27/03/2020

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of cane crushing Cane Crushing-9000 TCD .
2. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.

3(a) The maximum rate of emission of flue gas should not be more than the emission norms for the stacks.

3(b) . Air Pollution Source Details.

Air Pollution Source Details

S.No	Air Polution Source	Type of Fuel	Stack No.	Parameters	Height
1	Boiler-170 TPH	Bagasse-1600 TPD	01	Particulate Matter	ESP as APCS and Stack Hight of 72 meter from ground level
2	Boiler-70 TPH & 50 TPH	Bagasse 630 TPD	2	Particulate Matter	Wet Scrubber as APCS and stack height 60 Meter from ground level

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

Emission Quality Details Detail

S.No	Stack No	Parameter	Standard
1	01	Particulate Matter	150 mg/nm3
2	02	Particulate Matter	150 mg/nm3

4 . The industry should be operated in such a manner that it does not adversely affect the environment and the solid waste generated such as ash etc. is disposed in eco friendly manner .

5 . Any source of emission other than that mentioned in the Air consent seeking application will not be permitted by the Board .

6 . The industry should ensure the operation of the air pollution control system (APCS) in such a manner that the air emission confirms with the standards prescribed under the E.P Act 1986 as amended.

7 . The industry shall submit Environmental Statement in prescribed format as per rule no.14 as per E.P Rules 1986 .

8 . The industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time .

9 . Industry shall submit monthly monitoring reports of all stacks and ambient air quality from a certified / approved laboratory under E.P. Act 1986 .

10 . The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.

11 . The industry will ensure the continuous and uninterrupted data supply from the OCEEMS to the CPCB and SPCB .

12 . The unit shall submit audited balance sheet for the current year and the details of fees deposited during last three years within a month failing which consent would be deemed void.

13 . The use of Pet coke and Furnace oil as a fuel in the factory is restricted in compliance of the Hon'ble Supreme court order .

The Industry will use minimum 20% Bio Briquette as fuel in the Boiler depending upon its availability .

The industry shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).

16. Minimum 33% of the land on which industry is established will be covered and properly maintained by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H-16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www. uppcb. com /pdf/Green-Belt-Guidle_160218.pdf .

17. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order .

18. Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time .

Specific Conditions:

1.This consent to operate is valid for production Sugar and cane crushing capacity of 9000 TCD.
2 Unit shall operate and maintaine the APCS i.e. ESP at the boiler of 170 TPH & stack height of 72 meter from ground level & wet scrubber & stack height of 60 metre from ground level respectively.
3.Unit shall submit the proposal for installation of ESP/ Bag Filter for the boilers of 50 TPH & 70 TPH.
4.Unit shall use Bio-briquette as co-fuel with main fuel in the ratio of minimum 20 percent in boiler subject to its availability.
5.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.
6.The ambient noise level shall confirm to the standards under the Environment (Protection) Act 1986.
7.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.
8.Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India and OA no 539/2019 Adil Ansari vs Dhampur sugar Mill Ltd &ors..
9.Unit shall submit emission monitoring report of the stack of air polluting sources done by MoEF & CC approved laboratory in every 3 months.
10.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.

Issued with the permission of competent authority .

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 17:16:45 +05'30'

For and on behalf of U.P. Pollution Control Board .

Chief Environment Officer

Annexure II

U.P. Pollution Control Board

CONSENT ORDER

Ref No. -
29309/UPPCB/Moradabad(UPPCBRO)/CTO/wat
er BHIM NAGAR/2019

Dated : 27/03/2020

To ,

Shri MUKESH KASHYAP
M/s DSM SUGAR ASMOLI
DSM SUGAR ASMOLI (SUGAR UNIT)ASMOLI SAMBHAL,SHAMBHAL,244304
BHIM NAGAR

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

Reference Application No :6218477 **Dated :27/03/2020**

1 For disposal of effluent into water body or drain or land under The Water (Prevention and control of Pollution) Act,1974 as amended (here in after referred as the act) M/s. DSM SUGAR ASMOLI is hereby authorized by the board for discharge of their industrial effluent generated through ETP for irrigation/river through drain and disposal of domestic effluent through septic tant/soak pit subject to general and special conditions mentioned in the annexure ,in refrence to their foresaid application .

2 This consent is valid for the period from 01/01/2020 to 31/12/2021 .

3 In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 27(2) of the Water (Previntion and Controt of Pollution) Act, 1974 as amended .

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 17:14:25 +05'30'

For and on behalf of U.P. Pollution Control Board

Chief Environment Officer

Enclosed : As above
(condition of consent):

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 17:14:38 +05'30'

Chief Environment Officer

U.P. POLLUTION CONTROL BOARD, LUCKNOW

Annexure to Consent issued to M/s.DSM SUGAR ASMOLI vide

Consent Order No. 6218477/ Water Dated : 27/03/2020

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of Cane Crushing-9000 TCD .
2. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.
3. The quantity of maximum daily effluent discharge should not be more than the following :

Effluent Discharge Details			
S.No	**Kind of Effulant**	**Maximum daily discharge,KL/day**	**Treatment facility and discharge point**
1	Domestic	6 KLD	Septic Tank
2	Industrial	Industrial effluent quantity shall be restricted to 900 KLD and Cooling Tower blow down shall be restricted to 900 KLD, only 1 outlet is allowed	ETP

Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. The treated domestic and industrial effluent if discharged outside the premises, if meets at the end of final discharge point, arrangement should be made for measurement of effluent and for collecting its sample. Except the effluent informed in the application for consent no other effluent should enter in the said arrangements for collection of effluent. It should also be ensured that domestic effluent should not be discharged in storm water drain .

4(a) The domestic effluent should be treated in the treatment plant so that it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules 1986 as amended.

Domestic Effulant		
S.No	**Parameter**	**Standard**
1	Total Suspended Solids	100 mg/l
2	BOD	30 mg/l
3	COD	250 mg/l
4	Oil & Grease	10 mg/l
5	Quantity of Discharge	6 KLD

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

Industrial Effulant		
S.No	Parameter	Standard
1	Total Suspended Solids	100 mg/l (for on land disposal for irrigation), 30 mg/l (for discharge in drain)
2	BOD	100 mg/l (for on land disposal for irrigation), 30 mg/l (for discharge in drain)
3	COD	250 mg/l
4	Oil & Grease	10 mg/l
5	Quantity of Discharge	Industrial effluent quantity shall be restricted to 900 KLD and Cooling Tower blow down shall be restricted to 900 KLD, only 1 outlet is allowed

4(c) Loading Rates for different soil textures.

S.No	Soil Texture	Loading rate in m3/Ha/Day

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

If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order.

Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time.

Specific Conditions:

1.This consent to operate is valid for production Sugar and cane crushing capacity of 9000 TCD.
2.Unit shall submit the plan of STP for treatment of domestic effluent 06 KLD within 6 months.
3.Industrial effluent quantity shall be restricted to 900 KLD and Cooling Tower blow down shall be restricted to 900 KLD in compliance of notification no G.S.R.35(E) dated 15.01.2016 of MoEF&CC.
4.Unit shall use the treated effluent for irrigation on land and disacharge as per norms in drain.
5.The discharge norms must confirm as per the notification no G.S.R. 35 (E) dated 15.01.2016 of MoEF&CC.
6.Unit shall comply with the directions issued Central Pollution Control Board , New Delhi.
7.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.
8.Unit shall obtain NOC from CGWA for ground water extraction. Unit must obtain registration under Section 10/ Section 11 of The Uttar Pradesh Ground Water (Management and Regulation) Act 2019.
9.Unit shall operate and maintain the installed electromagnetic flow meter at water source and outlet of ETP with running hours and maintain the records of water extracted and treated effluent supplied to irrigation or discharge in drain.
10.Unit shall maintain pipe line from outlet of ETP and to the point of irrigation land.
11.Unit shall maintain and operate properly the installed online effluent monitoring system at the outlet of ETP and ensure the connectivity to the servers of CPCB and UPPCB.
12.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.
13.Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India and OA no 539/2019 Adil Ansari vs Dhampur sugar Mill Ltd &ors.
14.Unit shall submit treated effluent monitoring report of the ETP and ground water quality of premises as well as of the irrigated area done by MoEF & CC approved laboratory in every 3 months.
15. Unit shall maintain the log-book for the generation and disposal of ETP sludge and other solid wastes including boiler ash generation.
16.Unit should install Condensate Polishing Unit (CPU) for high pressure boilers (105 Kg/cm2) to treat process condensate for reuse in process. This will help in reduction of fresh water consumption.
17.The Unit must ensure the maximum reuse of treated effluent in process.
18.All domestic waste water generated within the Unit's premises and residential colony shall be discharged after proper treatment. The Unit shall install Sewage Tretment Plant (STP) of adequate capacity for the treatment of domestic wastewater.
19.Unit shall maintain pipe line from outlet of ETP and to the point of irrigation land.
20.Unit shall install flow meters at Mill Fibrizer, Mescuite cooling and RO reject and submit the compliance with authentic data and records thereof.
21.Unit shall provide Hazardous tank in the Boiling house.
22.Unit shall provide lagoon (for storage of treated effluent) properly lined to prevent leaching/ contamination of ground water.
23.The mechanical sludge dewatering/handling system for better management of wet sludge shall be provided by the Unit.
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.

Amit Chandra
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Registered

UTTAR PRADESH POLLUTION CONTROL BOARD
T.C. 12 V, VIBHUTI KHAND, GOMTI NAGAR, LUCKNOW

Ref: HW210 C-7/Haz-18/17 Dated: 27-12-17

1. Number of authorisation and date of issue: 52/ Haz Auth - 18/17 as above
2. Reference of application (No. and date):
3. Mr. Mukesh Kashyap of M/s Dhampur Sugar Mills Ltd, (Sugar Unit) Asmoli Sambhal, Moradabad is hereby granted an authorisation based on the enclosed signed inspection report for generation, storage & disposal of hazardous wastes as per following details.

Details of Authorisation

Sl. No.	Category of Hazardous wastes as per Schedule I,II and III of these rules	Authorised mode of disposal or Recycle or utilization or co-processing, etc.	Quantity /Annum
1.	Schedule I-Cat 5.1 (Oil & Greese)	TSDF	1200 Ltr./Annum

1. The authorisation shall be valid for a period of Five Year from the date of issue, if not suspended or cancelled earlier.
2. The authorisation is subject to the following general and specific conditions. Valid upto 26/12/22

A. General conditions of authorisation:

1. The authorisation shall comply with the provisions of Environment (Protection) Act 1986 and rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer of the U.P. Pollution Control Board.
3. The person authorised shall not rent lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the U.P. Pollution Control Board.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of this 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 U.P. Pollution Control Board to close down the facility.
8. An application for the renewal of an authorisation shall be made in form 1, before its expiry as laid down in rule It is further brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 shall be allowed to operate without valid authorisation. It is also provided in the same orders that industries which are not complying with the conditions of authorisation shall not be allowed to operate. Hence in case you fail to apply for authorisation, before its expiry or fail to comply with conditions of the earlier authorisation issued to you, closure order shall be issued against your industry without any further notice.
9. Annual return shall be filled by June 30th for the period ensuring 31st March of the Year.
10. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
11. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.

12. The applicant must file returns on prescribed Form 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.
13. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.
14. The authorised person shall not receive, collect, or store any hazardous waste from any unauthorised occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorisation of the Board.
15. In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers of hazardous chemicals such as flammable corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.
16. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorisation issued under the Rule – 7 of Hazardous and Other Wastes (Management & Transboundar Movement) Rules, 2016.
17. You are directed to display on-line data/display board outside the main factory gate with regard to quantity nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.
18. It is the mandatory duty of the authorised person to comply with the guidelines for transportation of hazardous waste in accordance with rule 18 of Hazardous and Other Waste (Management and Tran boundary Movement) Rules, 2016.
19. It should be ensured that hazardous wastes shall be properly collected and packed in HDPE bags and then temporarily stored in a lined RCC tank/pit with suitable shed.
20. An ETP sludge test report of a laboratory approved under E.P. Act shall be submitted along with compliance of this letter of this office.
21. Used oil shall be sold only to recyclers registered with U.P. Pollution Control Board. The record shall be maintained.
22. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.
23. Details of raw material which is (Hazardous waste) and product along with quantity shall be sent with the annual
24. You shall become the member of any common TSDF for S.L.F. (M/S U.P. Waste Management Project Kumbhi Kanpur Dehat or M/s Bharat Oil & Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat permitted by U.P.P.C.B), and start sending the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifest (document of proof) within one/three month of this letter. The authorized incinerator is with M/s Bharat Oil Company, Sahibabad, Ghaziabad for oily waste and paint sludge only and common incinerator at Kumbhi, Kanpur Dehat, Uttar Pradesh for other incinerable wastes. The authorized incinerator is also with U.P. Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat.
25. You are required to store the hazardous waste safely and send it to TSDF/incinerator within Ninty days Six months of its generation.
26. Copies of Hazardous Waste Manifest in Form-10 shall be sent regularly to U.P.P.C.B. for each category of waste sent to TSDF / Incinerator.
27. Emission from the Common / Captive incinerator stack shall meet the prescribed standards under Environmental Protection Act, 1986.

(Ashish Tiwari)
Member Secretary

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

(Amit Chandra)
Chief Environmental Officer
Circle - I

₹. 100

NOTARIAL

उत्तर प्रदेश UTTAR PRADESH AGREEMENT

This Agreement is made on this day 31st Oct 2017 between M/s. DSM Sugar Asmoli (A Unit of Dhampur Sugar Mills Ltd.) a Company incorporated under Company's Act having its Plant located at Vill. Asmoli, Tehsil & District – Sambhal – U.P. (hereinafter called as FIRST PART which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors, nominees and assigns of the First Part.

AND

M/s Bharat Oil and Waste Management Ltd (BOWML), a Company registered under the Companies Act 1956, having its registered office at B-5(GF), East of Kailash, New Delhi - 110065 and its engineered common facility at Gata No. 672, Vill. Kumbi, NH-2, Ramabai Nagar, Kanpur (U.P.) duly authorized by the Uttar Pradesh Pollution Control Board and having another Facility at Mauza Mukimpur, Roorkee-Hasar Road, Roorkee-247667, (Uttarakhand), to treat, store and dispose of Hazardous Waste and/or Bharat Oil Company (India) Registered (BOC) a partnership concern registered under the Partnership Act with its registered office at 169, Kailash Hills New Delhi - 110065 duly registered with Pollution Control Board having its CHAETSIDE at F 18, Site IV, Sahibabad Industrial Area, Ghaziabad (U.P.) duly authorized by the UPPCB under the Environment Protection Act, 1986 (for short the Act) and the Hazardous & Other Waste (Management Transboundary Movement) Rules, 2016 and the E-Waste (Management) Rules 2016 (for short 'The Rules') as amended from time to time represented by its Director/Partner, as the case may be (hereinafter called as 'SECOND PART' which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors, nominees and assigns of the Second Part.

WHEREAS First Part is engaged in manufacturing Sugar at its Plant located at Vill. Asmoli, Tehsil & District – Sambhal – U.P. and whereas during the said manufacturing process/ activities different types of wastes including Hazardous Waste are generated as per Annexure to this Agreement.

AND WHEREAS the First Part desires that the Hazardous Waste being generated at its production unit mentioned above, to be lifted, transported, treated, stored and disposed of by utilizing the services of SECOND PART as per the Pollution Control Board Authorization for the Hazardous Waste the likely quantity is enclosed herewith, marked as Annexure

DSM SUGAR ASMOLI Auth. Signatory Asmoli Sambhal

For Bharat Oil & Waste Management Ltd.

Authorised Signatory

AND WHEREAS the SECOND PART has represented and assured to First Part that it's Facility in Kanpur/Roorkee/Sahibabad is duly authorized by the concerned State Pollution Control Board and further capable of handling the Hazardous Waste generated at the First Part's premises.

AND WHEREAS First Part has agreed to avail the services of Second Part [illegible] the Hazardous [illegible] in the above named Facility facilities.

Now, therefore, those present witnessed and it is hereby declared and agreed by and between the Parties as follows:-

FIRST PART will pay an amount of Rs. 15,000/-(Rs. Fifteen Thousand Only) plus Applicable GST (AMOUNT Rs. 17,700/-) to SECOND PART towards Non-refundable Lifetime Membership Deposit which will be applicable for lifetime from the date of signing of this Agreement and membership can be renewed per year without any extra charge.

1. The scope of services to be provided by Second Part is limited to lift, transport through authorized vehicles, treat, store and dispose of Hazardous Waste of First Part as per the guidelines prescribed by Pollution Control Board or First Part can also send HW to SECOND Part's Plant directly at its own cost.

2. Second Part, on receipt of written information from FIRST PART, will plan and schedule lifting logistics of the Hazardous Wastes from the premises of FIRST PART within 3(Three) business days of receipt of such information. First Part shall ensure that Hazardous Waste must be packed in proper & leak proof Bags or polythene Bags or containers for safe transportation.

3. SECOND PART shall at all times comply with all the provisions of Hazardous & Other Wastes (Management Transboundary Movement) Rules, 2016 as amended from time to time framed by MoEF/@PCB.

4. SECOND PART shall indemnify and keep indemnified FIRST PART from all losses, damages, and third party claims after taking out HW from the premises of the First Part, in cases of non-compliance of statutory norms on the part of SECOND PART.

5. FIRST PART shall keep ready the Hazardous Waste as per the mandate given to SECOND PART for collection, as it is a common facility catering to diverse wastes. SECOND PART shall follow Ministry of Environment & Forest, Central Pollution Control Board and State Pollution Board guidelines, future amendments and latest disposal technologies.

6. FIRST PART shall ensure that the above Hazardous Waste must be packed in proper containers/bags so as to prevent any damage/spillage of the material, during transit to SECOND PART factory. Containers/Bags arranged by FIRST PART shall be of Metallic/PVC/Leak proof

For Bharat Oil & Waste Management Ltd.

Authorised Signatory

bags and kept at the storage place under cover. Container/bags' weight will also be added in the weight of the material.

7. FIRST PART will provide labour and special Material Handling Equipment as at its own cost to lift and load the containers at the FIRST PART premises, to the vehicles for the transportation.

8. FIRST PART has mandatory obligations to provide the entire process detail which leads to generation of Hazardous Waste and its tentative Quantity per month or year to SECOND PART for the purpose of determining the waste characteristics and to decide parameters for comprehensive analysis and process for disposal. However, it is specifically agreed between the parties that the process details provided by FIRST PART shall be kept confidential and Second Part shall not disclose it to any third party without the First Part's prior written consent. This clause shall survive termination for a period of 1 (One) year after the determination of this Agreement for any reason whatsoever.

9. FIRST PART shall provide comprehensive Laboratory Analysis Report from a CPCB approved Laboratory of each type of Hazardous Waste for Proper Print Analysis. In the event there are differences in the analysis results FIRST PART may send its samples to a mutually agreed THIRD PARTY at their own cost. New Comprehensive Analysis Reports shall be provided by FIRST PART when there is a change in the Hazardous Waste characteristics, manufacturing process or change in the product mix etc. Reports must be provided to SECOND PART prior to scheduling pick-up of Hazardous Waste. Reports shall be sent via Electronic mail as well as by courier/speed post to SECOND PART.

10. The comprehensive Analysis Report shall determine the disposal Pathway based on the Waste Characteristics and as per Waste Acceptance Criteria given to the FIRST PART and any other condition/solution that would help in safe disposal of Hazardous Waste. Disposal Pathway is mutually agreed between FIRST PART and SECOND PART to finalize the disposal base or basic USER CHARGES. The base User Charges are defined in Annexture to this Agreement.

11. FIRST PART will maintain and provide details of the HW as per the provisions in various Forms prescribed in the Rules. These Forms can be provided by SECOND PART at cost or be printed by FIRST PART as per the formats given by the SECOND PART

12. If FIRST PART provides any false information/declarations or withholds information in relation to the provisions of Hazardous Waste rules and /or E-Waste rules any time during the term of this Agreement, all charges of Hazardous Waste during transportation, handling, treatment and disposal including post-disposal period shall remain vested at the responsibility of FIRST PART

13. The charges for collection, treatment, storage and disposal facility (hereinafter called as User Charges) will be applicable to FIRST PART/SECOND PART as per Annexure.

For Bharat Oil & Waste Management Ltd.

Authorised Signatory

14. FIRST PART shall make payment for Waste management Services to SECOND PART and vice-versa per User Charges and other terms and conditions as per mutually agreed terms outlined in Annexure

15 FIRST PART is responsible to segregate/store/accumulate/fill/load the Hazardous Waste in the container provided by FIRST PART in a neat and proper manner and so also, the container area should be accessible to SECOND PART's vehicle, to come and lift the Waste. The Transporter/SECOND PART reserves the right to reject lifting of Hazardous Waste spilled over the ground and container whose exteriors are soiled by [illegible] due to leakage

16. In case, for any reason, the SECOND PART's Vehicle is sent back without giving the Hazardous Waste even after being requisitioned by FIRST PART, FIRST PART will have to pay actual transport charges to SECOND PART, for a minimum load of 1 (One) MT.

17. First Part shall at all times comply with all the provisions of the Acts and Rules from time to time in force and the Guidelines issued from time to time regarding handling of Waste involving the collection, storage, transportation and delivery thereof and shall not prejudice to the generality of the foregoing, also comply with all Environmental Protection Laws, Safety Laws and Regulations from time to time in force and the Rules, Regulations and Notifications made or issued thereunder from time to time. In the event of First Part committing any breach of the terms of this clause of Agreement, FIRST PART shall indemnify and keep indemnified SECOND PART from and against all claims, payments, costs and actions of whatsoever nature brought against or sustained or incurred by SECOND PART arising from or as a result of such breach committed by FIRST PART in that behalf, provided these are proved

18. Each PART shall indemnify and keep indemnified the other PART at all times from and against all actions, suits, proceedings, claims, third party claims, costs, payments and expenses of whatsoever nature made or suffered or incurred by the other PART whether by reason of or by virtue of non-performance or non-observance or non-compliance by either PART, of any terms and conditions of this Agreement or of the relevant Act, the Rules and the Guidelines.

IT IS FURTHER HEREBY AGREED BY AND BETWEEN THE PARTIES AS UNDER:-

19. This Agreement is valid for a period of 5 yrs. (from 31.10.2017 to 30.10.2022) and can be renewed thereafter on similar or revised terms and conditions as may be mutually agreed between the parties.

20. FIRST PART shall use the services of the SECOND PART during the period of this contract to dispose generated hazardous waste at agreed prices, while the agreement is in force SECOND PART must legally and safely collect, transport, treat, dispose hazardous waste from FIRST PART during the agreed period per rates agreed while this Agreement is in force and payments made as per Agreement terms.

21. If all the terms and conditions as per the clauses of this Agreement are adhered to by FIRST PART, it will be SECOND PART's responsibility to lift, transport, treat and dispose of the Hazardous Wastes generated by FIRST PART in accordance with prevailing Govt. Rules and FIRST PART shall not have any liability whatsoever in this regard.

For Bharat Oil & Waste Management Ltd.

Authorised Signatory

22. The main mode of final disposal of HW shall be incineration and fly ash would be cemented and landfilled. The modes of disposal are dependent on the Hazardous Wastes characteristics and FIRST PART shall not have any liability whatsoever in this regard.

23. The User Charges are subject to Annual Revision on the basis of ... of India Wholesale Price Index [WPI], (Commodities Index-All India) and once a quarter in the event of escalation of fuel costs and on major price escalations, escalation of fuel costs viz., Power Tariff, change in Disposal Technologies/Method, Wage Hike etc., to name a few. For the purpose of escalation in fuel cost, 30% of freight rate will be considered as fuel element of the cost.

24. SECOND PART reserves the right to cancel this Agreement if FIRST PART fails/refuses to pay the bills/dues as per the payment terms applicable to FIRST PART as mentioned in Annexure A.Notice period of maximum 15 (Fifteen) days will be allowed from the date of submission of invoice. If FIRST PART fails to pay in settlement of the invoice or dues liable to pay interest @ 18% per annum and this may also result in cancellation of first party's membership, forfeiture of deposit, and termination of this Agreement. Repeated defaults and violation of payment terms will also result in cancellation of Membership and forfeiture of Membership deposit.

25. Hazardous Wastes that require other alternate destruction technologies shall be handled at SECOND PART's facility. However, the prices for such treatment techniques shall be determined on a case to case basis of their characteristics.

26. Notwithstanding anything contained herein, neither Part hereto shall be liable for damages or have this Agreement terminated for any delay or default in the performance of such Part hereunder if such delay or default in performance derives from conditions beyond the reasonable control of such Part including but not limited to, acts of God, fires, floods, extreme drought, riots, work stoppages, embargoes, governmental actions or damage to the plant or facility or any cause unavoidable or beyond the control of either part including any arbitrary ruling by the Government prohibiting the handling of the Waste or continuing domestic or international problems such as wars or natural calamities.

27. This Agreement shall be deemed to represent the entire Agreement between the parties hereto regarding the subject matter hereof and shall supersede, cancel and replace all prior agreements or arrangements, if any, in this behalf, signed/entered into by and between the parties hereto.

28. This Agreement is on principal to principal basis and nothing contained herein shall be deemed to constitute a partnership, joint venture or agency by and between the parties hereto.

29. This Agreement may be modified or amended only by writing, duly executed by or on behalf of the parties hereto.

30. Any terms and conditions of this Agreement may be waived at any time by the party that is entitled to the benefit thereof. Such waiver must be in writing and must be executed by an authorized officer of such party. A waiver on one occasion will not be deemed to be a waiver of a similar occasion or any other similar breach or non-fulfillment on a future occasion.

31. If any provision of this Agreement is held to be illegal, invalid or unenforceable under any present or future laws, such provisions shall be deemed terminable and the remaining parts and provisions of this Agreement shall remain in full force and effect.

32. Either Part shall have the right to terminate this Agreement upon giving 30 days written notice to the other Part with a reasonable cause.

33. It is clearly and expressly understood by and between the parties that the activity of lifting, transportation, treatment, storage and disposal of Hazardous Wastes is an independent contract and it does not come within the purview of the FIRST PART's manufacturing and selling activities. It is also clearly understood and confirmed by and between the parties that this contract is for performance of work and not for supply of labour.

For Bharat Oil & Waste Management Ltd.

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Authorised Signatory

34. Nothing contained in these terms and conditions shall be construed as creating any relationship either direct or indirect of employer and employee between the FIRST PART and the persons engaged by SECOND PART. The FIRST PART shall have no liability towards such persons and such persons will not have any claim whatsoever against the FIRST PART for salary, wages provident fund, gratuity, retrenchment compensation or any other compensation for accident or death or any other claim whatsoever.

35. Any dispute arising on any clause or clauses of this Agreement and the execution of the Annexure hereto between FIRST PART and SECOND PART shall be referred to an Arbitrator of repute by SECOND PART. The Arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 with amendment thereof. The arbitration proceedings shall be conducted in English and shall take place at New Delhi, India. The arbitral award including interim awards, if any, shall be final and binding upon the parties.

36. Subject to the provisions of the foregoing clause, FIRST PART and SECOND PART mutually agree that the courts of Delhi alone, to the exclusion of any other, shall have the jurisdiction.

37. SECOND PART will lift and dispose waste from FIRST PART only if FIRST PART has valid & active legal authorization/consent to generate waste and operate the specified unit by relevant SPCB. First Part states that it is authorized to generate Hazardous Waste vide UPPCB/UEPPCB approval no. ..... Dated..... .....valid till..... .. (Copy attached), and has valid unexpired Consent to Operate under Air/Water Act No. ..... Dated..... .....valid till ..... (Copy attached). The actual operation of collection/ Transportation/Storage/ Treatment/Disposal of Hazardous Waste from First Part will start only after receiving the copy of valid approval of Air/Waren/HW Consents from First Part. First Part will notify promptly in 30 days to SECOND PART if it has been ordered closure by relevant state pollution control board or any court of jurisdiction over it and that during the term of this agreement.

This Agreement is signed on this 31st Oct. 2017 at New Delhi.

For M/S DSM SUGAR ASMOLI

By its authorized signatory
Name & Designation
Mukesh Kashyap
G.M. (Commercial)

For Bharat Oil & Waste Management Ltd

For Bharat Oil & Waste Management Ltd.

Authorised Signatory

Director (Partner)
(Naresh Manglani)/BT Manglani

Witnesses:
1. Name & Designation)
(Mobile: 7895003364)
Mr. Satveer Singh
Manager (Q.C.)

1. Sanjiv. S. Bhatnagar

2. Name & Designation
(Mobile : 9927100968)
Mr. Munish Kumar
Sales Officer

2. Sandeep Kumar (9717700119)
sandeep.kumar@bharatoil.com

GST NO. 09AABCT2827N1ZY
PAN No. AABCT2827N
CIN NO. L15249UP1933PLC000511
Phone No.05923-221310, 221566

DSM SUGAR MILLS

ANNEXURE

Waste Management & Handling Service Charge

This annexure is in conjunction with Agreement signed between FIRST PART M/s. DSM Sugar Asmoli, Distt. Sambhal U.P.and SECOND PART Bharat Oil & Waste Management Limited on 31st Oct. 2017

Disposal of Hazardous Waste: - Recycling/incineration/landfill

Category – A- Recycling or refining:

SrNO	Type Hazardous Waste	BOWML Rates in Rs.
1.	Used/ Waste Oil	2000.00 per Barrel of 230 Lit. (Rupees Two Thousand only)
2.	Empty Container- 200-220 Liters	120/- per barrel of 220 Liter (Rupees One Hundred Twenty Only)
3.	Batteries	Rs. 20.00 per Kg (Rupees Twenty per kg only)
4.	E-Waste- Laptop, Desktop, Monitor, UPC, CPU	Rs. 11.00 per Kg (Rupees Eleven per kg only)

- Quoted Rates are inclusive of all taxes & duties.
- With container; Material should conform to specification in schedule V i.e. - Without water & sludge and for fully filled drums.
- BOWML will pay for Minimy of 200 Liters otherwise used oil will come free of cost.
- We will pay for the full loaded capacity of vehicle only

Category –B- Disposal:- Hazardous Waste

SR NO.	Type Hazardous Waste	Approx. Generation Frequency/ Annum	BOWML Rates in Rs.
1.	Cotton Waste, plastic Waste, Oil Soaked cotton, paper, rubber waste, Hand gloves, Oily-Paint Sludge etc. (Incinerable) Chemicals waste with water mix.	As A	Rs. 17.00 per kg (Rupees Seventeen per kg only).

DSM SUGAR ASMOLI Distt. Sambhal

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For Bharat Oil & Waste Management Ltd.

Authorised Signatory

2	Air/Oil Filters (Incinerable)	200 qtl	Rs. 35/- per kg (Rupees [illegible] per kg only)
3.	CFL Tube lights, Chokes, Capacitors, wires (E-waste & landfillable), Printers, Cartage, Mouse, Key board, CPU, Chargers,		Rs. 25.00 per kg (Rupees Twenty five Per kg Only)
4.	ETP Sludge (Landfillable waste)		Rs. 10.00 per kg (Rupees Ten per kg only)
5.	Discarded Containers below 200 liters capacity		Rs. 140.00 per kg (Rupees One hundred forty per kg only)
6.	Used Grease/Used Coolant	200 qtl	Rs. 12/- (Rupees Twelve Only)
7	Transport Charge		As per Actual

Transport: - You can also send wastes directly to our Ghaziabad/Kanpur Plant.

Terms and conditions

a) FIRST PART shall ensure that the above Hazardous Waste must be packed in proper containers/gunny bags so as to prevent any damage/spillage of the material during transit at FIRST PART plant. Containers/Gunny bags arranged by FIRST PART shall be of metallic/PVC and kept at the storage place under cover. Containers weight will also be added in the weight of total Hazardous Waste and those are not on returnable basis.

b) FIRST PART shall deliver their waste at our plant at D-58, Sahibabad Industrial Area, Ghaziabad/Gate No. 6/7, Village-Kumbhi NH-2, Kanpur Delhi 209101 UP at own cost. If SECOND PART finds some material in transportation cost shall be borne by FIRST PART as quoted above. Loading is in scope of FIRST PART. All document shall provide by SECOND PART i.e. Form-6 for E-waste & Form-9 & 10 for Hazardous Waste) & Form- as per Quoted

c) Administrative billing of Rs. 5000/- (Rs. Five thousand only) plus taxes or as per stipulated rates will be applicable per quarter even if there is no waste lifted to be disposed in a quarter is payable by FIRST PART to the SECOND PART until the termination of this agreement/ Annexure.

d) As per Rule 8 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016 as amended FIRST PART (Hazardous Waste Generator) need to send/dispose the Hazardous Waste within 90 days from their Plant failing which agreement can be terminated without any notice.

e) In accordance with the MoEF Memorandum No. 23-1/2008-HSMD dated 16th April 2009, an amount equivalent to 5% of the billed amount of landfillable hazardous waste towards maintaining of Escrow Fund with scheduled bank jointly operated by MoEF and UPPCB for post-closure monitoring of the Hazardous Waste landfill facility is additionally chargeable.

f) For Category (A) Payment shall be made by SECOND PART in favour of FIRST PART by Cheque/DD before lifting/ transportation of the Hazardous Waste. (Used Waste Oil should

DSR SUGAR & SUGAR Amit Bhan Gazipur Sambhal

For Bharat Oil & Waste Management Ltd.

Page

Authorised Signatory

meet parameters as per Schedule V (A) of H.W. (Management & Transboundary Movement) Rules 2016).

g) For Category (B) FIRST PART shall pay to SECOND PART within [illegible] of receipt of SECOND PART's Invoice by cheque/Demand Draft. NO CASH TRANSACTION WILL BE ENTERTAINED. However, besides cheque, we can accept payments under NEFT/ RTGS mode also."

h) TAXES / LEVIES:- All Government / Municipal Taxes, Duties, Levies, Octroi, Service Tax, Tolls etc. as applicable from time to time, will be payable by FIRST PART.

i) There shall be no goods other than mentioned in this Annexure. If FIRST PART sends goods which are not as agreed upon or unlawful, controlled substance or can't be disposed by SECOND PART, then the same shall be returned to FIRST PART. SECOND PART will not invoice the disposal charge, but full transport, handling fee will be invoiced and payable by FIRST PART in such case.

For M/S DSM Sugar Asmoli

(First Part)

For Ehara Oil & Waste Management Ltd.

Authorised Signatory

(Second Part)

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dhampur
DSM SUGAR ASMOLI
(DISTILLERY DIVISION)
(A Unit of Dhampur Sugar Mills Ltd.)
Village: Asmoli, Tehsil: Sambhal
Dist. Sambhal, Pin Code : 244 304, U.P.
Telefax: +91-5923-221566, 221310
E-mail: dsmasmoli@dhampur.com
Website: www.dhampur.com

Ref No: DSM/DISTT/20-2021/140 Date:

To,

The Chairperson
District Ground Water Management Council
District: Sambhal (UP).

Subject: Regarding application of NOC for Ground Water abstraction for Distillery project of capacity 250 KLD located at village – Asmoli, Tehsil & District: Sambhal (UP).

Reference/ Registration No: SMBL1120NIN0001

Sir,

In reference to the subject mentioned above, as per "The Uttar Pradesh Ground Water (Management and Regulation) Act 2019 "and The Uttar Pradesh Ground Water (Management and Regulation) Rules, 2020, we have filled an application regarding NOC for abstraction of Ground water from existing bore well.

Kindly find enclosed herewith dully filled NOC application form (From – 8A) along with necessary annexures and Copy of paid chalan.

In addition to above, we would like to inform you that, earlier in June 2016 we had obtained NOC from CGWA for abstraction of water at existing capacity of 100 KLD. After that in 13th March 2019, we obtained consent to establish for expanded capacity 250 KLD from Uttar Pradesh Pollution Control Board. This is an existing industry located in Notified area as per Ground Water Department, Uttar Pradesh, therefore, we are applying for issuance of NOC for existing bore well.

It is requested that kindly consider our application for the grant of NOC for which we shall be highly obliged.

Thanking you

For DSM Sugar Asmoli

Authorised Signatory.

CIN : L15249UP1933PLC000511
Regd. Office: Dhampur Sugar Mills Ltd. Dhampur, N. Rly. Dist. Bijnor (U.P.), Pin Code-246 761
Branch Office: 1/125, Vijay Khand, Gomti Nagar, Lucknow - 226 010 (U.P.), Tel.: +91-522-239242
Units : 1. Dhampur, 2. Mansurpur, 3. Asmoli, 4. Rajpura, 5. Meerganj

List of Enclosures

Sr. No.	Enclosures No.	Document Name
1	Enclosure: 01	Application No. 1
2	Enclosure: 02	Copy of Challan for Application No. 1
3	Enclosure: 03	Application No. 2
4	Enclosure: 04	Copy of Challan for Application No. 2
5	Enclosure: 05	Application No. 3
6	Enclosure: 06	Copy of Challan for Application No. 3
7	Enclosure: 07	Authorization Letter
8	Enclosure: 08	Copy of Aadhar Card
9	Enclosure: 09	Undertaking for maximum abstraction of Ground Water
10	Enclosure: 10	Copy of CGWA NOC

(9)

भारत सरकार
केन्द्रीय भूमि जल प्राधिकरण
जल संसाधन, नदी विकास
और गंगा संरक्षण मंत्रालय

MEMBER SECRETARY

Government of India
Central Ground Water Authority
Ministry of Water Resources,
River Development & Ganga Rejuv...

File No: - 21-4/1254/UP/IND/2016 - 1655

NOC No: - CGWA/NOC/IND/ORIG/2017/2575

To,

Date:- 23 MAY 2017

M/s Dhampur Sugar Mills (Asmoli Unit),
Village Asmoli, Tehsil Sambhal,
Uttar Pradesh- 244304

Sub: - NOC for ground water withdrawal to M/s Dhampur Sugar Mills (Asmoli Unit) in respect of their existing Sugar manufacturing unit located at Village Asmoli, Block Asmauli, District Sambhal, Uttar Pradesh – reg.

Refer to your application on the above cited subject. Based on recommendations of Regional Director, Central Ground Water Board, Northern Region, Lucknow vide their recommendations dated 22/03/2017 and further deliberations on the subject, the NOC of Central Ground Water Authority is hereby accorded to M/s Dhampur Sugar Mills (Asmoli Unit) in respect of their existing Sugar manufacturing unit located at Village Asmoli, Block Asmauli, District Sambhal, Uttar Pradesh. The NOC is however subject to the following conditions.-

1. The firm may abstract 900 cu.m/day (and not exceeding 1,12,500 cu.m/year) of ground water, through existing three (3) borewells only. No additional ground water abstraction structures to be constructed for this purpose without prior approval of the CGWA.
2. All the borewells to be fitted with water meter by the firm at its own cost and monitoring of ground water abstraction to be undertaken accordingly on regular basis, atleast once in a month. The ground water quality to be monitored twice in a year during pre- monsoon and post- monsoon periods.
3. M/s Dhampur Sugar Mills (Asmoli Unit) shall, in consultation with the Regional Director, Central Ground Water Board, Northern Region, Lucknow implement ground water recharge measures to the tune of 4,44,000 cu.m/year as proposed for augmenting the ground water resources of the area within six months from the date of issue of this letter. Firm shall undertake periodic maintenance of recharge structures at its own cost.
4. The photographs of the recharge structures after completion of the same are to be furnished immediately to the Regional Director, Central Ground Water Board, Northern Region, Lucknow for verification and under intimation to this office.

Asst. Hy...
for ...

5. The firm at its own cost shall install two (2) piezometers fitted with automatic water level recorder with telemetry system at suitable location and execute ground water regime monitoring programme in and around the project area on regular basis in consultation with the Central Ground Water Board Northern Region, Lucknow
6 The ground water monitoring data in respect of S. No. 2 & 5 to be submitted to Central Ground Water Board Northern Region, Lucknow on regular basis at least once in a year.
7. The firm shall ensure proper recycling and reuse of waste water after adequate treatment.
8. Action taken report in respect of S No. 1 to 7 may be submitted to CGWA within one year period.
9 The permission is liable to be cancelled in case of non-compliance of any of the conditions as mentioned in S No. 1 to 8.
10. This NOC is subject to prevailing Central/State Government rules/laws or Courts orders related to construction of tubewell/ground water withdrawal/construction of recharge or conservation structure/discharge of effluents or any such matter as applicable.
11. This NOC does not absolve the applicant / proponent of this obligation / requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.
12. The NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and be taking decisions independently of the NOC
13. This NOC is valid from 03/05/2017 till 02/05/2019.

Member Secretary

Copy to:
1. The Member Secretary, Uttar Pradesh Pollution Control Board, PICUP Bhawan, Third Floor, B-Block, Vibhuti Khand, Gomti Nagar, Lucknow, Uttar Pradesh with a request to ensure that the conditions mentioned in the NOC are complied by the firm. The District Magistrate, District Sambhal, Uttar Pradesh.
2. The District Magistrate, District Sambhal, Uttar Pradesh for necessary action
3 The Regional Director, Central Ground Water Board Northern Region Lucknow This has reference to your recommendation dated 22/03/2017
4 TS to the Chairman, Central Ground Water Board, Bhujal Bhawan, Faridabad, Haryana.
5 Guard File 2017-18

Member Secretary

GROUND WATER DEPARTMENT

(Namami Gange & Rural Water Supply Department)
Ministry of Jal Shakti
Government of Uttar Pradesh

Form 1(B)/फॉर्म 1(बी)

[See rule 6(2)/नियम 6(2) देखें]

APPLICATION FOR REGISTRATION OF WELL
कूप के रजिस्ट्रीकरण हेतु आवेदन पत्र

(Commercial/Industrial/Infrastructural/Bulk user having N.O.C. issued by Central Ground Water Authority or by Ground Water Department)
(वाणिज्यिक/औद्योगिक/अवसंरचनात्मक/सामूहिक उपयोक्ता जिनके पास एन.ओ.सी. केंद्रीय भूगर्भ जल प्राधिकरण या भूगर्भ जल विभाग द्वारा जारी किया गया)

[UIS 10(1) or 11(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]
[उत्तर प्रदेश भूगर्भ जल प्रबंधन और विनियमन अधिनियम, 2019 का यूआईएस 10 (1) या 11 (1)]

Applicant's Details
आवेदक का विवरण

Type of Applicant आवेदक का प्रकार	Behalf of Firm/Company	Application Number आवेदन संख्या	SMBL1120RIN0003
Name of the Applicant आवेदक का नाम	Jagveer Singh	Father's Name पिता का नाम	Daljeet Singh
Date of Birth जन्मतिथि	05/10/1976	Gender लिंग	Male
Nationality राष्ट्रीयता	Indian	ID as Address Proof निवास प्रमाण हेतु आईडी	Aadhaar Card
Aadhaar Card Number आधार कार्ड संख्या	9099-0253-6271	Uploaded Aadhaar Card अपलोड किया गया आधार कार्ड	Download
House No./Flat No./Building No. मकान सं0/फ्लैट सं0/भवन सं0	A - 6 DSM Sugar Asmoli	Locality/Village मुहल्ला/गाँव	Asmoli
City/Town/Post Office नगर/कस्बा/पोस्ट ऑफिस	Sambhal	State राज्य	Uttar Pradesh
District जनपद	Sambhal	Pin Code पिन कोड	244304
Designation पद	Deputy GM Production	Company Name कंपनी का नाम	DSM SUGAR ASMOLI (SUGAR UNIT)
Company Address कंपनी का पता	A-5 DSM SUGAR ASMOLI ASMOLI SAMBHAL UP,SHAMBHAL,24	Authorization Letter प्राधिकार पत्र	Download

Details of Existing Well
विद्यमान कूप का विवरण

District जनपद	Sambhal	Block ब्लॉक	ASMOLI
Plot No./Khasra No. प्लॉट संख्या/खसरा संख्या	existing Premises details attached	Municipality/Municipal Corporation नगर पालिका/नगर निगम	NA
Ward No./Holding No. वॉर्ड संख्या/होल्डिंग संख्या			NA

Particulars of The Existing Well
विद्यमान कूप का ब्यौरा

Date of Construction/Sinking of Well कूप की निर्माण तिथि	01/04/2007	Type of Well कूप का प्रकार	Tube Well/Boring

ipe If Any	Yes	Approx. Length of Housing Pipe (In meter) हाउसिंग पाईप की अनुमानित लंबाई (मीटर में)	200.00
Approx. Diameter of Housing Pipe (mm) हाउसिंग पाईप का अनुमानित व्यास (मिलीमीटर में)	200.00	Material of the Housing Pipe & Blank Pipe हाउसिंग पाईप एवं ब्लैंक पाईप की सामग्री	Galvanized Iron

Strainer Details
स्ट्रेनर का विवरण

Material of Strainer स्ट्रेनर की सामग्री	Galvanized Iron	Number of Strainer(s) स्ट्रेनर की संख्या	1

S.No. क्रम संख्या	Strainer Installed at what Depth from Ground Level (In Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई पर स्थापित है (मीटर में)	Strainer Installed upto what Depth from Ground Level (In Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई तक स्थापित है (मीटर में)	Length (In meter) लंबाई (मीटर में)	Diameter (In millimeter) व्यास (मिलीमीटर में)
1	54.00	60.00	6.00	200.00

Approx. Depth of Well (In meter) कूप की अनुमानित गहराई (मीटर में)	60.00	Whether There has been Any Adverse Report Regarding Water Quality of the Well? क्या कूप के जल की गुणवत्ता के संबंध में कोई प्रतिकूल रिपोर्ट है?	No

Details of Existing Pumping Device विद्यमान पंपिंग उपकरण का विवरण

Type of Pump to be Used प्रयोग किये जाने वाले पंप का प्रकार	Turbine	Pump Capacity (In m3/hr) पंप क्षमता (m3/hr)	100.00
Horse Power (H.P.) हॉर्स पावर (एच.पी.)	40.00	Length of Suction Pipe (In meter) सक्शन पाइप की लंबाई (मीटर में)	25.00
Operational Device परिचालन उपकरण	Electric Motor	Date of Energization विद्युतीकरण तिथि	01/04/2007

Details of Utilization of Well
कूप के उपयोग का विवरण

Purpose of the Existing Well विद्यमान कूप का उद्देश्य?	Industrial	Annual Running Hours वार्षिक उपयोग (घंटे में)	600.00
Daily Running Hours दैनिक उपयोग (घंटे मे)	4.00	Whether the Water Supplied in Well Area Through Pipe Water Supply or Not? क्या क्षेत्र में जल की आपूर्ति पाइप जलापूर्ति के माध्यम से होती है?	No
Please Submit Mode of Treatment of Waste Water/Effluent (For Industries) अपशिष्ट जल की उपचार प्रणाली भरें (उद्योग हेतु)	Waste water generated is being treated in ETP which is based on Activated Sludge Process followed by Tertiary Treatment.	Please Mention Whether Obtained NOC from Uttar Pradesh Pollution Control Board for Discharge of Effluent/Waste Water or Not? कृपया उल्लेख करें कि क्या उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड से अपशिष्ट प्रवाह/ अपशिष्ट जल प्रवाह हेतु अनापत्ति प्रमाण पत्र प्राप्त कर लिया गया है अथवा नहीं	Yes
Upload NOC अनापत्ति प्रमाणपत्र अपलोड करें		Download	
Whether Rain Water Harvesting Structure has been Constructed within the Premises? क्या परिसर में वर्षा जल संचयन संरचना का निर्माण किया गया है?	No	Any Other Information Which You Would Like to Furnish कोई अन्य जानकारी जो आप प्रदान करना चाहते हैं	As this red category indus[illegible] we adopted pond for rain[illegible] recharge We also obtai[illegible] NOC in 23 May 2017 We [illegible] pond for recharge of 3[illegible] meter Annum

[redacted] By:
प्रमाण पत्र (द्वारा निर्गत)

[redacted]tral Ground Water Authority
केन्द्रीय भूगर्भ जल प्राधिकरण

Yes

Certificate Number प्रमाणपत्र संख्या	ORIG/2017/2575	Issue Date निर्गमन तिथि	03/05/2017
Expiry Date अंतिम तिथि	02/05/2019	Upload Certificate प्रमाणपत्र अपलोड करें	Download

Ground Water Department Uttar Pradesh
भूगर्भ जल विभाग उत्तर प्रदेश सरकार

No

Declaration by the Applicant
आवेदक द्वारा उद्घोषणा

I do hereby declare that the particulars fuenished herein above are correct and true . I understand that in case any of the information and particulars is found to be incorrect at any stage of scrutiny and investigation or there after, my application/registration is liable to be rejected/cancelled ,,
मैं एतद्द्वारा घोषित करता हूँ कि ऊपर दिये गए विवरण सही व सत्य हैं | मैं जानता हूँ कि यदि जांच पड़ताल के दौरान किसी भी स्तर पर उपरोक्त विवरण असत्य पाये गए तो मेरा रजिस्ट्रीकरण अस्वीकृत/निरस्त किए जाने योग्य होगा"

I Agree/मैं सहमत हूं

वित्तीय नियम संग्रह खण्ड-5 भाग-2

(वित्त विभाग शासनादेश संख्या-63/II/[illegible])

(धारा 447 एवं 478 देखिए)

धनराशि जमा करने का चालान फॉर्म

(बैंक का नाम व पता) _____

जिस व्यक्ति द्वारा धन जमा किया जाना है उसका नाम व पता: [illegible] Ground Water Department Govt. of Uttar Pradesh

पता: 6th Floor, Indira Bhawan, Ashok Marg Lucknow-226001

पंजीकरण संख्या / पत्र का नाम व क्रम संख्या: SMBL1120RIN0003

जमा की जा रही धनराशि का पूर्ण विवरण: Ground Water Department Govt. of Uttar Pradesh for Registration of well/issuance of NOC for well

(धनराशि किस हेतु जमा की जा रही है तथा किस विभाग के पक्ष में जमा की जा रही है)

शासन की मुख्य शीर्ष: Rs. 5000

उपशीर्ष का विवरण: Rs. 5000

विभिन्न शीर्षक का पूर्ण विवरण / संख्या शीर्षक की पुष्टि

लेखा शीर्षक की 4 3 रिपीट कोड

मुख्य लेखा-शीर्षक	उप मुख्य-शीर्षक	लघु-शीर्षक	उप-शीर्षक	अतिरिक्त-शीर्षक	धनराशि
8 2 3 5	0 0	2 0 0	0 4	0 0	5000

धनराशि (शब्दों में) five thousand only

शासन में लेखा-शीर्षक की पुष्टि करने वाले

विभागीय अधिकारी के हस्ताक्षर मुहर सहित

हस्ताक्षरकर्ता का नाम व हस्ताक्षर [illegible] Singh

केवल ट्रेजरी/उपकोषागार / बैंक के प्रयोगार्थ

चालान संख्या 51848547

दिनांक 30/11/2020

बैंक/ट्रेजरी मोहर [illegible] 29 1 22

मुख्य शीर्ष 8235

अंकों में रु० Rs. 5000

शब्दों में रु० five thousand

हस्ताक्षर [illegible]

GROUND WATER DEPARTMENT

Ministry of Jal Shakti
Government of Uttar Pradesh

Form 1(B)/फॉर्म 1(बी)

[See rule 6(2)/नियम 6(2) देखें]

APPLICATION FOR REGISTRATION OF WELL
कूप के रजिस्ट्रीकरण हेतु आवेदन पत्र

(Commercial/Industrial/Infrastructural/Bulk user having N.O.C. issued by Central Ground Water Authority or by Ground Water Department)
(वाणिज्यिक/औद्योगिक/अवसंरचनात्मक/सामूहिक उपयोक्ता जिनके पास एन.ओ.सी. केंद्रीय भूगर्भ जल प्राधिकरण या भूगर्भ जल विभाग द्वारा जारी किया गया)

[UIS 10(1) or 11(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]
[उत्तर प्रदेश भूगर्भ जल प्रबंधन और विनियमन अधिनियम, 2019 का युआईएस 10 (1) या 11 (1)]

Applicant's Details
आवेदक का विवरण

Type of Applicant आवेदक का प्रकार	Behalf of Firm/Company	Application Number आवेदन संख्या	SMBL1120RIN0004
Name of the Applicant आवेदक का नाम	Jagveer Singh	Father's Name पिता का नाम	Daljeet Singh
Date of Birth जन्मतिथि	05/10/1976	Gender लिंग	Male
Nationality राष्ट्रीयता	Indian	ID as Address Proof निवास प्रमाण हेतु आईडी	Aadhaar Card
Aadhaar Card Number आधार कार्ड संख्या	9099-0253-6271	Uploaded Aadhaar Card अपलोड किया गया आधार कार्ड	Download
House No./Flat No./Building No. मकान सं0/फ्लैट सं0/भवन सं0	A - 6 DSM Sugar Asmoli	Locality/Village मुहल्ला/गाँव	Asmoli
City/Town/Post Office नगर/कस्बा/पोस्ट ऑफिस	Sambhal	State राज्य	Uttar Pradesh
District जनपद	Sambhal	Pin Code पिन कोड	244304
Designation पद	Deputy GM Production	Company Name कंपनी का नाम	DSM SUGAR ASMOLI (SUGAR UNIT)
Company Address कंपनी का पता	A-5 DSM SUGAR ASMOLI ASMOLI SAMBHAL UP,SHAMBHAL,24	Authorization Letter प्राधिकार पत्र	Download

Details of Existing Well
विद्यमान कूप का विवरण

District जनपद	Sambhal	Block ब्लॉक	ASMOLI
Plot No./Khasra No. प्लॉट संख्या/खसरा संख्या	existing Premises details attached	Municipality/Municipal Corporation नगर पालिका/नगर निगम	NA
Ward No./Holding No. वॉर्ड संख्या/होल्डिंग संख्या			NA

Particulars of The Existing Well
विद्यमान कूप का व्यौरा

Date of Construction/Sinking of Well कूप की निर्माण तिथि	01/04/2007	Type of Well कूप का प्रकार	Tube Well/Boring

Pipe If Any	Yes	Approx. Length of Housing Pipe (In meter) हाउसिंग पाईप की अनुमानित लंबाई (मीटर में)	60.00
Approx. Diameter of Housing Pipe (mm) हाउसिंग पाईप का अनुमानित व्यास (मिलीमीटर में)	200.00	Material of the Housing Pipe & Blank Pipe हाउसिंग पाईप एवं ब्लैंक पाईप की सामग्री	Galvanized Iron

Strainer Details
स्ट्रेनर का विवरण

Material of Strainer स्ट्रेनर की सामग्री	Galvanized Iron	Number of Strainer(s) स्ट्रेनर की संख्या	1

S.No. क्रम संख्या	Strainer Installed at what Depth from Ground Level (In Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई पर स्थापित है (मीटर में)	Strainer Installed upto what Depth from Ground Level (In Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई तक स्थापित है (मीटर में)	Length (In meter) लंबाई (मीटर में)	Diameter (In millimeter) व्यास (मिलीमीटर में)
1	54.00	60.00	6.00	200.00

Approx. Depth of Well (In meter) कूप की अनुमानित गहराई (मीटर में)	60.00	Whether There has been Any Adverse Report Regarding Water Quality of the Well? क्या कूप के जल की गुणवत्ता के संबंध मे कोई प्रतिकूल रिपोर्ट है?	No

Details of Existing Pumping Device विद्यमान पंपिंग उपकरण का विवरण

Type of Pump to be Used प्रयोग किये जाने वाले पंप का प्रकार	Turbine	Pump Capacity (In m3/hr) पंप क्षमता (m3/hr)	100.00
Horse Power (H.P.) हॉर्स पावर (एच.पी.)	40.00	Length of Suction Pipe (In meter) सक्शन पाइप की लंबाई (मीटर में)	25.00
Operational Device परिचालन उपकरण	Electric Motor	Date of Energization विद्युतीकरण तिथि	01/04/2007

Details of Utilization of Well
कूप के उपयोग का विवरण

Purpose of the Existing Well विद्यमान कूप का उद्देश्य?	Industrial	Annual Running Hours वार्षिक उपयोग (घंटे में)	600.00
Daily Running Hours दैनिक उपयोग (घंटे में)	4.00	Whether the Water Supplied in Well Area Through Pipe Water Supply or Not? क्या क्षेत्र में जल की आपूर्ति पाइप जलापूर्ति के माध्यम से होती है?	No
Please Submit Mode of Treatment of Waste Water/Effluent (For Industries) अपशिष्ट जल की उपचार प्रणाली भरें (उद्योग हेतु)	Waste water generated is being treated in ETP which is based on Activated Sludge Process followed by Tertiary Treatment.	Please Mention Whether Obtained NOC from Uttar Pradesh Pollution Control Board for Discharge of Effluent/Waste Water or Not? कृपया उल्लेख करें कि क्या उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड से अपशिष्ट प्रवाह/ अपशिष्ट जल प्रवाह हेतु अनापत्ति प्रमाण पत्र प्राप्त कर लिया गया है अथवा नहीं	Yes
Upload NOC अनापत्ति प्रमाणपत्र अपलोड करें		Download	
Whether Rain Water Harvesting Structure has been Constructed within the Premises? क्या परिसर में वर्षा जल संचयन संरचना का निर्माण किया गया है?	No	Any Other Information Which You Would Like to Furnish कोई अन्य जानकारी जो आप प्रदान करना चाहते हैं	As this red category indust[illegible] we adopted pond for rain[illegible] recharge. We also obtain[illegible] NOC in 23 May 201[illegible] pond for recharge of 3[illegible] meter Annum

ed By:
प्रमाण पत्र (द्वारा निर्गत)

ntral Ground Water Authority
न्द्रीय भूगर्भ जल प्राधिकरण

Yes

Certificate Number प्रमाणपत्र संख्या	ORIG/2017/2575	Issue Date निर्गमन तिथि	03/05/2017
Expiry Date अंतिम तिथि	02/05/2019	Upload Certificate प्रमाणपत्र अपलोड करें	Download

Ground Water Department Uttar Pradesh
भूगर्भ जल विभाग उत्तर प्रदेश सरकार

No

Declaration by the Applicant
आवेदक द्वारा उद्घोषणा

I do hereby declare that the particulars fuenished herein above are correct and true . I understand that in case any of the information and particulars ... found incorrect at any stage of scrutiny and investigation or thereafter, my application/registration is liable to be rejected/cancelled
मैं एतद्द्वारा घोषित करता हूँ कि ऊपर दिये गए विवरण सही व सत्य हैं। मैं जानता हूँ कि यदि जाँच पड़ताल के दौरान किसी भी स्तर पर उपरोक्त विवरण असत्य पाये ... रजिस्ट्रीकरण अस्वीकृत/निरस्त किए जाने योग्य होगा

I Agree/मैं सहमत हूं

वित्तीय नियम संग्रह खण्ड-5 भाग-2

प्रपत्र संख्या- 43 क (1)

(नियम 417 एवं 476 देखिए)

धनराशि जमा करने का चालान फॉर्म

उपकोषागार / बैंक का नाम व पता: _____

जिस व्यक्ति (पदनाम का उल्लेख हो) या संस्था के नाम से धनराशि जमा की जा रही है उसका नाम: Ground Water Department, Govt. of Uttar Pradesh

पता: 9th Floor, Indira Bhawan, Ashok Marg Lucknow-226001

पंजीकरण संख्या / पैन का नाम व कोड: SMBL1120RIN0004

जमा की जा रही धनराशि का पूर्ण विवरण: Ground Water Department, Govt. of Uttar Pradesh for Registration of well/Issuance of NOC for wel
(प्रयोजन जिस हेतु जमा की जा रही है तथा वित्त विभाग के पत्र से भ्रमण की जा रही है)

चालान की सकल राशि: Rs. 5000

अक्षरों में निवेत राशि: Rs. 5000

लेखा-शीर्षक का पूर्ण विवरण / लेखा शीर्षक से मुद्रित

लेखा-शीर्षक की 13 डिजिट कोड

मुख्य लेखा-शीर्षक	उप लेखा-शीर्षक	लघु-शीर्षक	उप-शीर्षक	प्रकार उप-शीर्षक
8 2 3 5	0 5	2 0 6	0 4	0 0

धनराशि (अक्षरों में): five thousand only

चालान में संशोधन की पुष्टि करने वाले

विधायीय अधिकारी के हस्ताक्षर मुहर सहित

हस्ताक्षरी का नाम व पदनाम: Jagveer Singh

केवल उपकोषागार / बैंक के प्रयोगार्थ

चालान संख्या: 01955137

दिनांक: 30/11/2020

राशि में रु.: Rs. 5000

अक्षरों में रु.: five thousand

GROUND WATER DEPARTMENT

Ministry of Jal Shakti
Government of Uttar Pradesh

Form 1(B)/फॉर्म 1(बी)

[See rule 6(2)/नियम 6(2) देखें]

APPLICATION FOR REGISTRATION OF WELL
कूप के रजिस्ट्रीकरण हेतु आवेदन पत्र

(Commercial/Industrial/Infrastructural/Bulk user having N.O.C. issued by Central Ground Water Authority or by Ground Water Department)
(वाणिज्यिक/औद्योगिक/अवसंरचनात्मक/सामूहिक उपयोक्ता जिनके पास एन.ओ.सी. केंद्रीय भूगर्भ जल प्राधिकरण या भूगर्भ जल विभाग द्वारा जारी किया गया)

[UIS 10(1) or 11(1) of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]
[उत्तर प्रदेश भूगर्भ जल प्रबंधन और विनियमन अधिनियम, 2019 का यूआईएस 10 (1) या 11 (1)]

Applicant's Details
आवेदक का विवरण

Type of Applicant आवेदक का प्रकार	Behalf of Firm/Company	Application Number आवेदन संख्या	SMBL1120RIN0005
Name of the Applicant आवेदक का नाम	Jagveer Singh	Father's Name पिता का नाम	Daljeet Singh
Date of Birth जन्मतिथि	05/10/1976	Gender लिंग	Male
Nationality राष्ट्रीयता	Indian	ID as Address Proof निवास प्रमाण हेतु आईडी	Aadhaar Card
Aadhaar Card Number आधार कार्ड संख्या	9099-0253-6271	Uploaded Aadhaar Card अपलोड किया गया आधार कार्ड	Download
House No./Flat No./Building No. मकान सं0/फ्लैट सं0/भवन सं0	A - 6 DSM Sugar Asmoli	Locality/Village मुहल्ला/गाँव	Asmoli
City/Town/Post Office नगर/कस्बा/पोस्ट ऑफिस	Sambhal	State राज्य	Uttar Pradesh
District जनपद	Sambhal	Pin Code पिन कोड	244304
Designation पद	Deputy GM Production	Company Name कंपनी का नाम	DSM SUGAR ASMOLI SUGAR UNIT
Company Address कंपनी का पता	A-5 DSM SUGAR ASMOLI ASMOLI SAMBHAL UP,SHAMBHAL,24	Authorization Letter प्राधिकार पत्र	Download

Details of Existing Well
विद्यमान कूप का विवरण

District जनपद	Sambhal	Block ब्लॉक	ASMOLI
Plot No./Khasra No. प्लॉट संख्या/खसरा संख्या	existing Premises details attached	Municipality/Municipal Corporation नगर पालिका/नगर निगम	NA
Ward No./Holding No. वॉर्ड संख्या/होल्डिंग संख्या			NA

Particulars of The Existing Well
विद्यमान कूप का ब्यौरा

Date of Construction/Sinking of Well कूप की निर्माण तिथि	01/04/2007	Type of Well कूप का प्रकार	Tube Well/Boring

Housing Pipe If Any है	Yes	Approx. Length of Housing Pipe (In meter) हाउसिंग पाईप की अनुमानित लंबाई (मीटर में)	60.00
Approx. Diameter of Housing Pipe (mm) हाउसिंग पाईप का अनुमानित व्यास (मिलीमीटर में)	200.00	Material of the Housing Pipe & Blank Pipe हाउसिंग पाईप एवं ब्लैंक पाईप की सामग्री	PVC

Strainer Details
स्ट्रेनर का विवरण

Material of Strainer स्ट्रेनर की सामग्री	Galvanized Iron	Number of Strainer(s) स्ट्रेनर की संख्या	1

S.No. क्रम संख्या	Strainer Installed at what Depth from Ground Level (In Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई पर स्थापित है (मीटर में)	Strainer Installed upto what Depth from Ground Level (In Meter) स्ट्रेनर, भू-स्तर से कितनी गहराई तक स्थापित है (मीटर में)	Length (In meter) लंबाई (मीटर में)	Diameter (In millimeter) व्यास (मिलीमीटर मे)
1	54.00	60.00	6.00	200.00

Approx. Depth of Well (In meter) कूप की अनुमानित गहराई (मीटर में)	60.00	Whether There has been Any Adverse Report Regarding Water Quality of the Well? क्या कूप के जल की गुणवत्ता के संबंध में कोई प्रतिकूल रिपोर्ट है?	No

Details of Existing Pumping Device विद्यमान पंपिंग उपकरण का विवरण

Type of Pump to be Used प्रयोग किये जाने वाले पंप का प्रकार	Submersible	Pump Capacity (In m3/hr) पंप क्षमता (m3/hr)	40.00
Horse Power (H.P.) हॉर्स पावर (एच.पी.)		15.00	
Operational Device परिचालन उपकरण	Electric Motor	Date of Energization विद्युतीकरण तिथि	01/04/2007

Details of Utilization of Well
कूप के उपयोग का विवरण

Purpose of the Existing Well विद्यमान कूप का उद्देश्य?	Industrial	Annual Running Hours वार्षिक उपयोग (घंटे में)	150.00
Daily Running Hours दैनिक उपयोग (घंटे में)	3.00	Whether the Water Supplied in Well Area Through Pipe Water Supply or Not? क्या क्षेत्र में जल की आपूर्ति पाइप जलापूर्ति के माध्यम से होती है?	No
Please Submit Mode of Treatment of Waste Water/Effluent (For Industries) अपशिष्ट जल की उपचार प्रणाली भरें (उद्योग हेतु)	Waste water generated is being treated in ETP which is based on Activated Sludge Process followed by Tertiary Treatment	Please Mention Whether Obtained NOC from Uttar Pradesh Pollution Control Board for Discharge of Effluent/Waste Water or Not? कृपया उल्लेख करें कि क्या उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड से अपशिष्ट प्रवाह/ अपशिष्ट जल प्रवाह हेतु अनापत्ति प्रमाण पत्र प्राप्त कर लिया गया है अथवा नहीं	Yes
Upload NOC अनापत्ति प्रमाणपत्र अपलोड करे		Download	
Whether Rain Water Harvesting Structure has been Constructed within the Premises? क्या परिसर में वर्षा जल संचयन संरचना का निर्माण किया गया है?	No	Any Other Information Which You Would Like to Furnish कोई अन्य जानकारी जो आप प्रदान करना चाहते है	As this red category indust[illegible] we adopted pond for rain [illegible] recharge We also obtain[illegible] NOC in 23 May 2017 We [illegible] pond for recharge of 33476.4 Cubic meter Annum

[redacted]ied By;
[redacted] प्रमाण पत्र (द्वारा निर्गत)

Central Ground Water Authority
केन्द्रीय भूगर्भ जल प्राधिकरण

			Yes
Certificate Number प्रमाणपत्र संख्या	ORIG/2017/2575	Issue Date निर्गमन तिथि	03/05/2017
Expiry Date अंतिम तिथि	02/05/2019	Upload Certificate प्रमाणपत्र अपलोड करें	Download
Ground Water Department Uttar Pradesh भूगर्भ जल विभाग उत्तर प्रदेश सरकार			No

Declaration by the Applicant
आवेदक द्वारा उद्घोषणा

I do hereby declare that the particulars fuenished herein above are correct and true. I understand that in case any of the information and particulars is found to be incorrect at any stage of scrutiny and investigation or thereafter, my application/registration is liable to be rejected/cancelled
मैं प्रतद्द्वारा घोषित करता हूँ कि ऊपर दिये गए विवरण सही व सत्य हैं। मैं जानता हूँ कि यदि जाँच पड़ताल के दौरान किसी भी स्तर पर उपरोक्त विवरण असत्य पाये गए तो मेरा आवेदन रजिस्ट्रीकरण अस्वीकृत/निरस्त किए जाने योग्य होगा"

I Agree/मैं सहमत हूं

वित्तीय नियम संग्रह खण्ड-5 भाग-2

(नियम संख्या 43.क.(1)

(पृष्ठ संख्या 417 एवं 478 देखिए)

धनराशि जमा करने का चालान फॉर्म

प्रेषणकार / बैंक का नाम व पता: _____

जिस व्यक्ति (प्राधिकार पत्र आवश्यक हो) या संस्था के नाम से चालान जमा (1 या एक से अधिक शीर्ष) है उसका नाम : Ground Water Department, Govt. of Uttar Pradesh

पता : 5th Floor, Indira Bhawan, Ashok Marg Lucknow-226001

पंजीकरण संख्या / पत्र का नाम व पता : SMBL1120RINO005

धनराशि जो जमा की जा रही है उसका पूर्ण विवरण : Ground Water Department, Govt. of Uttar Pradesh for Registration of well/Issuance of NOC for well (धनराशि किस हेतु जमा की जा रही है तथा किस विभाग के पक्ष में जमा की जा रही है)

चालान की सकल राशि : Rs. 5000

चालान की निवल राशि : Rs. 5000

प्रेषणकार के पूर्ण विवरण / लेखा शीर्षक की मुहर

(अधिकतम 15 डिमाई साइज़)

मुख्य लेखा-शीर्षक	उप मुख्य-शीर्षक	लघु-शीर्षक	सा...पत्र	अधीन बर शीर्षक	
8 2 3 5	0 0	2 0 0	0 0	0 0	5000

धनराशि (शब्दों में) : five thousand only

चालान में लेखा-शीर्षक की पुष्टि करने वाले

वित्तपोषित अधिकारी के हस्ताक्षर मुहर सहित

प्रमाणित का नाम व हस्ताक्षर : Jagveer Singh

केवल उपकोषागार / बैंक के प्रयोगार्थ

चालान संख्या : 81434521

दिनांक : 30/11/2020

बैंक में प्र...

Rs. 5000

शब्दों में ...

five thousand

प्रमाणित

उपकोषागार / बैंक के प्राधिकृत हस्ताक्षर

dhampur

Dhampur Sugar Mills
Unit: Asmoli
Village: Asmoli, Tehsil: Sambhal
Distt: Bheem Nagar, Pin Code: 244 30[illegible]
Telefax: +91-5923-271300, 271310
E-mail: dsmasmoli@dhampur.com
Website: www.dhampur.com

Authorization letter

I, Sanjay Sharma - Vice President authorize Mr. Jagveer Singh S/o Sh. Daljeet Singh, Gram - Khandsal Kalan Post Kanrai, Gardali Amroha - U.P., to make all necessary correspondence on behalf of the firm M/s Dhampur Sugar Mills Ltd. Unit Asmoli, Vill. & P.O. Asmoli, Distt. Sambhal, U.P. with Ground Water Department, U.P. in connection with obtaining No Objection Certificate for groundwater withdrawal

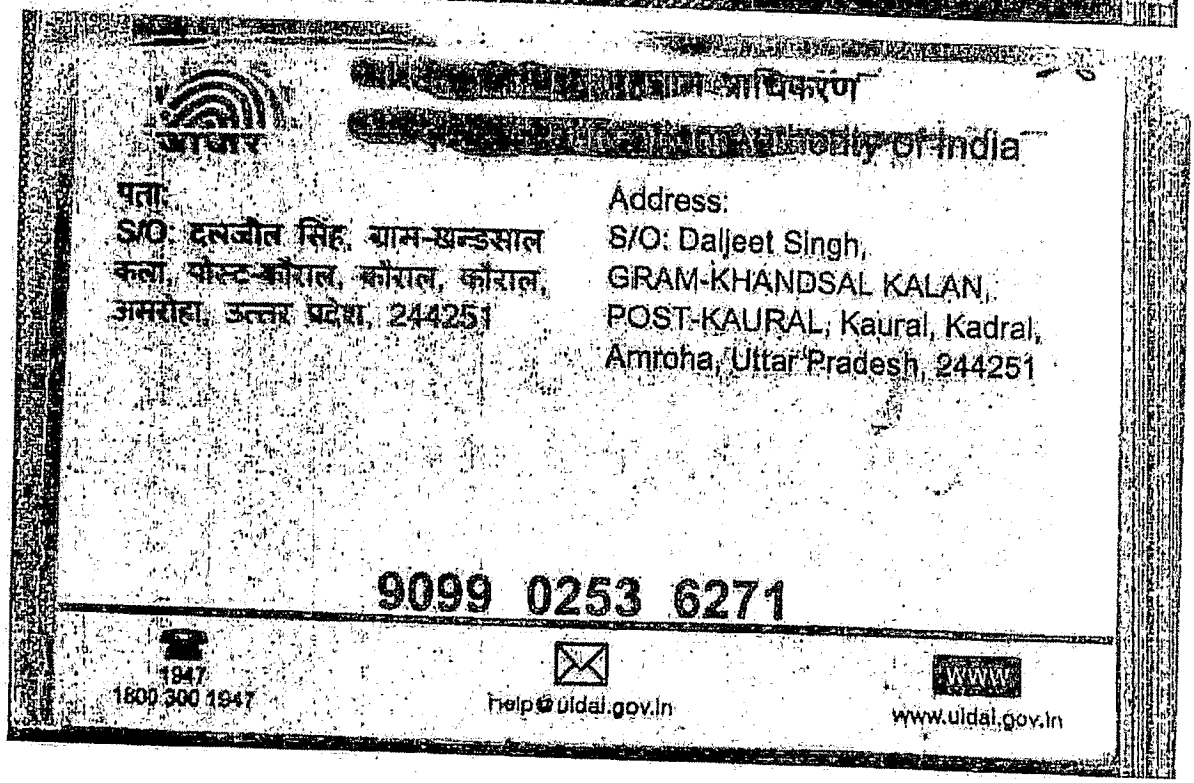
Signature of authorized person

(Signature of Authorized signatory of the firm)
(Signature with stamp)

जगवीर सिंह
Jagveer Singh
जन्म तिथि / DOB : 05/10/1976
पुरुष / Male

9099 0253 6271

आधार - आम आदमी का अधिकार



आधार

पता:
S/O: दलजीत सिंह, ग्राम-खन्डसाल कला, पोस्ट-कौराल, कौराल, कौराल, अमरोहा, उत्तर प्रदेश, 244251

Address:
S/O: Daljeet Singh,
GRAM-KHANDSAL KALAN,
POST-KAURAL, Kaural, Kadral,
Amroha, Uttar Pradesh, 244251

9099 0253 6271

1947
1800 300 1947

help@uidai.gov.in

www.uidai.gov.in

To be printed on letter head and signed by Authorise Signatory

Ref No: Date:

To,
The Chairperson
District Ground Water Management Council
District: Sambhal (UP).

Subject: Regarding Undertaking of maximum abstraction of water for Sugar project of located at village – Asmoli, Tehsil & District: Sambhal (UP).

Reference/ Registration No: Bore well 1 : SMBL1120RIN0003,
Bore well 2 : SMBL1120RIN0004,
Bore well 3 : SMBL1120RIN0005

Sir,

In reference to the subject mentioned above, we hereby declare that maximum annual abstraction of water will not be more than 135000 Cubic meter / Annum or can say 900 Cubic Meter /. Day. Industry also committed to adopt the water conservation measure and ensuring waste water will be treated and maximum recycling will be achieved to reduce the fresh water demand.

Thanking you

For DSM Sugar Asmoli
Sugar Unit

Authorised Signatory.

Annexure 2

Joint Inspection Report

(14.01.2021)

of

M/s Dhampur Sugar Mill Ltd., Sidhauli Road, Meerganj, Bareilly (U.P.)

In The Matter Of

Adil Ansari Vs M/s Dhampur Sugar Mills Ltd. and Ors.

O.A 539/2019 (I.A. No. 376/2020)

-Prepared by-
The Joint Committee of CPCB & UPPCB

Constituted by

Hon'ble National Green Tribunal

(Order dated 9th November, 2020)

JOINT INSPECTION REPORT OF M/S DHAMPUR SUGAR MILL LTD., SIDHAULI ROAD, MEERGANJ, BAREILLY, U.P. ON 14/01/2021 IN COMPLIANCE TO DIRECTION ISSUED BY HON'BLE NATIONAL GREEN TRIBUNAL IN O.A. NO. 539/2019 (I.A. No. 376/2020), ADIL ANSARI Vs M/S DHAMPUR SUGAR MILLS LTD. AND ORS. – REG.

1. Background

Hon'ble NGT vide order dated 09/11/2020 in the matter of Adil Ansari Vs M/s Dhampur Sugar Mills Ltd. and Ors. in Original Application 539/2019 had directed following:

"We direct the State PCB to take further appropriate action by way of prohibiting any activity in violation of law, initiating prosecution and recovering compensation as per applicable norms, following due process of law. The State PCB may also respond to the IA filed by the applicant with particulars in the table annexed to the application, reproduced above and file an action taken report before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF. The CPCB and State PCB may undertake necessary inspection for the purpose."

In compliance to the aforesaid direction, a joint team of officials from Central Pollution Control Board, Delhi and Regional Office, Uttar Pradesh Pollution Control Board (UPPCB), Bareilly, visited the premises of M/s Dhampur Sugar Mill Ltd., Sidhauli Road, Meerganj, Bareilly, U.P. and had interaction with the officials of the Unit andz nearby farmers/ public on 14/01/2021.

2. Inspection of M/s Dhampur Sugar Mill Ltd., Sidhauli Road, Meerganj, Bareilly (U.P.) on 14/01/2021 by Joint team of officials from CPCB and UPPCB.

- In compliance to the Hon'ble NGT order dated 09/11/2020 inspection of M/s Dhampur Sugar Mill Ltd., Sidhauli Road, Meerganj, Bareilly, U.P. (hereinafter referred as 'the unit') was carried out on 14th January, 2021 by a joint team comprising of the officials from Regional Office, Bareilly, Uttar Pradesh Pollution Control Board (UPPCB) and Central Pollution Control Board (CPCB) Delhi.
- Prior to the entry into the sugar mill premise, the joint team visited the surrounding areas and nearby fields around M/s Dhampur Sugar Mill Ltd., Sidhauli Road, Meerganj, Bareilly, U.P. and had interactions with the local residents of the area.
- The team further surveyed the area along the boundary of sugar mill till the interior locations in the adjoining agriculture field to trace any bypass/ effluent discharge point in the drain. The joint team observed a drain carrying domestic waste water/storm water adjacent to unit's boundary wall. Sample were collected from the drain flowing outside the boundary wall of the unit for further physico-chemical analysis. Analysis results are presented in ***Table-6***.
- The team has also surveyed the Peelakhar river to survey the bypass of untreated effluent through a pipeline laid underground as reported during previous inspection. A slope towards Peelakhar river was found dry and no physical color/contamination observed in the river water. The earlier observed underground pipeline to be used as bypass line is now being used as irrigation line for providing treated effluent to farmers by giving points at various locations.
- During inspection the unit was found operational and its ETP was fully functional.

- The samples were collected from inlet and outlet of ETP and various units of ETP. Analysis results are presented in ***Table-5.***
- Detailed observation and recommendations of the joint inspection are enclosed herewith.

2.1 Analysis results of sample collected from groundwater from residential area of industrial premises

- The joint team also collected groundwater sample from the Bore-well near ETP and Handpump outside the Unit's premises in front of the Unit's main gate. Analysis results are presented in ***Table 1.***

Table 1: Analysis results of sample collected from groundwater from residential area of industrial premises

Sampling Locations / Parameters	Bore well No.1	Hand-pump outside the mill	(Permissible limit in the absence of alternate source) Drinking water standards (BIS) DRINKING WATER — SPECIFICATION (Second Revision) IS 10500: 2012
Depth (meter)			
Colour	BDL	BDL	15
pH	7.4	7.1	6.5-8.5
Conductivity	438	1125	
Total Alkalinity	265	428	600
Total Hard-ness	294	730	600
COD	5	7	-
TDS	286	740	2000
Cl-	9	28	1000
F-	0.3	0.3	1.5
NO_3	BDL	BDL	45
SO_4	12	465	400
As	BDL	0.01	0.05
Cd	BDL	BDL	NR*
Co	BDL	BDL	—
Cr	BDL	BDL	NR*
Cu	BDL	BDL	1.5
Fe	2.41	12.78	NR*
Mn	0.17	0.51	0.3
Ni	BDL	BDL	NR*
Pb	BDL	BDL	NR*
Zn	0.17	BDL	15

Parameters in mg/l except pH, Color in Hazen unit and Conductivity in µmho/cm

- The analysis results of groundwater collected from the Bore-well No-1 (inside the premises) indicates all physio-chemical parameter complying with the acceptable limit of the Drinking Water Standards (BIS) IS 10500:2012, however, hand-pump outside sugar mill indicates higher total hardness **730 mg/l** against 600 mg/l and sulphate **465 mg/l** against 12 mg/l thus, exceeding the acceptable limit of Drinking Water Standards (BIS) IS 10500:2012.

INSPECTION REPORT OF SUGAR MILLS DURING CRUSHING SEASON (2018-2019) TO VERIFY THE STATUS OF IMPLEMENTATION OF CHARTER FOR WATER CONSERVATION AND COMPLIANCE VERIFICATION OF DISCHARGE STANDARDS

1. GENERAL INFORMATION

1.	**Name and address of the Sugar Mill**	DSM Sugar, Sidhauli Road, Meerganj, Bareilly	
2.	**Latitude and longitude**	28.5502343, 79.2129414	
3.	**Standalone/ integrated (with co-generation) Sugar/ sugar refinery**	Integrated with incidental co-generation	
4.	**License capacity of sugar Mill (TCD)**	5000	
5.	**Average actual crush rate (TCD)**	4967.143 TCD (As per RT-7 (C) from 3rd Nov-20 to 31st December -20 and DMR report from 03rd Jan to 13th Jan-21)	
6.	**Consent status & its Validity (Yes/No/applied)** a. Air Consent b. Water consent c. Hazardous Waste Authorization	Yes (Consent no. 6343158) validity up to 31.12.2021 **(Annexure-1)** Yes (Consent no. 6345432) validity up to 31.12.2021 **(Annexure-2)** Yes (Authorization no. H04611) validity up to 19.06.2022 **(Annexure-3)**	
7.	**NOC from CGWA (Yes/No)**	Expired (valid up to 07.06.2020), Applied for renewal on 28.04.2020, Application copy placed at **Annexure-4**	
8.	**Start period of crushing season**	03.11.2020	
9.	**Date of visit**	14.01.2021	
10.	**Operational status during visit (operational/ closed/ temporary closed/ permanent closed)**	Operational	
11.	**Factory officials interacted during Visit**	**Designation**	**Contact No & E- mail**
	1. Mr. Aashish Sharma	GM	9837889485 aashishsharma@dhampur.com
	2. Mr. Sarabjit Saini	Production Manager	9457030473 sarabjitsaini@dhampur.com
	3. Mr. Atul Sharma	ETP In-charge	7302253551 atulsharma@dhampur.com

2. OPERATIONAL STATUS

Sr. No.	Particulars			
1.	**Sources of fresh water**			
	a. Bore well/Tube well/ Any other & its No's	Borewells- 4 nos.		
	b. Flow meter Installation at wells (Yes/No)	Yes		
	c. Reading of Flow Meter during visit	Bore well No.	Totalized reading (m^3)	Flow rate (m^3/hr)
		Borewell 1	168362 m^3	0.0
		Borewell 2	347416.3 m^3	134.2
		Borewell 3	23071 m^3	1.33
		Borewell 4	4403.7 m^3	2.47
	d. Any Logbook maintained (Yes/No), if yes, attach.	Yes, Placed at **Annexure-5**		
	e. Quantity of water (KLD)	**379.40** (As per logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21)		
2.	**Fresh water consumption (KLD) – Current crushing season (Avg. till 13.01.2021)**			
	a. Sugar plant			

	b. co-generation	358.07 (As per logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21)	
	c. Residential etc.	21.33 (As per logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21)	
	d. Total fresh water Consumption (KLD)	379.4 (As per logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21)	
	e. Log book maintained (Yes/ No) If any, details to be collected	Yes	
3.	**Details of Hot & Cold water recycling system**	**Number**	**Capacity**
	a. Details of Hot water UGR.	1 no. common	600 m^3
	b. Cold water UGR and cooling towers		
	c. **Hot water**- Location of flow meter & its Installation	**Flow (m^3/hr)**	**Totalizer Reading (m^3)**
	1. Imbibition water at mills	93	238078
	2. Filter cake wash water at rotary vacuum filter	28	912227
	3. Sugar melting (B & C Megma)	6.0	35791
	4. Pan boiling	-	32123
	5. Molasses conditioning	0.7	605
	6. Wash water at Centrifugal (B and C massecuite curing)	3.2	25398.7
	d. **Cold water** -Location of flow meter & its Installation		
	1. Power turbine cooling	28.98	65262
	2. Mills, pumps cooling	54	12146
	3. Fibrizer bearing	7.0	3185
	4. Boiler, wet scrubber	No	-
	5. Cooling tower of co-generation	No	-
	6. SO2 gas cooling	No	-
	7. B and C massecuite cooling	-	37026
	8. Final molasses cooling	-	30089
4.	**Waste water (Influent) generation (KLD) in current crushing season** (as per logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21)		
	a. Spray pond/cooling tower over flow (for double sulphitation)	346.75 KLD (Lamella Clarifier inlet)	
	b. Mills, boiling house, D.M./ R.O. Plant boilers etc.	355.72 KLD (ETP inlet)	
	h. Total waste water (Influent) generation.	702.485 KLD	
5.	**Waste water received at inlet of ETP, Liter/ton of cane**	141.42 L/T	
6.	**Spray pond overflow**	**Flow (m^3/hr)**	**Totalizer Reading (m^3)**
	a. Flow meter Installation	17.26	133895.11
	b. Provision of separate spray pond overflow treatment	Yes available	
	c. Brief description of spray pond over flow treatment process (mention technology as per charter)	Physio-chemical treatment (PAC dosing) & settling in lamella clarifier followed by secondary aerobic treatment.	
7.	**Details of Flow meters**	**Flow (m^3/hr)**	**Quantity of water (Average in KLD)** (as per logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21)
	a. Outlet of mill house and boiling house.	Not available	NA
	b. Outlet of steam generation house.	Not available	NA
	c. Outlet of cooling tower/spray pond i.e. over flow	17.26	346.75 KLD (Lamella Inlet)

	d. At ETP outlet (effluent) (The flow at ETP outlet was observed higher compare to the flow at ETP inlet as the treated effluent from cooling tower overflow through Lamella Clarifier (for Sulphate Recovery) was combined prior to reaching storage lagoon.)	67	685.97 KLD
	e. At ETP Inlet (Influent)	29.47	702.48 KLD
	f. Other places of effluent generation	Not Applicable	
8.	**Details of tube cleaning method adopted (chemical/ hydrojet/ any other appropriate method if any), provide details**	Chemical cleaning by Caustic solution	
9.	**Availability of Hazardous tank to collect wash water generated during chemical/Mechanical cleaning of evaporator tubes. (Yes/No), if Yes give Details.**	Yes, 35 KL	
10.	**Total waste water discharge from ETP, (Liters/ton of cane)** (waste water generation from process+ Waste water (Influent) generation + Spray pond overflow)	138.10 L/T	
11.	**Construction of small pits with smooth inner surface with ceramic tiles near to boiler feed pumps, condensate pumps, Injection pumps and RVF vacuum to collect gland cooling water. (Yes/No), give details**	Small pits provided near boiling house and feed water pump area etc.	
12.	**Aeration in equalization tank (Yes/No)**	Yes	
13.	**Type of aeration in aeration tank Diffused/ surface/ any other**	Diffused	
14.	**Tertiary treatment (Yes/No), give Details**	Yes, 2 no. DMF and 2 No. ACF (all in series)	
15.	**Schematic diagram of ETP. (flow chart to be collected)**	Placed at Annexure-6	
16.	**Rain water harvesting system adopted (Yes/No.)**	No	
17.	**Retention time (Min/hr)**	**Retention Time/Contact Time**	**As per Industry**
	1. Bar screen Chamber	30 minutes	35 min
	2. Oil & grease tank	45 minutes	2.5 hrs.
	3. Equalization tank with aeration	6 hrs.	29.6 hrs.
	4. Primary Clarifier	5-6 hrs.	5.3 hrs.
	5. Aeration tank	24-28 hrs.	48 hrs.
	6. Secondary Clarifier	7-8 hrs.	8.4 hrs.
	7. Sand/multi grade filter	20-25 minutes	20 min
	8. Activated carbon filter	20-25 minutes	25 min
	9. Sludge drying bed	Not < 0.03 m3 per ton of cane	0.09 m^3 per ton of cane
	10. Filter Press	-	-
18.	**Brief processing details (flow chart)**	Physio-chemical treatment (Lime dosing) →Secondary Treatment →Tertiary filtration (MGF/DAF) & disinfection by Hypochlorite solution (refer Annexure-6)	
19.	**Storage of treated Effluent**		
	a. No. & size of lagoons	One lagoon of 5000 m^3 capacity (Capacity is not adequate for 15 days)	
	b. Retention time	6-7 days	
	c. Lagoon type- permeable/impermeable	Impermeable	

20.	**Recirculation of treated effluent in Sugar plant**	Treated effluent used for irrigation only
21.	**Sludge Handling Process (Yes/No), give details.**	
	a. Sludge Digestion Method	Composting
	b. Sludge Drying Process	8 no. Sludge Drying Bed
	c. Final Disposal of Sludge	Mixed with press mud & boiler ash and provided to farmer
	d. Whether mechanical sludge handling system installed (yes/ No)	Yes, 1 no. filter press
22.	**Any Hazardous Substances (Yes/No), if yes, give details. (Quantity & way of Disposal)**	• PAC dosing in Flash mixture for spray pond overflow treatment • Generated sludge is finally mixed with secondary sludge & boiler ash and provided to farmer as a manure • Oil & Grease is authorized for burning into boiler after mixing with bagasse as per Hazardous Waste Authorization
23.	**Manpower employed for ETP operation & maintenance.**	11 no. (7 skilled, 4 non-skilled)
24.	**Details of irrigation system & treated effluent used quantity**	
	1. Own land area for irrigation (Yes/No),	Yes
	2. Farmer land area and their agreement	Yes
	3. Net effluent generation left for Irrigation	1000 KL/day as per irrigation management plan, 2017
	4. Flow meter to measure amount of water used for irrigation.	Yes
	5. Distance of land Area from the Unit	Around 3 km
	6. Total Available Area	131.51 Hectare
	7. Soil Texture of land (Sandy, Sandy loam, Loam, Clay loam, Clay)	Sandy loam
	8. Crop area under effluent application	Total 131.51 (28.91 hectare for factory farm, lawn & green belt and 102.6 hectare for farmer land)
25.	**Cleaning mechanism at ETP and factory floor**	Dry cleaning mostly
26.	**Color coding of pipelines for water distribution network (Yes/No)**	Yes

3. Observations

3.1 Sources of Fresh Water

1. The Unit has total of 4 nos. bore wells located at different places within the premises as below:

Table 2: Co-ordinates of borewells at M/s Dhampur Sugar Mills Ltd., Meerganj

Borewell Details			
Sr. No.	Borewell No.	Coordinates	
		Latitude	Latitude
1	Borewell No. 1	28.5502343	79.2129414
2	Borewell No. 2	28.5502717	79.214153
3	Borewell No. 3	28.55263	79.215370
4	Borewell No. 4	28.5513166	79.2220848

2. NOC issued by CGWA was valid up to 07.06.2020 for the abstraction of ground water from 04 tube wells of total quantity 743 m^3/day (not exceeding 99,356 m^3/year) (**Annexure 4**). The unit has applied for renewal of CGWA NOC dated 28.04.2020.

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3. Apart from 04 permitted borewells, one additional bore-well was observed near residential colony of the unit (Fig.24), which is violation of CGWA NOC conditions, however the unit has provided the photographic evidence of this dismantled borewell (Fig.25).

3.2 Fresh Water Consumption

1. As per the record (logbook data) of borewell meters provided by the Unit, total freshwater consumption from November-2020 to 13.01.2021 is as below:

Table 3: Month wise (from Nov-20 to Jan-2020-till 13.01.2021) fresh water abstraction

Sr. No.	Borewell No.	Month wise water abstraction (as per logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21)		
		Nov-2020	Dec-2020	Jan-2021
1	Borewell No. 1	572	989	1789
2	Borewell No. 2	7256	12102	1941
3	Borewell No. 3	163	183	70
4	Borewell No. 4	541	715	237
	Total	**8532**	**13989**	**4037**
	Average (m^3/day)	**304.71**	**451.26**	**367.00**

2. As per the logbook record of borewells, the unit has extracted avg. of 304.71 m^3/day in Nov-2020, 451.26 m^3/day in Dec-2020 and 367 m^3/day in Jan-2021 (Till 13.01.2021) of ground water from 04 borewells (refer ***Table-3***), which is within the permitted abstraction of 743 m^3/day.
3. The unit has installed 02 nos. of piezometers within the unit premises, reading of which were observed 5.13 meters and 5.64 meters respectively.

3.3 Process area and Effluent Treatment Plant (ETP)

1. The unit is engaged in production of sugar with consented capacity of 5000 TCD using sugarcane. On the day of inspection, the unit was found operational. The unit started cane crushing on 03rd November, 2020. On the date of 13.01.2021, the sugar plant was operated at 5350 TCD. The ETP was reported to be operational from 27.09.2020.
2. The unit has installed 33 flow meters in the sugar plant, out of which 30 flow meters are digital and remaining 03 meters are mechanical. Details of flow meters is placed at **Annexure-7.**
3. Unit has single UGR of capacity 600 m^3 for Hot and Cold-water recirculation.
4. The unit has installed Effluent Treatment Plant (ETP) of designed capacity 1000 KLD for the treatment of trade effluent from mill house, boiling house, Spray Pond Overflow etc. and the ETP consists of Screen chamber, Oil & grease trap, Equalization tank, Primary clarifier, Aeration tank-I (AT-I), Aeration tank-II (AT-II), Secondary clarifier, Clear water tank, Multi Grade Filter (MGF) & Activated Caron Filter (ACF) (2 nos.).
5. Unit has provided 2 stream of DM plant having capacity 20 m^3/hr for water treatment for boiler use. Regeneration reject from DM plant goes to main ETP for treatment.
6. The Unit is having two low pressure boilers of 80 TPH and 50 TPH for steam generation facility. Separate wet scrubbers as air pollution control device are provided for both boilers followed by a common stack of 60 meters height.

7. For collection of wash water generated during chemical/mechanical cleaning of evaporators, the unit has provided a tank of 35 m^3 capacity. As informed by unit representative, collected wash water is reused/pumped to ETP for further treatment.
8. Unit has provided separate physio-chemical treatments system for treatment of spray pond overflow which comprises of flash mixer, flocculator and lamella clarifier, then the effluent is merged with ETP effluent into a common Aeration Tank, followed by Secondary Clarifier, Chlorine Dosing Tank, MGF & ACF.
9. At ETP, the unit has provided flow meter at inlet of secondary clarifier, inlet of lamella clarifier (spray pond overflow treatment), outlet of lagoon, following reading were observed during joint inspection:
   a) Inlet of secondary clarifier: flow rate-30.28 m^3/hour; totalizer-237211.29 m^3
   b) Inlet of lamella clarifier: flow rate-17.6 m^3/hour; totalizer-133895.11 m^3
   c) Outlet of lagoon: flow rate-69.00 m^3/hour; totalizer-129650.3 m^3
10. Manual dosing of Poly Aluminum Chloride (PAC) solution as a coagulant observed in flash mixer without flow optimization. Clarified effluent than transferred to main ETP through Lamella Clarifier for further treatment.
11. Manual dosing of Lime observed in the pH correction tank for pH balancing before equalization tank.
12. Unit has provided two parallel units for secondary treatment (two aeration tanks and two secondary clarifiers) of varying design capacity & dimensions. However, provision is made, so that, aeration tank outlet from both tanks can be fed in any clarifier.
13. Aeration tank-II depth observed only 2.5 meter only against the typical depth of 4-5 meter. Low submergence greatly impacts on the air mixing & DO level of aeration tanks.
14. Diffuser along with air grid are provided for aeration in aeration tanks.
15. Unusual negative hydraulic gradient found exist between aeration tank & secondary clarifier because of which gravitation flow is not feasible. Provision of pumping from aeration tanks to secondary clarifiers are provided to counter the negative gradient. Pumping action may affect the performance of secondary clarifier as reflected in the analysis too.
16. Short circuiting (A part of influent/feed found falling directly in the clarifier section near effluent weir rather than central feed well) of feed flow was observed in the secondary clarifier-1.
17. Unit has installed a new secondary clarifier-2 but yet to be operational/commissioned. Overflow line modification work was in progress.
18. Unit has provided manual dosing of hypochlorite as a disinfectant in Filter Feed Tank.
19. Unit has provided 2 nos. Multi Grade Filter (MGF) and 2 nos. of Activated Carbon Filter (ACF) of different diameter for tertiary filtration. All filters are found operating in series.
20. Unit has provided 8 no. of sludge drying bed common for handling of sludge from lamella clarifier, primary clarifier and secondary clarifier.
21. Dried ETP sludge finally mixed with boiler ash and press mud and provided to farmer as a manure.
22. Unit has provided OCEMS at outlet of ETP for continuous monitoring of treated effluent parameters and found connected with CPCB server.
23. AT-I & AT-II receive effluent from filter backwash, overflow from lamella clarifier and primary clarifier.
24. Flow meter for measuring generated effluent installed at boiling house outlet was found defunct. No flow meter for effluent measurement was installed at mill house.
25. The unit has provided oil and grease skimmer between the collection tank and an oil and grease chamber, due to which removal of oil and grease from the effluent could not be achieved (Fig.5). Hence the unit shall place the oil and grease in the chamber to achieve proper oil and grease removal. Oil and grease is collected in HDPE tanks and then burned in boiler, as per hazardous waste authorization.

26. As per the ETP logbook data from Nov-20 to Jan-21 (till 13.01.2021), submitted by the unit, quantity of influent fed in ETP, lamella clarifier inlet, ETP outlet and lagoon outlet is as below:

Table 4: ETP logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21, submitted by the unit

Sr. No.	Month	ETP Inlet (KL)	Lamella clarifier Inlet (KL)	Total Inlet (KL)	ETP Outlet (KL)	Lagoon outlet (KL)
1	Nov-20	9739	9739	19478	18944	19184
2	Dec-20	10953	10336	21289	21274	20574
3	Jan-21 (from 3.1.21 to 13.01.2021)	4209	4198	8407	7800	7994
Total		24901	24273	49174	48018	47752
Avg		355.73	346.76	702.49	685.97	682.17
Liter per ton of cane crushed i.e., 4967.143 TCD				141.42 L/T	138.10 L/T	137.33 L/T

27. As per the logbook data from 3rd Nov-20 to 31st December -20 and 03rd Jan to 13th Jan-21 provided by the unit, treated effluent discharge from lagoon outlet is 682.17 KLD i.e., 137.33 liters per ton of cane crushed, which is within the prescribed limit of discharge.
28. As recommended by National Sugar Institute (NSI), Kanpur in validation report of ETP for season 2018-19. The Unit has installed flow meters at power turbine cooling, boiler, wet scrubber, B & C Massecuite cooling. The same has been verified by the joint inspection team on 14.01.2021.
29. The Unit has maintained logbook for daily effluent generation and treatment, disposal of ETP sludge, Boiler ash and other solid wastes.
30. Samples were collected from ETP inlet, Primary outlet, Secondary outlet, Aeration tank-1, Aeration tank-2, Spray pond overflow, Lamella clarifier outlet (Spray pond outlet), ETP outlet, Additional sump for irrigation, Lagoon and from Irrigation pipeline of one farm for analysis purpose. Analysis results are as below:

Table 5: Analysis result of samples collected from ETP

Sampling location	Parameters (all values are in mg/l except colour & pH, colour in hazen)								
	Sulphur/ Sulphate	pH	COD	BOD	TSS	TDS	Color	MLSS/ MLVSS	O & G
ETP Inlet	21	7.0	849	426	81	1028	60	-	-
Primary Clarifier Outlet	25	7.1	671	384	154	404	25	-	-
Aeration tank-1	-	-	-	-	-	-	-	3006/1786	-
Aeration tank-2	-	-	-	-	-	-	-	2931/1654	-
Secondary Clarifier Outlet	75	7.2	263	74	100	732	34	-	-
Spray pond overflow	75	6.9	2713	1428	635	2564	65	-	-
Lamella clarifier outlet (Spray pond outlet) going to AT-II	73	6.8	2479	1257	314	2556	50	-	-
ETP Outlet	51	7.2	160	46	90	528	16	-	BDL
Additional Sump for irrigation	47	7.4	93	26	50	404	14	-	-

Lagoon	93	7.2	196	63	90	640	24	-	-
Irrigation pipeline of one farm	34	6.9	260	122	61	360	21	-	-

31. Analysis result of sample collected from ETP inlet shows pH-7.0, COD-849 mg/l, BOD-426 mg/l, TSS-81 mg/l, TDS-1028 mg/l, Color-60 Hazen, however primary clarifier outlet shows pH-7.1, COD-671 mg/l, BOD-384 mg/l, TSS-154 mg/l, TDS-404 mg/l, Color-60 Hazen; a sharp reduction of about 60 % in TDS is observed, however TDS again increased at secondary outlet (732mg/l), indicates possibility of dilution at primary clarifier/equalization tank level, as there, no TDS reduction unit was observed to be existing at present.
32. MLSS in AT-I and AT-II measured 3006 & 2931 ml/L respectively which indicate that both aeration tanks were in stabilized condition.
33. MLVSS/MLSS ratio in AT-I and AT-II measured 0.6 & 0.56 respectively which is below the typical optimum value i.e. 0.7-0.8, indicating that aeration tank is filled with dead sludge & waste sludge is not removed periodically as desired.

3.4 Lagoon & Irrigation System

1. The earlier reported bypass of untreated effluent through a pipeline laid underground up to Peelakhar river in Sindholi Village, found removed and a slope joining Peelakhar river also found dry during the inspection.
2. Previously, the unit had two lagoons of 5000 m^3 and 2200 m^3 capacity for storage of final treated effluent. However, during joint inspection, it was found that, the unit has kept only one lagoon of 5000 m^3 capacity for storage of final treated effluent and the second lagoon of 2200 m^3 capacity converted into aeration tank for spray pond overflow treatment.
3. The lagoon capacity of 5000 m^3 is adequate for only 6-7 days, which is less than the maximum permissible storage of 15. However, it is also mentioned in validation of ETP performance report performed by National Sugar Institute, Kanpur in the month of March, 2020.
4. As per the valid CTO under the Water (Prevention & Control of Pollution) Act, 1974 (Consent no. 6345432) the unit is allowed to discharge the treated effluent through one outlet only, however during joint inspection it was observed that, apart from a lagoon of 5000 m^3 capacity, the unit has provided an additional sump for irrigation (having capacity of 42 m^3); for storage of treated effluent from ETP. This tank is also having provision to store and supply secondary treated effluent for irrigation, however, the same is dismantled by the unit on the day of joint inspection.
5. Treated effluent as claimed by unit was being provide to farmers via fixed HDPE pipeline but unit was not able to make the line operational and no flow was observed at the point of treated effluent supply to farm land. After about 3-4 hours the flow was observed at the point in farmland in the HDPE line from where sample was collected. This indicates that unit is not providing regularly for irrigation via HDPE pipeline. Sample analysis also shows high BOD (122 mg/l) and COD (196 mg/l) indicates no supply of treated effluent for irrigation regularly.
6. The unit has installed fixed HDPE pipelines to pump the ETP treated effluent to the farmer's farm lands. A sample from the outlet of a pipeline located at one farm was collected for analysis purpose. Sample analysis result is shown in ***Table 5***.
7. The analysis results mentioned in ***Table 5*** shows that pH-6.9, COD-260 mg/l, BOD-122 mg/l, TSS-61 mg/l, TDS-360 mg/l against the discharge standards (pH- 5.5-8.5, COD 250 mg/l, BOD- 100 mg/l, TSS- 100 mg/l, TDS- 2100 mg/l) for land disposal from irrigation pipeline of one farm. Analysis results of samples collected from additional sump for irrigation shows pH-7.4, COD-93 mg/l, BOD-26 mg/l, TSS-50 mg/l, TDS-404 mg/l

against the discharge standards (pH- 5.5-8.5, COD 250 mg/l, BOD- 100 mg/l, TSS- 100 mg/l, TDS- 2100 mg/l) for land disposal. Analysis results of samples collected from lagoon shows pH-7.2, COD-196 mg/l, BOD-63 mg/l, TSS-90 mg/l, TDS-640 mg/l against the discharge standards (pH- 5.5-8.5, COD 250 mg/l, BOD- 100 mg/l, TSS- 100 mg/l, TDS- 2100 mg/l) for land disposal. The analysis result indicates high BOD & COD in treated effluent storage lagoon and irrigation pipeline as compared to ETP outlet, however unit claimed that the treated effluent is used in the farm land of the unit.

3.5 Residential Colony

1. The unit has a residential colony with 35 houses and guest house with 14 rooms in the premises. To treat the domestic wastewater generated from this colony, the unit has installed 50 KLD Sewage Treatment Plant (STP) and laying of the pipeline connection was under progress. STP was not operational at the time of inspection.
2. Ponding of untreated sewage observed besides the boundary wall of the sugar mill. Samples were collected from the drain located outside of the unit and from the inside of the unit for analysis purpose. Analysis results are as below:

Table 6: Analysis result of samples collected from sewage drain

Sampling location	Parameters (all values are in mg/l except colour & pH, colour in hazen)						
	Colour	pH	BOD	COD	TSS	TDS	Sulfate
Sewage Drain from outside wall	27	7.2	23	63	50	412	12
Sewage Drain from inside	20	7.1	61	22	37	396	18

3.6 Hazardous waste & Fly ash generation and disposal

1. The unit has obtained hazardous waste authorization (Authorization no. H04611) from UPPCB, which is valid from 20.06.2017 to 19.06.2022.
2. As per the valid hazardous waste authorization (Authorization no. H04611) from UPPCB, allowed quantity of oil & grease to recycle/burn into own boiler is 2 MT/annum.
3. As per submitted record, quantity of oil and grease utilized in boiler for burning in Nov-2020, Dec-2020 and Jan-2021 (till 13.01.2021) is 6 kg, 18.5 kg and 9 kg respectively
4. The unit is also generating discarded containers, oily rags, cotton waste etc., for which the unit has not obtained hazardous waste authorization.
5. As per the log book data provided by the unit for the month of Nov-20 and Dec-20, average boiler ash generation is 209.36 Quintals and 247.90 Quintals respectively. Generated boiler ash is distributed to the farmers after mixing with press mud, as informed.
6. The unit is having 80 hectares of area as press mud yard for storage as well as mixing of press mud and ash. At the time of joint inspection, mixing of press mud and ash was observed.

3.7 Observations w.r.t. previous findings:

S.No.	Recommendations in previous inspection dated 29.11.2019	Observations w.r.t. previous recommendations/findings
1	The unit must dismantle the bypass line (PVC pipe) from the premises to the river Peelakhar and ensure that the untreated/partially treated	The bypass line of PVC pipe from the unit premises to the river Peelakhar is now being used as irrigation line for providing treated

	effluent shall not be discharged outside the premises in any case.	effluent to farmers by giving points at various locations.
2	Unit shall maintain the log book for the generation & disposal of ETP effluent, sludge, Boiler ash, hazardous waste and other solid wastes.	The unit has maintained the log book for the generation & disposal of ETP effluent, sludge, boiler ash (Avg. 224.5 Quintal/day as per log book record from 03.11.2020 to 30.11.2020), hazardous waste (Avg. 0.40 kg/day as per log book record from 01.11.2020 to 31.12.2020) and other solid wastes.
3	Unit shall install the flow meters at the places as recommended by National Sugar Institute (NSI), Kanpur.	The Unit has installed flow meters at power turbine cooling, boiler, wet scrubber, B & C Massecuite cooling as recommended by NSI, Kanpur in validation report of ETP for season 2018-19. The same has been verified by the joint inspection team on 14.01.2021.
4	All domestic waste water generated within the premises and colony shall be discharged after proper treatment. The unit shall install Sewage Treatment Plant (STP) for the treatment of domestic waste water.	The installation of Sewage Treatment Plant (STP for the treatment of domestic waste water generated from the colony was under progress on the day of joint inspection, however the unit has provided photographic evidence of operational STP via email dated 22.01.2021).

4. Conclusion

1. Additional borewell was observed near residential colony of the unit for which no NOC from CGWA were permitted. However, the unit has dismantled the additional borewell and provided photographic evident for the same.
2. Flowmeter of ETP inlet were installed after equalization tank and not at ETP inlet.
3. Aeration tank-II depth observed only 2.5 meter against the typical depth of 4-5 meter. Low submergence greatly impacts on the air mixing & DO level of aeration tanks.
4. The unit has installed secondary clarifier prior to lamella which was not in operation at the time of inspection.
5. Provision of pumping from aeration tanks to secondary clarifiers are provided to counter the negative gradient existing between aeration tank & secondary clarifier.
6. Short circuiting (A part of influent/feed found falling directly in the clarifier section near effluent weir rather than central feed well) of feed flow observed in the secondary Clarifier-I.
7. MLSS/MLVSS ratio in AT-I and AT-II measured 0.6 & 0.56 respectively which is below the typical optimum value i.e. 0.7-0.8, indicating that aeration tank is filled with dead sludge & waste sludge is not removed periodically as desired.
8. Flow meter for measuring generated effluent installed at boiling house outlet was found defunct. No flow meter for effluent measurement was installed at mill house.

9. The unit has provided oil and grease skimmer between the collection tank and oil & grease chamber, due to which removal of oil & grease from the effluent could not be achieved.
10. Analysis results of sample collected from lagoon (BOD- 63 mg/l, COD- 196 mg/l, TDS- 640 mg/l, Sulphate- 93 mg/l, Color- 24 hazen) shows increase in BOD, COD, TDS, Sulphate, Color when compared with analysis results of ETP outlet (BOD- 46 mg/l, COD- 160 mg/l, TDS- 528 mg/l, Sulphate-51 mg/l, Color- 16 hazen).
11. High BOD (63 mg/l) and COD (196 mg/l) were observed in lagoon and irrigation pipeline (BOD- 122 mg/l, COD- 260 mg/l) w.r.t. ETP outlet which indicate that the unit has not supplying treated effluent to farmer's land for irrigation on regular basis.
12. To treat the domestic waste water generated from the colony, the installation work of 50 KLD Sewage Treatment Plant (STP) and the pipeline work was under progress at the time of inspection.
13. Drain of untreated sewage observed besides the boundary wall of the sugar mill. The analysis result of drain outside the unit beside the boundary wall of sugar mill (Color- 27 hazen, pH- 7.2, BOD-23 mg/l, COD- 63 mg/l, TSS- 50 mg/l, TDS- 412 mg/l) indicates direct discharge of domestic waste water from inside the unit premises near residential colony of the unit.
14. Additional sump (having capacity 42 m^3) were observed for irrigation as well as for backwash purpose.
15. The unit was generating discarded containers, oily rags, cotton waste etc., for which the unit has not obtained hazardous waste authorization.
16. The bypass line of PVC pipe from the unit premises to the river Peelakhar is now being used as irrigation line for providing treated effluent to farmers by giving points at various locations and the slope towards Peelakhar river found dry and no physical color/contamination observed in the river water.
17. The unit is not regularly supplying treated effluent for irrigation purpose to farmer's land as observed during the inspection; the inspection team waited for more than 3-4 hours at one of the supply point of treated water for irrigation.
18. Analysis results of samples collected from irrigation pipeline was not complying w.r.t. BOD- 122 mg/l against 100 mg/l, COD- 260 mg/l against 250 mg/l, as per consent issued by Uttar Pradesh Pollution Control Board (UPPCB) dated 31.12.2021.

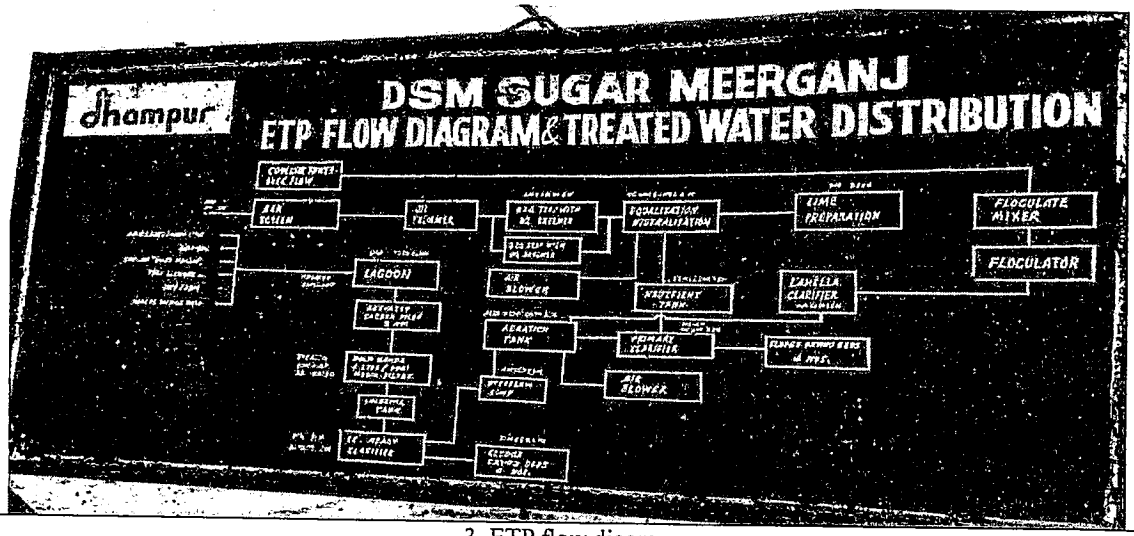
5. Recommendations:

1. ETP inlet flowmeter should be installed at the main inlet of ETP.
2. Periodic removal of sludge be ensured.
3. Flow meter shall be installed at mill house and boiling house outlet for monitoring of generated effluent.
4. The oil skimmer shall be installed within a tank having approximate retention time of 45 min.
5. The treated effluent discharges for irrigation shall comply with MOEFF&CC Notification dated 14.01.2016 (G.S.R. (35E)) for land disposal.
6. Installed STP shall be made operational for treatment of generated sewage. Treated sewage shall be utilized for irrigation & other purposes.
7. The unit shall keep only single arrangement to pump the treated effluent from the lagoon to irrigation supply.
8. Unit shall obtain amended Hazardous waste authorization from UPPCB to handle and safe disposal of discarded containers, oily rags, cotton waste, O&G and spray pond ETP sludge.
9. All possible efforts shall be made to ensure consistent compliance of the standards referred.

6. Photographs

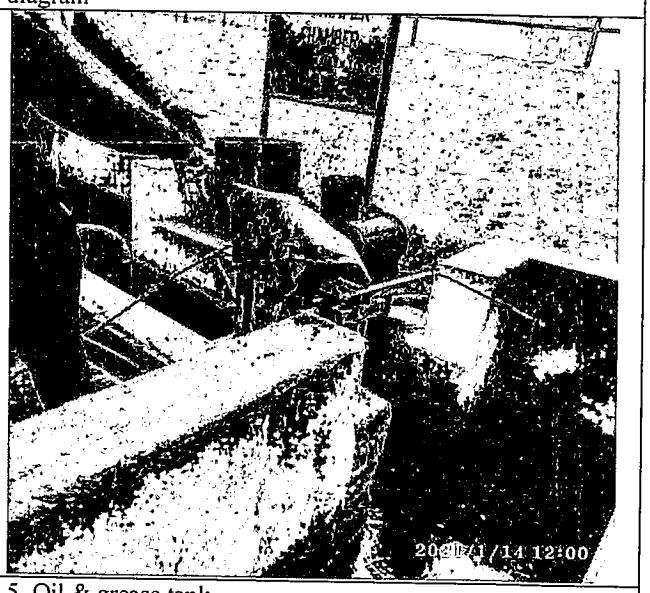
1. Main gate of the unit

2. Environmental display board located at ETP area



3. ETP flow diagram

4. Bar screen chamber

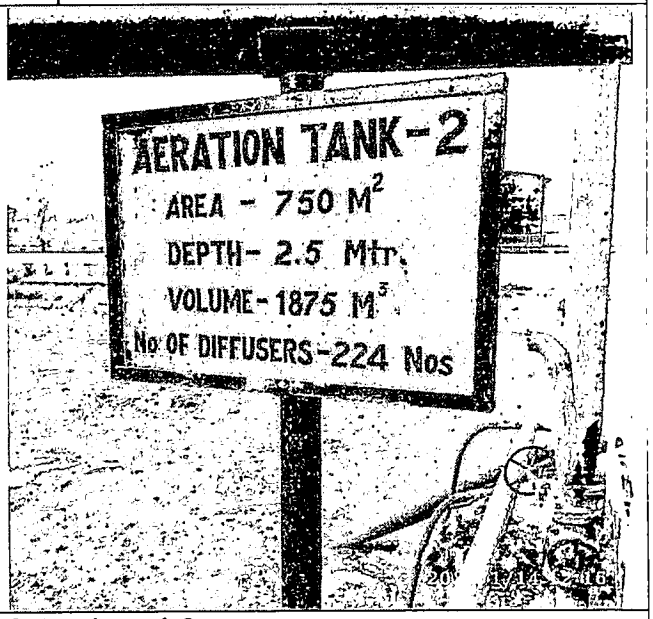


5. Oil & grease tank

6. pH correction tank

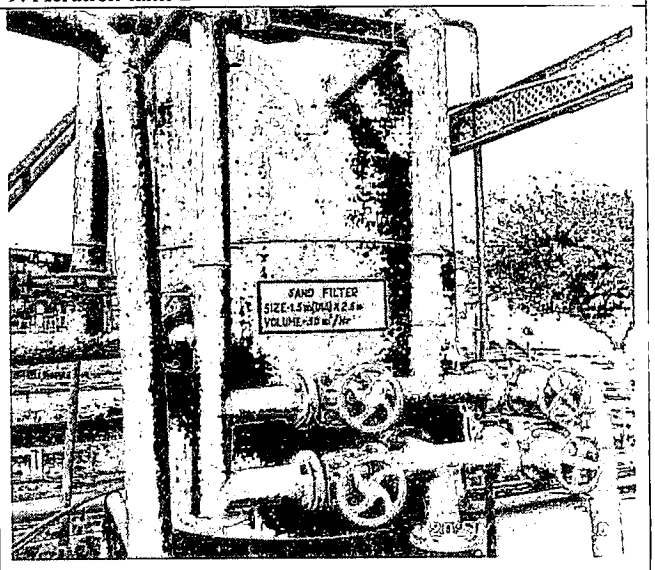
7. Equalization tank

8. Aeration tank-1

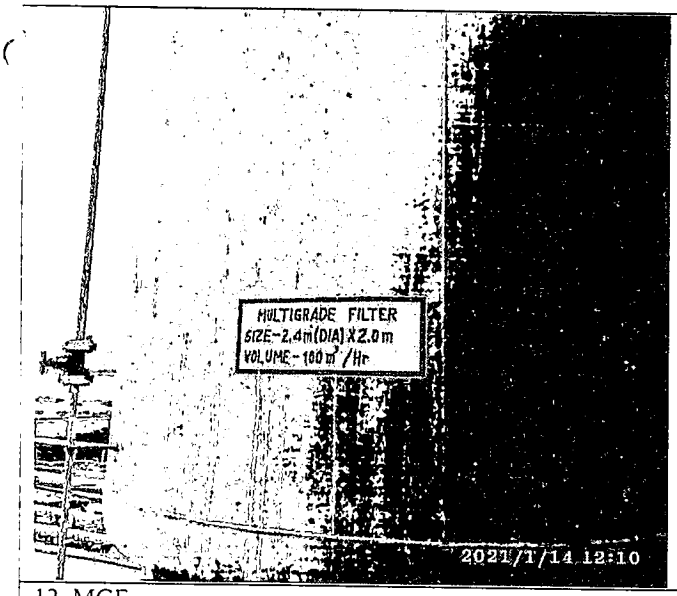


9. Aeration tank-2

10.Storage lagoon

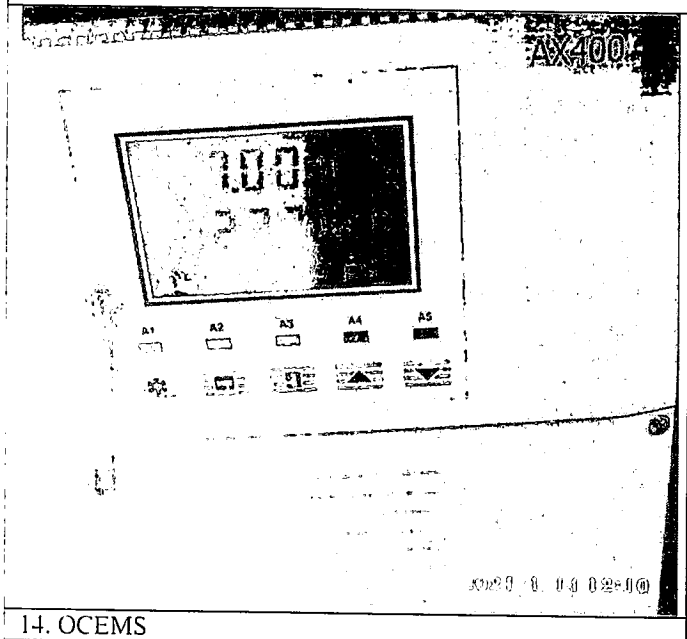


11. Sand filter

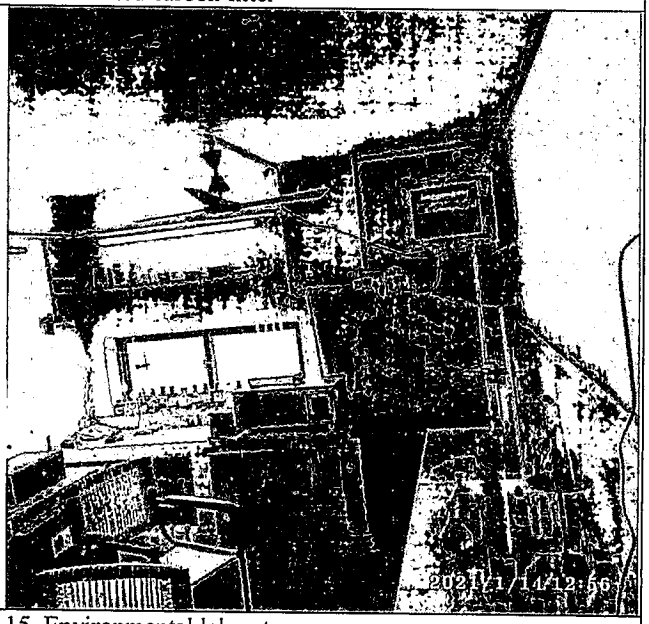


12. MGF

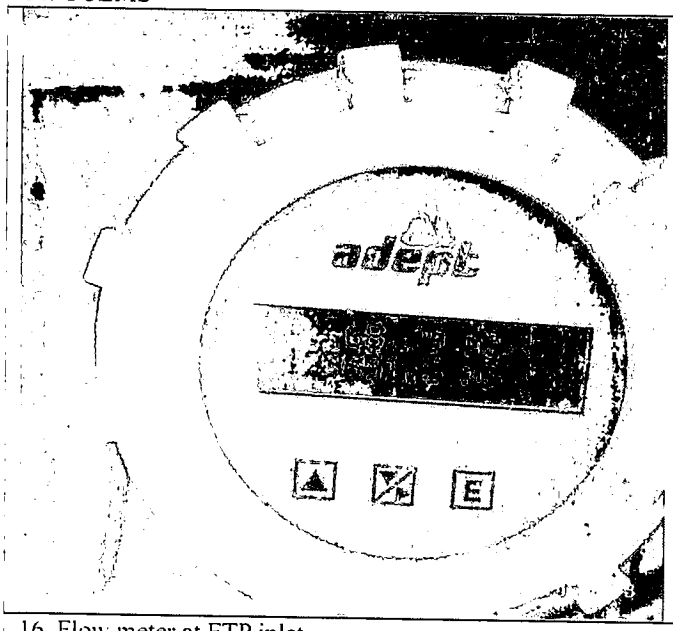
13. Activated carbon filter



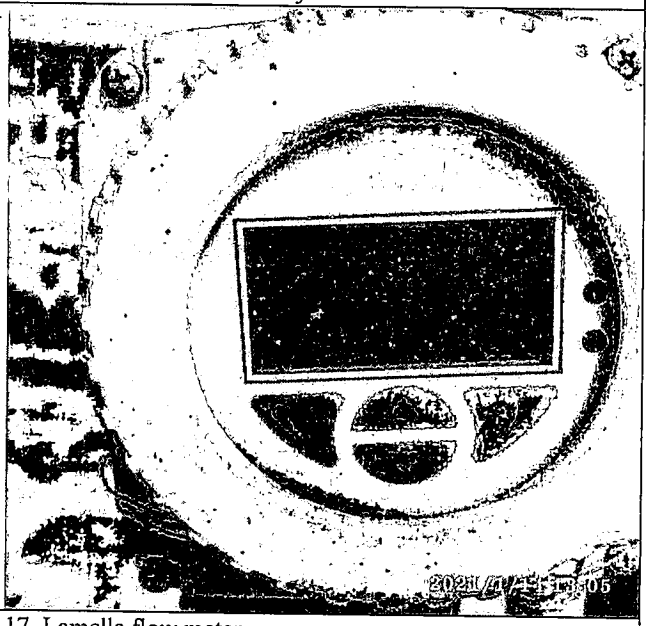
14. OCEMS



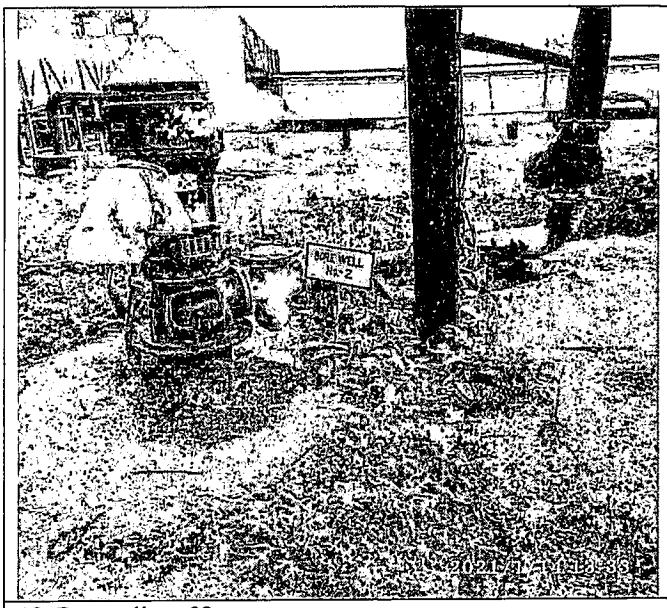
15. Environmental laboratory



16. Flow meter at ETP inlet

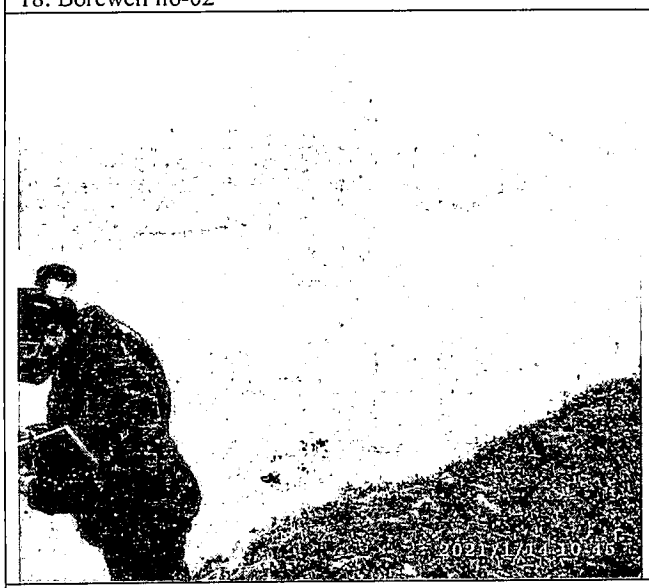


17. Lamella flow meter

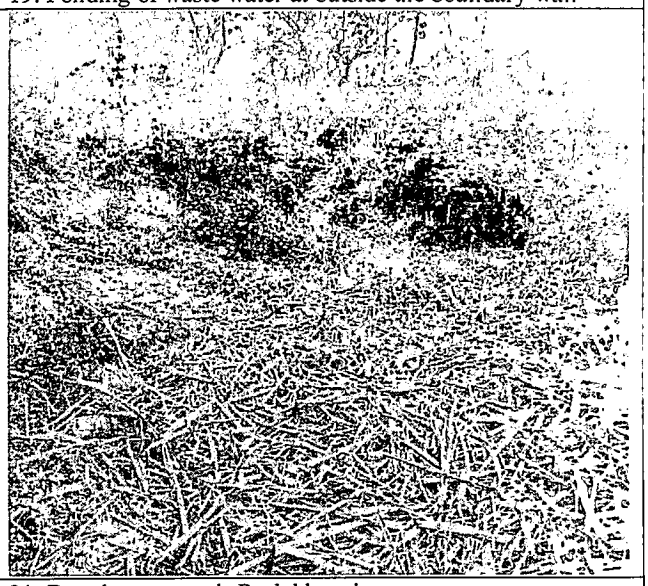


18. Borewell no-02

19. Ponding of waste water at outside the boundary wall

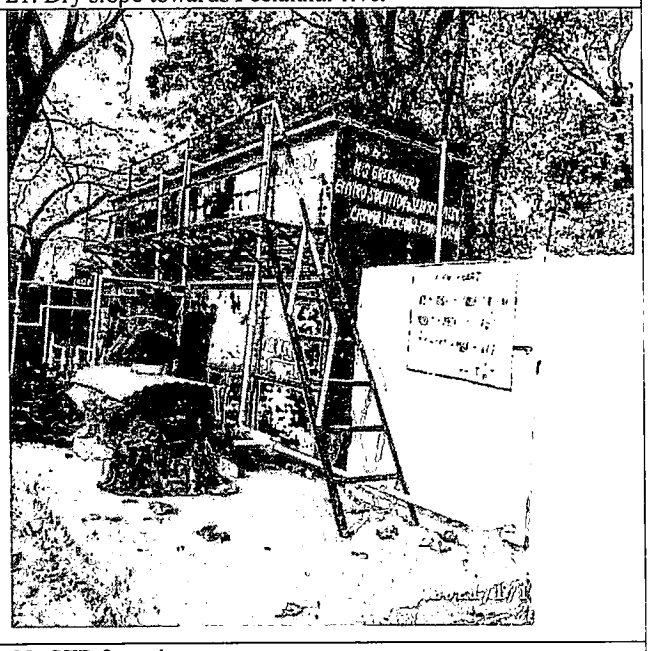


20. Peelakhar river



21. Dry slope towards Peelakhar river

22. Arrangement of pipe for irrigation



23. STP for colony waste water

Additional bore-well near residential colony	25. Additional bore-well near residential colony which is now dismantled

7. Inspection Team

Sr. No.	Name of the inspecting officers	Signature
1.	Mrs. Reena Satavan, Sc. 'D' CPCB, Delhi	
2.	Sh. Rohit Singh, Regional Officer., Bareilly, UPPCB	
3.	Sh.S. Vinadkar, AEE, Regional Office, Bareilly, UPPCB	
4.	Dr. Prabhat Ranjan, Sc. 'B', CPCB, Delhi	
5.	Sh. Vipin Kumar, RA-III, CPCB, Delhi	
6.	Ms. Anshul Kumari, RA-III, CPCB, Delhi	
7.	Ms. Shivangi Goswami, RA-II, CPCB, Delhi	
8.	Sh. Ashwani K. Singh, RA-II, CPCB, Delhi	
9.	Sh. Muktesh Chaudhary, SRF, CPCB, Delhi	

Annexure – L

U.P. Pollution Control Board

CONSENT ORDER

Ref No. -
71114/UPPCB/Bareilly(UPPCBRO)/CTO/air/BAREILLY/2019

Dated : 20/03/2020

To ,

Shri SANJAY SHARMA
M/s DSM SUGAR MEERGANJ
DSM SUGAR MEERGANJ, A UNIT OF DHAMPUR SUGAR MILLS LIMITED, SINDHAULI ROAD, MEERGANJ, BAREILLY, UP
BAREILLY

Sub : Consent under section 21/22 of the Air (Prevention and control of Pollution) Act, 1981 (as amended) to M/s. DSM SUGAR MEERGANJ

Reference Application No. 6343158

Dated : 20/03/2020

1. With reference to the application for consent for emission of air pollutants from the plant of M/s DSM SUGAR MEERGANJ. under Air Act 1981. It is being authorised for said emissions, as per the standards, in environment, by the Board as per enclosed conditions .
2. This consent is valid for the period from 01/01/2020 to 31/12/2021 .
3. Inspite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 21 (6) of the Air (Previntion and Controt of Pollution) Act, 1981 as amended.

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.20 17:29:51 +05'30'

For and on behalf of U.P. Pollution Control Board

Chief Environment Officer

Enclosed : As above
(condition of consent):

Copy to: Regional Officer Bareilly to ensure the compliance of the conditions imposed in the consent order.

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.20 17:30:08 +05'30'

Chief Environment Officer

U.P. Pollution Control Board

Dated : 20/03/2020

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of cane crushing Cane Crushing Capacity - 5000 TCD .
2. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.

3(a) The maximum rate of emission of flue gas should not be more than the emission norms for the stacks.

3(b) . Air Pollution Source Details.

Air Pollution Source Details					
S.No	**Air Polution Source**	**Type of Fuel**	**Stack No.**	**Parameters**	**Height**
1	4. DG sets 625 KVA, 625 KVA and 125 KVA	diesel	02	Particulate Matter	stack height of 5 meter, 5 meter and 2.2 meter above the roof of nearest building
2	boilers of 80 TPH and 55 TPH	Baggaes-1296 TPD	01	Particulate Matter	The boilers are equipped with individual wet scrubber and common stack height of 50 meter from ground level

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

Emission Quality Details Detail			
S.No	**Stack No**	**Parameter**	**Standard**
1	01	Particulate Matter	150mg/NM3
2	02	Particulate Matter	As per Environment(Protection) Rules 1986

4 . The industry should be operated in such a manner that it does not adversely affect the environment and the solid waste generated such as ash etc. is disposed in eco friendly manner .

5 . Any source of emission other than that mentioned in the Air consent seeking application will not be permitted by the Board .

6 . The industry should ensure the operation of the air pollution control system (APCS) in such a manner that the air emission confirms with the standards prescribed under the E.P Act 1986 as amended.

7 . The industry shall submit Environmental Statement in prescribed format as per rule no.14 as per E.P Rules 1986 .

8 . The industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time .

9 . Industry shall submit monthly monitoring reports of all stacks and ambient air quality from a certified / approved laboratory under E.P. Act 1986 .

10. The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.
11. The industry will ensure the continuous and uninterrupted data supply from the OCEEMS to the CPCB and SPCB .
12. The unit shall submit audited balance sheet for the current year and the details of fees deposited during last three years within a month failing which consent would be deemed void.
13. The use of Pet coke and Furnace oil as a fuel in the factory is restricted in compliance of the Hon'ble Supreme court order .
14. The Industry will use minimum 20% Bio Briquette as fuel in the Boiler depending upon its availability .
15. The industry shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).
16. Minimum 33% of the land on which industry is established will be covered and properly maintained by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H-16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www. uppcb. com /pdf/Green-Belt-Guidle_160218.pdf .
17. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order .
18. Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time .

Specific Conditions:

1.This Consent to operate air is valid for production of Sugar crystal at cane crushing capacity of 5000 TCD.
2.Unit shall operate and maintain the APCS i.e. individual wet scrubber and common stack height of 50 meter from ground level at the boilers of 80 TPH and 55 TPH
3.Unit shall install online emission monitoring system at the stack of boilers and ensure connectivity to the server of UPPCB.
4.DG sets 625 KVA, 625 KVA and 125 KVA shall always be in cannopy and adequate stack height of 5 meter, 5 meter and 2.2 meter above the roof of nearest building.
5.Unit shall use Bio-briquette as co-fuel with main fuel in the ratio of minimum 20 percent in boiler subject to its availability.
6.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.
7.The ambient noise level shall confirm to the standards under the Environment (Protection) Act 1986.
8.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.
9.Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India and O.A. No 539/2019 Adil Ansari Vs M/s Dhampur Sugar Mills Ltd and Ors.
10.Unit shall submit emission monitoring report of the stack of air polluting sources done by MoEF & CC approved laboratory in every 3 months.
11.Unit shall maintain the log-book for the generation and disposal of ETP sludge, Boiler Ash and other solid wastes.
12.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.

Issued with the permission of competent authority .

Amit Chandra

Digitally signed by Amit Chandra
Date: 2020.03.20 17:30:25 +05'30'

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For and on behalf of U.P. Pollution Control Boar[illegible]

Chief Environment Officer

Annexure-2

U.P. Pollution Control Board

CONSENT ORDER

Ref No. -
71145/UPPCB/Bareilly(UPPCBRO)/CTO/water/BAREILLY/2019

Dated : 20/03/2020

To ,

Shri SANJAY SHARMA
M/s DSM SUGAR MEERGANJ
DSM SUGAR MEERGANJ, A UNIT OF DHAMPUR SUGAR MILLS LIMITED, SINDHAULI ROAD, MEERGANJ, BAREILLY, UP
BAREILLY

Sub : Consent under Section 25/26 of The Water (Prevention and control of Pollution) Act, 1974 (as amended) for discharge of effluent to M/s. DSM SUGAR MEERGANJ

Reference Application No :6345432 **Dated :20/03/2020**

1. For disposal of effluent into water body or drain or land under The Water (Prevention and control of Pollution) Act,1974 as amended (here in after referred as the act) M/s. DSM SUGAR MEERGANJ is hereby authorized by the board for discharge of their industrial effluent generated through ETP for irrigation/river through drain and disposal of domestic effluent through septic tant/soak pit subject to general and special conditions mentioned in the annexure ,in refrence to their foresaid application .
2. This consent is valid for the period from 01/01/2020 to 31/12/2021 .
3. In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 27(2) of the Water (Previntion and Controt of Pollution) Act, 1974 as amended .

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.20 15:11:27 +05'30'

For and on behalf of U.P. Pollution Control Board

Chief Environment Officer

Enclosed : As above
(condition of consent):

Copy to: Regional Officer Bareilly to ensure the compliance of the conditions imposed in the consent order.

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.20 15:11:42 +05'30'

Chief Environment Officer

U.P. POLLUTION CONTROL BOARD, LUCKNOW

Annexure to Consent issued to M/s.DSM SUGAR MEERGANJ vide

Consent Order No. 6345432/ Water Dated : 20/03/2020

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of Cane Crushing Capacity-5000 TCD .
2. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.
3. The quantity of maximum daily effluent discharge should not be more than the following :

Effluent Discharge Details			
S.No	**Kind of Effulant**	**Maximum daily discharge,KL/day**	**Treatment facility and discharge point**
1	Domestic	18 KLD	Septic Tank
2	Industrial	Industrial effluent quantity shall be restricted to 500 KLD and Cooling Tower blow down shall be restricted to 500 KLD, only one outlet is allowed	ETP

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

4(a) The domestic effluent should be treated in the treatment plant so that it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules 1986 as amended.

Domestic Effulant		
S.No	**Parameter**	**Standard**
1	Total Suspended Solids	100mg/l
2	Total Suspended Solids	30mg/l
3	BOD	250mg/l
4	Oil & Grease	10mg/l
5	Quantity of Discharge	18 KLD

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

Industrial Effulant		
S.No	**Parameter**	**Standard**
1	Total Suspended Solids	100mg/l(For Discharge on land)/ 30 mg/l (for discharge in a surface water body)
2	Total Suspended Solids	100mg/l(For Discharge on land)/ 30 mg/l (for discharge in a surface water body)
3	COD	250mg/l
4	Oil & Grease	10mg/l
5	Quantity of Discharge	Industrial effluent quantity shall be restricted to 500 KLD and Cooling Tower blow down shall be restricted to 500 KLD, only one outlet is allowed

4(c) Loading Rates for different soil textures.

S.No	Soil Texture	Loading rate in m3/Ha/Day

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

18. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order.
19. Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time.

Specific Conditions:

1.This Consent to operate is valid for production Sugar crystal at cane crushing capacity of 5000 TCD.
2.Industrial effluent quantity shall be restricted to 500 KLD and Cooling Tower blow down shall be restricted to 500 KLD, only one outlet is allowed in compliance of notification no G.S.R.35(E) dated 15.01.2016 of MoEF&CC.
3.Unit shall comply with the directions issued Central Pollution Control Board, New Delhi.
4.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.
5.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.
6.Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India and O.A. No. 539/2019 Adil Ansari Vs M/s Dhampur Sugar Mills Ltd & Ors.
7.Unit shall submit treated effluent monitoring report of the ETP and ground water quality of premises as well as of the irrigated area done by MoEF & CC approved laboratory in every 3 months.
8.The Unit must ensure that no untreated/partially treated effluent be discharged outside the premises in any case.
9.Unit must take corrective measures to prevent the leaching of untreated effluent into the soil/ ground water.
10.Unit shall maintain the logbook for the generation and disposal of ETP effluent, sludge, Boiler Ash, hazardous waste and other solid wastes.
11.Unit shall ensure to implement the recommendations made by National Sugar Institute (NSI), Kanpur in validation report of ETP for session 2018-19.
12.Unit shall install the flow meters at the places as recommended by the National Sugar Institute (NSI), Kanpur.
13.All domestic wastewater generated within the premises and colony shall be discharged after proper treatment. The Unit shall install Sewage Treatment Plant (STP) for the treatment of domestic waste water.
14.Unit shall obtain NOC from CGWA for ground water extraction. Unit must obtain registration under Section 10/ Section 11 of The Uttar Pradesh Ground Water (Management and Regulation) Act 2019.
15.Unit shall install sealed electromagnetic flow meter at water source and outlet of ETP with running hours and maintain the records of water extracted and treated effluent supplied to irrigation.
16.Unit shall maintain pipe line from outlet of ETP and to the point of irrigation land.
17.Unit shall maintain and operate properly the installed online effluent monitoring system at the outlet of ETP and ensure the connectivity to the servers of CPCB and UPPCB.
18.Unit shall operate and maintain the installed electromagnetic flow meter at water source and outlet of ETP with running hours and maintain the records of water extracted and treated effluent supplied to irrigation or discharge in drain.
19.Unit shall maintain and operate properly the installed online effluent monitoring system at the outlet of ETP and ensure the connectivity to the servers of CPCB and UPPCB.
20.Unit shall maintain the log-book for the generation and disposal of ETP sludge and other solid wastes including boiler ash generation.
21.Unit should install Condensate Polishing Unit (CPU) for high pressure boilers (105 Kg/cm2) to treat process condensate for reuse in process. This will help in reduction of fresh water consumption.
22.The Unit must ensure the maximum reuse of treated effluent in process.
23.All domestic waste water generated within the Unit's premises and residential colony shall be discharged after proper treatment. The Unit shall install Sewage Tretment Plant (STP) of adequate capacity for the treatment of domestic wastewater.
24.Unit shall maintain pipe line from outlet of ETP and to the point of irrigation land.
25.Unit shall install flow meters at Mill Fibrizer, Mescuite cooling and RO reject and submit the compliance with authentic data and records thereof.
26.Unit shall provide Hazardous tank in the Boiling house.
27.Unit shall provide lagoon (for storage of treated effluent) properly lined to prevent leaching/ contamination of ground water.
28.The mechanical sludge dewatering/handling system for better management of wet sludge shall be

provided by the Unit.
29.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.

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.20 15:12:03 +05'30'

Issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board .

Chief Environment Officer

Annexure -3

Registered

UTTAR PRADESH POLLUTION CONTROL BOARD
T.C. 12 V, VIBHUTI KHAND, GOMTI NAGAR, LUCKNOW

Ref: [illegible] /C-7/Haz./12/2017 Dated: [illegible]

1 Number of authorisation and date of issue 27/Haz/Auth/12/17 Dt. As above
2. Reference of application (No. and date) : DSM/PROD/UPPCB/45,. Dt. Nil.
3 **M/s. D.S.M. Sugar, Sindhauli Raod, Meerganj, Distt-Bareilly** is hereby granted an authorisation based on the signed inspection report dated 13-04-2017 for generation, storage & disposal of hazardous wastes as per following details.

Details of Authorisation

Sl. No.	Category of Hazardous waste as per Schedule I,II and III of these rules	Authorised mode of disposal or Recycle or utilization or co-processing, etc.	Quantity
1.	Schedule-I, Category 5.1, 5.2 Oil & Grease	Mix with baggase & burn into own boiler.	02 M.T./Annum

1. The authorisation shall be valid for a period of **Five Year** from the date of issue, if not suspended or cancelled earlier.
2. The authorisation 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 authorisation:

1. The wastes must be safely collected in leak proof containers and shall be duly marked in a manner suitable for handling, storage and transport and the packaging shall be easily visible and be able to withstand physical conditions and climatic factors. All hazardous waste containers / bags shall be provided with a general label. The storage area should be at an isolated spot in the premises and must be fenced, covered and duly marked.
2. The authorized person/agency shall ensure that no adverse impact on the air, soil and water including groundwater takes place due to activities for which authorization has been requested. Comprehensive safety measures must be followed in handling of wastes and the staff must be properly trained.
3. The authorisation shall comply with the provisions of Environment (Protection) Act 1986 and rules made thereunder.
4. The authorisation or its renewal shall be produced for inspection at the request of an officer of the U P Pollution Control Board.
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. The person authorised shall not rent lend, sell, transfer or otherwise transport the hazardous wastes without obtaining prior permission of the U.P. Pollution Control Board.
8. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of this authorisation.
9. It is the duty of the authorised person to take prior permission of the U.P. Pollution Control Board to close down the facility.
10. An application for the renewal of an authorisation shall be made in form 1, before its expiry as laid down in rule It is further brought to your notice that as per the order dated 14-11-2003 passed by the Hon'ble Supreme Court in W.P. (c) No. 657 of 1995, no industry covered under Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 shall be allowed to operate without valid authorisation. It is also provided in the same orders that industries which are not complying with the conditions of authorisation shall not be allowed to operate. Hence in case you fail to apply for authorisation before its expiry or fail to comply with conditions of the earlier authorisation issued to you, closure order shall be issued against your industry without any further notice.
11. The applicant must file returns on prescribed Form 4 along with a compliance report of this letter and should also maintain records on Form 3 and present it to Board's inspecting officials.
12. In case of occurrence of an accident, complete details on form must be sent to U.P. Pollution Control Board at the earliest along with details of mitigative and remedial measures taken.

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13. The authorised person shall not receive, collect, or store any hazardous waste from any unauthorised occupier or generator of hazardous wastes. In case any hazardous wastes is sold to any other reprocessing unit it must be ensured that such unit is fully complying with environmental requirements and has a valid authorisation of the Board.
14. In no case any hazardous wastes shall be disposed off on land, in any drain or stream. All spillages of hazardous chemicals, used containers, of hazardous chemicals such as flammable corrosive, explosive and toxic nature must be safely collected and stored. Non-compatible wastes must be suitably and safely handled.
15. It is within the powers and functions of the U.P. Pollution Control Board to modify / revoke the terms and conditions of the authorisation issued under the Rule – 7 of Hazardous and Other Wastes (Management & Transboundar Movement) Rules, 2016.
16. You are directed to display on-line data/display board outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises. Necessary compliance should be sent within 15 days of receipt of this letter.
17. It is the mandatory duty of the authorised person to comply with the guidelines for transportation of hazardous waste in accordance with rule 18 of Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.
18. It should be ensured that hazardous wastes shall be properly collected and packed in HDPE bags and then temporarily stored in a lined RCC tank/pit with suitable shed.
19. An ETP sludge test report of a laboratory approved under E.P. Act shall be submitted along with compliance of this letter of this office.
20. Used oil shall be sold only to recyclers registered with U.P. Pollution Control Board. The record shall be maintained.
21. The occupier, transporter and operator of a facility shall be liable for damages caused to the environment resulting due to improper handling and disposal of hazardous waste listed in schedule 1,2, and 3 and shall be liable to pay a fine as levied by the State Pollution Control Board under the rules.
22. Details of raw material which is (Hazardous waste) and product along with quantity shall be sent within one month.
23. You shall become the member of any common TSDF for S.L.F. (M/S U.P. Waste Management Project Kumbhi Kanpur Dehat or M/s Bharat Oil & Waste Management Ltd., Kumbhi, Akbarpur, Kanpur Dehat permitted by U.P.P.C.B)., and start sending the stored hazardous wastes for final disposal to the TSDF and report back to U.P.P.C.B. with the required manifesto (document of proof) within one/three month of this letter. The authorized incinerator is with M/s Bharat Oil Company, Sahibabad, Ghaziabad for oily waste and paint sludge only. or the hazardous waste (Lead Dross) through open heartn furnace may be sent to recycler facilities duly authorized by CPCB. The proof/document shall be submitted having three months. Lead slag shall not be generated in this unit.
24. You are required to store the hazardous waste safely and send it to TSDF/incinerator within Ninty days/Six months of its generation.

(Dr. Rajeev Upadhyay)
Member Secretary

Copy to:- Regional Officer, U.P. Pollution Control Board, **Bareilly** for information and necessary action

Environmental Engineer
Incharge – (Circle 7)

Annexure – 4

Regional Director

सत्यमेव जयते

भारत सरकार
केन्द्रीय भूमि जल प्राधिकरण
जल संसाधन, नदी विकास
और गंगा संरक्षण मंत्रालय

Government of India
Central Ground Water Authority
Ministry of Water Resources,
River Development & Ganga Rejuvenation

File No: - 21-4/4611/UP/IND/2017 - 1319

NOC No: - CGWA/NOC/IND/ORIG/2018/3734

Date: - 20 JUN 2018

To

M/s DSM Sugar Meerganj
(A Unit of Dhampur Sugar Mills Ltd.)
Sindhauli Road, Block Meerganj,
District Bareilly, Uttar Pradesh – 243504

Sub: - NOC for ground water withdrawal to M/s DSM Sugar Meerganj (A Unit of Dhampur Sugar Mills Ltd.) in respect of their existing Sugar manufacturing unit located at Sindhauli Road, Village Nagaria Sadat, Block Meerganj, District Bareilly, Uttar Pradesh – reg.

Refer to your application for grant of NOC for ground water withdrawal dated 24/12/2017. Based on recommendations of the Regional Director, Central Ground Water Board, Northern Region, Lucknow vide their recommendations dated 03/04/2018 and further deliberations on the subject, the NOC of Central Ground Water Authority is hereby accorded to **M/s DSM Sugar Meerganj (A Unit of Dhampur Sugar Mills Ltd.) in respect of their existing Sugar manufacturing unit located at Sindhauli Road, Village Nagaria Sadat, Block Meerganj, District Bareilly, Uttar Pradesh.** The NOC is valid from 08/06/2018 to 07/06/2020 and is subject to the following conditions:-

1. The firm may abstract **743 cu.m/day** (and not exceeding **99,356 cu.m/year**) of ground water through four (4) existing tube wells only. No additional ground water abstraction structures shall be constructed for this purpose without prior approval of the CGWA
2. All the wells shall be fitted with digital water meter by the firm at its own cost and monthly ground water abstraction data shall be recorded in a log book. Compliance to this condition shall be reported within one month from the date of issue of this letter
3. **M/s DSM Sugar Meerganj (A Unit of Dhampur Sugar Mills Ltd.)**, in consultation with the Regional Director, Central Ground Water Board, Northern Region, Lucknow shall implement ground water recharge measures atleast to the tune of **51,070 cu.m/year** as proposed, for augmenting the ground water resources of the areas where post monsoon water level is more than 5 meter below ground level. Firm shall report the compliance within six months from the date of issuance of this letter. Firm shall also undertake periodic maintenance of recharge structures at its own cost.
4. The photographs of the recharge structures after completion of construction of the same shall be furnished immediately to the Regional Director, Central Ground Water Board Northern Region, Lucknow for verification and under intimation to this office

5. The firm, at its own cost, shall construct one (1) observation well (piezometer) at suitable location and install digital water level recorder having telemetry system for monthly ground water level monitoring in consultation with the Regional Director Central Ground Water Board, Northern Region, Lucknow. The firm shall share the user ID and password of the telemetry system with the Regional Director Central Ground Water Board, Northern Region, Lucknow.
6. The ground water quality shall be monitored once in a year during pre- monsoon period.
7. The ground water monitoring data in respect of S. No. 2, 5 & 6 shall be submitted to the Regional Director, Central Ground Water Board, Northern Region, Lucknow on regular basis at least once in a year.
8. The firm shall ensure proper recycling and reuse of waste water after adequate treatment.
9. Action taken report in respect of S. No. 1 to 8 shall be submitted to CGWA within one year period.
10. This NOC is liable to be cancelled in case of non-compliance of any of the conditions as mentioned in S. No. 1 to 9.
11. This NOC is subject to prevailing Central/State Government rules/laws or Court orders related to construction of tube well/ground water withdrawal/construction of recharge or conservation structure/discharge of effluents or any such matter as applicable.
12. The firm shall report self compliance online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
13. This NOC does not absolve the applicant / proponent of this obligation / requirement to obtain other statutory and administrative clearances from other statutory and administrative authorities.
14. The NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and be taking decisions independently of the NOC.

Regional Director

Copy to: -

1. The Member Secretary, Uttar Pradesh Pollution Control Board, PICUP Bhawan, Third Floor, B-Block, Vibhuti Khand, Gomti Nagar, Lucknow, Uttar Pradesh **with a request to ensure that the conditions mentioned in the NOC are complied by the firm in consultation with the District Magistrate, District Bareilly, Uttar Pradesh.**
2. The District Magistrate, District Bareilly, Uttar Pradesh for necessary action.
3. The Regional Director, Central Ground Water Board, Northern Region, Lucknow. This has reference to your recommendation dated 03/04/2018.
4. Guard File 2018-19.

Regional Director

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater (Application For Renewal of NOC)

Application Number : 21-4/4611/UP/IND/2017

Applied For Renewal : 1st

1. **General Information:**

Water Quality:	Fresh Water
Application Type Category/ Type of Application:	Sugar
(i) **Name of Industry:**	DSM SUGAR MEERGANJ (A UNIT OF DHAMPUR SUGAR MILLS LTD)

(ii) **Location Details of the Industrial Unit- (Attach Site Plan and Certified Revenue Sketch) ($)**

Address Line 1 :	SINDHAULI ROAD
Address Line 2 :	MEERGANJ
Address Line 3 :	
State:	UTTAR PRADESH
District:	BAREILLY
Sub-District:	MIRGANJ
Village/Town:	Nagaria Sadat
Latitude:	
Logitude:	
Area Type :	Non-Notified
Area Type Category :	Safe

(iii) **Communication Address**

Address Line 1:	DSM SUGAR MEERGANJ (A UNIT OF DHAMPUR SUGAR MILLS LTD)
Address Line 2:	SINDHAULI ROAD
Address Line 3:	MEERGANJ
State:	UTTAR PRADESH
District:	BAREILLY
Sub-District:	MIRGANJ
Pincode:	243504
Phone Number with Area Code:	
Mobile Number:	91-9837894082
Fax Number:	
E-Mail:	sultanahmad@dhampur.com

(v) **Details of Existing NOC issued by CGWA (enclose copy)**

NOC Letter No:	CGWA/NOC/IND/ORIG/2018/3734
Date of Issuance:	08/06/2018
Vailidity (Start):	08/06/2018

Government of India
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Application Number : 21-4/4611/UP/IND/2017

Applied For Renewal : 1st

Validity (End):	07/06/2020
Reason for not applying for renewal before expiry of NOC Validity (Attach Affidavit):	NA
(vi) Purpose of Renewal Application:	Existing Ground Water

2. **Details of Water Requirement (Fresh and Recycled Water Usage):**
(Please Enclose Water Flow Chart of Activities and Requirement of Water at each Stage) ($)

(i) Total Water Requirement (a+b+c+d) (m3/day)

	Existing	Additional	Total
Water Requirement Details (Fresh Water) (m3/day)			
(a) Ground Water Requirement (m3/day):	743.00	0.00	743.00
(b) Surface Water Available (Canal, River, Ponds etc.) (m3/day):	0.00	0.00	0.00
(c) Water Supply from Any Agency (m3/day):	0.00	0.00	0.00
Total Fresh Water Requirement (a+b+c)(m3/day):	**743.00**	**0.00**	**743.00**
(d) Recycled Water Usage (m3/day):	390.00	0.00	390.00
Total Water Requirement : (a+b+c+d)(m3/day)	**1133.00**	**0.00**	**1133.00**

(ii) Breakup of Water Requirement and Usage:

Activity	Existing Requirement (m3/day)	Additional Requirement (m3/day)	Total Requirement (m3/day)	No. of Operational Days in a Year	Annual Requirement (m3/year)
Industrial Activity	1063.00	0.00	1063.00	125	132875.00
Residential / Domestic	27.00	0.00	27.00	365	9855.00
Greenbelt Development /Environment Maintenance	25.00	0.00	25.00	125	3125.00
Other Use	18.00	0.00	18.00	125	2250.00
Grand Total	1133.00	0.00	1133.00		148105.00

(iii) Details of Water Availability from ETP / STP for Recycle / Resuse usage:

	Existing			Additional			Total	
	(m3/day)	No. Of Days	(m3/year)	(m3/day)	No. Of Days	(m3/year)	(m3/day)	(m3/year)
Effluent / Sewerage generated and treated in ETP / STP:	390.00	125	48750.00				390.00	48750.00
Availability treated Effluent / Sewerage for usage:	390.00	125	48750.00				390.00	48750.00

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Effluent / Sewerage discharge after treatment:	0.00	125	0.00		0.00	0.00

(iv) Availability treated effluent usage : Total quantity same as 2 i (d) and 2 ii (b) above

	Existing (m3/day)	Additional availability (m3/day)	Total Use + Availability (m3/day)
Industrial Activity / Commercial Use	347.00	0.00	347.00
Domestic / Residential Use	0.00	0.00	0.00
Greenbelt development / Enviorment maintenance	25.00	0.00	25.00
Other Use / Flushing Req.	18.00	0.00	18.00
Total	390.00	0.00	390.00

3. (a). Groundwater Abstraction Structure- Existing:

Number of Existing Structures: 4

SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether Fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
1	Borewell / 1995	60.00 / 150	10.00	155.00	2 / 125	Submersible Pump	50.00	Yes	Yes / NOC No: CGWA/NOC/IND/ORIG/2018/3734 DATED: 20/06/2018
2	Borewell / 1995	60.00 / 150	10.00	155.00	2 / 125	Submersible Pump	50.00	Yes	Yes / NOC No: CGWA/NOC/IND/ORIG/2018/3734 DATED: 20/06/2018
3	Borewell / 2001	60.00 / 150	10.00	50.00	2 / 125	Submersible Pump	10.00	Yes	Yes / NOC No: CGWA/NOC/IND/ORIG/2018/3734 DATED: 20/06/2018
4	Borewell / 2012	60.00 / 100	10.00	5.00	6 / 365	Submersible Pump	2.00	Yes	Yes / NOC No: CGWA/NOC/IND/ORIG/2018/3734 DATED: 20/06/2018

(b). Groundwater Abstraction Structure- Additional:

Number of Additional Structures: 0

Government of India
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SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof

4. (a). Compliance to the Condition prescribed in the NOC

SNo.	Conditions given in NOC	Compliance Conditions Applicable	Status of Compliance
1	Area Specific Plantation	Yes	COMPLIED
2	Domestic Water School Sanitation	Not Applicable	NOT APPLICABLE
3	Groundwater quality monitoring - Pre monsoon and Post monsoon	Yes	COMPLIED
4	Maintenance of recharge structures	Yes	COMPLIED
5	Number of Pizometers as per NOC and Water Level Record	Yes	COMPLIED
6	Number of Tubewells Borewales as per NOC	Yes	COMPLIED
7	Pizometer fitted with AWLRs with telemetrry as per NOC	Yes	COMPLIED
8	Quantum of Groundwater as per NOC	Yes	COMPLIED
9	Recharge through ponds	Yes	COMPLIED
10	Recycle and reuse of water	Yes	COMPLIED
11	RWH and AR structures implemented	Yes	COMPLIED
12	Submission of Compliance report to the Region	Yes	COMPLIED
13	Water conservation measures	Yes	COMPLIED
14	Water Security Plan of villages	Not Applicable	NOT APPLICABLE
15	Well monitored around the plant premises	Not Applicable	NOT APPLICABLE
16	Wells fitted with water meter and its Record	Yes	COMPLIED

(b). Compliance to the Condition prescribed in the NOC - Other

SNo.	Conditions given in NOC	Status of Compliance

Government of India
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Department of Water Resources, River Development and Ganga Rejuvenation
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Application Number : 21-4/4611/UP/IND/2017

Applied For Renewal : 1st

5. **Groundwater Availability (Please Enclose a Comprehensive Report / Note on Groundwater Condition / Groundwater Quality in and Around the Area) Applicable to Industries Consuming Greater Than 500 m3/day and / or having a Land Area of Greater Than 2 Ha.- ($)**

   NOT APPLICABLE

6. **Details of Rainwater Harvesting and Artificial Recharge Measures for Groundwater Recharge in the Area. If the Firm has Proposed to take up Rainwater Harvesting and Recharge outside the Industrial Unit Premises, then provide NOC from the Concern Authority / Agency where the Harvesting Measures are Proposed, if Already implemented, details may be furnished. (Attach Report on Comprehensive & Feasible Rainwater Harvesting / Recharge Proposal).- ($)**

   ATTACHED

INDUSTRIAL USE- Self Declaration

☑ I hereby certify that the data and information furnished above are true to the best of my knowledge and belief and I am aware that if any part of the data / information submitted is found to be false or misleading at any stage, the application will be rejected outright.

I hereby declare that all the mandatory documents prescribed in the application form have been uploaded and no blank /irrelevant documents have been uploaded. I am also aware that any false/ wrong submission /uploading of document will lead to rejection of my application without any notice.

It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.

I hereby undertake that in case any environmental compensation/ penalty is imposed on the firm by any statutory authority, I shall comply with the decision of such authority.

1. Application proforma is subject to modification from time to time.

2. Application is submitted online on website http://cgwa-noc.gov.in to following office.

Regional Director,Central Ground Water Board Northern Region, Bhujal Bhavan, Sector-B. Sitapur Road Yojna, Ram Ram Bank Chauraha, LUCKNOW, UTTAR PRADESH, 226021

3. Incomplete application will be summarily rejected.

Scanned copy of last page of application with signature and seal should be attached at presribed place before submission of application.

4 Reciept of Processing Fee of Rs. 500.00/- (Rupees Five Hundred Only) submitted through NON TAX RECEIPT PORTAL (https://bharatkosh.gov.in) should be attached along with hard copy of application.

Processing Fee:-

Bharat Kosh Transaction Ref. No:- 2204200000713

Bharat Kosh Transaction Date:- 22/04/2020

Note:- The Processing Fee is Non-Refundable. Applicant should ensure and Check Eligibility of Submission of Application and Required Documents before Submitting Online Application.

5. Hard copy of application required: No

Government of India
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Applied For Renewal : 1st

Attached Files:

1). Site Plan : (Refer: 1 (ii))

No Attachment Found!

2). Certified Revenue Sketch : (Refer: 1 (ii))

No Attachment Found!

3). Reason for Not Applying for Renewal before Expiring NOC : (Refer: 1 (v))

No Attachment Found!

4). Existing NOC : (Refer: 1 (vii))

S.No	Attachment Name	File Name
1	NOC Copy from CGWA	NOC Copy from CGWA.pdf

5). Enclose Flow Chart of Activity and Requirement of Water: (Refer: 2)

No Attachment Found!

6). Groundwater Availability Report : (Refer: 4)

No Attachment Found!

7). Details of Rainwater Harvesting / Artificial Recharge Measures : (Refer: 5)

S.No	Attachment Name	File Name
1	Recharge Calculation	Recharge Calculation.pdf
2	POND RECHARGE	POND RECHARGE.pdf

8). Authorization :

S.No	Attachment Name	File Name
1	authrazation letter	authrazation letter.jpg

9). Extra Attachment :

S.No	Attachment Name	File Name
1	SITE PLAN	SITE PLAN .pdf
2	Water Consent	Water Consent.pdf
3	Compliance Report	Compliance Report.pdf

10). Compliance to the Condition prescribed in the NOC

SNo.	Conditions given in NOC	Attachments		
		S.No.	Attachment Name	File Name
1	Area Specific Plantation	1	PLANTATION	PLANTATION.pdf
2	Domestic Water School Sanitation	No Attachment Found!		

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
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Application Number : 21-4/4611/UP/IND/2017

Applied For Renewal : 1st

3	Groundwater quality monitoring - Pre monsoon and Post monsoon	1	Pre mansoon report	Pre mansoon report.pdf
		2	Post mansoon report	Post mansoon report.pdf
4	Maintenance of recharge structures	1	Recharge Structures	Recharge Structures.pdf
5	Number of Pizometers as per NOC and Water Level Record	1	Piezometer Pics	Piezometer Pics.pdf
		2	Piezo Reading Boiling House	Piezo Reading Boiling House.pdf
		3	Piezo Reading Colony	Piezo Reading Colony.pdf
6	Number of Tubewells Borewales as per NOC	1	TUBEWELL PICS	TUBEWELL PICS.pdf
7	Pizometer fitted with AWLRs with telemetrry as per NOC	1	Piezometer Pics	Piezometer Pics.pdf
8	Quantum of Groundwater as per NOC	1	NOC Copy from CGWA	NOC Copy from CGWA.pdf
9	Recharge through ponds	1	POND RECHARGE	POND RECHARGE.pdf
10	Recycle and reuse of water	1	ETP PICS	ETP PICS.pdf
		2	etp out let lab report	etp out let lab report.pdf
11	RWH and AR structures implemented	1	RWH Structures	RWH Structures.pdf
12	Submission of Compliance report to the Region	1	Action Taken Report	Action Taken Report.pdf
		2	SelfCompliance	SelfCompliance.pdf
		3	Compliance Report	Compliance Report.pdf
13	Water conservation measures	1	ETP PICS	ETP PICS.pdf
		2	Water Consent	Water Consent.pdf
14	Water Security Plan of villages	No Attachment Found!		
15	Well monitored around the plant premises	No Attachment Found!		
16	Wells fitted with water meter and its Record	1	FLOW METER PICS	FLOW METER PICS.pdf
		2	One month logbook	One month logbook.jpg

11). Compliance to the Condition prescribed in the NOC - Other

SNo.	Conditions given in NOC	Attachments		
		S.No.	Attachment Name	File Name

12). Bharat Kosh Reciept (Porcessing Fee):

S.No	Attachment Name	File Name
1	TransactionReceipt	TransactionReceipt.pdf

13). Application with Signature and Seal:

Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development and Ganga Rejuvenation
Central Ground Water Authority (CGWA)
Applications for Issue of NOC to Abstract Ground Water (NOCAP)

Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater (Application For Renewal of NOC)

Application Number : 21-4/4611/UP/IND/2017

Applied For Renewal : 1st

S.No	Attachment Name	File Name
1	Self Declaration	Self Declaration.jpg

Date :

Place :

Name & Signature of the applicant

(With official seal)

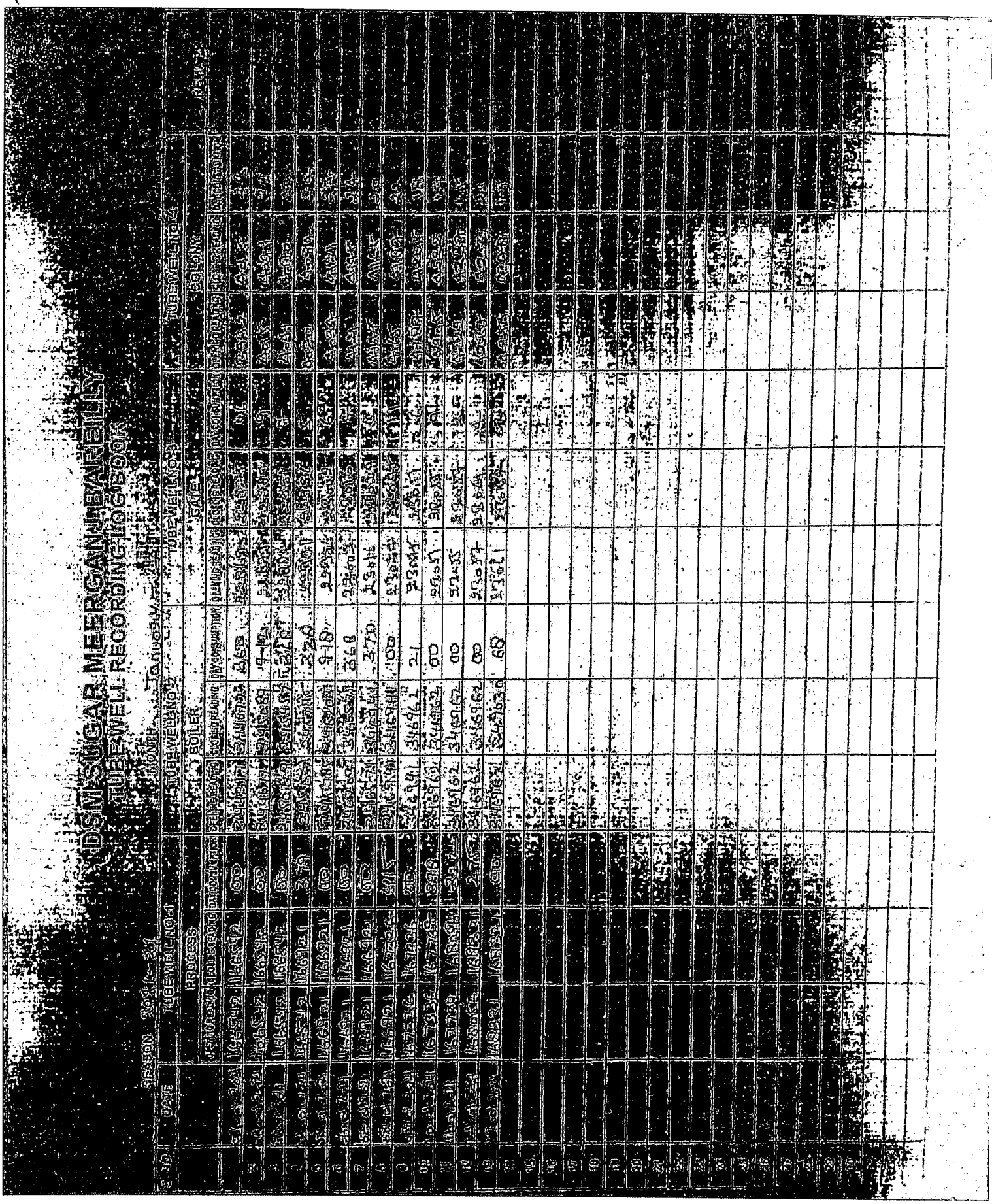
Associated User : sultandsm

Submitted By User : sultandsm

Submission Date : 28/04/2020

* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.

Annexure-5


DSM SUGAR MEERGANJ BAREILLY
TUBEWELL RECORDING LOG BOOK
SEASON 2021-22
TUBEWELL NO-1
PROCESS
TUBEWELL NO-2
BOILER
GATE
TUBEWELL NO-3
TUBEWELL NO-4
BOILER
DATE

DSM SUGAR MEERGANJ BAREILLY
TUBE WELL RECORDING LOG BOOK

SEASON

MONTH December-2020

S.NO.	DATE	TUBE WELL NO -1			TUBE WELL NO -2			TUBE WELL NO -3			TUBE WELL NO -4			REMARK
		PROCESS			BOILER			GATE			COLONY			
		OPENING READING	CLOSING READING	DAY CONSUMPTION	OPENING READING	CLOSING READING	DAY CONSUMPTION	OPENING READING	CLOSING READING	DAY CONSUMPTION	OPENING READING	CLOSING READING	DAY CONSUMPTION	
1				00	332244	332596	352	21686	21694	008				
2				00	332596	332874	278	21694	21698	004				
3				00	332874	333274	380	21698	21705	07				
4				00	333274	333752	478	21705	21710	05				
5				00	333752	334167	415	21710	21716	06				
6				00	334167	334535	368	21716	21722	06				
7				00	334535	334861	326	21722	21727	05				
8				00	334861	335279	418	21727	21734	07				
9				00	335279	335608	329	21734	21740	06				
10				00	335608	336071	463	21740	21745	05				
11				00	336071	336479	408	21745	21749	04				
12				00	336479	336869	390	21749	21755	06				
13				00	336869	337207	338	21755	21760	05				
14				00	337207	337603	396	21760	21764	04				
15				00	337603	337999	421	21764	21769	05				
16				00	337999	338389	390	21769	21777	08				
17				00	338389	338801	396	21777	21783	06				
18				00	338801	339162	378	21783	21790	07				
19				00	339162	339545	383	21790	21795	05				
20				00	339545	339960	415	21795	21799	04				
21				00	339960	340368	408	21799	21806	07				
22				00	340368	340739	371	21806	21814	08				
23				00	340739	341077	338	21814	21819	05				
24				00	341077	341471	394	21819	21825	06				
25				00	341471	341851	380	21825	21833	08				
26				00	341851	342261	410	21833	21839	06				
27				00	342261	342759	498	21839	21846	07				
28				00	342759	343158	399	21846	21851	05				
29				00	343158	343583	425	21851	21855	04				
30				00	343583	343991	408	21855	21861	06				
31				109	343991	344395		21861						

DSM SUGAR MEERGANJ BAREILLY
TUBE WELL RECORDING LOG BOOK

SEASON MONTH

S. NO.	DATE	TUBE WELL NO -1			TUBE WELL NO -2			TUBE WELL NO -3			TUBE WELL NO -4			REMARK
		PROCESS			BOILER			GATE			COLONY			
		OPENING READING	CLOSING READING	DAY CONSUMPTION	OPENING READING	CLOSING READING	DAY CONSUMPTION	OPENING READING	CLOSING READING	DAY CONSUMPTION	OPENING READING	CLOSING READING	DAY CONSUMPTION	
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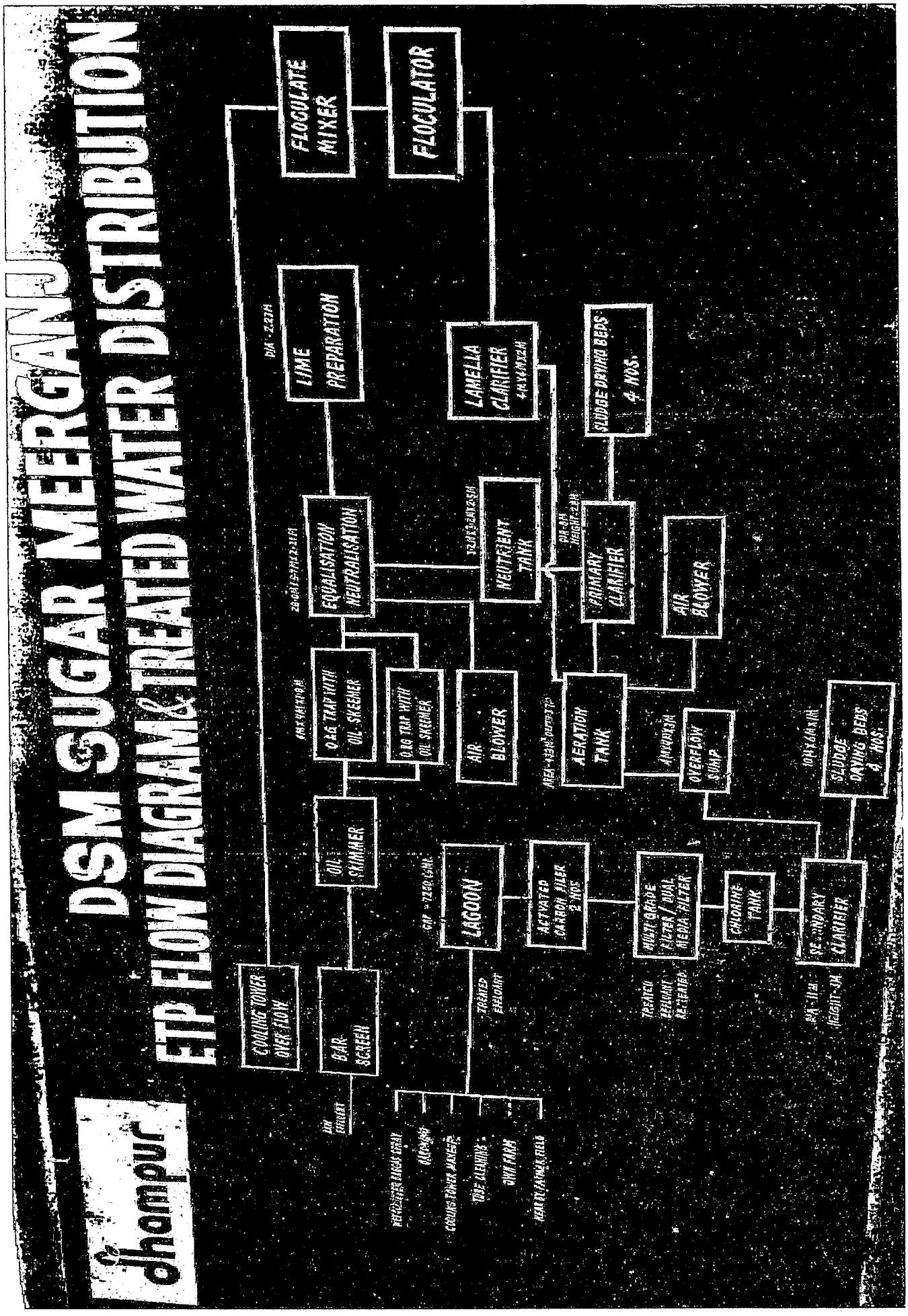
TOTAL														

Annexure


dhampur
DSM SUGAR MEERGANJ
ETP FLOW DIAGRAM & TREATED WATER DISTRIBUTION
COOLING TOWER OVER FLOW
BAR SCREEN
OIL SKIMMER
LAGOON
ACTIVATED CARBON FILER 2 NOS
MULTI GRADE FILTER / DUAL MEDIA FILTER
CHLORINE TANK
SECONDARY CLARIFIER
SLUDGE DRYING BEDS 4 NOS.
OVERFLOW SUMP
AERATION TANK
AIR BLOWER
PRIMARY CLARIFIER
NEUTRIENT TANK
AIR BLOWER
O&G TRAP WITH OIL SKEEMER
O&G TRAP WITH OIL SKEEMER
EQUALISATION NEUTRALISATION
LIME PREPARATION
LAMELLA CLARIFIER
FLOCULATE MIXER
FLOCULATOR

7. Inspection Team

Sr. No.	Name of the inspecting officers	Signature
1.	Mrs. Reena Satavan, Sc. 'D' CPCB, Delhi	
2.	Sh. Rohit Singh, Regional Officer., Bareilly, UPPCB	
3.	Sh.S. Vinadkar, AEE, Regional Office, Bareilly, UPPCB	
4.	Dr. Prabhat Ranjan, Sc. 'B', CPCB, Delhi	
5.	Sh. Vipin Kumar, RA-III, CPCB, Delhi	
6.	Ms. Anshul Kumari, RA-III, CPCB, Delhi	
7.	Ms. Shivangi Goswami, RA-II, CPCB, Delhi	
8.	Sh. Ashwani K. Singh, RA-II, CPCB, Delhi	
9.	Sh. Muktesh Chaudhary, SRF, CPCB, Delhi	

Annexure -3

JOINT INSPECTION REPORT

(02.02.2021 and 03.02.2021)

OF

M/s DHAMPUR SUGAR MILLS LTD.,

SUGAR UNIT- DHAMPUR

BIJNOR – 246761

(U.P.)

In the Matter Of

ADIL ANSARI Vs M/s DHAMPUR SUGAR MILLS LTD. & ORS.

OA NO. 539/2019

-Prepared by-

The Joint Committee of CPCB & UPPCB

Constituted by

Hon'ble National Green Tribunal

(Order dated 09th November, 2020)

JOINT INSPECTION OF M/S DHAMPUR SUGAR MILLS LTD., SUGAR UNIT-DHAMPUR, BIJNOR, (U.P.) ON 02.02.2021 and 03.02.2021 IN COMPLIANCE TO DIRECTION ISSUED BY HON'BLE NATIONAL GREEN TRIBUNAL IN OA NO. 539/2019, IN THE MATTER OF ADIL ANSARI Vs M/s DHAMPUR SUGAR MILLS LTD. & ORS. – REG.

1.0 Background

Hon'ble NGT vide order dated 09.11.2020 in the matter of Adil Ansari vs M/s Dhampur Sugar Mills Ltd. & Ors, OA No. 539/2019, had directed following:

> *"Accordingly, we direct that the State PCB to take further appropriate action by way of prohibiting any activity in violation of law, initiating prosecution and recovering compensation as per applicable norms, following due process of law. The State PCB may also respond to the IA filed by the applicant with particulars in the table annexed to the application, reproduced above and file an action taken report before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR support PDF and not in the form of image PDF. The CPCB and State PCB may undertake necessary inspection for the purpose."*

In compliance to the aforesaid direction, a joint team of officials from Central Pollution Control Board (CPCB), Delhi and Regional Office- Bijnor, Uttar Pradesh Pollution Control Board (UPPCB) surveyed the domestic drain all along the boundary wall of M/S Dhampur Sugar Mills Ltd., Sugar Unit-Bijnor, Uttar Pradesh (hereinafter referred as 'the unit') and its confluence with Ikra Drain with upstream & downstream stretches, visited the premises of the unit as well as carried out the inspection of the unit on **02.02.2021 and 03.02.2021**.

1. **Inspection of M/s Dhampur Sugar Mills Ltd., Sugar Unit- Dhampur, Bijnor, (U.P.) on 02.02.2021 and 03.02.2021 by Joint team of officials from CPCB and Regional Office, Uttar Pradesh Pollution Control Board (UPPCB), Bijnor.**

- In compliance to the Hon'ble NGT order dated 09.11.2020 inspection of M/S Dhampur Sugar Mills Ltd., Sugar Unit-Bijnor, Uttar Pradesh, was carried out on 02nd Feb and 03rd February, 2021 by a joint team comprising of the officials from Central Pollution Control Board (CPCB), Delhi and Regional Office, Uttar Pradesh Pollution Control Board (UPPCB), Bijnor.
- Prior to the entry into the sugar mill premises, the joint team surveyed the surrounding areas and boundary wall of sugar mill till the interior locations in the adjoining agriculture field to trace any bypass/ effluent discharge point from the Unit.
- Inspection team has observed three drain around the premises of the unit:
  1. Ikara drain from Dhampur city, found flowing adjacent to the back boundary of the unit and mostly carries the sewage from Dhampur city and ultimately meet to river

Ramganga via Karula river. (waste water sample collected from Ikara Drain at Up Stream and Down Stream of the unit).

2. Local drain found flowing from colony in front of unit and carries the sewage from front colony as well as drains from sugar mill & distillery unit. Drains carries the smell of sugar effluent. Grab sampling was conducted for analysis of wastewater quality.
3. Local drain behind the spray pond overflow treatment system meeting into Ikara drain (waste water sample collected from local drain meeting into Ikara Drain opposite side of spray pond overflow).

- Both the local drains i.e. Local drain from colony in front of unit (along the boundary wall) and Local drain behind the spray pond overflow treatment system ultimately discharges into Ikara drain.
- The team has not observed good housekeeping at the surroundings along the boundary wall of the unit.

2.1 Analysis results of samples were collected from drain along the boundary wall, Ikara drain at u/s & d/s locations and local drain behind the spray pond overflow treatment system.

1. The Joint Team at the time of survey experienced the fresh smell of molasses coming from the drain, flowing along the boundary wall of the unit. The sample were collected from the drain flowing along the boundary wall of the unit; downstream & upstream of Ikara drain and also from Local drain behind the spray pond overflow treatment system which meet to Ikara drain behind the spray pond overflow treatment system of the unit. Analysis results are presented in **Table-1.**
2. A tap of fresh water was observed at the channel/drain, flowing along the boundary wall of the unit, is used by labours of the unit for washing/ drinking purpose.

Table-1 Analysis results of samples were collected from drain along the boundary wall, Ikara drain at u/s & d/s locations and local drain behind the spray pond overflow treatment system.

S.N.	Sample location	Parameters								
		pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	Color (Haze n unit)	NH_3-N (mg/l)	TC (MPN)	FC (MPN)
1	**Drain from colony along boundary wall of sugar mill**	**4.6**	**2448**	**1604**	28	508	21	-	-	-
3	**Ikara Drain at Up Stream of the unit**	**6.9**	**296**	**125**	**146**	684	53	17	$23x10^6$	$45x10^5$
2	**Ikara Drain at Down Stream of the unit**	**6.4**	**536**	**296**	**74**	628	29	44	$17x10^6$	$49x10^5$
4	**Local drain behind the spray pond**	**5.8**	**606**	**342**	**194**	712	47	-	-	-

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	overflow treatment system									
Prescribed standards for irrigation *[as per the Consent granted by UPPCB]*	5.5 to 8.5	250	100	100	2100	-	-	-	-

Observations on above analysis result:

- The analysis result of sample collected from drain coming from colony along front boundary wall of sugar unit shows **pH- 4.6, COD-2448 mg/l , BOD-1604 mg/l**, which are on higher side of typical sewage characteristics i.e. **pH** in range of 6.5 to 8.5, BOD in range of 200 mg/l -300 mg/l, COD in range of 400 mg/l -550 mg/l which indicates that the Sugar effluent got mixed with the domestic sewage drain, however no bypass of effluent/waste water was observed from the boundary wall into the drain as the drain was covered.
- Analysis result of sample collected from local drain opposite to spray pond overflow treatment system, shows pH- 5.8 against 6.5 to 8.5, **COD-606 mg/l** against 250 mg/l, **BOD-342 mg/l** against 100 mg/l, **TSS-194 mg/l** against 100 mg/l.
- Analysis results of samples collected from U/s of Ikara drain shows pH- 6.9, **COD-296 mg/l, BOD-125 mg/l, TSS-146 mg/l** which indicates sewage characteristics. Analysis of samples collected from D/s of Ikara drain shows pH- 6.4, **COD-536 mg/l, BOD-296 mg/l, TSS-74 mg/l.**
- It is evident that discharges from both the local drains have greatly impacted on the downstream water quality of Ikara drain & increased the pollution load of the Ikara drain to almost doubled as compared with upstream location and possess a potential threat to environment.

2.2 Analysis results of groundwater sample collected from borewell installed in industrial premises and hand-pump outside the unit.

- The joint team also collected groundwater sample from hand-pump at bio-compost yard, the bore-well installed in industrial premises and hand-pump outside the unit. Analysis results are presented in **Table 2.**

Table- 2 Analysis results of groundwater sample collected from hand-pump at bio-compost yard borewell installed in industrial premises and hand-pump outside the unit.

Sampling Locations / Parameters	Hand-pump at Bio-compost yard	Bore well No.1 installed in unit premises	Hand-pump outside the unit	(Permissible limit in the absence of alternate source) Drinking water standards (BIS) DRINKING WATER — SPECIFICATION (Second Revision) IS 10500: 2012
Colour	BDL	BDL	BDL	15
pH	7.5	7.4	7.5	6.5-8.5
Conductivity	424	486	430	-

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Total Alkalinity	228	245	228	600
Total Hard-ness	213	224	198	600
COD	BDL	BDL	BDL	-
TDS	252	290	256	2000
Cl-	14	20	10	1000
F-	0.4	0.5	0.5	1.5
NO_3	BDL	BDL	BDL	45
SO_4	BDL	BDL	BDL	400
As	BDL	BDL	0.01	0.05
Cd	BDL	BDL	BDL	NR*
Co	BDL	BDL	BDL	-
Cr	BDL	BDL	BDL	NR*
Cu	BDL	BDL	BDL	1.5
Fe	0.14	0.07	0.15	NR*
Mn	0.14	0.17	0.09	0.3
Ni	BDL	BDL	BDL	NR*
Pb	BDL	BDL	BDL	NR*
Zn	0.02	BDL	0.10	15
Sb	BDL	BDL	BDL	-
Se	BDL	BDL	BDL	NR*
V	BDL	BDL	BDL	-

*No Relaxation

Observations w.r.t. Ground water sample analysis results:

- Groundwater samples collected from hand-pump at bio-compost yard, borewell no.1 installed in the unit premises and hand-pump outside the unit, shows all the parameter within limit as per the Permissible limit of Drinking Water Standards (BIS) IS 10500:2012.

INSPECTION REPORT OF M/s DHAMPUR SUGAR MILLS LTD., SUGAR UNIT- DHAMPUR, BIJNOR, (U.P.)- 246761

1. GENERAL INFORMATION

1.	**Date of Inspection**	**02.02.2021 and 03.02.2021**	
2.	**Name of the unit with complete postal address**	**M/s Dhampur Sugar Mills Ltd., Sugar Unit- Dhampur, Bijnor, (U.P.)- 246761**	
3.	**Spatial Co-ordinates** **Latitude and longitude (in Decimal format only)**	29.288674 78.514256	
4.	**Standalone/ integrated (with co-generation) Sugar/ sugar refinery**	Integrated	
5.	**Year of commissioning**	Year 1933	
6.	**License capacity of sugar Mill**	14000 TCD	
7.	**Average actual crush rate (TCD)**	11619.03 TCD (As per RT-7 (C) for the month of Nov-20, Dec-20, DMR for the month of Jan-21 and Feb-21)	
8.	**Consent status & its Validity with date** (Expired/Applied for renewal/First time applied/Never applied) a. Air Consent b. Water consent c. Hazardous Waste Authorization	 Valid upto 31.12.2021, **Annexure-I** Valid upto 31.12.2024, **Annexure-II** Valid upto 28.12.2025, **Annexure-III**	
9.	**NOC from CGWA & its Validity with date** (Expired/Applied for renewal/First time applied/Never applied)	Valid upto 26.04.2022, **Annexure-IV**	
10.	**Start period of crushing season**	31.10.2020	
11.	**Operational status during visit (operational/ closed/ temporary closed/ permanent closed)** If non-operational: a. Self-closed then collect copy of unit shut down letter duly certified by regional officer of concerned SPCB. b. Closure notice by CPCB or SPCB then collect copy of notice and copy of unit shut down letter duly certified by regional officer of concerned SPCB. c. Any other reason, then specify and attach supporting documents	Operational	
12.	**Name of contact person**	**Designation**	**Contact No & E- mail**
	Sh. M.R. Khan	Unit Head (Sugar)	7895003687 mrkhan@dhampur.com
	Mr. Anil Sharma	G.M. (Production)	9624019860 anilsharma@dhampur.com

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	Mr. Arun Kumar	Manager (ETP)	9760366927 Arun.kr@dampur.com

2. OPERATIONAL STATUS

S.No.	Particulars		
1.	**Sources of fresh water**		
	a. Bore well/Tube well/ Any other & its No's	Bore well, 04 nos.	
	b. Flow meter Installation at wells (Yes/No)	Yes	
	c. Reading of Flow Meter during visit	Yes, Bore well – I= Σ 101994.23 m^3 Bore well – II=Σ 58604.15 m^3 Bore well – III=Out of order Bore well – IV=Σ 58604.15 m^3	
	d. Any Logbook maintained (Yes/No), if yes, attach.	Yes, logbook for fresh water withdrawal maintained	
	e. Quantity of water withdrawal (KLD)	(Avg. withdrawal quantity from log book for the month of Nov-20, Dec-20, Jan-21 and Feb-21) Bore well – I= 155.9 KLD Bore well – II= 151.6 KLD Bore well – III=0.0 KLD Bore well – IV=1156 KLD **Total Avg.** withdrawal = **1463.97 KLD**	
2.	**Fresh water consumption (m^3/hr)**		
	a. Sugar plant	1354.636 KLD	
	b. co-generation	-	
	c. Residential etc.	109.3 KLD	
	d. Total fresh water Consumption (m^3/hr)	**1463.97 KLD**	
	e. Log book maintained	Yes, log book for water consumption in sugar plant is maintained.	
3.	**Details of Hot & Cold-water recycling system (Yes/No.)**	**Number**	**Capacity**
	a. Details of Hot water UGR.	01	500 m^3
	b. Cold water UGR and cooling towers	02	350 m^3
	c. **Hot water**- Location of flow meter & its Installation **(Yes/No)**	**Flow meter installed (m^3/hr)**	**Totalizer Reading (m^3)**
	1. Imbibition water at mills	237 m^3/hr	Σ=1543946 m^3
	2. Filter cake wash water at rotary vacuum filter (OC-Filter)	29.33 m^3/hr	Σ= 226927.9 m^3
	3. Sugar melting, pan boiling, molasses conditioning	PAN -A= 0 m^3/hr	Σ= 11557m^3

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		PAN -B= 0 m^3/hr PAN -B= 0 m^3/hr	Σ= 7195m^3 Σ=13801m^3
	4. Wash water at Centrifugal	BC Centrifugal Machine = 1.4 m^3/hr A Centrifugal Machine = 4.7 m^3/hr	Σ=23403m^3 Σ=18448m^3
	d. **Cold water** -Location of flow meter & its Installation.		
	1. Power turbine cooling Power Turbine – 1 Power Turbine – 2	 1897 m^3/hr 2265 m^3/hr	 Σ= 18901294 m^3 Σ= 10409722 m^3 Recycled through Co-gen Cooling Tower
	2. Mills, fibrizer bearing, pumps cooling	Mill Fibrizer cooling=7.267 m^3/hr	Σ=86731.6 m^3
	3. Cooling tower of co-generation		
	4. SO_2 gas cooling (Sulphur Furnace)	2.2 m^3/hr	Σ=80849 m^3
	5. B massecuite cooling C massecuite cooling	0 m^3/hr 94.4 m^3/hr	Σ=45750 m^3 Σ=133152 m^3
	6. Final molasses cooling	6.412 m^3/hr	Σ=63928.6 m^3
	7. Make water for shortfall at any point operation including spray pond/process cooling tower. Cooling Tower Make-up Water Spray Pond Make-up Water	 0 m^3/hr 0 m^3/hr	 Σ=239343 m^3 Σ=31938.3 m^3
	8. Others **(Yes/No)**		
4.	**Waste water (Influent) generation (m^3/hr) (Avg. quantity from log book for the month of Nov-20, Dec-20, Jan-21 and Feb-21)**		
	a. Spray pond/cooling tower over flow (for double sulphitation)	Spray pond over flow=239.066 KLD (Faulty meter showing error)	
	b. Mills, boiling house, D.M./ R.O. Plant boilers etc.	Mill & Boiling House=1934.52 KLD (For mill and boiling house common flowmeter installed)	
	c. Co-generation		
	h. Common / total influent generation.	2173.58 KLD	
5.	**Waste water (Influent) generation, Liter/ton of cane**	**187.07 Liter/ton**	
6.	**Spray pond overflow**	**Flow meter reading**	**Totalizer Reading (m^3)**

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	a. Flow meter Installation	Yes, Flow meter showing error/ Fluctuating reading	
	b. Provision of separate spray pond overflow treatment	Yes	
	c. Brief description of spray pond over flow treatment process (mention technology as per charter) 1. Separate treatment of spray pond overflow through micro settlers followed by secondary aerobic treatment. 2. Combined treatment of entire effluent through micro settlers after removal of Oil & grease followed by secondary aerobic treatment. 3. Spray pond overflow treatment using anaerobic filters followed by secondary aerobic treatment. 4. Combined treatment of entire effluent using anaerobic filters followed by secondary aerobic treatment.	Spray pond overflow waste water collection pit→ Chemical dosing→ Reaction tank cum settler→ Primary clarifier→ Aeration tank → Secondary clarifier→ Multigrade Filter → Activated Carbon Filter → Treated effluent collection pit	
7.	**Details of Flow meters**	**Flow meter reading (m^3)**	**Quantity of water (Avg. quantity from log book for the month of Nov-20, Dec-20, Jan-21 and Feb-21)**
	a. Outlet of mill house and boiling house to ETP-1.	Flow= 131.68 m^3/hr Σ= 76893.63m^3	1934.52 KLD
	b. Outlet of cooling tower/spray pond i.e. over flow to ETP-2	Flow= 44.48 m^3/hr Σ=228200 m^3	239.06 KLD
	c. Common ETP outlet	Flow=116.7m^3/hr Σ=90207.5m^3	2131.21 KLD
8.	**Details of tube cleaning method adopted (chemical/ hydrojet/ any other appropriate method if any), provide details**	Chemical (by Caustic and Sulfamic Acid)	
9.	**Availability of Hazardous tank to collect wash water generated during chemical/Mechanical cleaning of evaporator tubes. (Yes/No), if Yes give Details.**	Yes, (07 nos.)	
10.	**Total waste water (effluent) generation, (Liters/ton of cane)**	**187.07 L/T** of cane crushed	

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	(ETP outlet/Discharge ration with average Cane Crushed)		
11.	**Condensate polishing system adopted by the factory (for boilers >45 kg/cm^2 steam pressure)**	CPU installation is under process. Unit provided purchase order of CPU (P.O.- No.-4100007975)	
	If yes, then provide the details of condensate polishing system		
	Recycled water from CPU		
12.	**Construction of small pits with smooth inner surface with ceramic tiles near to boiler feed pumps, condensate pumps, Injection pumps and RVF vacuum to collect gland cooling water**	Yes	
13.	**Aeration in equalization tank**	Yes	
14.	**Type of aeration in aeration tank Diffused/ surface/ any other**	Diffused	
15.	**Tertiary treatment (Yes/No), give Details**	Yes, MGF and ACF	
16.	**Schematic diagram of ETP (flow chart to be collected)**	Mill & boiling house effluent collection pit→ Oil skimmer→ DSM screen→ Chemical dosing tank (milk of lime and other nutrients)→ Equalization tank →Primary clarifier→ Aeration tank→ Secondary clarifier→ collection pit→ Multigrade filter→ Activated carbon filter→ Decanter→ Treated effluent lagoon	
17.	**Rain water harvesting system adopted**	No Storm water channelized to ETP	
18.	**Treatment capacity of ETP (KLD)**	4500 KLD (3000 KLD for Mill & Boiling House and 1500 KLD for Spray Pond)	
19.	**Retention time (Min/hr)**	**Retention Time/Contact Time (Mentioned in CPCB charter)**	**As per Industry at licensed crush rate of 14000 TCD**
	1. Bar screen Chamber	30 minutes	30 minutes
	2. Oil & grease tank	45 minutes	67 minutes
	3. Equalization tank with aeration	6 hrs	7.3 hrs
	4. Primary Clarifier	5-6 hrs	5.6 hrs
	5. Aeration tank	24-28 hrs	39 hrs

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	6. Secondary Clarifier	7-8 hrs	7 hrs
	7. Sand/multi grade filter	20-25 minutes	20.1 minutes
	8. Activated carbon filter	20-25 minutes	20.1 minutes
	9. Sludge drying bed	Not <0.03 m^3 per ton of cane	250 m^3
	10. Decanter	5 m^3/hr	
20.	**Any further treatment after ETP (Yes/No)**	No; only storage in lagoon before irrigation	
21.	**Brief processing details (flow chart)**	Attached as **Annexure-V**	
22.	**ETP Analysis (Performance Parameters)** pH, BOD, COD, TSS, TDS, O&G (Table – 05)		
23.	**Number of Piezometric wells available in the unit premises:** Yes, o1 Piezometric well available in sugar unit at the depth of 6.0 meter (lat: 29.290599, long:78.512944)		
24.	**Storage of treated Effluent**	**-Lagoon**	
	a. No. & size of lagoons, Lagoon type- permeable/impermeable b. Retention time	**a.** No. of lagoon=02 **Size/Capacity** 1. Capacity (New lagoon) =10000 m^3, impermeable 2. Capacity = 4000 m^3, Polythene lined b. Retention Time = 15 days	
25.	**Sludge Handling Process (Yes/No), gives details:** Quantity=40276.94 kg/d (as per log book for the month of Dec-2020 to Jan-2021)		
	a. Sludge Digestion Method	None	
	b. Sludge Drying Process	Yes, sludge drying bed but not in operation	
	c. Final Disposal of Sludge	Mixed with boiler ash + press mud & given to farmers	
	d. Whether mechanical sludge handling system installed	Decanter	
26.	**Any Hazardous Substances (Yes/No), if yes, give details. (Quantity & way of Disposal)**	Yes, Schedule I (Category 5.1) waste oil The unit is registered member of BHARAT OIL & WASTE MANAGEMENT LTD. (BOWML)	
27.	**Manpower employed for ETP operation & maintenance**	18	
28.	**Details of irrigation system & treated effluent used quantity**		
	1. Own land area for irrigation	Yes, 50 acres	
	2. Farmer land area and their agreement	Yes	
	3. Flow meter to measure amount of water used for irrigation.	Yes, Flow rate - 0.0 m3/hour; Totalizer - 16384.90 m3	

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	4. Distance of land Area from the Unit (Km)	~0.5 Km
	5. Soil Texture of land (Sandy, Sandy loam, Loam, Clay loam, Clay)	Sandy loam
29.	**Cleaning mechanism at ETP and factory floor**	Dry cleaning
30.	**Color coding of pipelines for water distribution network**	Yes
31.	**Mode of disposal (route to reach Ganga)**	No discharge, treated effluent used for irrigation

3. OBSERVATIONS

1. The unit is engaged in production of sugar by Double Sulphitation process with consented capacity of 14000 TCD using sugarcane.
2. The unit has started cane crushing for the current season on 31st October, 2020.
3. Unit has two no of ETPs i.e. ETP-1 for boiling & mill house effluent treatment & ETP-2 for spray pond overflow treatment. Both the ETPs were reported to be operational, one month prior to start of cane crushing.
4. ETPs were found operational at the time of visit.
5. Unit is having valid Consent to Operate under Air (Prevention & Control of Pollution) Act, 1981 (as amended), which is valid up to 31.12.2021 and Water (Prevention & Control of Pollution) Act, 1974 (as amended), valid up to 31.12.2024. The unit is also having valid Authorization under Hazardous Waste (Management & Transboundary Movement) Rules, 2016 for storage and disposal of hazardous wastes valid up to 28.12.2025.

3.1 Sources of Fresh Water

1. The Unit has total of 4 nos. bore wells located at different places within the premises for sugar unit as below:

Table 3: Co-ordinates of borewells installed at M/s Dhampur Sugar Mills Ltd., Bijnor

Borewell Details			
Sr. No.	**Borewell No.**	**Coordinates**	
		Latitude	**Latitude**
1	Borewell No. 1	28.5502343	79.2129414
2	Borewell No. 2	28.5502717	79.214153
3	Borewell No. 3	28.55263	79.215370
4	Borewell No. 4	28.5513166	79.2220848

2. The borewell no. 04 is used for providing fresh water to DM plant as well as to the residential colony of the unit. Fresh water consumption in residential colony is 109.3 KLD as per the average withdrawal quantity from log book for the month of Nov-20, Dec-20, Jan-21 and Feb-21.

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3. Out of 04 borewell, one borewell was found out of order.
4. NOC issued by Central Ground Water Authority (CGWA), which was valid up to 26.04.2022 for the abstraction of ground water from 04 tube wells of total quantity 1500.00 m^3/day (not exceeding 333000.00 m^3/year) (**Annexure-IV**).

3.2 Fresh Water Consumption

1. As per the record (logbook data) of borewell meters provided by the Unit, total average freshwater withdrawal quantity from log book for the month of Nov-20, Dec-20, Jan-21 and Feb-21 are as below:

Table 4: Month wise (from Nov-20 to Feb-2021-till 01.02.2021) fresh water abstraction

Sr. No.	Borewell No.	Month wise water abstraction (as per logbook data from 3rd Nov-20 to 31st December - 20 and 03rd Jan to 13th Jan-21)			
		Nov-2020	Dec-2020	Jan-2021	Feb-2021
1	Borewell No. 1	4622	1649	2150	0
2	Borewell No. 2	0	3345	2994	180
3	Borewell No. 3	0	0	0	0
4	Borewell No. 4	33528	35552	36107	1204
	Total	38150	40546	41251	1384
	Average (m^3/day)	1271.66	1307.93	1330.67	1384

2. As per the logbook record of borewells, the unit has extracted avg. of 1271.66 m^3/day in Nov-2020, 1307.93 m^3/day in Dec-2020, 1330 m^3/day in Jan-2021 and 1384 m^3/day in Feb-2021 (01.02.2021) of ground water from 04 borewells (refer Table-4), which is within the permitted abstraction of 1500.00 m^3/day as per CGWA NOC.
3. The unit has installed 01 nos. of piezometer (latitude: 29.290599, longitude:78.512944) within the unit premises, having depth of 6.0 meters.

3.3 Process Area and Effluent Treatment Plant (ETP)

1. The unit has installed two ETPs with design capacity of 3000 KLD for the treatment of effluent generated from Mill & Boiling house (ETP-1) and 1500 KLD for effluent generated from Spray Pond Overflow treatment system (ETP-2).
2. ETP-1 comprises of effluent collection pit→ Oil skimmer & Bar screen →pumping station →outfall structure → Equalization tank → Chemical dosing tank (Lime dosing) → Primary Clarifier → Aeration tank → Secondary Clarifier→ Common filtration system.
3. Flow received to ETP-1 is via pumping rather than gravitational flow. Two pumping stations; one in boiling area and another at near mill gate observed for pumping of generated effluent to ETP area. Oil skimmer and provision of lime dosing observed in the process area boiling house before pumping to main ETP.

4. At outfall structure in ETP 1, one 150 mm pipeline is observed other than main ETP inlet line. As per operator that line is not in use now and they are going to dismantle the same soon.
5. ETP-2 consists of pumping station→ chemical dosing →Reaction tank cum settler→ Primary clarifier→ Aeration tank→ Secondary clarifier→ collection pit → Common filtration system.
6. Small collection pit is provided for collecting the clarified effluent from both ETPs before filtration rather than filter feed tank with typical retention time of 2-3 hrs.
7. Unit has provided common filtration system consists of 2 sand filter and 2 carbon filter for further polishing of treated effluent from both ETPs.
8. No filtered/treated water tank is provided for backwashing of filtration system. Fresh water line with valve arrangement was observed at the common header of filter feed pump for the same as reported by operator.
9. Unit has provided flow meter at the inlet of both ETPs, common ETP outlet and lagoon outlet.
    a. ETP-1 inlet: Flow= 131.68 m^3/hr, totalizer reading= 76893.63m^3
    b. ETP-2 inlet: Flow= 44.48 m^3/hr, totalizer reading= 228200 m^3
       Rapid fluctuation in reading observed in the flow meter.
    c. Outlet of lagoon: Flow rate- 0.0 m3/hour; Totalizer - 16384.90 m3
10. Unit has provided OCEMS at common outlet of ETPs for continuous monitoring of treated effluent and found it connected with CPCB server showing flow rate - 116.7 m^3/hour; totalizer- 90207.5 m^3, TSS – 21.578 mg/l; BOD – 11.6 mg/l and COD 102.6 mg/l.
11. The unit has provided purchase order (P.O.- No.-4100007975, dated 16.10.2020) for the installation of Condensate Polishing Unit (CPU) with RO membrane for feed 72 cum/hr and permeate 50 cum/hr.
12. The unit has not installed Sewage Treatment Plant (STP) for sewage generated from colony located inside the unit premises, however the unit provided purchase order of STP (P.O. No.-4100007977) dated 16.10.2020 with capacity of 220 KLD which was under installation.
13. The unit has two boiler having capacity of 170 Tonne each for steam generation.
14. Unit has provided 3 stream of DM plant having capacity30 m^3/hr, 30 m^3/hr. & 50 m^3/hr. for water treatment for boiler use. All units consist of MGF, RO unit, degasser, cationic and anionic resin unit.
15. Regeneration reject from DM plant was found collected in a 100 KL tank near DM plant. As informed by DM plant operator reject water is utilized in ash silos, boiler floor washing, fire hydrant and in bagasse yard rather than sent to ETP for further treatment.
16. Samples were collected from Mill House effluent, ETP inlet, Primary clarifier outlet, Aeration tank-1, Secondary clarifier outlet, Aeration tank-2, Spray pond overflow, Spray pond primary outlet, Spray pond treatment secondary outlet, ETP outlet, New lagoon and Old lagoon. Analysis results are as below:

Husain

Table 5: Analysis result of samples collected from ETP

S.No.	Locations	Sulphur/ Sulphate (mg/L)	pH	COD (mg/L)	BOD (mg/L)	TSS (mg/L)	TDS (mg/L)	Color	MLSS/ MLVSS (mg/L)	O & G
1.	Mill House effluent	101	4.3	15680	9050	503	9340	151	-	-
2.	ETP Inlet	47	**10.7**	**849**	**426**	**81**	**1028**	**60**	-	-
3.	Primary Clarifier Outlet	36	**10.9**	**2520**	**1532**	**185**	**1864**	**18**	-	-
4.	Secondary Clarifier Outlet	20	6.8	86	22	23	524	15	-	-
5.	ETP Outlet	23	6.9	46	13	20	472	12	-	BDL
6.	Aeration tank 1	-	-	-	-	-	-	-	**4840/2518**	-
7.	Aeration tank 2	-	-	-	-	-	-	-	**5256/2873**	-
8.	Spray pond overflow	14	6.9	1990	1357	504	1160	88	-	-
9.	Spray pond Treatment Pri. outlet	16	6.8	2220	1053	403	1228	78	-	-
10.	Spray pond Treatment Sec. outlet	17	6.7	70	31	30	384	25	-	-
11.	New Lagoon	68	6.8	**370**	**187**	68	776	45	-	-
12.	Old Lagoon	21	6.7	218	**117**	62	584	24	-	-
Prescribed standards for irrigation ***[as per the Consent granted by UPPCB]***		-	**5.5 to 8.5**	**250**	**100**	**100**	**2100**	-	-	-

17. The analysis result of sample collected from ETP outlet shows pH- 6.9 (norms: 5.5 to 8.5), COD-46 mg/l (against 250 mg/l), BOD-13 mg/l (against 100 mg/l), TSS-20 mg/l (against 100 mg/l), TDS-472 mg/l (against 2100 mg/l) and O&G- BDL, which indicates that the unit is complying with stipulated discharge norms for irrigation purpose.

3.4 Lagoon & Irrigation System

1. The unit had two lagoons for storage of treated effluent. One with impermeable base having capacity of 10000 m^3 and second having PVC sheets with 4000 m^3 capacity and retention time of 15 days. The second lagoon was a Kachcha lagoon with improper lining of PVC sheets also mentioned in previous finding. Treated effluent is being used for irrigation purpose.

2. The analysis results of new lagoon (having capacity of 10,000 m^3) in Table 5 shows pH-6.8 against 5.5-8.5, COD-370 mg/l against 250 mg/l, BOD-187 mg/l against 100 mg/l, TSS-68 mg/l against 100 mg/l, TDS- 45 mg/l against 2100 mg/l which indicate non-compliance w.r.t. BOD and COD as per notified standards under E(P) Rules, 1986.
3. Similarly, analysis results of sample collected from old lagoon (having capacity of 4000 m^3) shows pH-6.7 against 5.5-8.5, COD-218 mg/l against 250 mg/l, BOD-117 mg/l against 100 mg/l, TSS-62 mg/l against 100 mg/l, TDS- 584 mg/l against 2100 mg/l which indicate non-compliance w.r.t. BOD as per notified standards under E(P) Rules, 1986.

3.5 Residential Colony

1. The unit has no STP to treat the waste water generated from residential colony located in the unit premises, however, the unit has provided purchase order (PO No.-4100007977 dated-16.10.2020) of 220 KLD STP, which was found under installation.

3.6 Hazardous waste & Fly ash generation and disposal

1. The unit has obtained hazardous waste authorization (Authorization no. 9837398) from UPPCB, which is valid from 28.12.2020 to 28.12.2025.
2. The unit is registered member of Bharat Oil & Waste Management Ltd. (BOWML). The unit has provided manifest (Form-10) for disposal of hazardous waste (oily sludge) for the month of Jan-2021.
3. The unit has seven number of hazardous tanks.
4. The Unit has two piezo-well, one in the sugar unit and another one in the bio-compost yard of 10 acres area.
5. The ETP sludge is mixed with boiler ash, press mud and is given to farmers and also being used for gardening & bio-composting by the unit.

3.7 Observations w.r.t. previous findings:

1. Primary clarifier was found operational during the inspection.
2. The unit has installed seven hazardous tanks for storing the effluent generated during hydrojet tube cleaning/ chemical cleaning by caustic and sulfamic acid (2- caustic solution storage tank and 2 -sulfamic acid solution storage tank and 3- wash storage tank) in the boiling house.
3. The unit has provided purchase order (P.O.- No.-4100007975, dated 16.10.2020) for the installation of Condensate Polishing Unit (CPU) with RO membrane for high pressure boilers (105 kg/cm^2).
4. The unit has installed decanter for better management of sludge handling system.
5. The unit has maintained proper log book for the generation and disposal of ETP sludge, boiler ash, and other solids.
6. No bypass arrangement in the unit premises was observed during the inspection.

4.0 Conclusion

1. The unit was operational from 31st October, 2020 and found under consented capacity with valid air, water consent and HW authorization.
2. Specific wastewater generation and discharge was reported as 187.07 and 183.42 liter/ Ton of cane crushed respectively.

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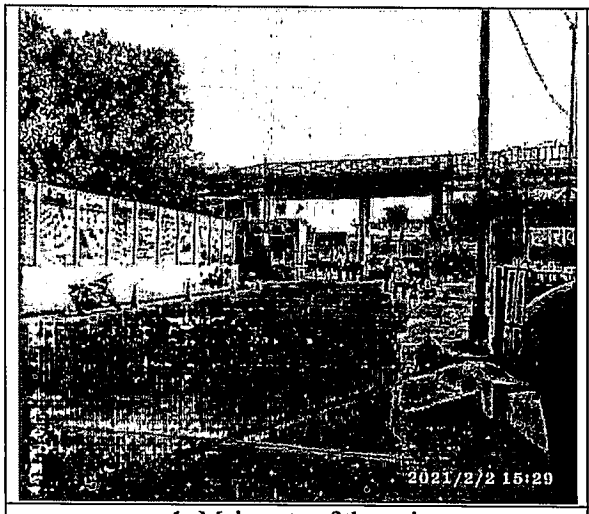
3. The unit is withdrawing fresh water from 04 nos of borewell and total withdrawal was under permitted quantity by CGWA.
4. Analysis result of samples collected from drain coming from city along boundary of sugar unit shows **pH- 4.6, COD-2448 mg/l, BOD-1604 mg/l, TSS- 28 mg/, TDS- 508 mg/l and colour-21 hazen,** clearly indicates spillage/surface runoff/discharge of waste water from industrial premises.
5. The analysis of samples collected from upstream of Ikara drain shows domestic sewage characteristics but analysis result of sample collected from Local drain behind the spray pond overflow treatment system, are on higher side and indicates effluent dilution in the drain.
6. The analysis of samples collected from downstream of Ikara drain indicates that industrial effluent increased the pollution load of the Ikara drain as compared with upstream location which is a serious threat to environment.
7. Both the drains i.e. drain coming from city along boundary wall of sugar unit and local drain behind the spray pond overflow treatment system have adverse effect on the water quality at downstream of Ikara drain.
8. Installation of CPU for high pressure boiler is under progress by the unit.
9. Installation of Sewage Treatment Plant (STP) for sewage, generated from colony is under progress.
10. The storage lagoon with capacity of 10,000 m^3 (New Lagoon) shows non-compliance w.r.t. COD and BOD as per notified discharge standards by MOEF&CC vide Order dated 14.01.2016. for irrigation purpose.

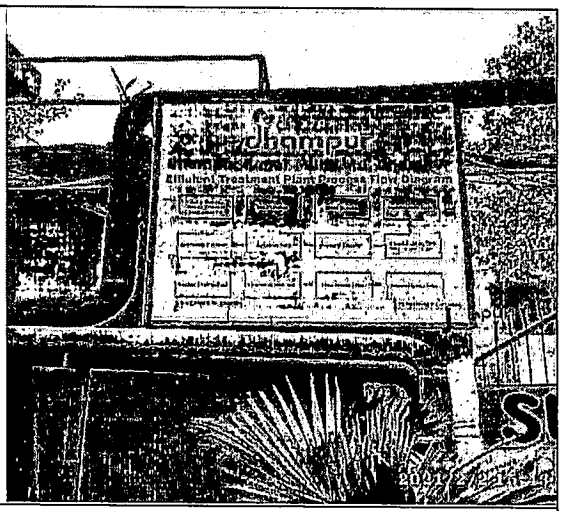
5.0 Recommendations:

1. The unit shall take measures to stop discharge of spillage/surface runoff containing waste water from industrial premises into drain (Ikra drain and drain coming from city along boundaries of sugar unit) and shall maintain water quality of the drain.
2. The unit shall maintain and calibrate the flow meter installed at Spray pond overflow.
3. The unit shall install the CPU for high pressure boiler at earliest.
4. The unit shall install the Sewage Treatment Plant (STP) for sewage generated from colony at the earliest.
5. The unit shall convert the 4000 m^3 capacity storage lagoon in to lined impermeable lagoon to avoid any possibility of leakages and must ensure the compliance of stored treated effluent w.r.t. notified discharge standards under E(P) Rules, 1986.
6. Unnecessary lines for ETP feed near falling structure shall be dismantled immediately.
7. Abandoned old pumping station along with connecting line shall be dismantled.
8. Filter backwashing tank of suitable design capacity shall be installed for filter backwashing. Existing fresh water line in ETP area shall be dismantled.
9. Provision shall be made for DM plant CIP reject shall be treated in ETP only.
10. Unit shall ensure the proper marking of electromechanical items and connected pipe line. Proper color coding shall be adopted.

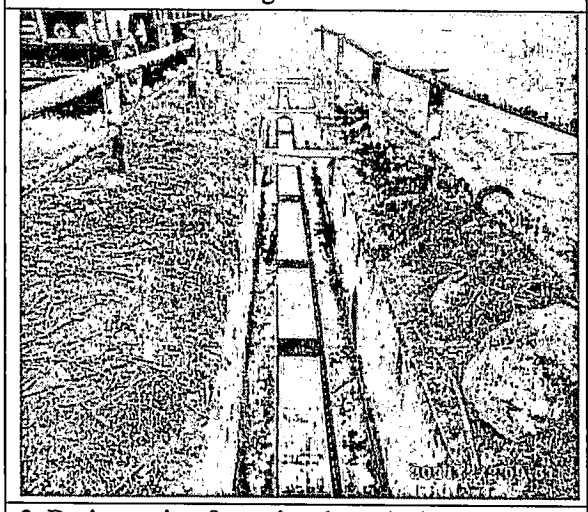
6.0 Photographs



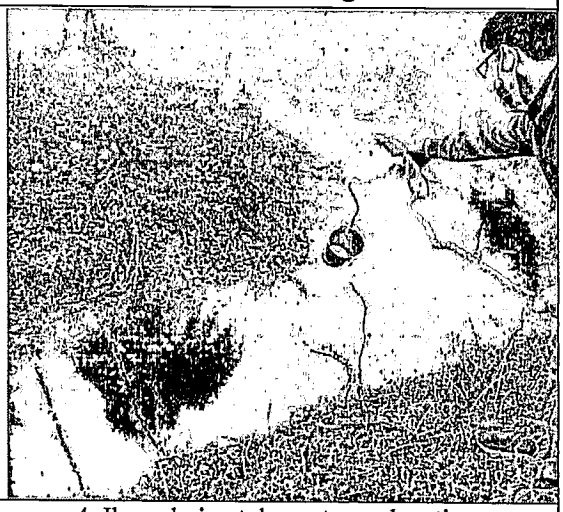
1. Main gate of the unit



2. ETP flow chart at the gate of ETP

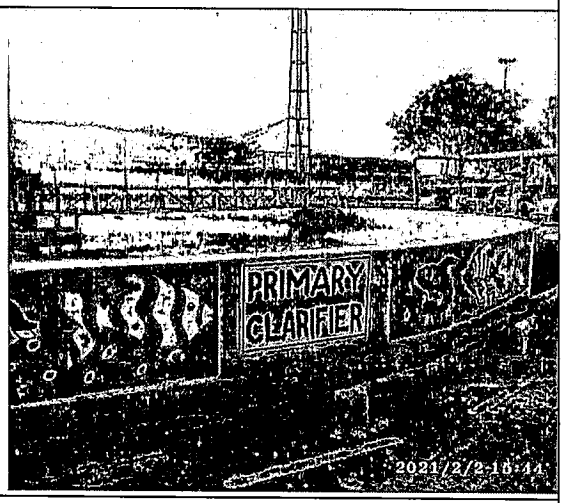


3. Drain coming from city along the boundary wall of unit

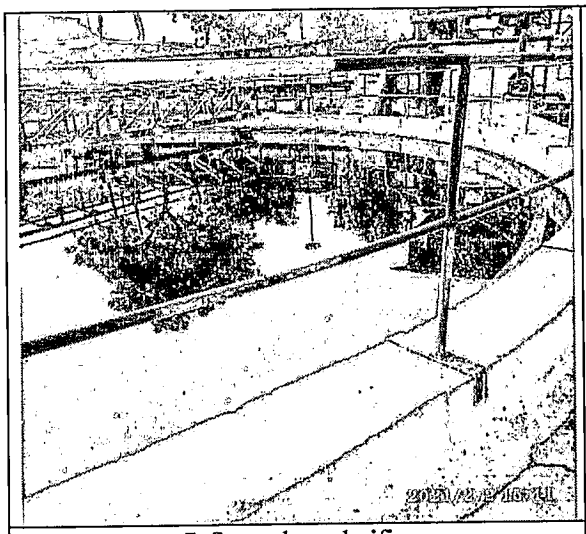


4. Ikara drain at downstream location

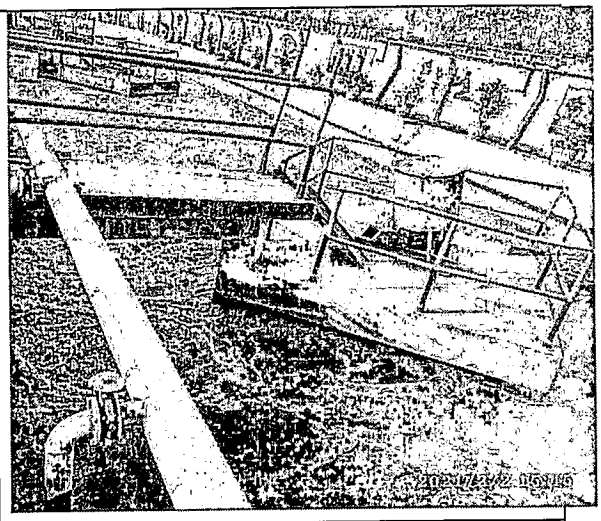
5. Ikara drain at upstream location



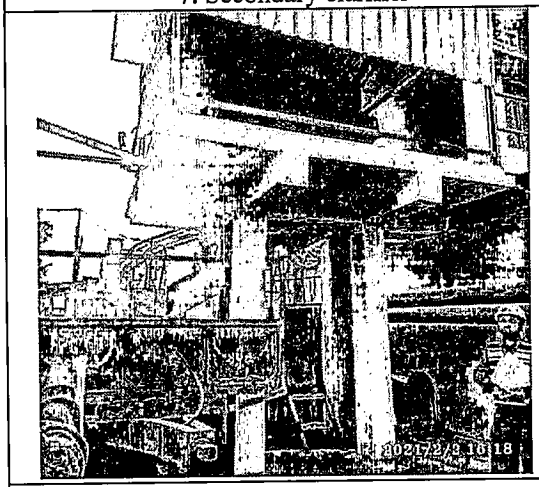
6. Primary clarifier



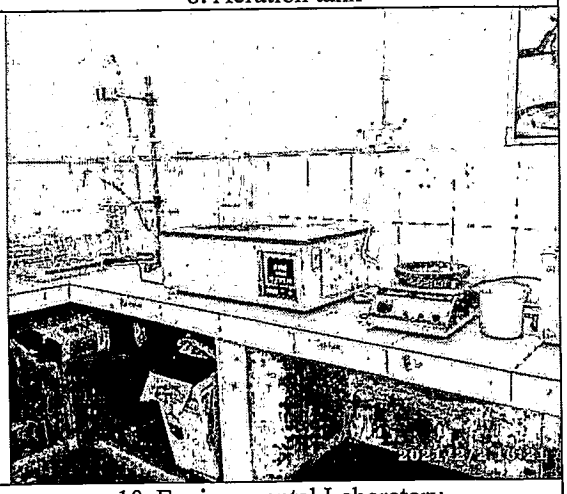
7. Secondary clarifier



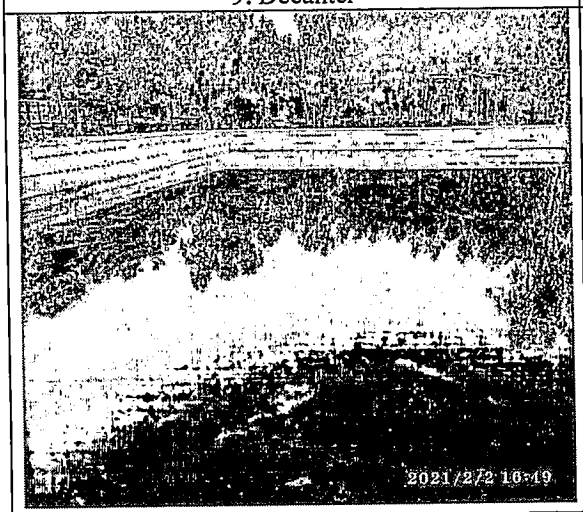
8. Aeration tank



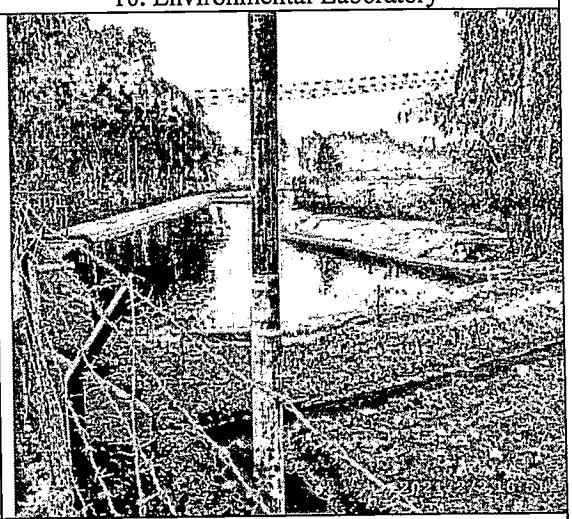
9. Decanter



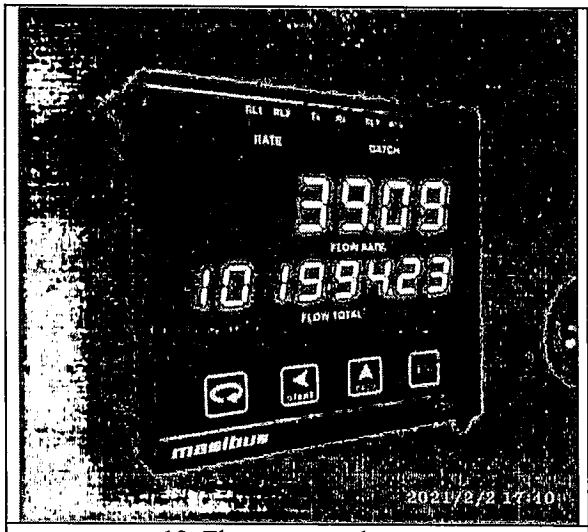
10. Environmental Laboratory



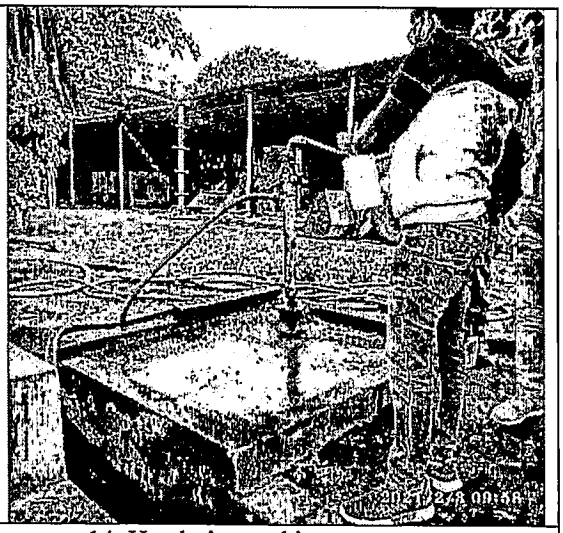
11. Treated water lagoon (10000 m3)



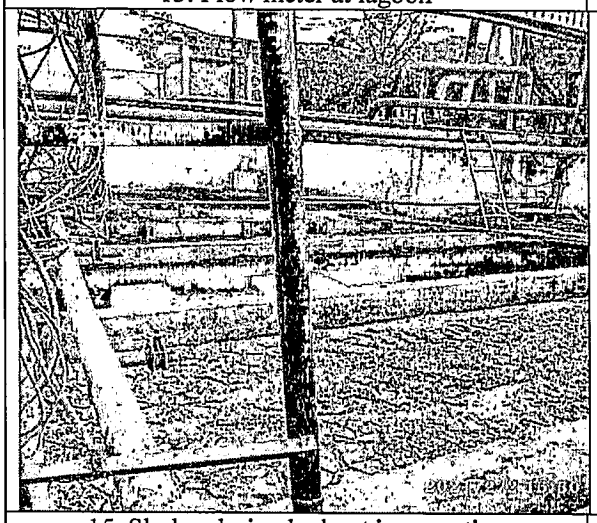
12. Treated water lagoon (4000 m3)



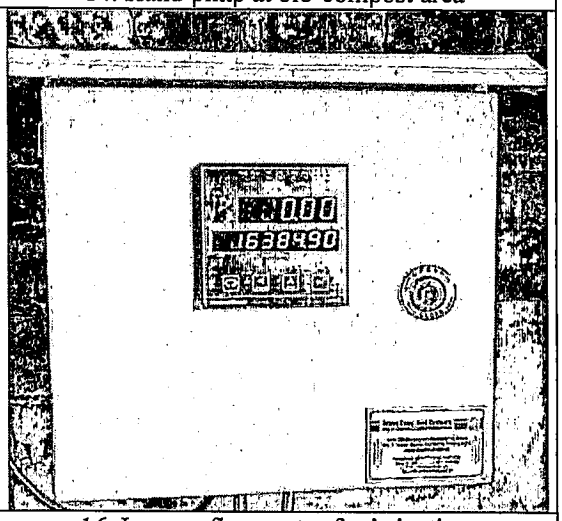
13. Flow meter at lagoon



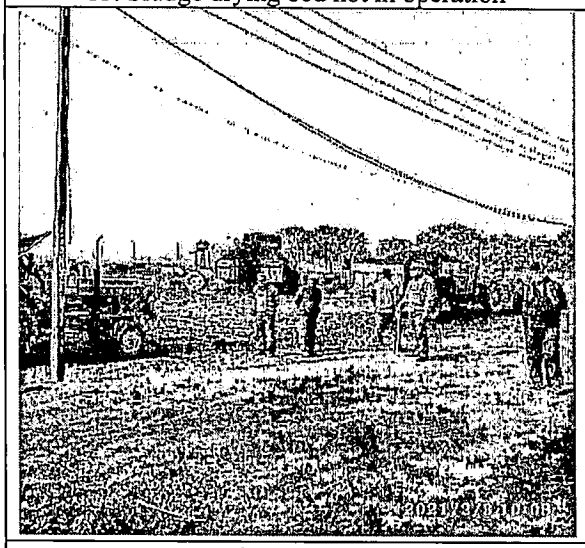
14. Hand-pimp at bio-compost area



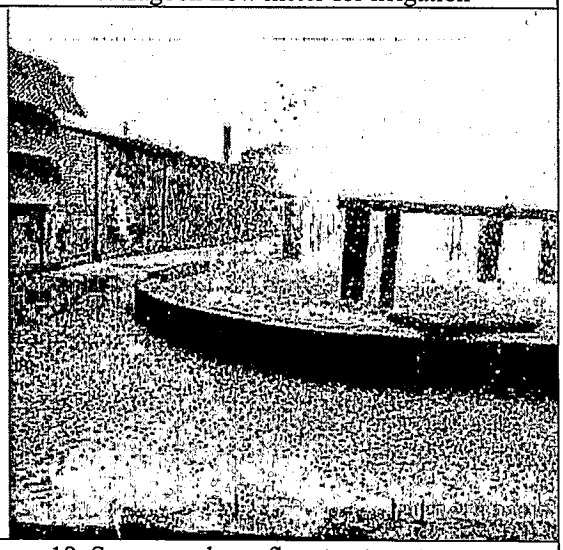
15. Sludge drying bed not in operation



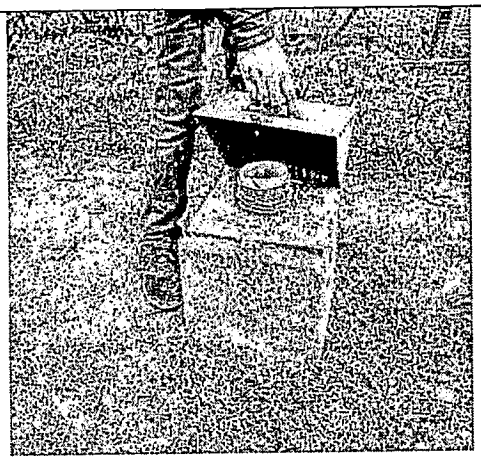
16. Lagoon flow meter for irrigation



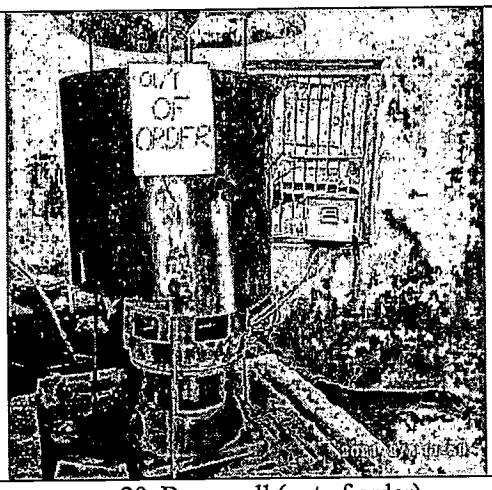
17. Bio-compost yard



18. Spray pond overflow treatment system



19. Piezometer well



20. Bore-well (out of order)

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7.0 Inspection Team

Sr. No.	Name of the inspecting officers	Designation	Signature
1.	Mrs. Reena Satavan	Sc. 'D' CPCB, Delhi	
2.	Sh. J.P. Maurya	R.O., Bijnor, UPPCB	
3.	Sh. Mahir Husain	AEE, Bijnor, UPPCB	
4.	Dr. Prabhat Ranjan	Sc. 'B', CPCB, Delhi	
5.	Sh. Vipin Kumar	RA-III, CPCB, Delhi	
6.	Ms. Anshul Kumari	RA-III, CPCB, Delhi	
7.	Ms. Shivangi Goswami	RA-II, CPCB, Delhi	
8.	Sh. Ashwani K. Singh	RA-II, CPCB, Delhi	

Annexu-I

U.P. Pollution Control Board

CONSENT ORDER

Ref No. - **69295/UPPCB/Bijnore(UPPCBRO)/CTO/air/BIJNOR/2019** **Dated : 27/03/2020**

To,

Shri AMIT SHARMA SHARMA
M/s DHAMPUR SUGAR MILLS LTD SUGAR UNIT
DHAMPUR SUGAR MILLS LTD SUGAR UNIT,BIJNOR,246761
BIJNOR

Sub : **Consent under section 21/22 of the Air (Prevention and control of Pollution) Act, 1981 (as amended) to M/s. DHAMPUR SUGAR MILLS LTD SUGAR UNIT**

Reference Application No. 6217421 Dated : 27/03/2020

1. With reference to the application for consent for emission of air pollutants from the plant of M/s DHAMPUR SUGAR MILLS LTD SUGAR UNIT. under Air Act 1981. It is being authorised for said emissions, as per the standards, in environment, by the Board as per enclosed conditions .
2. This consent is valid for the period from 30/12/2019 to 31/12/2021 .
3. Inspite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 21 (6) of the Air (Previntion and Controt of Pollution) Act, 1981 as amended.
4. This consent is being issued with the permission of competent authority .

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 16:05:08 +05'30'

For and on behalf of U.P. Pollution Control Board

Chief Environment Officer

Enclosed : As above
(condition of consent):

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 16:05:23 +05'30'

Chief Environment Officer

U.P. Pollution Control Board

Dated : 27/03/[illegible]

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of cane crushing cane crushing capac 14000 TCD and 60 MW co generation power plant .

2. This consent is valid only for products and quantity mentioned above. Industry shall obtain pr approval before making any modification in product/ process /fuel/ plant machinery failing whi consent would be deemed void.

3(a) The maximum rate of emission of flue gas should not be more than the emission norms for the stacks.

3(b) Air Pollution Source Details.

Air Pollution Source Details

S.No	Air Polution Source	Type of Fuel	Stack No.	Parameters	Height
1	boiler 175 TPH and 175 TPH	baggasse - 100 MTH	01	Particulate Matter	separate ESP as APCS and common stack height of 90 meter
2	DG set of 750 KVA	Disel oil	02	Particulate Matter	6 meter above from the roof of nearest building

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

Emission Quality Details Detail

S.No	Stack No	Parameter	Standard
1	01	Particulate Matter	150mg/NM3
2	02	Particulate Matter	As per standards stipulated in E(P)Rules 1986

4. The industry should be operated in such a manner that it does not adversely affect the environment and the solid waste generated such as ash etc. is disposed in eco friendly manner .

5. Any source of emission other than that mentioned in the Air consent seeking application will not be permitted by the Board .

6. The industry should ensure the operation of the air pollution control system (APCS) in such manner that the air emission confirms with the standards prescribed under the E.P Act 1986 , amended.

7. The industry shall submit Environmental Statement in prescribed format as per rule no.14 as per E Rules 1986 .

8 The industry shall abide by orders / directions issued by Hon'ble Supreme court Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time .

9 Industry shall submit monthly monitoring reports of all stacks and ambient air quality from a certified / approved laboratory under E.P. Act 1986 .

10. The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.

11 The industry will ensure the continuous and uninterrupted data supply from the OCEEMS to the CPCB and SPCB .

12 The unit shall submit audited balance sheet for the current year and the details of fees deposited during last three years within a month failing which consent would be deemed void.

The use of Pet coke and Furnace oil as a fuel in the factory is restricted in compliance of the Hon'ble Supreme court order .

The Industry will use minimum 20% Bio Briquette as fuel in the Boiler depending upon its availability .

The industry shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).

Minimum 33% of the land on which industry is established will be covered and properly maintained by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H-16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www. uppcb. com /pdf/Green-Belt-Guidle_160218.pdf .

If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order .

Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board and UPPCB for protection and safe guard of environment from time to time .

Specific Conditions:

1. This Consent to Operate Air is valid for production of Sugar crystal at Cane crushing capacity of 14000 TCD and 60 MW cogeneration power plant.
2. This consent shall be effected by the orders passed by Hon'ble NGT in OA no 539/2019 Adil Ansari vs Dhampur sugar Mill Ltd &ors.
3. Unit shall operate and maintain the APCS i.e ESP at the boilers of 170 TPH each and common stack height of 90 meter from ground level at the boilers. The stack emission shall be as per the prescribed norms
4. DG sets of 750 KVA is equipped with canopy and stack height shall be 6 meter above from the roof of nearest building.
5. Unit shall use Bio-briquette as co-fuel with main fuel in the ratio of minimum 20 percent in boiler subject to its availability.
6. 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.
7. The Ambient noise level shall confirm to the standards under the Environment (Protection) Act 1986.
8. 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.
9. Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended, Air (Prevention and Control of Pollution) Act 1981 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India.
10. Unit shall submit emission monitoring report of the stack of air polluting sources done by MoEF & CC approved laboratory in every 3 months.
11. 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.

. Amit Chandra

Digitally signed by Amit Chandra
Date: 2020.03.27 16:05:36 +05'30'

Issued with the permission of competent authority .

For and on behalf of U.P. Pollution Control Board .

Chief Environment Officer

Annexure-II

U.P. Pollution Control Board

CONSENT ORDER

Ref No. -
69304/UPPCB/Bijnore(UPPCBRO)/CTO/water/BIJNOR/2019

Dated : 27/03/2020

To,

Shri AMIT SHARMA SHARMA
M/s DHAMPUR SUGAR MILLS LTD SUGAR UNIT
DHAMPUR SUGAR MILLS LTD SUGAR UNIT,BIJNOR,246761
BIJNOR

Sub : **Consent under Section 25/26 of The Water (Prevention and control of Pollution) Act. 1974 (as amended) for discharge of effluent to M/s. DHAMPUR SUGAR MILLS LTD SUGAR UNIT**

Reference Application No :6217798 **Dated :27/03/2020**

For disposal of effluent into water body or drain or land under The Water (Prevention and control of Pollution) Act,1974 as amended (here in after referred as the act) M/s. DHAMPUR SUGAR MILLS LTD SUGAR UNIT is hereby authorized by the board for discharge of their industrial effluent generated through ETP for irrigation/river through drain and disposal of domestic effluent through septic tant/soak pit subject to general and special conditions mentioned in the annexure ,in refrence to their foresaid application .

This consent is valid for the period from 30/12/2019 to 31/12/2024 .

In spite of the conditions and provisions mentioned in this consent order UP Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 27(2) of the Water (Previntion and Controt of Pollution) Act, 1974 as amended .

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 16:02:54 +05'30'

For and on behalf of U.P. Pollution Control Board

Chief Environment Officer

Enclosed : As above
(condition of consent):

Copy to: Regional Officer Bijnore to ensure the compliance of the conditions imposed in the consent order.

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.03.27 16:03:07 +05'30'

Chief Environment Officer

U.P. POLLUTION CONTROL BOARD, LUCKNOW

Annexure to Consent issued to M/s.DHAMPUR SUGAR MILLS LTD SUGAR UNIT vide

Consent Order No. 6217798/ Water Dated : 27/03/2017

CONDITIONS OF CONSENT

1. This consent is valid for the approved production capacity of cane crushing capacity 14000 TCD
2. This consent is valid only for products and quantity mentioned above. Industry shall obtain prior approval before making any modification in product/ process /fuel/ plant machinery failing which consent would be deemed void.
3. The quantity of maximum daily effluent discharge should not be more than the following :

Effluent Discharge Details			
S.No	**Kind of Effulant**	**Maximum daily discharge,KL/day**	**Treatment facility and discharge point**
1	Domestic	50KLD	Septic Tank
2	Industrial	Industrial effluent quantity shall be restricted to 1400 KLD and Cooling Tower blow down shall be restricted to 1400 KLD, only one outlet is allowed	ETP

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

4(a) The domestic effluent should be treated in the treatment plant so that it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules 1986 as amended.

Domestic Effulant		
S.No	**Parameter**	**Standard**
1	Total Suspended Solids	100 mg/l
2	BOD	30 mg/l
3	Oil & Grease	10 mg/l
4	COD	250 mg/l
5	Quantity of Discharge	50KLD

4(b) The industrial effluent should be treated in treatment plant so that the treated effluent should be in conformity with the standard lay down under the notification issued by MOEF&CC vide its G.S.R. GSR 35 (E) dated 14/01/2016.

Industrial Effulant		
S.No	Parameter	Standard
1	Total Suspended Solids	100 mg.l(for disposal on land), 30 mg/l(for disposal on surface water)
2	BOD	100 mg.l(for disposal on land), 30 mg/l(for disposal on surface water)
3	COD	250 mg/l
4	Oil & Grease	10 mg/l
5	Quantity of Discharge	1400 KLD and cooling tower blow down shall be restricted to 1400 KLD, only one outlet is allowed.

(c) Loading Rates for different soil textures.

S.No	Soil Texture	Loading rate in m3/Ha/Day

5. Effluent generated in all the processes, bleed water, cooling effluent and the effluent generated from washing of floor and equipments etc should be treated before its disposal with treated industrial effluent so that it should be according to the norms prescribed under The Environment (Protection) Rules, 1986 or otherwise mandatory.

6. The method for collecting industrial and domestic effluent and its analysis should be as per legal Indian standards and its subsequent amendments/ standards prescribed under the Environment (Protection) Act, 1986.

7. The industry shall establish the cooling arrangement and polishing tank for recycling the excess condensate water to process or utilities or allied units.

8. Effluent Treatment Plant to be stabilized one month prior to the start of the crushing season and continue to operate one month after the crushing season.

9. During no demand period for irrigation, the treated effluent to be stored in a seepage proof lined pond having 15 days holding capacity only.

10. The industry shall implement treated effluent flow distribution measurement for irrigation purposes completely in accordance with irrigation plan.

11. The impact of treated effluent application on land is to be included further in E.I.A. studies, involving ground water monitoring point identified in close proximity to the unit.

12. The industry will have to ensure compliance of the permission from the CGWA before ground water extraction and it will be the responsibility of the industry to comply with the various conditions of the permission taken.

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

14. The industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.

15. Minimum 33% of the land on which unit is established will be covered and properly maintained by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H-16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf.

16. The industry will ensure the continuous and uninterrupted data supply from the OCEEMS to the CPCB and SPCB .

17. Flow meter to be installed in all water abstraction points and usage of fresh water to be minimized. The unit will ensure facility to transmit data to CPCB server and submit a regular calibration certificate of Electro Magnetic Flow meter to the Board.

18. If closure order is issued by CPCB or UPPCB against the unit, then CTO issued earlier will remain suspended during the closure period and after ensuring the compliance and after revocation of closure order, the CTO will automatically be effective with additional conditions mentioned in the closure revocation order.

19. Industry shall abide by the directions given by Hon'ble Court, Central Pollution Control Board, UPPCB for protection and safe guard of environment from time to time.

Specific Conditions:

Annexure-3

UTTAR PRADESH POLLUTION CONTROL BOARD

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

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

Ref. No : 13196/UPPCB/Bijnore(LAB)/HWM/BIJNOR/2020

Dated :28/12/2020

To,

M/s DHAMPUR SUGAR MILLS LTD SUGAR UNIT
DHAMPUR SUGAR MILLS LTD SUGAR UNIT,BIJNOR,246761
Tehsil : Bijnor
District :BIJNOR

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 13196 and 28/12/2020 .
2. Reference of application (No. and date) 9837398 and 17/10/2020 .
3. Mr AMIT SHARMA SHARMA of M/s DHAMPUR SUGAR MILLS LTD SUGAR UNIT is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, utilization, storage and disposal or any other use of hazardous or other wastes or both on the premises situated at DHAMPUR SUGAR MILLS LTD SUGAR UNIT,BIJNOR,246761 .

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)
	Schedule I (Category 5.1)waste oil	TSDF	6 KL Per Annum

1. The authorization shall be valid for a period of 28/12/2025 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) .

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

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.
3. 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.

(Authorized Signatory)
Amit
Chandra
UTTAR PRADESH POLLUTION CONTROL BOARD

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

Amit
Chandra
CEO/EE, I/C Circle

ISO 9001:2015
Quality Certified Company

BHARAT OIL & WASTE MANAGEMENT LTD.

(BOWML)

www.bharatoil.com

Passionately Protecting Mother-Nature Since 1978

MEMBERSHIP CERTIFICATE

M / s. **Dhampur Sugar Mills Ltd.**

Dhampur, Northern Railway Bijnor-246761, UP

BOWML/K/4029/20

is a registered member of our facility

Gate No. 672. Vill. Kumbhi, Akbarpur Road, NH - 2 Kanpur-Dehat-209101, UP

for safe, legal & scientific Disposal of Hazardous Waste.

BOWML/K/4029/20

Scan & Verify

Member #

October 29, 2021

Expiry Date :

One may verify 'active' membership by calling
Bharat Oil & Waste Management Ltd. at
011-4100 0710, 2981 6466 or Email : sales@bharatoil.com

For **Bharat Oil & Waste Management Ltd.**

Pragati Rohtagi
Sales Cordinator
sales@bharatoil.com

Digitally Signed By:Pragati Rohtagi
Date: 2020-11-18 16:09:09
IP: 122.161.199.235
ID: S/ruvJp9PXQCLoBCBvShSQ==
Click here to E-verify

Authorized Signatory

For **Bharat Oil & Waste Management Ltd.**

Sunder K Kukreja
GM (Admin & Fin.)
sales@bharatoil.com

Digitally Signed By:Sunder K Kukreja
Date: 2020-11-18 16:10:36
IP: 122.162.212.171
ID: G4FTN04gAWYmPhQ6aYLXzA==
Click here to E-verify

Authorized Signatory

21ST CENTURY LUBRICANTS & GREASES

*Membership is subject to the terms & conditions of agreement & may be terminated by BOWML upon non-payment of dues / payment.

FORM 10 Copy for

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE S.No.: 4470

1 Occupier's Name & Mailing Address (including Phone No. and email)	M/S Dhampur Sugar Mills Ltd. Unit - Dhampur District Bijnor (U.P.)
2 Sender's Authorization No.	
3 Manifest Document No,	S.No: 6994 Dt 18/01/21
4 Transporter's Name & Address (including Phone No. and email)	Dhampur
5 Type of Vehicle	(Truck / Tanker / Special Vehicle)
6 Transporter's Registration	UP 20 AL 4299
7 Vehicle Registration No.	
8 Receiver's Name & Mailing Address (including Phone No. and email)	(I) **BHARAT OIL COMPANY (I) REG.** E-18, Site-IV, Sahibabad Industrial Area, Ghaziabad, UP-201010 Tel.: 0120-4167924, e-mail:sales@bharatoil.com
(II) **BHARAT OIL & WASTE MANAGEMENT LTD.** Mauza Mukimpur, Roorkee-Lakshar Road, Roorkee - 247664 UK, Tel. :08874207664 e-mail:sales@bharatoil.com	(III) **BHARAT OIL & WASTE MANAGEMENT LTD.** Plot # 672, Sikandra Road, NH-2, Kumbhi Village, Tehsil Akbarpur, Kanpur Dehat, UP, Tel : 0512-2285[illegible] e-mail:sales@bharatoil.com
9 Receiver's Authorization No.	(I) 1486/UPPCB/Ghaziabad(UPPCBRO)/HWM/GHAZIABAD/2018 Valid upto: 03/05/2023
(ii) UEPPCB/HO/Con-B-84/2018/548 Valid upto: 31/03/2023	(iii) 1403/UPPCB/KanpurDehat(UPPCBRO)/HWM/KANPUR DEHAT/2018 Valid upto:30/04/2023
10 Waste Description	Oily Sludge
11 Total Quantity No. of Containers	100 Ltr ..... m³ or MT ..... Nos.
12 Physical Form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13 Special Handling Instructions & Additional Information	Do not throw Drums from truck. In case of leakage/ seapage, use Washing soap at point of leak to stop its leakage.
14 SENDER'S CERTIFICATE	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised packed, marked and labeled, and are in all respects in proper condition for transport by road according to applicable national government regulations.
Typed Name & Stamp : Signature :	Month 01 Day 19 Year 2021
15 Transporter Acknowledgement of Receipt of Waste	Month 01 Day 19 Year 2021
Typed Name & Stamp : Signature :	
16 Receiver's Certificate for Receipt of Hazardous and other Waste	Month 01 Day 19 Year 2021
Typed Name & Stamp : Signature :	

Annexure-IV

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTIC

Project Name:	M/s Dhampur Sugar Mills Ltd. (Dhampur Unit)		
Project Address:	Dhampur, District - Bijnor, Uttar Pradesh		
Town:	Dhampur (NPP)	Block:	Dhampur
District:	Bijnor	State:	Uttar Pradesh
Pin Code:	246761		
Communication Address:	M/s Dhampur Sugar Mills Ltd.(Dhampur Unit), Dhampur, District - Bijnor, U' 246761		
Address of CGWB Regional Office :	Central Ground Water Board Northern Region, Bhujal Bhavan, Sector-B Sit Yojna, Ram Bank Chauraha, Lucknow, Uttar Pradesh - 226021		

1.	NOC No.:	CGWA/NOC/IND/REN/1/2020/5636			
2.	Application No.:	21-4/1256/UP/IND/2016	3.	Category:	Industry
4.	Project Status:	Existing Project	5.	NOC Type:	1st Renewal
6.	Valid from:	28/04/2019	7.	Valid up to:	26/04/2022

8 Ground Water Abstraction Permitted:

Fresh Water		Saline Water		Dewatering		Tot
m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day
1500.00	333000.00					1500.00

9 Details of ground water abstraction /Dewatering structures

	Total Existing No.:4					Total Proposed No.:0				
	DW	DCB	BW	TW	MP	DW	DCB	BW	TW	
Abstraction Structure*	0	0	0	4	0	0	0	0	0	

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit

10.	Quantum of ground water recharge/harvesting(m³/year):	194630.00

11.	Number of Piezometers (Observation wells) to be constructed/ monitored & Monitoring mechanism.	No. of Piezometers	Monitoring Mechanism		
			Manual	DWLR**	DWLR Wi
	**DWLR - Digital Water Level Recorder	2	0	1	

(Compliance Conditions given overleaf)

Digitally signed by
NANDAKUMARAN P
Date: 2020.01.27 18:35

सदस्य (केन्द्रीय भूमि जल
Member (CGWA

...idity of this NOC shall be subject to compliance of the following mandatory conditions:

1. No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
2. The proponent shall seek prior permission from CGWAfor any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
3. All new as well as existing ground water abstraction/ de-watering structures shall be fitted with digital water flow meters by the firm at its own cost immediately on completion of their construction or grant of NOC as the case may be. In case of renewal of NOCs, all existing ground water abstraction structures shall continue to be fitted with digital water flow meters. Intimation of installation of flow meters shall be sent by the proponent to the Regional Director of CGWB within 6 months of grant of NOC. Daily ground water abstraction data shall be monitored / continue to be monitored (in case of renewal) by the firm and recorded in a log book. Details of month-wise ground water abstraction shall be submitted to the Regional Director, CGWB, once every year.
4. In case the ground water abstraction is more than 10 m^3/day, monthly water level monitoring data shall be maintained and submitted annually to the Regional Office of CGWB. Wherever groundwater withdrawal is more than 500 m^3/day,the firm shall install telemetry system in one of the piezometers and share USER ID and password of the telemetry system with the Regional Director, CGWB.
5. In case ground water abstraction is more than 10 m^3/day, ground water quality shall be monitored once in a year (during pre- monsoon period) and the report submitted to the Regional Office, CGWB. Wherever the extraction is less than 10 m^3/day, ground water quality report shall be submitted by the proponent at the time of submission of self-compliance report.
6. Ground water augmentation/harvesting measures, as stipulated in the NOC, shall be implemented (in new cases) / continue to be maintained (in case of renewal) in consultation with the concerned Regional Director, CGWB.
7. Proof of recharge/water harvesting structures constructed (photographs of structures) shall be submitted to the concerned Regional Director, CGWB within 6 months from the date of issue of NOC. The firm shall also undertake periodic maintenance of recharge/water harvesting structures at its own cost.
8. The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
9. In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
10. The firm shall optimize water use through recycling/ reuse of waste water after proper treatment.
11. Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
12. In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
13. Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
14. The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
15. This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.
16. This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
17. The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
18. This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
19. Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment(Protection)Act,1986.
20. **In case of any violation of NOC conditions or illegal extraction of Ground water the firm shall be liable to pay "Environmental Compensation"/ "Penalty", if any under Sec 15 of EPA 1986 as and when decided by statutory authorities.**

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

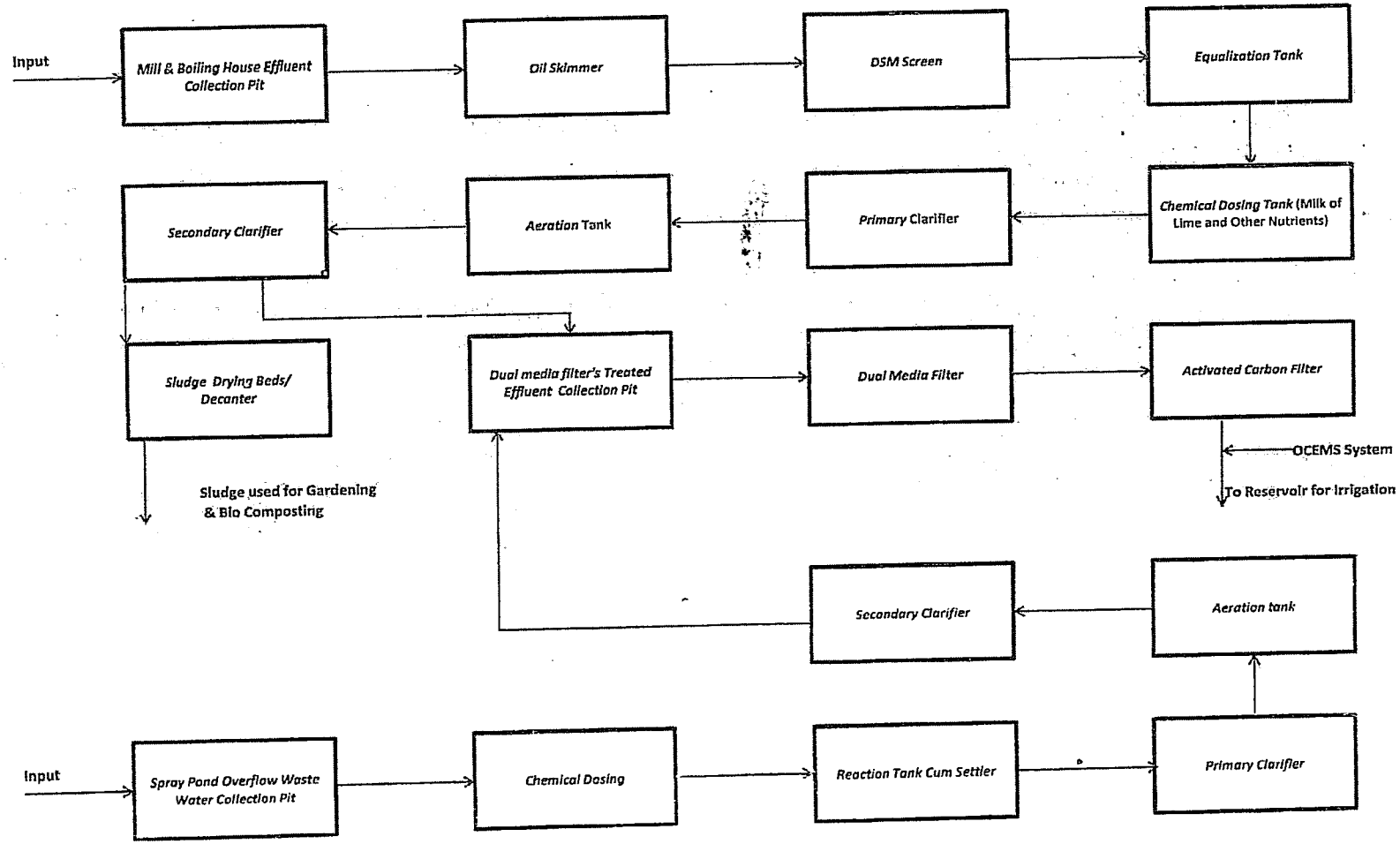
Annexure-V

dhampur

Dhampur Sugar Mills. Ltd, Dhampur

Effluent Waste treatment Stream

Mill & Boiling House and Spray Pond Overflow Effluent treatment Plant Process Flow Diagram



Annexure-4

JOINT INSPECTION REPORT

(02.02.2021)

OF

M/s DHAMPUR SUGAR MILLS LTD.,

DISTILLERY UNIT- DHAMPUR

BIJNOR – 246761, UP

In the Matter Of

ADIL ANSARI Vs M/s DHAMPUR SUGAR MILLS LTD. & ORS.

OA NO. 539/2019

-Prepared by-

The Joint Committee of CPCB & UPPCB

Constituted by

Hon'ble National Green Tribunal

(Order dated 09th November, 2020)

Joint Inspection Report of M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnor, UP-246761

S.No.	Name & Address of the Industry:	M/s Dhampur Sugar Mills Ltd (Distillery Unit), Dhampur, Bijnor, UP-246761
1.	Type of Industry Sector	Distillery
2.	Date of Inspection	02.02.2021
3.	Operational Status	Operational
4.	Name of main Raw Material	Molasses
5.	Name of Final Product (s)	Spirit (ENA)/Absolute alcohol
6.	Consented Production Capacity	220 KLD Rectified Spirit/220 KLD Absolute Alcohol/120 KLD Extra Neutral Alcohol and 140 KLD Ethyl Acetate
7.	Production during inspection (based on Excise data)	248 KLD
8.	Air and water consent	Valid up to 31.12.2021
9.	Authorization under Haz. and Other Wastes Rules, 2016	Never applied
10.	Permission from CGWA for abstraction of Ground Water	Valid from 08.04.2019 to 06.04.2024
11.	Sources of Water Supply	Bore wells: 03 Numbers Water Meters: -installed Working status of Water meters: Operational Logbook maintained:- Yes
12.	Consumption of Fresh Water (KLD)	1757.04 KLD (as per the ground water withdrawal data submitted by the unit from Aug-2020 to Jan-2021)
13.	Wastewater Stream	**Industrial effluent:** Spent wash, spent lees, process condensate, cooling tower blow down and boiler blow down **Domestic:** Sewage
14.	Method of Treatment, concentration and Utilization of Wastewater	**For Industrial effluents to achieve ZLD:** Spent wash Management: Multi Effect Evaporator (SMEE) & Integrated MEE (IMEE) followed by Incineration boiler. Unit has installed **Condensate Polishing Unit (CPU)** of capacity 2500m^3/day for treatment of IMEE condensate, MEE condensate, cooling tower blowdown and spent lees. **For Domestic waste water:** Sewage Treatment Plant (STP) found under construction.
15.	Mass flow meters at inlet and outlet of MEE	Installed and found operational
16.	Online monitoring system connected	Unit has installed total 02 PTZ cameras and both are connected to CPCB server (As verified by respective SPCB)

4.1 Consented production capacity of the unit;

- M/s Dhampur Sugar Mills Ltd. (Distillery Unit), Dhampur, Bijnor, UP is a molasses based distillery unit having consented capacity of 220 KLPD and installed capacity of 350 KLPD.
- The unit has consent to operate (CTO) under the Water (Prevention & Control of Pollution) Act (Consent No. 6189722) and the Air (Prevention & Control of Pollution) Act (Consent No. 6188660) issued by Uttar Pradesh Pollution Control Board (UPPCB) having validity upto 31.12.2021 (**Annexure-4a** and **Annexure-4b**).
- As per the consent condition, the approved production capacity is 220 KLD Rectified Spirit/220 Absolute Alcohol/120 KLD Extra Neutral Alcohol and 140 KLD Ethyl Acetate.

Detailed inspection report of Distillery plant is as below;

4.2 Fresh Water Consumption

4.2.1 Sources of Fresh Water

- To meet the requirement of fresh water, the distillery unit has total 03 nos. of tube wells located at different places within the campus.
- As informed by the unit representative the unit is operating only two tube wells i.e., tube well no. 1 **(Fig. 1)** & tube well no. 2 to meet the requirement of fresh water and flow meters are also installed on both operational tube wells **(Fig. 2)**.
- A common pipe line was observed for tube well no. 3 (non-operational) & tube well no. 1. (operational). The unit has installed flow meter on non-operational tube well no. 3, but reading was not visible **(Fig. 3)**.
- Flow meters reading (Totalizer) and flow rate observed during joint inspection is mentioned below:

Table 1: Tube well meter reading and Co-ordinates

Tube well No.	Meter reading at time of inspection (m^3)	Flow rate (m^3/hr)	Latitude	Longitude
1.	30795.3	46.6	29.288	78.516
2.	2739282.6	0.0	29.289	78.513
3.	Meter was installed but reading was not visible	Nil	29.288	78.517

4.2.2 Freshwater Consumption

1. As per log book of tube wells provided by the unit, freshwater consumption in distillery plant of the unit is presented below for time period from Aug-2020 to Jan-2021:

Table 2: Ground water withdrawal from two operational tube wells (from Aug-2020 to Jan-2021)

Month	Tube well No. 1	Tube well No. 2	Total fresh water consumption (m^3)	No. of days of abstraction
Aug-20	18240.9	29250.8	47491.7	29
Sep-20	5506	32380.8	37886.8	24
Oct-20	0	58337.9	58337.9	31
Nov-20	1550	58153.8	59703.8	30
Dec-20	4479	39571.1	44050.1	29
Jan-21	16479.9	41774	58253.9	31
Total ground water withdrawal from Tube well-1 & 2 from Aug-2020 to Jan-2021			305724.2	174
Average Daily consumption			**1757.04 m^3/day**	

4.3 Piezometers Details

2. The unit has provided 02 nos. of Piezometers for measurement of groundwater depth at the following locations:

Table 3: Piezometers locations

S. No.	Piezometer No.	Location	Latitude	Longitude
1	Piezometer No. 1	Inside the unit premises (**Fig. 4**)	29.2866	78.5142
2	Piezometer No. 2	At bio-compost yard (**Fig. 5**)	29.287387	78.506727

4.4 Characteristics of the Ground Water

3. The analysis results of ground water samples collected from the distillery plant is as below:

Table 4: Characteristics of Ground water samples of the unit

Sample location → / Parameters ↓	Tube well no. 1	Hand Pump at compost yard	Hand Pump outside unit	BIS IS 10500:2012 (Permissible limit in absence of alternative source)
pH	7.3	7.5	7.5	6.5-8.5
Conductivity (µmho/cm)	585	424	430	-
Color (Hazen)	BDL	BDL	BDL	15
COD (mg/l)	BDL	BDL	BDL	-
TDS (mg/l)	342	352	256	2000
Total hardness as $CaCO_3$ (mg/l)	297	213	198	600
Total alkalinity as $CaCO_3$ (mg/l)	274	228	228	600
Chloride (mg/l)	30	14	10	1000
Sulfate (mg/l)	09	BDL	BDL	400
Fluoride (mg/l)	0.4	0.5	0.5	1.5

NO_3-N (mg/l)	BDL	BDL	BDL	45
As (mg/l)	0.01	BDL	BDL	0.05
Cd (mg/l)	BDL	BDL	BDL	0.003
Co (mg/l)	BDL	BDL	BDL	-
Cr (mg/l)	BDL	BDL	BDL	0.05
Cu (mg/l)	0.03	BDL	BDL	1.5
Fe (mg/l)	**2.03**	0.14	0.15	0.3
Mn (mg/l)	0.18	0.14	0.09	0.3
Ni (mg/l)	BDL	BDL	BDL	0.02
Pb (mg/l)	BDL	BDL	BDL	0.01

4.5 Observations on freshwater withdrawal, piezometer wells installations and analysis results of ground water samples

1. The distillery plant of the unit has CGWA NOC for abstraction of ground water from two tube wells, which is valid from 08.04.2019 to 06.04.2024. As per the valid CGWA NOC, the unit is permitted to withdraw 2400 m^3/day (6,48,000 m^3/year). Copy of valid CGWA NOC is placed at **Annexure-4c.**
2. As per the fresh water consumption data from Aug-2020 to Jan-2021, provided by the unit, average daily ground water withdrawal from two tube wells is 1757.04 m^3/day which is within the CGWA permissible limit of 2400 m^3/day.
3. Fe in sample collected from tube well no. 1 is found 2.03 mg/l against BIS-IS 10500:2012 standards of 0.3 mg/l (refer table 4).

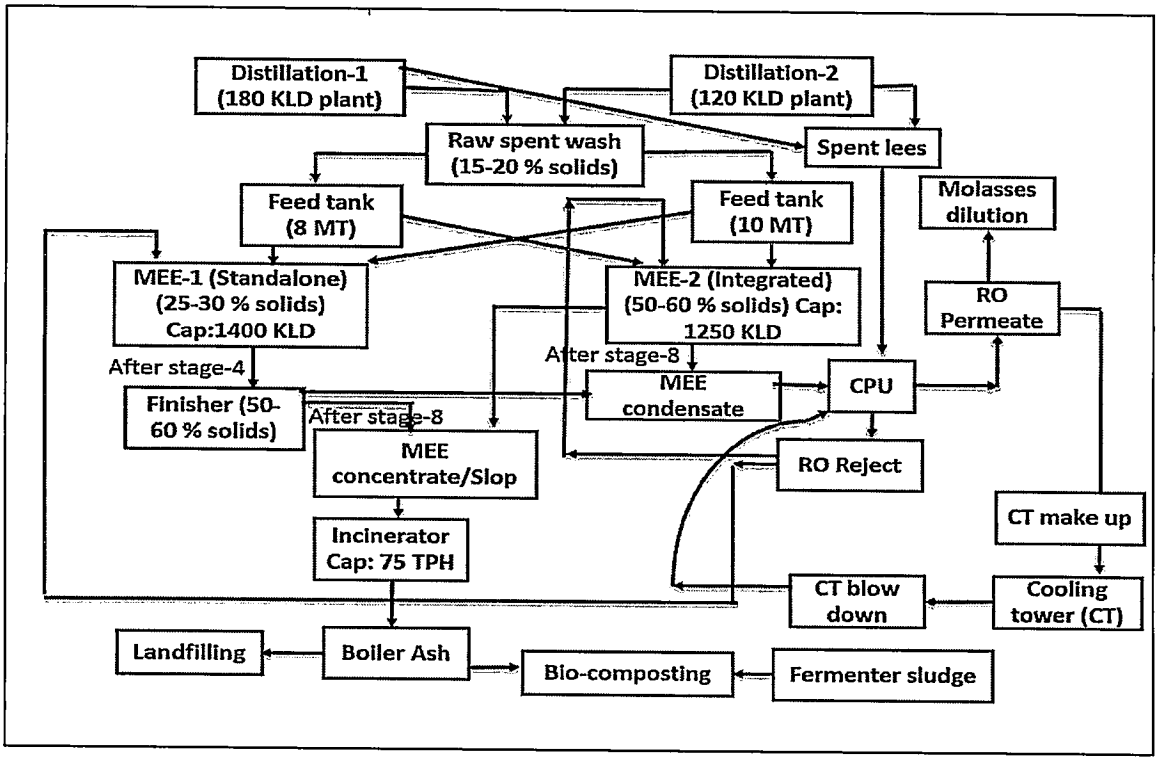
4.6 Existing Spent Wash and other effluent management system

1. For the management of spent wash, the unit has installed following systems:
   i. One Standalone Multiple Effect Evaporator (SMEE) of 06 stages (05+01) + 04 stage finisher (03+01),
   ii. One Integrated Multi Effect Evaporator (IMEE) of total 09 stages (08+01),
   iii. Condensate Polishing Unit (CPU) and
   iv. Incineration boiler

Table 5: Details of existing spent wash management system

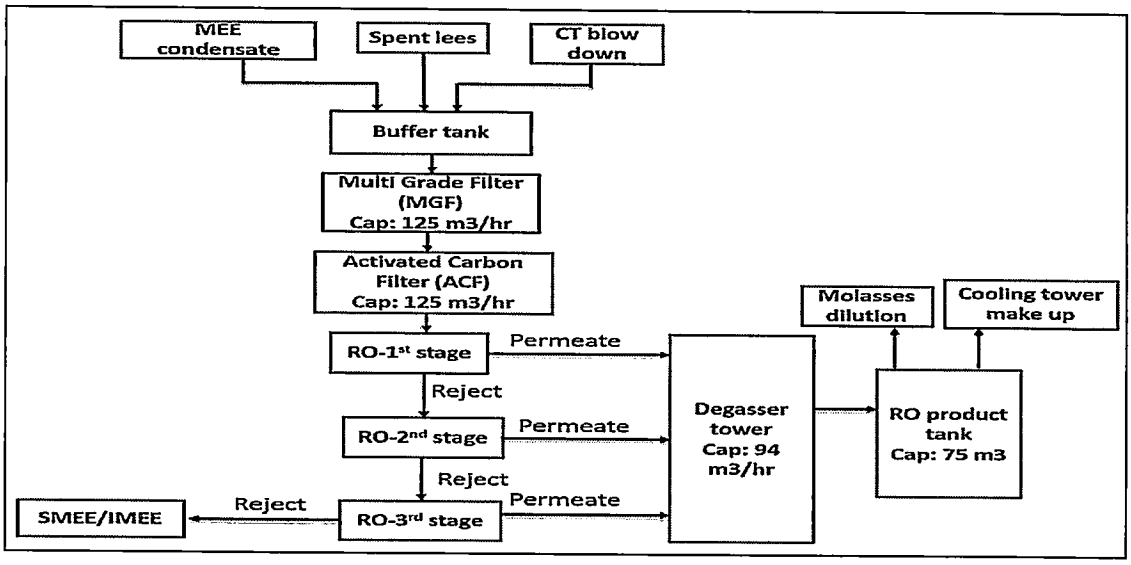
S. No.	Particulars	Nos.	Capacity	Type of operation
1.	Standalone Multi Effect Evaporator (SMEE) of 06 stages (05+01) + 04 stage finisher (03+01), connected with 180 KLPD distillation plant	01	1400 m^3/day	Continuous
2.	Integrated Multi Effect Evaporator (IMEE) of total 09 stages (08+01), integrated with 120 KLPD distillation plant	01	1260 m^3/day	Continuous
3.	Condensate Polishing Unit (CPU) – RO based technology	01	2500m^3/day	Continuous
4.	Incineration boiler	01	75 TPH	Continuous

4 Flow chart of spent wash and other effluent management system of the distillery unit is mentioned below;



5 For treatment of condensate generated from both MEEs (finisher condensate of SMEE and condensate of IMEE) and other non-process low strength effluents like spent lees, cooling tower blow down, the unit has installed Condensate Polishing Unit (CPU) of 2,500 m^3 capacity.

6 CPU is comprising of Multi Grade Filter (MGF), Activated Carbon Filter (ACF), three stage RO and degasser tower. Treated effluent/RO permeates from the CPU is being used in molasses dilution/cooling tower make up and RO-3 reject of the CPU is feed to SMEE/IMEE for evaporation. Flow diagram of CPU is as below:



4.7 Observations on Distillery plant

1. On the day of inspection, the unit was found operating at production capacity of 248 KLD using B-heavy molasses as raw material.
2. On the day of inspection, all the spent wash management system i.e., both MEEs, Incineration boiler and CPU were found operational.
3. The distillery unit has two plants of capacity 180 KLPD and 120 KLPD, which are based on common batch type fermentation and separate Multi Pressure Distillation technology to produce Rectified Spirit/Extra Neutral Alcohol (ENA)/Absolute Alcohol.
4. The unit has total 12 nos. of fermenters with variable capacities- 1.25 lakh liters (2 nos.), 2.5 lakh liters (6 nos.), 5 lakh liters (3 nos.) and 6 lakh liters (1 no).
5. The unit has provided two storage tanks in series i.e., one of 3500 m^3 capacity for settling of raw spent wash (RSW) generating from 180 KLPD distillation plant as well as 120 KLD distillation plant and other one is of 2500 m^3 capacity for mixing/setting of raw spent wash + RO reject of CPU. From this settling tank of 2500 m^3 capacity, the unit has provision to feed raw spent wash either to SMEE (capacity 1400 m^3/day) or to IMEE (capacity of 1260 m^3/day) for concentration.
6. As per the logbook data submitted by the unit, month wise total alcohol production, total raw spent wash generation, spent wash generation per KL of alcohol production and alcohol production per quintal of molasses is as below:

Table 6: Month wise Alcohol Production, spent Wash generation and SW generation per KL of alcohol production

Month	Total Production using (in KL)	Total raw spent wash generation (KL)	Avg. Spent wash generation per KL of alcohol production (KL/KL)	Molasses consumed (Quintals)	
				C-Heavy	B-Heavy
Aug-2020	5805.057	45327	7.81	84550	140550
Sept-2020	4396.67	34942	7.95	97900	78500
Oct-2020	7164.178	54647	7.63	84050	191550
Nov-2020	7325.904	53362	7.28	152375	132075
Dec-2020	5780.354	42860	7.41	13550	186300
Jan-2021	7706.866	62073	8.05	93250	181575
Average of 06 months (from Aug-2020 to Jan-2021)	**6363.17**	**48868.5**	**7.69**	**87612.5**	**151758.3**

7. As per the MEEs operation data submitted by the unit from Aug-2020 to Jan-2021, the unit is achieving average volume reduction of 78.13 % and 72.84 through SMEE and IMEE, however the overall volume reduction of both MEEs is 75.69 %.
8. After both MEEs, the unit has provided two tanks of 275 m^3 and 400 m^3 capacity for storage of concentrated spent wash (CSW) with 55 to 60 °Brix (slop) generated from

SMEE and IMEE respectively. From these two tanks (of 275 m^3 and 400 m^3 capacity), slop is pumped to a storage cum pump sump tank of 270 m^3 capacity before feed to incineration boiler. This slop is then feed to incineration boiler along with supporting fuel i.e., bagasse.

9. As informed, CIP (Cleaning in Process) of both the MEEs is fed to MEEs after mixing with raw spent wash.
10. The unit has incineration boiler of design capacity 75 TPH followed by bag filter as Air Pollution Control Measure device (APCD) having stack height of 84 meters.
11. As per the logbook data submitted by the unit, month wise total concentrated spent wash (slop) generation, total concentrated spent wash (slop) and subsidiary fuel feed to Incineration boiler is as below:

Table 7: Month wise concentrated SW (slop) generation, concentrated SW and subsidiary fuel feed to incineration boiler

Month	Slop generation (MT)	Slop feed to incineration boiler (MT)	Subsidiary fuel (bagasse) feed to incineration boiler (MT)	Total Feed (MT)	Ratio of Slop: Bagasse feed to Incineration boiler
Aug-20	14984	14929	10108.3	25037.3	1.47
Sept-20	12255	12283	7917	20200	1.55
Oct-20	18407	18424	11534.9	29958.9	1.59
Nov-20	18502	18507	10920.8	29427.8	1.69
Dec-20	13980	14006	7242.4	21248.4	1.93
Jan-21	18813	18776	10512	29288	1.78
Total	**96941**	**96925**	**58235.4**	**155160.4**	**Average: 1.67**

12. The unit representative informed that, they are maintaining 70:30 ratio for concentrated spent wash (slop) and subsidiary fuel in incineration boiler, however from the above data, it can be concluded that, the unit is maintaining 60:40 ratio for concentrated spent wash (slop) and subsidiary fuel in incineration boiler.
13. As informed, ash generated from the incineration boiler is distributed to the farmers at free of cost through open trolleys after mixing with press mud.
14. The Unit has installed mass flow meters with totalizer at inlet and outlet of SMEE, IMEE and at incineration boiler feed. All mass flow meters are connected to CPCB server. At the time of inspection, the reading of mass flow meters (totalizer and flow rate) were noted and are as follows:
    a. Reading of mass flow meter (totalizer and flow rate) at IMEE;
        i. At inlet of IMEE: totalizer reading-527719 T, flow rate-52.2 T/hr (49.24 m^3/hr, considering Sp.Gr.1.06)
        ii. At outlet of IMEE (IMEE Concentrate): totalizer reading-151864 T, flow rate-13.56 T/hr (11.69 m^3/hr, considering Sp.Gr.1.16)

b. Reading of mass flow meter (totalizer and flow rate) at SMEE;
   i. At inlet of SMEE: totalizer reading-1693558 T, flow rate-54.8 T/hr (51.69 m^3/hr, considering Sp.Gr.1.06)
   ii. At outlet of SMEE (SMEE Concentrate): totalizer reading-371896 T, flow rate-12.20 T/hr (10.52 m^3/hr, considering Sp.Gr.1.16)

c. Reading of mass flow meter (totalizer and flow rate) at Incineration boiler;
   i. At inlet of incineration boiler: totalizer reading-587 T, Slop (Concentrate) flow rate-26 T/hr (20.15 m^3/hr, considering Sp.Gr.1.29)

15. In CPU, the unit has installed flow meter at RO-Feed, RO-Permeate and RO-Reject, at the time of inspection flow meter totalizer reading were found 66827.5 m^3 (flow rate: 116.5 m^3/hr), 61918.3 m^3 (flow rate: 71 m^3/hr) and 3072.2 m^3 (flow rate: 39 m^3/hr) respectively.

16. The unit has following settling tanks as well as lagoons used for different purposes. Capacity (as provided by the unit), condition observed during joint inspection and purpose of all the settling tanks/lagoons is presented below:

Table 8: Capacity (as provided by the unit), status observed during joint inspection and purpose of all the tanks and lagoons

S. No.	Identification	Condition observed during joint inspection	Capacity (as provided by the Unit)	Purpose
1.	Settling tank-1	Filled with approx. 2000 m3 of raw spent wash	3492 KL~3500 KL	Used as Settling Tank for raw spent wash only
2.	Settling tank-2	Filled with approx. 2000 m^3 of raw spent wash	2499.84 KL~2500 KL	Used as Settling Tank for raw spent wash + RO reject (from CPU)
3.	Buffer Tank	Completely filled	501.33 KL	Used as buffer tank before SMEE (as informed)
4.	Tank	Filled with finisher product	275 KL	Finisher product generated from SMEE and IMEE respectively.
5.	Tank	Filled with finisher product	400 KL	
6.	Tank	Closed tank for concentrated spent wash (slop)	207 KL	Storage cum pump sump of MEE concentrate before incineration.
7.	Tank at bio-compost yard	Filled with rain water (**Fig. 6**)	100 KL	Pump sump of MEE concentrate before bio-composting. (located at bio-compost yard of 10 acres)
8.	Lagoon 1	Dismantling work by filling with boiler ash was found in progress. Approx. 70 % of lagoon was found filled with ash. (**Fig. 7**)	6159.60 KL	Previously, it was used as lagoon for storage of concentrated spent wash, but now it is under dismantling by filling with boiler ash
9.	Lagoon 2	Dismantling work by filling with boiler	10,173 KL	Previously, it was used as lagoon for storage of

		ash was found in progress. Approx. 70 % of lagoon was found filled with ash. (**Fig. 8**)		concentrated spent wash, but now it is under dismantling by filling with boiler ash

17. The unit has dismantled its 02 lagoon of capacity 10173 m^3 and 6159 m^3. The supply pipeline of spent wash to these tanks has also been dismantled and disconnected. The unit has filled both the lagoons with distillery boiler ash.
18. Previously, the unit had opted bio-composting as well as incineration boiler for achieving Zero Liquid Discharge (ZLD), however as informed by the unit representative that the process of bio-composting has been discontinued from June-2020 and presently the unit has opted for concentration incineration system. During joint inspection, the bio-composting operation was found not in operation.
19. The unit has four bio-compost yards as listed below:

Bio-compost yard	**Area (in acres)**	**Previously used for**	**Current status**
Bio-compost yard-1	20.46	10 acres-for Bio-composting	Mixing of boiler ash (from distillery & sugar unit) with press mud was observed.
		10.46 acres used for press mud storage	
Bio-compost yard-2	1.28	Bio-composting	This 7.91 acres of bio-composting area was found dry and empty. No bio-composting or any other activity was observed on these land.
Bio-compost yard-3	2.93		
Bio-compost yard-4	3.7		
Bi-furcation of total bio-compost area is as below:			
Total bio-compost area=28.37 acres			
Total active bio-compost area = 16.91 acres			
Area used for storage of press mud = 10.46 acres			
Area previously used for storage of ready bio-compost yard = 1.0 acres			

20. Presently, in 10 acres of active bio-compost yard, the unit is mixing boiler ash coming from distillery & sugar plant with press mud and after mixing, the prepared mixture is distributed to the farmers at free of cost through open trolleys.
21. The Unit has one piezo well in the bio-compost yard of 10 acres' area.
22. At active bio-compost yard of 10 acres, the unit has one tank of capacity 100 KL (refer **Fig. 6**), which was previously being used as pump sump for MEE concentrate (with 30% solids) before bio-composting. Presently the unit has dismantled the pipe line which was earlier use to pump conc. spent wash (i.e. with 30% solids) from MEE to bio-compost yard.
23. At bio-compost yards, total 04 nos. of MS tanks of 08 KL, 10 KL, 12 KL and 12 KL capacity (**Fig. 9** & **Fig. 10**) were observed. The unit representative has informed that these tanks

were earlier used for spraying of concentrated spent wash on bio-compost. These tanks are currently not in use as the process of bio-composting has been stopped by the unit from June 2020.

24. The unit has informed that to achieve ZLD, previously the system consisted of Bio-methanation followed by MEE followed by Incineration and bio-composting both. However, from last 4-5 years the unit has stopped the use of bio-digesters and directly feeding the raw spent wash to SMEE and IMEE for concentration.
25. The unit is planning to dismantle these bio-digesters. As informed by the unit representative, these bio-digester contains approx. 30000 KL of bio-methanated sludge containing spent wash. The unit is planning to completely exhaust/utilize this bio-methanated sludge containing spent wash in bio-composting by 30, June 2021. In this context the unit has submitted a letter dated 04.01.2021 to MS, UPPCB requesting for temporary permission of bio-composting upto 30 June, 2021 for utilization of surplus of bio-methanated sludge containing spent wash, which is stored in the bio-digester of the distillery. (letter to UPPCB is enclosed at **Annexure-4d**).
26. To utilize the bio-methanated sludge containing spent wash in bio-composting, the unit has built a new pipe line from the distillery plant to bio-compost yard, however the pipe line is not in use and will come in use only after the unit received permission from UPPCB.
27. The unit representative also informed that after utilization of bio-methanated sludge, bio-composting operation will be discontinued after 30 June, 2021 under supervision of the concerned Regional Office of UPPCB and the temporary pipe line built for supply of bio-methanated sludge containing spent wash will also be dismantled permanently.
28. For treatment of domestic waste water generating from the residential colony, sugar plant and distillery plant, the unit is going to install a Sewage Treatment Plant (STP) of 220 KLD capacity and during joint inspection the STP construction work was found under progress (**Fig. 11** & **Fig. 12**). The unit has provided purchase order PO No. 4100007977 dated 16.10.2020 for STP.
29. As per the submitted purchase order, STP will be comprising of bar screen, equalization tank, oil & grease trap, chemical dosing system, tube settler, aeration tank, multi grade sand filter, activated carbon filter, chlorine dosing system and treated water storage tank.

4.8 Characteristics of samples collected from various locations of the distillery unit

1. At the time of inspection, samples were collected from various locations of the distillery unit to verify the efficiency of the ZLD system. Analysis results are represented below:

Table 9: Characteristics of spent wash and other effluents samples collected from the distillery unit

Sr. No	Sample location	Parameters						
		pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	TS (mg/l)	Color (hazen)
1.	**Raw spent wash from distillation unit**	4.6	94400	39667	-	-	113712	-

2.	**Raw spent wash Feed to IMEE and SMEE**	4.8	92000	29500	-	-	126448	-
3.	**IMEE Concentrate (Integrated)**	4.7	614400	208000	-	-	640892	-
4.	**IMEE Condensate (Integrated)**	3.1	5320	3990	BDL	160	-	13
5.	**SMEE Concentrate (Stand Alone)**	4.6	467200	142000	-	-	425784	-
6.	**SMEE Condensate (Stand Alone)**	3.0	9360	5886	BDL	132	-	19
7.	**SW in buffer tank**	4.5	323200	104000	-	-	366416	-
8.	**Lees**	3.5	648	167	BDL	180	-	12
9.	**Feed to Boiler**	4.6	550400	200000	-	-	495472	-
10.	**CPU feed**	4.2	4120	1933	BDL	1096	-	12
11.	**CPU permeate**	5.2	1272	833	BDL	156	-	BDL
12.	**CPU reject**	4.3	9760	6333	15	2776	-	27

2. Analysis of effluent samples collected from inlet of Condensate Polishing Unit shows pH- 4.2, COD – 4120 mg/l and BOD-1933 mg/l, TDS-1096 mg/l and colour-12 Hazen. Sample collected from the outlet of CPU permeate shows pH- 5.2, COD – 1272 mg/l and BOD-833 mg/l, TDS-156 mg/l and colour-BDL.
3. Analysis of samples collected from the inlet of SMEE and IMEE (common) shows pH-4.8, COD – 92000 mg/l and BOD-29500 mg/l and TS- 126448 mg/l (12%). Sample collected from the outlet of SMEE and IMEE shows pH- 4.6, COD – 467200 mg/l and BOD-142000 mg/l, TS-425784 mg/l (42%) and pH- 4.7, COD – 614400 mg/l and BOD-208000 mg/l, TS-640892 mg/l (64%).
4. At the time of inspection, it was informed by the unit representative that the settling tank is provided for storage of raw spent wash + CPU RO reject, which is being fed to MEEs, however the analysis result of sample collected from this settling tank indicates concentrated spent wash and not raw spent wash.
5. Concentrated spent wash (slop) collected from the feed line of the boiler shows pH-4.6, COD – 550400 mg/l and BOD-200000 mg/l and TS- 495472 mg/l (49%).

Table 10: Characteristics of samples collected from the drain adjacent to the distillery unit

Sample location	**Parameters**							
	pH	**COD (mg/l)**	**BOD (mg/l)**	**TSS (mg/l)**	**TDS (mg/l)**	**Color (hazen)**	**NH_3-N (mg/l)**	**TC/FC (MPN/100 ml)**
Ikra drain at Up Stream of the unit	6.9	296	125	146	684	53	17	Total Coliforms-$23x10^6$ MPN/100ml Fecal Coliforms-$45x10^5$ MPN/100ml
Ikra drain at Down	6.4	536	296	74	628	29	44	Total Coliforms-$17x10^6$ MPN/100ml

Stream of the unit								Fecal Coliforms- $49x10^5$ MPN/100ml

6. Analysis result of samples collected from the Ikra drain at upstream of the unit shows pH-6.9, COD-296 mg/l, BOD-125 mg/l, TSS-146 mg/, TDS-684 mg/l, colour-53 hazen, NH_3-N-17 mg/l and analysis result of sample collected from Ikra drain at downstream of the unit shows pH-6.4, COD-536 mg/l, BOD-296 mg/l, TSS- 74 mg/, TDS- 628 mg/l, colour-29 hazen and NH_3-N 44 mg/l, indicating possibility of discharge of domestic waste water into the drains.

4.9 Recommendations

1. The unit has total 03 nos. of tube wells against 02 nos. of permitted tube wells as per CGWA NOC. The unit shall dismantle the 3rd no. of non-operational tube well.
2. The unit shall obtain hazardous waste authorization from the respective state pollution control board.
3. The unit shall complete the construction work of STP at the earliest and shall treat the sewage generating from the residential colony as well as industrial plants in STP only.
4. The unit shall ensure complete filling of both the lagoons of capacity 6159.60 KL and 10,173 KL with ash.
5. If the concerned state pollution control board allows the unit to carry out temporary bio-composting for utilization of bio-methanated sludge, in that case the unit shall comply with the following;
   a) The unit shall ensure to consume the bio-methanated spent wash in bio-composting before monsoon season.
   b) After completion of the temporary bio-composting, the unit shall completely dismantle the pump sump of MEE concentrate, which is located at bio-compost yard of 10 acres.
   c) After completion of the temporary bio-composting, the unit shall completely dismantle the newly built pipeline.

4.10 Photographs

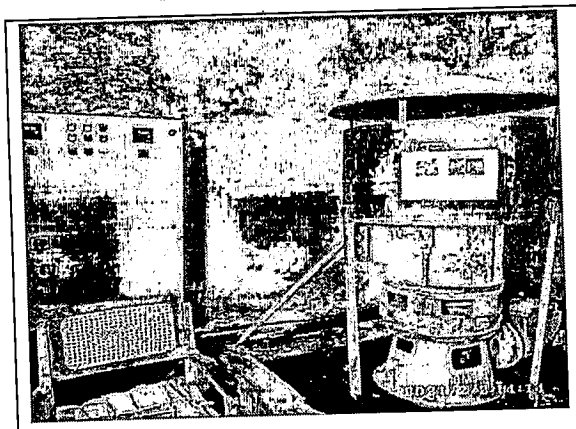


Fig. 1: Tube well no. 1 (Operational)

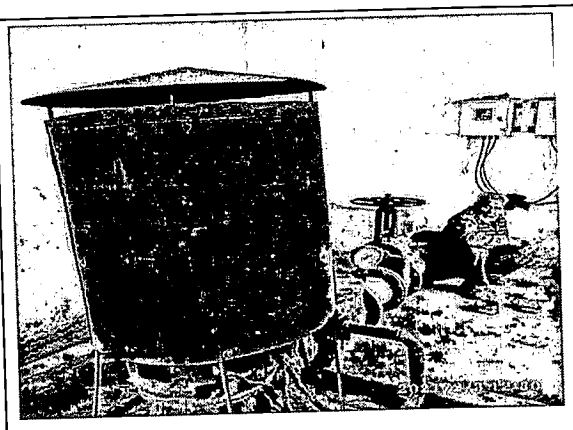


Fig. 2: Tube well no. 2 (Operational)

Fig. 3: Tube well no. 3 (Non-operational)

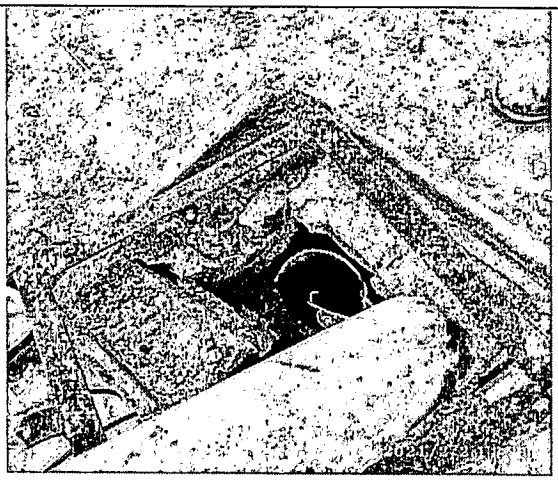


Fig. 4: Piezometric well no. 1 located inside the unit premises

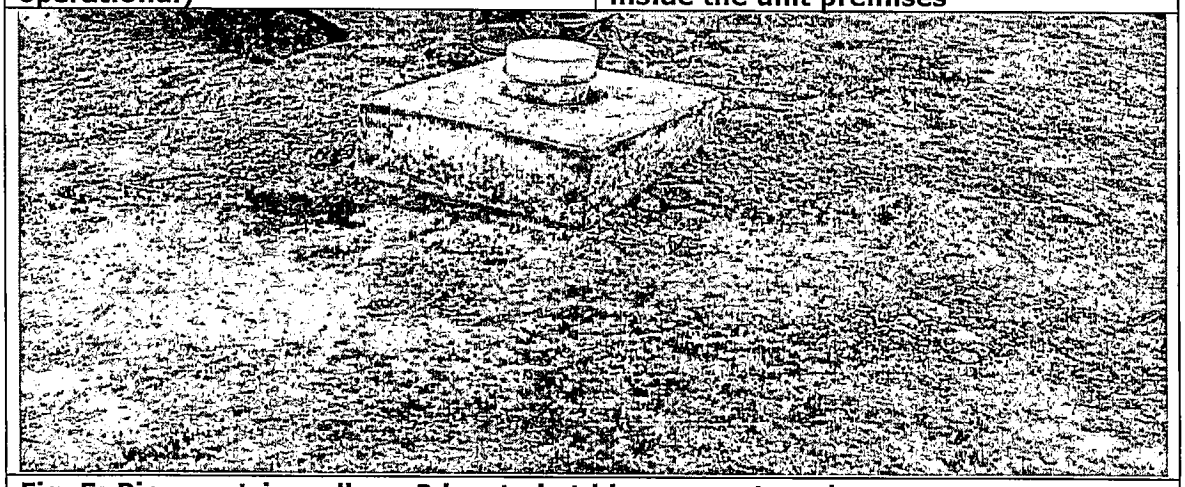


Fig. 5: Piezometric well no. 2 located at bio-compost yard

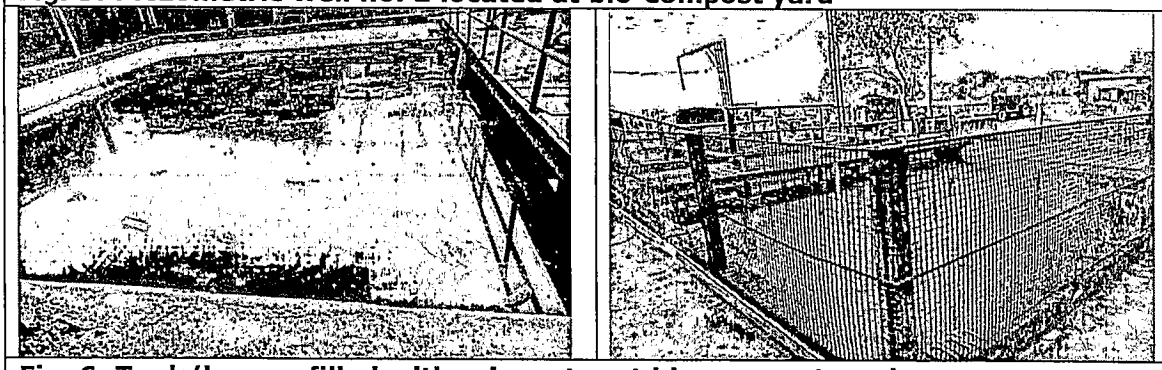


Fig. 6: Tank/lagoon filled with rain water at bio-compost yard

Fig. 7: Lagoon no. 1 of 6159 KL capacity-Under dismantling by filling with ash

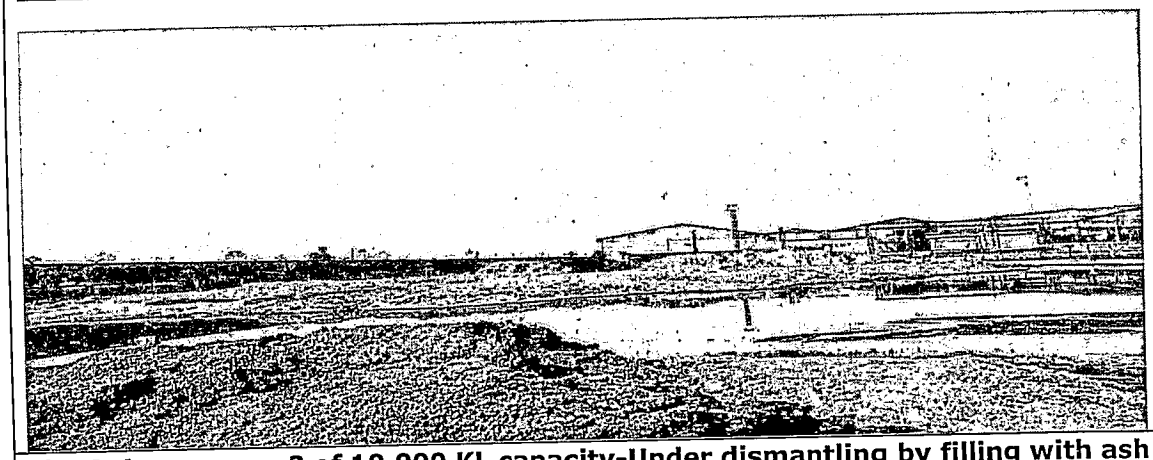


Fig. 8: Lagoon no. 2 of 10,000 KL capacity-Under dismantling by filling with ash

Fig. 9: MS tank to spray concentrated SW at bio-compost yard

Fig. 10: MS tank to spray concentrated SW at bio-compost yard

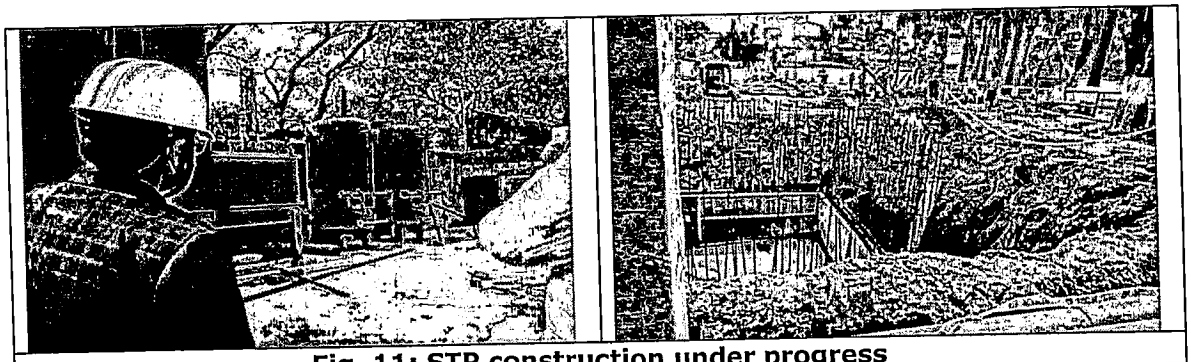


Fig. 11: STP construction under progress

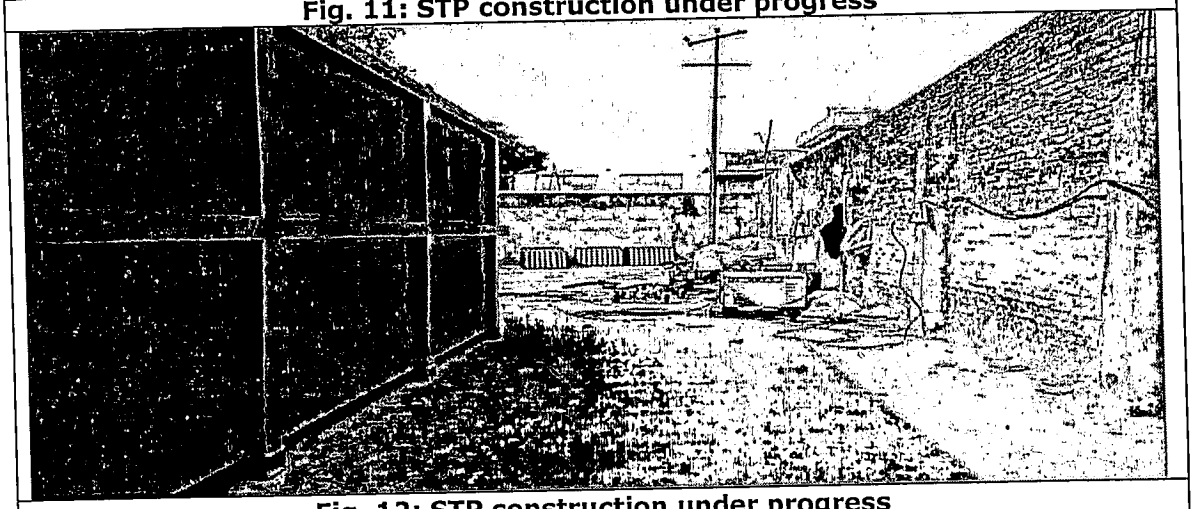


Fig. 12: STP construction under progress

4.11 Signature of Joint Inspection team

Sr. no.	Name of Inspecting officer	Signature
1.	Mrs. Reena Satawan, Sc. 'D', CPCB, Delhi	
2.	Sh. J.P Maurya, Regional Officer, RO-Bijnor, UPPCB	
3.	Sh. Mahir Hussain, AEE, RO-Bijnor, UPPCB	
4.	Dr. Prabhat Ranjan, Sc. 'B', CPCB, Delhi	
5.	Sh. Vipin Kumar, RA-III, CPCB, Delhi	
6.	Miss Anshul Kumari, RA-III, CPCB, Delhi	
7.	Mrs. Shivangi Goswami, RA-II, CPCB, Delhi	
8.	Sh. Ashwani Kumar, RA-II, CPCB, Delhi	
9.	Sh. Muktesh Chaudhary, SRF, CPCB, Delhi	

Annexure - 4a

U.P. Pollution Control Board

CONSENT ORDER

Ref No. -
68854/UPPCB/Bijnore(UPPCBRO)/CTO/water/B
IJNOR/2019

Dated : 17/07/2020

To,

Shri AMIT SHARMA SHARMA
M/s DHAMPUR SUGAR MILLS LTD DISTILLERY DIVISION
Dhampur Sugar Mills Ltd. Dhampur Distt Bijnor,BIJNOR-246761
BIJNOR

Sub : **Consent under Section 25/26 of The Water (Prevention and control of Pollution) Act, 1974 (as amended) for discharge of effluent to M/s. DHAMPUR SUGAR MILLS LTD DISTILLERY DIVISION**

Reference Application No :6189722 **Dated :17/07/2020**

1. For disposal of effluent into water body or drain or land under The Water (Prevention and control of Pollution) Act,1974 as amended (here in after referred as the act) M/s. DHAMPUR SUGAR MILLS LTD DISTILLERY DIVISION is hereby authorized by the board for discharge of their industrial effluent generated through ETP for irrigation/river through drain and disposal of domestic effluent through septic tant/soak pit subject to general and special conditions mentioned in the annexure in refrence to their foresaid application.
2. This consent is valid for the period from 01/01/2020 to 31/12/2021
3. In spite of the conditions and provisions mentioned in this consent order U.P.Pollution Control Board reserves its right and powers to reconsider/amend any or all conditions under section 27(2) of the Water (Previntion and Control of Pollution) Act, 1974 as amended.

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

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.07.17 13:01:06 +05'30'

For and on behalf of U.P. Pollution Control Board

Chief Environment Officer

Enclosed : As above
(condition of consent):

Copy to: Regional Officer Bijnore to ensure the compliance of the conditions imposed in the consent order.

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.07.17 13:01:22 +05'30'

Chief Environment Officer

2

U.P. POLLUTION CONTROL BOARD, LUCKNOW

Annexure to Consent issued to M/s DHAMPUR SUGAR MILLS LTD DISTILLERY DIVISION vide

Consent Order No. 6189722/Water Dated 17/07/2020

CONDITIONS OF CONSENT

1. This consent is valid only for the approved production capacity of 220 KLD Rectified Spirit / 220 Absolute Alcohol / 120 Extra Neutral Alcohol and 140 KLD Ethyl Acetate.
2. The quantity of maximum daily effluent discharge should not be more than the following :

Effluent Discharge Details			
S.No	Kind of Effulant	Maximum daily discharge KL/day	Treatment facility and discharge point
1	Domestic	20 KLD	Septic Tank
2	Industrial	ZLD	ETP

3. Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. It should be ensured that domestic effluent should not be discharged in storm water drain.

4(a) The domestic effluent should be treated in treatment plant so that the treated effluent should be in conformity with the following norms:

Domestic Effulant		
S.No	Parameter	Standard

5. The other pollutant for which norms have not been prescribed, the same should not be more than the norms prescribed for the water used in manufacturing process of the industry.
6. The method for collecting industrial and domestic effluent and its analysis should be as per legal Indian standards and its subsequent amendments/standards prescribed under the Environment (Protection) Act, 1986.
7. The industry shall not discharge any trade effluent outside the premises and Zero Liquid Discharge (ZLD) shall be maintained all the time.
8. Molasses shall not be stored in kachcha pits.
9. If UPPCB or CPCB issues closure order against the industry, this consent shall remain suspended for the period till closure order is revoked, after which the consent will be effective again for the remaining period.
10. The unit should be operated in such a way so that there is no adverse impact on public and environment.
11. Unit must maintain on line connectivity of mass flow meters at the inlet and outlet of MEE and web cameras installed at the final outlet, MEE and Bio Compost yard and connected with server of CPCB and UPPCB.
12. The unit shall ensure deployment of qualified staff for self monitoring mechanism on 24 X7 hours basis.
13. Volume of spent wash shall be reduced to 40 % minimum and solid concentration shall be maintained minimum 30% at the outlet of MEE.
14. Unit shall identify recipient drains/rivulets and their upstream & downstream locations in consultation with UPPCB and shall carry out monthly monitoring of identified recipient drains at upstream & downstream location through recognized lab under Environment (Protection) Act, 1986 and shall submit the analysis report on monthly basis by 10th of every month to CPCB and UPPCB.
15. The storage facility provided for spent wash shall be properly lined and made impermeable and the storage capacity at any stage shall not exceed 07 days equivalent of production in case of incineration boiler and 30 days equivalent of production in case of bio composting.
16. Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.

17. Industry shall ensure to send monthly reports regarding spent wash storage and details of spent wash in each lagoon constructed in industry.

Specific Conditions:

1.The Consent to Operate Water is valid for production of 220 KLD Rectified Spirit/ 220 Absolute Alcohol (Ethanol)/ 120 Extra Neutral Alcohol and 140 KLD Ethyl Acetate, for operation throughout the year.
2.The Show Cause Notice issued under section 33 A of Water Act 1974 vide letter no H 40035/C7/ Jal-195/ Ka. Ba. No./ 2019 dated 13.8.2019 is hereby revoked.
3.Unit shall regularly operate the installed Zero Liquid discharge system comprising of MEE, Slope boiler of 75 TPH and CPU. The MEE condensate, reject and Cooling tower blow down shall be treated in Condensate Polishing Unit and treated water is used for Molasses dilution and Cooling tower make up water. The plant shall strictly operate on Zero Liquid discharge. No waste/ treated water shall be discharged outside the premises. Operation of Bio Compost yard is not permitted and ZLD must be achieved through Incineration Boiler.
4.Other effluent streams from MEE Condensate, Spent Lees, Cooling Tower and Boiler blow downs shall be treated through Condensate Polishing unit, the RO permeate shall be used in activities like Molasses dilution, Cooling Tower make up and reject shall be circulated back to the MEE. Zero Liquid Discharge shall be maintained.
5.In the matter of OA no. 539/2019 Adil Ansari vs Dhampur Sugar Mills Ltd. & Ors. in compliance of order of Hon'ble NGT, the joint committee of CPCB and UPPCB inspected the unit and has recommended that the utilization of CPU permeate having pH of 4.3, COD- 1013 mg/l against 250 mg/l and BOD-323 mg/l against 100 mg/l in non process activities like gardening, is a violation of ZLD norms and should be stopped immediately. Unit must ensure compliance.
6.In the matter of OA 1007 of 2019 Priyanka Modern Sr. Secondary School vs Uttar Pradesh Pollution Control Board & Ors. in compliance of order of Hon'ble NGT, the joint committee constituted by District Magistrate, Bijnore inspected the unit and has made following recommendations-
a.The operation and maintenance of air pollution control system should be ensured in such a way that ambient air quality remains in accordance with the prescribed norms.
b.Unit should make permanent wall/ structure of adequate height and automatic water sprinkler to ensure dust control towards Priyanka Modern School.
c.Conveyor belt of Bagasse should be kept 100 percent covered.
d.Vehicles carrying bagasse in the industrial premises should be covered with green net.
e.Proper water sprinkler on bagasse be done.
f.Unit should develop dense green belt towards Priyanka Modern School boundary.
Unit must ensure compliance
7.The automatic water sprinkler shall be commissioned within 15 days.
8.Unit shall obtain approval shall be obtained from Petroleum and Explosives Safety Organization (PESO) for the site and layout plan.
9.Unit shall be using 2500 cubic meter lagoon with 2000 cubic meter spentwash and 3500 cubic meter lagoon with 2400 cubic meter spentwash. The 500 cubic meter lagoon shall be used as sludge settler tank. The maximum stored quantity of spentwash shall not exceed 4450 cubic meter, unit shall use lagoon of 2500 and 3500 cubic meter capacity for storage of spentwash. The lagoon of 10000 and 6000 cubic meter capacity shall be permanently dismantled and timebound plan shall be submitted within 15 days.
10.Unit shall operate in Zero Liquid Discharge and no effluent is allowed to discharge outside the premises.
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 obtain NOC from CGWA for ground water extraction within 3 months or shall make alternate arrangement for water requirement with prior permission of competent authority, failing which this consent shall be considered for revocation. Unit shall comply with the Section 10 & Section 11 of Uttar Pradesh Ground Water (Management and Regulation) Act 2019 and shall obtain Registration from ground water board.
16.Unit shall comply with the provisions of Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016 and shall obtain authorization for disposal of hazardous

waste.
17.Unit shall comply with 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.
18.Unit shall submit ground water quality monitoring report done by MoEF & CC approved laboratory in every 3 months.
19. The work of extra wall towards the boundary of Priyanka Modern School shall be completed by 31-08-2020 and the covered shed for bagasse should be ready by 30-10-2020 before the start of next crushing season.
20.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.
21. Unit shall deposit Bank Guarantee of Rs. 10 Lakh (Rs. Ten Lakh Only) for compliance of above conditions within 07 days failing which the CTO will be revoked automatically.

Amit Chandra

Digitally signed by Amit Chandra
Date: 2020.07.17 13:01:38 +05'30'

Issued with the permission of competent authority.

For and on behalf of U.P. Pollution Control Board.

Chief Environment Officer

Annexure - 4b

U.P. Pollution Control Board

CONSENT ORDER

Ref No. - 68841/UPPCB/Bijnore(UPPCBRO)/CTO/air/BIJNOR/2019 Dated : 20/07/2020

To,

Shri AMIT SHARMA SHARMA
M/s DHAMPUR SUGAR MILLS LTD DISTILLERY DIVISION
Dhampur Sugar Mills Ltd. Dhampur Distt Bijnor,BIJNOR,246761
BIJNOR

Sub : Consent under section 21/22 of the Air (Prevention and control of Pollution) Act, 1981 (as amended
to M/s. DHAMPUR SUGAR MILLS LTD DISTILLERY DIVISION

Dated : 20/07/202

Reference Application No: 6188660

1. With reference to the application for consent for emission of air pollutants from the plant of M/
DHAMPUR SUGAR MILLS LTD DISTILLERY DIVISION, under Air Act 1981. It is bein
authorised for said emissions, as per the standards, in environment, by the Board as per enclos
conditions.
2. This consent is valid for the period from 01/01/2020 to 31/12/2021.
3. Inspite of the conditions and provisions mentioned in this consent order UP Pollution Control Boa
reserves its right and powers to reconsider/amend any or all conditions under section 21 (6) of t
Air (Previntion and Control of Pollution) Act, 1981 as amended.
This consent is being issued with the permission of competent authority.

Amit Chandra Digitally signed Amit Chandra Date: 2020.07.2 16:14:09 +05:30

For and on behalf of U.P. Pollution Control Bo

Chief Environment Offi

Enclosed : As above
(condition of consent):

Copy to: Regional Officer Bijnore to ensure the compliance of the conditions imposed in the consent order.

Amit Chandra Digitally signe Amit Chandra Date: 2020.07. 16:14:26 +05'3

Chief Environment Of

2

U.P. Pollution Control Board

Dated : 20/07/2020

CONDITIONS OF CONSENT

1(a). The details of Air pollution sources and stacks attached with Boiler

Air Pollution Source Details					
S.No	Air Polution Source	Type of Fuel	Stack No.	Parameters	Height
1	boiler 75 TPH	Baggase - 13.7 TPH, Coal 8.1 TPH, Spentwash - 25.5 KL/Hr	01	Particulate Matter	Bag filter and 84 meter high stack
2	DG Set 750 KVA	Disel oil	02	Particulate Matter	6 meter above from the roof of nearest building

1(b) The emissions by various stacks into the environment should be as per the norms of the Board.

Emission Quality Details Detail			
S.No	Stack No.	Parameter	Standard
1	02	Particulate Matter	As per standards stipulated in E(P)Rules 1986
2	01	Particulate Matter	50 mg/.nm3

2. The equipment for air pollution control system and monitoring, as proposed by the industry and approved by the Board should be installed in their premises itself.
3. Industry shall dispose the incineration boiler ash in such a manner so that there should not be any adverse impact on public health at large and on Soil, Water & Air environment.
4. The modification or installation in the existing pollution control equipment shall be done only by prior approval of the Board.
5. The operation of air pollution control system and maintenance be done in such a way that the quantity of pollutants shall be in accordance with the standards prescribed by the Board/MoEF & CC/or otherwise mandatory.
6. Unit shall do provisions for control of fugitive emissions from process as per the norms of the Board/MOEF & CC/or otherwise mandatory.
7. The unit shall submit the stack emissions monitoring report within one month from issuance of consent order along with the point wise compliance report of the consent order. Further quarterly monitoring report analysed by Board/NABL accredited laboratory shall be submitted.
8. In case of closure directions under section-5 of E (P) Act, 1986 issued by CPCB, this consent will be automatically suspended during the closure period, and will be automatically reinstated with specific conditions as per CPCB revocation orders.
9. Industry shall develop and maintain green belt as per the guidelines issued by the Board vide office order dated 16/02/2018, which is available on Board's Website- www.uppcb.com.
10. Industry shall submit Environment Statement to this Board as per provision of Environment (Protection) amendment Rule, 1993 for the previous year ending 31st March on or before 30th September every year.
11. Industry shall abide by orders / directions issued by Hon'ble Supreme court, Hon'ble High Court, Hon'ble National Green tribunal, Central Pollution Control Board and U.P Pollution Control Board for protection and safe guard of environment from time to time.

Specific Conditions:

1.The Consent to Operate Air is valid for production of 220 KLD Rectified Spirit / 220 Absolute Alcohol (Ethanol) / 120 Extra Neutral Alcohol and 140 KLD Ethyl Acetate, for operation throughout the year.
2.Unit shall regularly operate the installed Zero Liquid discharge system comprising of MEE, Slope boiler of 75 TPH and CPU. The MEE condensate, reject and Cooling tower blow down shall be treated in Condensate Polishing Unit and treated water is used for Molasses dilution and Cooling tower make up water. The plant shall strictly operate on Zero Liquid discharge. No waste/ treated water shall be discharged outside the premises.
3.Unit shall maintain and operate Air pollution control system i. e bag filter and stack height of 84 meter from ground level regularly and ensure that Particulate emission are within the prescribed norms of 50 mg per normal cubic meter.
4.Unit shall achieve ZLD through MEE and Incineration Boiler only and Bio Compost yard shall be permanently closed with immediate effect. Maximum stored quantity of spentwash shall not exceed 4450 cubic meter, unit shall use lagoon of 2500 and 3500 cubic meter capacity for storage of spentwash. The lagoon of 10000 and 6000 cubic meter capacity shall be permanently dismantled and timebound plan shall be submitted within 15 days.
5.Unit shall maintain the canopy installed at the DG sets of 750 KVA and stack height of 6 meter above from the roof of nearest building.
6.In the matter of OA 1007 of 2019 Priyanka Modern Sr. Secondary School vs Uttar Pradesh Pollution Control Board & Ors, in compliance of order of Hon'ble NGT, the joint committee constituted by District Magistrate, Bijnore inspected the unit and has made following recommendations-
a.The operation and maintenance of air pollution control system should be ensured in such a way that ambient air quality remains in accordance with the prescribed norms.
b.Unit should make permanent wall/ structure of adequate height and automatic water sprinkler to ensure dust control towards Priyanka Modern School.
c.Conveyor belt of Bagasse should be kept 100 percent covered.
d.Vehicles carrying bagasse in the industrial premises should be covered with green net.
e.Proper water sprinkler on bagasse be done.
f.Unit should develop dense green belt towards Priyanka Modern School boundary.
Unit must ensure compliance.
7.Unit shall obtain approval shall be obtained from Petroleum and Explosives Safety Organization (PESO) for the site and layout plan.
8.Unit shall maintain online emission monitoring system and maintain the records, and ensure the connectivity to the servers of CPCB and UPPCB.
9.Unit shall ensure that ambient air quality of nearby areas is not adversely affected due to operation and emissions of the unit.
10.The ambient noise level shall confirm to the standards under the Environment (Protection) Act 1986
11.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.
12.Unit shall use Bio-briquette as co-fuel with main fuel in the ratio of minimum 20 percent in boiler subject to its availability.
13.Unit shall submit ambient air quality report and stack report of the air pollution sources from laboratory authorized from MOEF & CC on quarterly basis.
14.Unit shall comply the provisions of Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016 and shall obtain authorization for disposal of hazardous waste.
15.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.
16.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.
17. The work of extra wall towards the boundary of Priyanka Modern School shall be completed by 31-08-2020 and the covered shed for bagasse should be ready by 30-10-2020 before the start of next crushing season.
18. This Consent order shall automatically become invalid on issuance of Closure Order by C.P.C.B / UPPCB and further on Revoking of Closure order, the Consent order shall become valid.

Amit Chandra
Digitally signed by Amit Chandra
Date: 2020.07.20 16:14:43 +05'30'

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Issued with the permission of competent authority.

For and on behalf of U.P. Pollution Control Board.

Chief Environment Officer

Annexure - 4 C

सत्यमेव जयते

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	M/s Dhampur Sugar Mills Ltd.		
Project Address:	M/s Dhampur Sugar Mills Ltd.		
Town:	Alhaipur (CT)	Block:	Dhampur
District:	Bijno	State:	Uttar Pradesh
Pin Code:	246761		
Communication Address:	M/s Dhampur Sugar Mills Ltd.(Distillery Division), Dhampur, Bijnor, Uttar Pradesh - 246761		
Address of CGWB Regional Office :	Central Ground Water Board Northern Region, Bhujal Bhavan, Sector-B Sitapur Road Yojna, Ram Bank Chauraha, Lucknow, Uttar Pradesh - 226021		

1.	NOC No.:	CGWA/NOC/IND/REN/2/2020/5654			
2.	Application No.:	21-4/87/UP/IND/2007	3.	Category:	Industry
4.	Project Status:	Existing Project	5.	NOC Type:	2nd Renewal
6.	Valid from:	08/04/2019	7.	Valid up to:	06/04/2024

8. Ground Water Abstraction Permitted:

Fresh Water		Saline Water		Dewatering		Total	
m³/day	m³/year	m³/day	m³/year	m³/day	m³/year	m³/day	m³/year
2400.00	648000.00					2400.00	648000.00

9. Details of ground water abstraction /Dewatering structures

	Total Existing No.:2					Total Proposed No.:0				
	DW	DCB	BW	TW	MP*	DW	DCB	BW	TW	MP
Abstraction Structure*	0	0	0	2	0	0	0	0	0	0

*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit

10. Quantum of ground water recharge/harvesting(m³/year): 268584.00

11. Number of Piezometers (Observation wells) to be constructed/ monitored & Monitoring mechanism.

	No. of Piezometers	Monitoring Mechanism		
		Manual	DWLR**	DWLR With Telemetry
**DWLR - Digital Water Level Recorder	2	0	1	1

(Compliance Conditions given overleaf)

Digitally signed by
NANDAKUMARAN P
Date: 2020.03.23 11:51:00 +05'30'

सदस्य (केन्द्रीय भूमि जल प्राधिकरण)
Member (CGWA)

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011
Phone: (011) 23383561 Fax: 23382051, 23386743
Website: cgwa-noc.gov.in

पानी बचाये – जीवन बचाये
SAVE WATER - SAVE LIFE

Validity of this NOC shall be subject to compliance of the following mandatory conditions:

1. No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
2. The proponent shall seek prior permission from CGWAfor any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
3. All new as well as existing ground water abstraction/ de-watering structures shall be fitted with digital water flow meters by the firm at its own cost immediately on completion of their construction or grant of NOC as the case may be. In case of renewal of NOCs, all existing ground water abstraction structures shall continue to be fitted with digital water flow meters. Intimation of installation of flow meters shall be sent by the proponent to the Regional Director of CGWB within 6 months of grant of NOC. Daily ground water abstraction data shall be monitored / continue to be monitored (in case of renewal) by the firm and recorded in a log book. Details of month-wise ground water abstraction shall be submitted to the Regional Director, CGWB, once every year.
4. In case the ground water abstraction is more than 10 m^3/day, monthly water level monitoring data shall be maintained and submitted annually to the Regional Office of CGWB. Wherever groundwater withdrawal is more than 500 m^3/day,the firm shall install telemetry system in one of the piezometers and share USER ID and password of the telemetry system with the Regional Director, CGWB.
5. In case ground water abstraction is more than 10 m^3/day, ground water quality shall be monitored once in a year (during pre- monsoon period) and the report submitted to the Regional Office, CGWB. Wherever the extraction is less than 10 m^3/day, ground water quality report shall be submitted by the proponent at the time of submission of self-compliance report.
6. Ground water augmentation/harvesting measures as stipulated in the NOC, shall be implemented (in new cases) / continue to be maintained (in case of renewal) in consultation with the concerned Regional Director, CGWB.
7. Proof of recharge/water harvesting structures constructed (photographs of structures) shall be submitted to the concerned Regional Director, CGWB within 6 months from the date of issue of NOC. The firm shall also undertake periodic maintenance of recharge/water harvesting structures at its own cost.
8. The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
9. In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
10. The firm shall optimize water use through recycling/ reuse of waste water after proper treatment.
11. Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
12. In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
13. Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
14. The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
15. This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.
16. This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
17. The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
18. This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
19. Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment(Protection)Act,1986.
20. **In case of any violation of NOC conditions or illegal extraction of Ground water the firm shall be liable to pay "Environmental Compensation"/ "Penalty", if any under Sec 15 of EPA 1986 as and when decided by statutory authorities.**

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

Annexure - 4d

Dhampur Sugar Mills Limited
Unit: Dhampur
Dhampur, N. Rly. Dist. Bijnor (U.P.)
Pin Code: 246 761
Tel: 01344-220009
E-mail: dsmdhampur@dhampur.com
Website: www.dhampur.com

4th January, 2021

To,

The Member Secretary,
U.P. Pollution Control Board,
T.C.-12V, Vibhuti Khand,Gomti Nagar
Lucknow-226 010

Subject: Request for temporary permission of bio-composting upto 30th June 2021 for exhausting the old / surplus stock of bio-methanated sludge containing spent wash, stored in bio-digesters of the distillery.

Dear Sir,

This is to bring your kind notice that in compliance of the 'Standard operating Procedure' (SOP), dated 10.08.2018 issued by the CPCB; Office Memorandum dated 25.03.2019 of the MOEFCC and Office Memorandum dated 28.01.2020 of U.P.P.C.B., we had opted for total incineration of spent wash through Slope Boiler and had discontinued the bio-composting operations at Dhampur Distillery.Accordingly, we were granted consents of Water & Air (dated 17.07.2020 & 20.07.2020, respectively) for Dhampur Distillery which are valid upto 31.12.2021.

Here, we would like to submit that we have a methane generation system in our distillery and our bio-digesters are also a part of the same. Previously,our system for compliance of ZLD consisted of bio – methanation process in which spent wash was used as substrate to generate methane in bio-digesters where COD/BOD was degraded through microbiological degradation process, as such, the treated spent wash contained low COD / BOD having low calorific value. The bio-methanated spent wash in this process turns alkaline and it is almost impossible to fully concentrate the same in evaporator. It is reiterated that this spent wash has low calorific value which makes it's burning even more difficult.

As mentioned above,incineration of bio- methanatedsludge containing spent wash having lowcalorific value, stored in our bio- digesters remains a major problem for us as this spent wash does not burn efficiently in our boiler in comparison to the raw spent wash which has a much higher calorific value and which burns suitably in our slope boiler.

Use of bio-methanated spent wash in our slope boiler not only hampers the working of the distillery but also disturbs the efficiency & working of the slope boiler,resulting in break-downs& stoppages in day to day distillery operations. It is for this reason we are

Date 06-01-2021

discontinuing our methane generation process but the disposal of bio-methanated sludge containing spent wash remains a major factor.

In view of the above-mentioned circumstances, we request your good self to **temporarily** allow us to use the available quantity of Bio-methanated sludge / spent wash stored in bio-digesters for bio-composting upto 30th June 2021. This will enable us to exhaust the quantity of Bio-methanated sludge containing spent wash stored in our bio-digester. The "Organic Manure" produced through this temporary bio-composting operation up to 30th June 2021 will be supplied hand to hand to the cane growers who demand such 'organic manure' from us on regular basis. This will also help us in getting the bio-composting yard emptied simultaneously.

Weundertake that this temporary bio-composting operation will bediscontinued on 30th June 2021 under the inspection of the concerned Regional Office of U.P.P.C.B. and the temporary line built for supply of bio-methanated sludge containing spent wash will also be dismantled permanently under the inspection of the concerned Regional Office, U.P.C.B.
We shall also submit a monthly report regarding the use of bio-methanatedsludge containing spent wash in the temporary Bio-composting operations till 30.06.2021.

A detailed chart pertaining to the quantity ofbio-methanated sludge containing spent wash and it's projected daily use in Bio-composting upto 30.06.2021 is enclosed herewith as Annexure-I.

We are hopeful that your goodself will allow us such temporary permission to completely exhaust the bio-methanated sludge containing spent wash in the interest of environment and smooth running of the plant.
Thanking you.
Yours sincerely,
For Dhampur Sugar Mills Ltd.(Distillery Division)

Authorized Signatory

Encl: As stated above

CC to: (1) The Chairman, U.P.P.C.B, Lucknow.

(2) The C.E.O, U.P.P.B, Lucknow. (Circle-V)

(3) Regional Officer, U.P.P.C.B, Bijnor.

DHAMPUR DISTILLERY

Annexure -I

CHART SHOWING QTY OF BIO-METHANATED SLUDGE/ SPENT WASH TO BE BIO-COMPOSTED UPTO 30.06.2021 IN BIO-COMPOST YARD

Bio Composting Plan upto 30.06.2021	UOM	Qty.
Standard Norms for Press mud	MT/Acre	850
Standard Norms for Spent wash @ 30 Bx	PMC : SW	1.6
Total available Sludge with Water For Bio-Composting	KL	30000
Total Press Mud Required	MT	18750
Cycle Days	Days	45
Area Avaialble for the bio-composting	Acre	6
Press Mud consumption in available Area	MT	5100
Bio-composting Cycle Required for Available material	Nos	3.68
Total Nos of Days required for Above Cycle	Days	165
Nos of Month Required	Nos	5.5
Starting Date and Month of Bio-composting		
End Date and Month of Bio-composting		

Per Month Press Mud Consumption

Months	Qty. Of Press Mud (M.T.)	Ratio (KL/ Ton of PMC)	Total Consumption (K.L.)
First Cycle	8500	1.6	8500 X 1.6 = 13600
Second Cycle	8500	1.6	8500 X 1.6 = 13600
Third Cycle	2000	1.6	2000 X 1.6 = 3200
Total Qty. of Press Mud	19000	1.6	30400

Detailed study report on

"Extent of damage caused to the environment"

due to sugar units of

M/s Dhampur Sugar Mills Ltd. in Distt. Sambhal, Distt. Bijnor and Distt. Bareilly and Distillery Unit in Bijnor, U.P

(15-18th November 2021 & 1-2nd December 2021)

In the matter of

Adil Ansari Vs.

M/s Dhampur Sugar Mills Ltd., Asmoli

(Sugar Unit) &

M/s Dhampur Sugar Mills Ltd., Dhampur

(Sugar and Distillery Unit) &

M/s Dhampur Sugar Mills Ltd., Meerganj

(Sugar Unit)

[O.A. NO. 539/2019]

-Prepared by-
The Joint Committee of CPCB, UPPCB, CGWA and District Administrations of Bareilly, Sambhal and Bijnor

Constituted by

Hon'ble National Green Tribunal

(Order dated 01st September, 2021)

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DETAILED STUDY REPORT ON EXTENT OF DAMAGE CAUSED TO THE ENVIRONMENT DUE TO UNITS OF M/S DHAMPUR SUGAR MILLS LTD. & ORS., IN DIST. SAMBHAL, DIST. BIJNORE & DIST. BAREILLY AS PER HON'BLE NGT ORDER DATED 01.09.2021 CARRIED OUT BY JOINT COMMITTEE OF CPCB, UPPCB, CGWA & DISTRICT ADMINISTRATIONS OF DISTT. BIJNOR, SAMBHAL & BAREILLY ON 15TH TO 18 NOVEMBER, 2021 AND 1ST TO 2ND DECEMBER 2021

1. Subject Matter

Matter: Adil Ansari Vs. M/s. Dhampur Sugar Mills Ltd. & Ors, O.A. No. 539/2019

Subject: Detailed study report on assessment of the damage caused to the environment which includes contamination of soil, underground water, loss to agricultural crops, contamination of River Sot and river Pilakhar as well as due to air pollution due to Units of M/s Dhampur Sugar Mills Ltd. & ors. in distt. Bijnor, distt. Bareilly and distt. Sambhal.

2. Order of Hon'ble NGT dated 01.09.2021

The Hon'ble NGT in the said matter passed the following directions vide its order dated 01.09.2021:

"*A detailed study, of course, needs to be carried out regarding extent of damage caused to the environment. For that purpose, we constitute a Committee which will have three Members from CPCB (to be nominated by Chairman, CPCB), one from UPPCB and the District Magistrates concerned. The Committee will be constituted within a period of 15 days from today. The committee will hold its first meeting within 15 days, thereafter. It is further directed that the said Committee will assess the damage caused to the environment which includes contamination of the soil, underground water, loss to the agricultural crops, contamination of river Sot and river Pilakhar as well as the damage caused due to air pollution by the units. The Committee will also interact with the farmers and local inhabitants who may have suffered loss/ damage because of pollution caused by the units. It shall thus, assess the compensation not only for the loss/ damage caused to the local inhabitants but also for the cost of remediation and submit its report to the Chairman, CPCB within a period of three months from today*"

3. Constitution of committee as per Hon'ble NGT Order dated 01.09.2021 and Joint Survey and Monitoring in the surrounding areas of Dhampur Sugar Mills Ltd. & Ors on 15.11.2021 to 18.11.2021 and 01.12.2021 to 02.12.2021.

In compliance of Hon'ble NGT order, CPCB constituted a committee having representative from CPCB, UPPCB and concerned District Magistrates vide office order B-19123/WQM-II/Legal/NGT-6/CPCB/2020-21, dated 29.09.2021.

First meeting of the committee was held on 11.10.2021. The committee noted the Supreme Court order dated 08.10.2021 in Civil Appeal No. - 5975/2021 in the matter of M/S Dhampur Sugar Mills Ltd. & Ors. Vs Adil Ansari & Ors., where the Hon'ble Supreme Court has directed that "*a committee may be constituted to make a detailed study. However, no further steps shall be taken by the committee for a period of six weeks"*.

The committee members agreed that there is no stay on undertaking the study by the committee. The committee members undertook deliberation to plan the study as per terms of reference of the committee. After detailed deliberation, the committee arrived at the following decisions;

1. Teams shall be constituted, each team comprising officials from CPCB, UPPCB, District Administration, District Agricultural/ Horticulture Departments, Uttar Pradesh Ground Water Department (UPGWD), Uttar Pradesh Jal Nigam (UPJN), District Health Departments and Department of Fisheries for carrying out study for assessment of the damage to environment which includes contamination of the soil, underground water, loss to the agricultural crops, contamination of river Sot and river Pilakhar as well as the damage caused due to air pollution by the units. The Committee will interact with the farmers and local inhabitants who may have suffered loss/ damage because of pollution caused by the units.
2. UPPCB and District administrations will ensure the participation of officials from concerned department like, District Agricultural/ Horticulture departments, UPGWD, Uttar Pradesh Jal Nigam (UPJN), District Health Departments and Department of Fisheries.
3. Field visit and sampling shall be carried out from 20th Oct, 2021 onwards.
4. Assessment of damage to the soil will be done by District Agricultural Departments. Sampling and testing if required will also be done by District Agricultural Departments.
5. Data for groundwater aquifer flow and groundwater depth shall be provided by UPGWD.
6. Assessment of damage to groundwater will be done by UPGWD. Groundwater sampling for this purpose will be done by UPGWD. Testing of groundwater may be done either by UPGWD or CPCB.
7. Mapping of River Sot, Pilakhar and Ikra drain from origin to confluence, for identification of pollution sources and impact of concerned unit on their quality shall be carried out by teams of officials from CPCB, UPPCB and district administration.
8. Damage caused due to air pollution by the units shall be assessed in terms of loss of yield and produce of crops and fruits. If required local health service center will be contacted to ascertain facts on health impact through District Health Department.
9. Loss to agriculture crops and fruit orchards in terms of yield and productivity shall be assessed by District Agricultural/ Horticulture Departments.
10. The study being carried out by committee shall be video-graphed/ photographed. The videography and photography shall be arranged by UPPCB.
11. UPPCB shall also provide details of public complaints/ newspaper clippings published in past related to the pollution carried by the units.

4. Joint survey of study areas around the units of DSM

Joint teams comprising of officials from CPCB, UPPCB, UPGWB and District administrative officials from Jal Nigam, Agriculture department, Horticulture department carried out survey of the surrounding areas of units of M/s Dhampur Sugar Mills Ltd. & ors. in Meerganj (Bareilly), Asmoli (Sambhal) and Dhampur (Bijnor) on 15.11.2021 to 18.11.2021 and 01.12.2021 to 02.12.2021. The grid sampling method has been adopted for monitoring to assess the damage caused to the environment, with each grid of distance 1.5 km covering a peripheral area of 4 km around the unit.

Joint teams collected samples of ground water from borewell, handpumps and samples of soil from agriculture lands under cultivation, for assessment of any impact on soil and ground water. Joint teams also interacted with the villagers to evaluate the impact of pollution caused by these units i.e., discharge of treated/untreated effluent and boiler ash on health of villagers, animal health and crop productivity. Photography and videography of all inspections/Sampling were carried out during the survey.

5. Joint survey and monitoring in the surrounding areas of M/s Dhampur Sugar Mills Ltd (DSM), Meerganj, District Bareilly (Sugar Unit) and River Pilakhar during Nov. 15-16, 2021

Four teams comprising of officials from CPCB, UPPCB, UPGWB and District administrations, carried out survey and monitoring to assess the damage caused to the environment of 11 selected villages around the DSM unit and monitoring of River Pilakhar during Nov. 15-16, 2021. M/s DSM unit situated at Meerganj tehsil in the Bareilly District of U.P. The peripheral area of 4 km was taken for grid sampling with each grid length of 1.5 km, sampling has been done from each grid. The unit is located between NH24 on its west direction and Nahal canal & Pilakhar River in its north and North-East directions. Pilakhar river flows from North direction of the unit and joins Nahal canal in Sindhauli village of Bareilly thereafter flows towards south and joined Bakhra river. Based on the catchment of Pilakhar and Bakhra river contour gradient considered from the unit towards the flow directions of both the river in North and North-East directions.

Following 11 villages/ area were included in the survey;

i. Village Sindhauli Block-Meerganj, Dist- Bareilly, U.P
ii. Village Nagariya Kalayanpur Block-Meerganj, Dist- Bareilly, U.P
iii. Village Juner Block-Meerganj, Dist- Bareilly, U.P
iv. Village Gula. Block-Meerganj, Dist- Bareilly, U.P
v. Village Nagariya Sadat, Block-Meerganj, Dist- Bareilly, U.P.
vi. Village- Nausana, Block-Meerganj, Dist- Bareilly, U.P.
vii. Village- Kulchha Khurd, Block-Meerganj, Dist- Bareilly, U.P.
viii. Village Sillapur Block-Meerganj, Dist- Bareilly, U.P
ix. Village Khamariya sani Block-Meerganj, Dist- Bareilly, U.P
x. Village Sanjarpur Block-Meerganj, Dist- Bareilly, U.P
xi. Village Thiriya Brahmpur Block-Meerganj, Dist- Bareilly, U.P

Details of survey and monitoring are as under:

5.1. Assessment of contamination of soil

Twenty-two soil samples were collected from 11 selected villages to assess the soil health with respect to 12 parameters i.e. three macro-nutrients namely Nitrogen (N), Phosphorus (P) and Potassium (K); one secondary nutrient, Sulphur (S); five micro nutrients namely Boron (B), Zinc (Zn), Copper (Cu), Iron (Fe) and Manganese (Mn); and three physical parameters, pH, Electrical conductivity (EC) and Organic carbon (OC).

Location of soil samples collected with respect to the DSM unit are shown in figure 1 below;

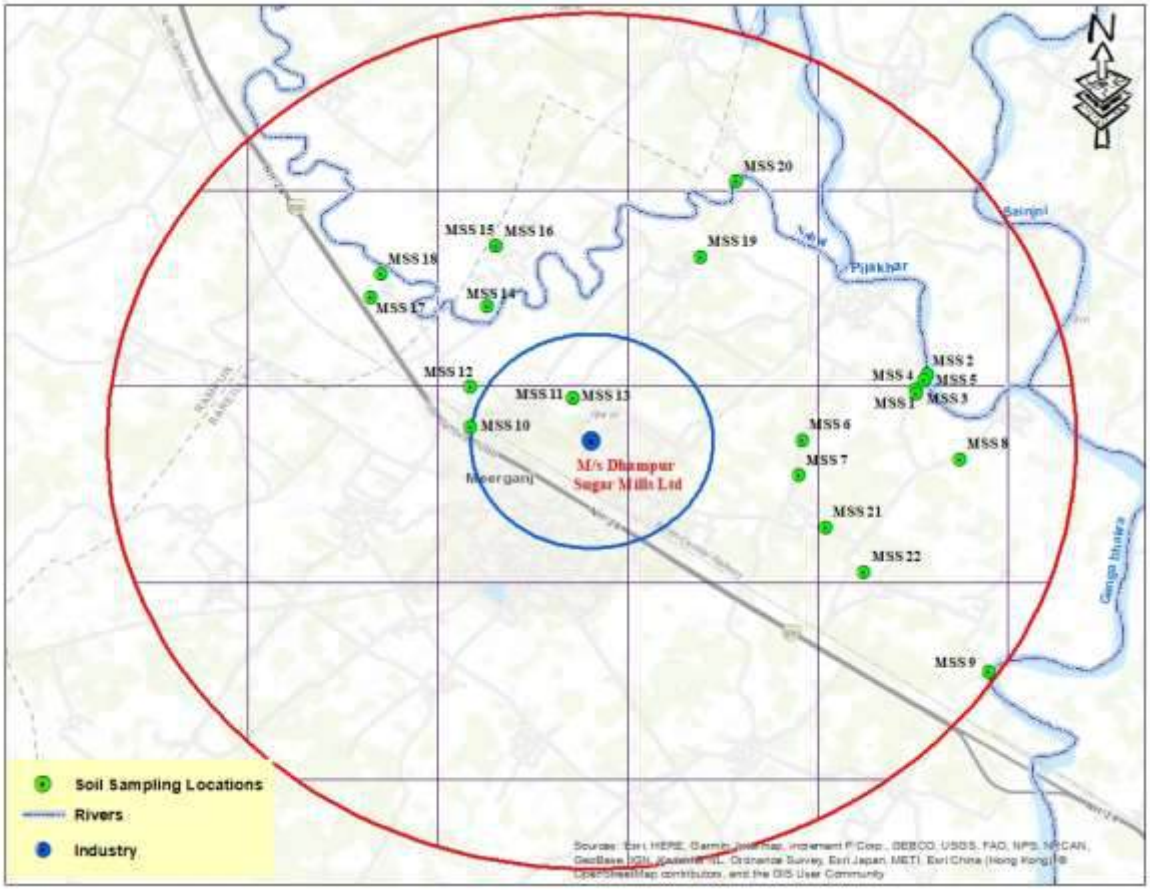


Figure 5.1 Location of soil sample collected in Meerganj block, Bareilly

Table 5.1 Details of soil samples collected from Meerganj block

Sample code	Sample location	Coordinate		Remark
		Latitude	Longitude	
MSS 1	Village- Sidhauli	28.555370,	79.241129	Ploughed field
MSS 2	Village- Sidhauli	28.555805,	79.241376	River bed of Pilakhar River
MSS 3	Village- Sidhauli	28.555307,	79.241068	Reported effluent discharge point near River Pilakhar
MSS 4	Village- Sidhauli	28.554621,	79.240418	Ploughed field
MSS 5	Village- Sidhauli	28.554231,	79.240413	Sugarcane field

Sample code	Sample location	Coordinate		Remark
		Latitude	Longitude	
MSS 6	Village- Sidhauli	28.550261,	79.230822	Ploughed field
MSS 7	Village- Nagariya Kalayanpur	28.5473173,	79.2304540	Ploughed field
MSS 8	Village- Jauner	28.548647,	79.244092	Sugarcane field
MSS 9	Village- Gula	28.530777,	79.246527	Ploughed field
MSS 10	Village- Nagariya Sadat	28.551421	79.2027740	Sugarcane
MSS 11	Village- Nagariya Sadat	28.5538	79.2114105	Ploughed field
MSS 12	Village- Nagariya Sadat	28.5548019	79.2027740	Mustard/Sugarcane
MSS 13	Village- Nagariya Sadat	28.5538444	79.21141052	Banana Orchard
MSS 14	Village- Nausana	28.56155586	79.20422363	Guava Orchard
MSS 15	Village- Nausana	28.56662	79.204939	Mustard field
MSS 16	Village- Nausana	28.566635	79.204968	Sugarcane field
MSS 17	Village- Kulchha Khurd	28.56234	79.1944	Mustard field
MSS 18	Village- Kulchha Khurd	28.56428	79.19519	Garlic field
MSS 19	Village-Sillapur	28.56573	79.2222	Sugarcane field
MSS 20	Village- Khamariya Sani	28.5721	79.22517	Sugarcane field
MSS 21	Village- Sanjarpur	28.54294	79.23276	Wheat field
MSS 22	Village-Thiriya Brahmpur	28.53915	79.236	Sugarcane field

Analysis results of soil samples collected are as below;

Table 5.2 Analysis results of physical parameters and macro-nutrients of soil samples collected from Meerganj block

Sample Code	pH	Available Organic Carbon		Available Phosphate		Available Potash		Available Nitrogen		Electrical Conductivity	
		(%)	Fertility Class	kg/ ha	Fertility Class	kg/ha	Fertility Class	kg/ha	Fertility Class	dS m-1	Fertility Class
MSS 1	7.1	0.34	L	9	L	89.6	L	76.5	L	1	CG
MSS 2	7.4	0.28	L	4.5	L	67.2	L	63	L	**1.8**	CG
MSS 3	7.7	0.34	L	18	M	123.2	M	76.5	L	**1.2**	CG
MSS 4	7.5	0.3	L	9	L	44.8	L	67.5	L	**1.5**	CG
MSS 5	7.1	0.39	L	4.5	L	44.8	L	87.75	L	1	CG
MSS 6	6.5	0.21	L	9	L	44.8	L	47.25	L	**1.2**	CG
MSS 7	6.5	0.36	L	4.5	L	33.6	L	81	L	**1.5**	CG
MSS 8	6.9	0.16	L	4.5	L	56	L	36	L	**1.5**	CG
MSS 9	7	0.19	L	4.5	L	56	L	42.75	L	**1.6**	CG
MSS 10	7.9	0.09	L	9	L	67.2	L	20.25	L	**1.4**	CG
MSS 11	7.5	0.19	L	4.5	L	44.8	L	42.75	L	**1.1**	CG
MSS 12	7.2	0.27	L	4.5	L	67.2	L	60.75	L	**1.5**	CG
MSS 13	6.8	0.25	L	9	L	67.2	L	56.25	L	**1.7**	CG
MSS 14	7.3	0.37	L	4.5	L	67.2	L	83.25	L	1	CG
MSS 15	7.9	0.16	L	9	L	33.6	L	36	L	**1.1**	CG
MSS 16	7.1	0.24	L	9	L	78.4	L	54	L	1	CG
MSS 17	7.1	0.34	L	4.5	L	44.8	L	76.5	L	**1.6**	CG
MSS 18	7.4	0.21	L	4.5	L	134.4	M	47.25	L	**1.3**	CG
MSS 19	7.2	0.25	L	4.5	L	44.8	L	56.25	L	**1.3**	CG
MSS 20	7.2	0.12	L	4.5	L	67.2	L	27	L	**2**	CGSC
MSS 21	6.9	0.13	L	4.5	L	56	L	29.25	L	**1.2**	CG
MSS 22	7.3	0.12	L	4.5	L	56	L	27	L	1	CG

Note: Values of Nitrogen (N), Phosphorus (P) and Potassium (K) are in kg/hectare. Unit of Electrical conductivity (EC) is in deci Seimens per meter (dS m^{-1}). Organic carbon (OC) is represented in %.

***L- Low, M-Medium, CG - Critical for germination, CGSC – Critical for Growth of Sensitive Crops**

Table 5.3 Analysis results of secondary nutrient and micro-nutrients of soil samples collected from Meerganj block

Sample Code	S	B	Cu	Fe	Mn	Zn
MSS 1	10.73	0.97	0.23	3.44	3.76	0.04
MSS 2	12.9	0.62	0.46	6.36	2.55	1.41
MSS 3	17.19	1.09	0.12	5.38	4.88	0.03
MSS 4	12.76	0.72	0.23	4.89	5.1	0.02
MSS 5	14.06	0.62	0.23	4.78	4.37	0.03
MSS 6	12.64	0.56	0.23	4.83	3.76	0.02
MSS 7	11.34	0.82	0.35	4.83	5.45	0.03
MSS 8	11.08	1.05	0.35	4.94	5.86	0.03
MSS 9	10.44	0.74	0.58	4.78	5.2	0.05
MSS 10	0.69	4.93	0.6	0.04	10.73	4.34
MSS 11	0.46	5.96	0.68	0.03	12.64	4.17
MSS 12	0.58	5.53	0.95	0.03	9.14	4.89
MSS 13	0.58	5.08	0.44	0.03	9.98	4.28
MSS 14	0.46	5.33	0.36	0.02	13.54	4.67
MSS 15	0.81	4.85	0.82	0.04	11.37	4.78
MSS 16	0.46	5.18	0.72	0.02	10.44	4.61
MSS 17	0.46	4.22	0.72	0.03	12.47	4.56
MSS 18	0.46	4.68	0.56	0.02	13.08	5.44
MSS 19	12.64	0.56	0.58	5.38	4.95	0.03
MSS 20	12.79	0.56	0.58	3.54	5.35	0.04
MSS 21	12.96	0.72	0.92	3.54	5.38	0.03
MSS 22	13.54	0.89	0.42	4.67	5.56	0.06

Note: values of Boron (B), Zinc (Zn), Copper (Cu), Iron (Fe), Manganese (Mn) and Sulphur (S) are in ppm.

Observation based on interaction with farmers on Soil health:

Residents of Sindhauli village and labours working in the agricultural field of Sindhauli village informed the team about effluent discharge into river Pilakhar. The joint team visited the reported discharge point near Pilakhar River and observed the outlet of the pipeline covered with sacks, hay/agricultural waste. However, no discharge was observed at the time of inspection. Joint team collected sample MSS3 from the mentioned location, which doesn't show any physio-chemical characteristics different from other soil samples collected from Sindhauli village.

Observations based on the analysis results of soil samples:

1. pH, Electrical conductivity (EC) and Organic carbon (OC) value range from 6.5 - 7.9, 1 - 2 dS m-1 and 0.09 - 0.39%, respectively.
2. Nitrogen (N), Phosphorus (P), Potassium (K) and Sulphur (S) value range from 20.25 - 87.75 kg/hectare, 4.5 - 18 kg/hectare, 33.6 - 134.4 kg/hectare and 0.46 - 17.19 ppm, respectively
3. Boron (B), Zinc (Zn), Copper (Cu), Iron (Fe) and Manganese (Mn) value range from 0.56 - 5.96 ppm, 0.02 - 5.44 ppm, 0.12 - 0.95 ppm, 0.02 - 6.36 ppm and 2.55 - 13.54 ppm, respectively.
4. District Agriculture Department, Bareilly, vide letter dated 23.03.2022 (**Annexure-1**) has reported that;

- *No industrial factor was evident which damage the crops and crop yield.*
- *pH of 22 soil samples found normal and values of other parameters are also in range as found in the area.*
- *Damage to crops/agricultural field due to industry not evident since last 05 years as District Agriculture Department conduct periodic survey to monitor the crop productivity/cultivation. In past few years the crop production was found normal.*

5.2. Assessment of contamination of ground water

Ground water samples were collected from 11 villages to assess its quality. Samples were collected from handpumps and borewell located in surveyed villages and tube well located in agricultural fields at different depths of 40 ft to 200 ft to evaluate the groundwater quality. Surface water samples were also collected from 02 different locations in Village Sindhauli.

Location of ground water and surface water samples collected from surrounding localities of the DSM unit are shown in figure below:

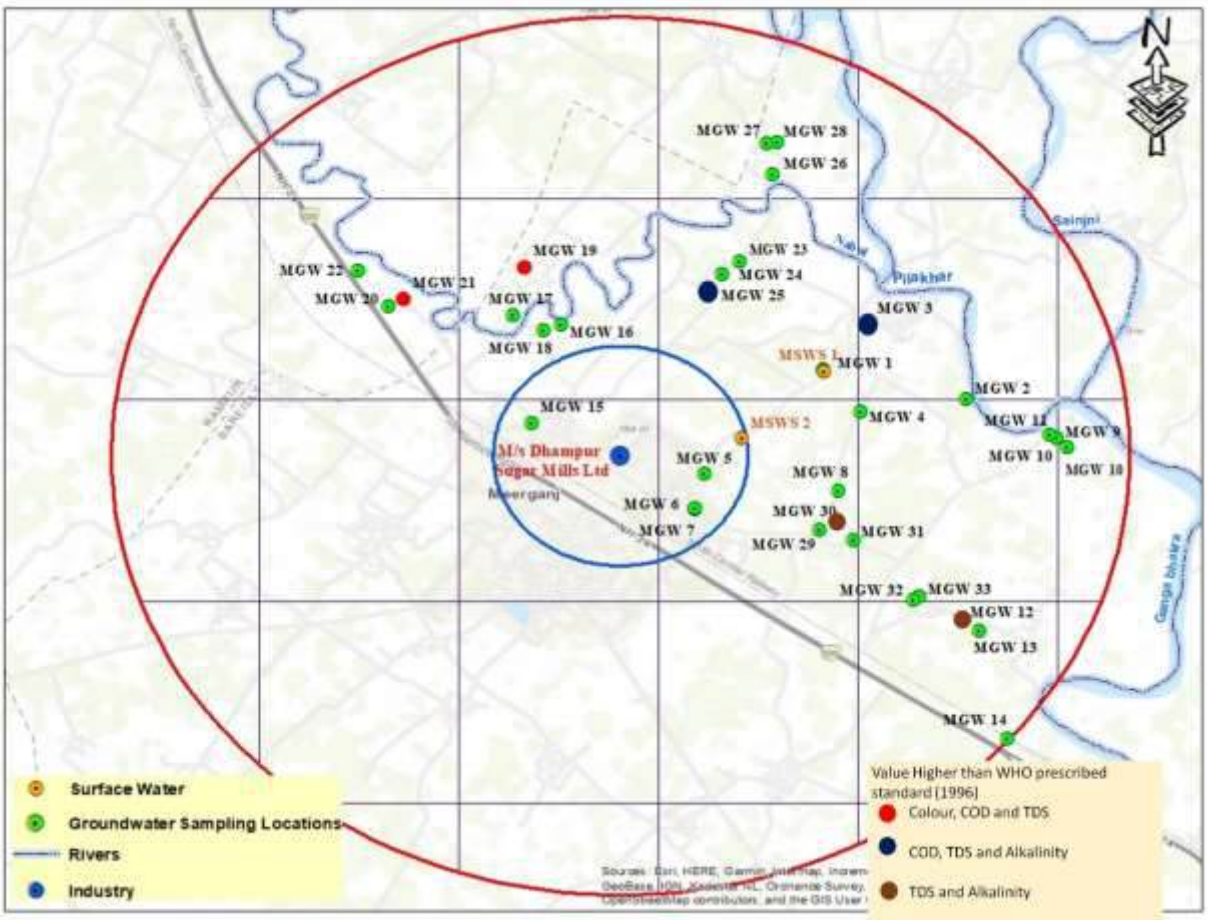


Figure 5.2 Sampling locations of ground water and surface water samples collected in Meerganj

Details of ground water samples collected:

33 groundwater samples were collected from borewell/ handpumps and tubewells around 11 villages. All samples were analysed for general parameter and analysis for heavy metals were carried out for 11 samples (one sample from each village). River Pilakhar flows from north (Bazpur, Uttarakhand) towards south and confluence with river Bakhra at Village Jauner, Bareilly. Considering contour gradient of the study area towards confluence point of river Pilakhar with river Bakhra at Jauner Village, location upstream side (U/s) of the confluence point may be considered as having less potential of impact of any discharge on groundwater and villages/locations at downstream (D/s) side of confluence point may be considered as high potential of groundwater contamination due to any discharge from industrial unit. 14 groundwater samples were collected from U/s locations and 19 groundwater samples were collected from D/s locations. The groundwater samples were compared with prescribed specification of ionic concentration in groundwater by WHO standards (1996).

Details of the samples collected are as follow:

Table 5.4 Details of ground water samples collected

Sample code	Sample location	Bore well / Handpump	Depth (ft)	MOC of pipe	Coordinate	
					Latitude	Longitude
MGW 1	Village Sidhauli	Hand pump	150	GI	28.557365	79.229294
MGW 2	Village Sidhauli	Hand pump	100	GI	28.554841	79.240812
MGW 3	Village Sidhauli	Hand pump	20	MS	28.561023	79.232951
MGW 4	Village Sidhauli	Hand pump	100	MS	28.553796	79.232273
MGW 5	Village Nagariya kalyanpur	Hand pump	100	MS	28.5487713	79.219740
MGW 6	Village Nagariya kalyanpur	Hand pump	55	PVC	28.545840	79.219013
MGW 7	Village Nagariya kalyanpur	Hand pump	100	MS	28.545921	79.218970
MGW 8	Village Nagariya kalyanpur	Bore-well	200	GI	28.5473173	79.230454
MGW 9	Village Jauner	Hand pump	45	PVC	28.551639	79.248017
MGW 10	Village Jauner	Hand pump	45	PVC	28.551941	79.247473
MGW 11	Village Jauner	Hand pump	40	MS	28.550869	79.248862
MGW 12	Village Gula	Hand pump	40	PVC	28.536777	79.240470
MGW 13	Village Gula	Hand pump	100	GI	28.535848	79.241833
MGW 14	Village Gula	Hand pump	100	GI	28.526925	79.244092
MGW 15	Village Nagariya Sadat	Handpump	150	GI	28.552877	79.205871
MGW 16	Village Nagariya Sadat	Handpump	80	PVC	28.560958	79.208282
MGW 17	Village Nausana	Handpump	80	GI	28.561769	79.204338
MGW 18	Village Nausana	Handpump	120	PVC	28.560485	79.206871
MGW 19	Village Nausana	Handpump	40	PVC	28.565702	79.205314
MGW 20	Village Kulchha Khurd	Handpump	150	GI	28.562509	79.194396
MGW 21	Village Kulchha Khurd	Borewell	65	GI	28.563056	79.195581

Sample code	Sample location	Bore well / Handpump	Depth (ft)	MOC of pipe	Coordinate	
					Latitude	Longitude
MGW 22	Village Kulchha Khurd	Borewell	200	MS	28.565441	79.191913
MGW 23	Village Sillapur	Hand pump	180	GI	28.56621	79.22253
MGW 24	Village Sillapur	Hand pump	80	MS	28.56518	79.22114
MGW 25	Village Sillapur	Hand pump	60	MS	28.5636	79.22021
MGW 26	Village Khamariya sani	Hand pump	180	MS	28.57335	79.22524
MGW 27	Village Khamariya sani	Hand pump	80	MS	28.57596	79.22557
MGW 28	Village Khamariya sani	Hand pump	80	MS	28.57593	79.22472
MGW 29	Village Sanjarpur	Hand pump	80	MS	28.54412	79.22895
MGW 30	Village Sanjarpur	Hand pump	60	MS	28.54474	79.23039
MGW 31	Village Sanjarpur	Hand pump	100	MS	28.54331	79.23171
MGW 32	Village Thiriya Brahmpur	Hand pump	100	MS	28.53864	79.23696
MGW 33	Village Thiriya Brahmpur	Hand pump	60	MS	28.53837	79.23655

Analysis results of ground water samples collected during survey is tabled below;

Table 5.5 Analysis results of ground water samples

Sample Code	Depth (ft)	pH	Color	COD	TDS	Total Alkalinity	Total Hardness	Cl^-	F^-	SO_4^{-2}	NO_3-N	As	Co	Cr	Cu	Fe	Mn	Ni	Pb	Zn
WHO Std.				4.0	500	30-500	250-500	100	1.5 – 2.4	250	10-45	0.1	0.05	0.01	0.2	5.0	0.2-0.3	0.2	0.1	2.0
MGW1	150	7.4	BDL	BDL	416	363	291	8	BDL	34	BDL	-	-	-	-	-	-	-	-	-
MGW2	100	7.7	BDL	BDL	454	363	154	14	BDL	39	BDL	0.01	BDL	BDL	BDL	2.06	0.12	BDL	BDL	0.29
MGW3	20	7.5	BDL	6	642	528	311	30	BDL	100	BDL	BDL	BDL	BDL	0.2	3.71	0.44	BDL	BDL	5.18
MGW4	100	7.6	BDL	8	350	282	182	12	BDL	33	BDL	-	-	-	-	-	-	-	-	-
MGW5	100	7.4	BDL	BDL	288	250	255	8	BDL	BDL	BDL	-	-	-	-	-	-	-	-	-
MGW6	55	7.6	BDL	9	474	411	327	18	BDL	28	BDL	0.02	BDL	BDL	BDL	1.98	0.24	BDL	BDL	0.01
MGW7	100	7.7	BDL	6	342	314	323	16	BDL	11	BDL	-	-	-	-	-	-	-	-	-
MGW8	200	7.3	BDL	BDL	356	302	295	10	BDL	25	BDL	0.01	BDL	BDL	BDL	0.36	0.14	BDL	BDL	BDL
MGW9	45	7.6	BDL	BDL	602	403	319	10	0.3	93	8.6	BDL	BDL	BDL	BDL	0.4	0.08	BDL	BDL	0.02
MGW10	45	7.4	BDL	BDL	428	371	242	20	BDL	43	2.1	-	-	-	-	-	-	-	-	-
MGW11	40	7.2	BDL	BDL	374	294	190	10	0.3	46	BDL	BDL	BDL	BDL	BDL	1.58	0.31	BDL	BDL	0.14
MGW12	40	7.5	BDL	BDL	696	580	400	42	0.2	109	BDL	-	-	-	-	-	-	-	-	-
MGW13	100	7.6	BDL	BDL	374	298	537	12	BDL	57	BDL	0.02	BDL	BDL	BDL	1.16	0.13	BDL	BDL	0.15
MGW14	100	7.4	BDL	BDL	344	242	263	8	0.2	61	BDL	-	-	-	-	-	-	-	-	-
MGW15	150	7.1	BDL	BDL	546	431	380	14	BDL	84	BDL	-	-	-	-	-	-	-	-	-
MGW 16	80	7.5	BDL	6	716	467	501	40	BDL	273	BDL	BDL	BDL	BDL	BDL	3.52	0.46	BDL	BDL	0.39
MGW 17	80	7.7	BDL	5	366	298	267	12	BDL	42	BDL	-	-	-	-	-	-	-	-	-
MGW 18	120	7.5	BDL	BDL	316	262	267	10	BDL	38	BDL	-	-	-	-	-	-	-	-	-

Sample Code	Depth (ft)	pH	Color	COD	TDS	Total Alkalinity	Total Hardness	Cl^-	F^-	SO_4^{-2}	NO_3-N	As	Co	Cr	Cu	Fe	Mn	Ni	Pb	Zn
MGW 19	40	7.2	24	10	948	709	634	108	BDL	115	BDL	0.01	BDL	BDL	BDL	3.37	0.61	BDL	BDL	0.12
MGW 20	150	7.7	BDL	BDL	362	298	287	16	BDL	27	BDL	-	-	-	-	-	-	-	-	-
MGW 21	65	7.1	96	9	718	472	404	72	BDL	138	BDL	BDL	BDL	BDL	BDL	7.94	1.14	BDL	BDL	BDL
MGW 22	200	7.5	BDL	BDL	436	326	255	16	BDL	56	BDL	-	-	-	-	-	-	-	-	-
MGW 23	180	7.3	BDL	BDL	388	286	339	12	BDL	85	BDL	BDL	BDL	BDL	BDL	1.16	0.17	BDL	BDL	0.05
MGW 24	80	7.2	BDL	BDL	522	480	368	12	BDL	38	BDL	-	-	-	-	-	-	-	-	-
MGW 25	60	7.4	BDL	29	1014	806	343	106	0.4	BDL	0.3	0.11	BDL	BDL	BDL	7.88	1.57	BDL	BDL	BDL
MGW 26	180	7.6	BDL	BDL	488	391	271	28	BDL	83	BDL	0.02	BDL	BDL	BDL	2.24	0.29	BDL	0.02	0.27
MGW 27	80	7.6	BDL	BDL	352	294	311	12	BDL	62	BDL	-	-	-	-	-	-	-	-	-
MGW 28	80	7.6	BDL	BDL	366	294	271	14	0.2	75	BDL	0.01	BDL	BDL	BDL	0.85	0.11	BDL	BDL	0.09
MGW 29	80	7.5	BDL	BDL	318	250	218	18	BDL	49	BDL	0.02	BDL	BDL	BDL	2.58	0.12	BDL	BDL	0.14
MGW 30	60	7.4	BDL	BDL	842	617	493	34	BDL	296	0.3	-	-	-	-	-	-	-	-	-
MGW 31	100	7.5	21	BDL	332	294	295	12	BDL	29	BDL	-	-	-	-	-	-	-	-	-
MGW 32	100	7.5	BDL	BDL	334	262	263	14	BDL	40	BDL	0.03	BDL	BDL	BDL	0.23	0.17	BDL	BDL	0.04

Sample Code	Depth (ft)	pH	Color	COD	TDS	Total Alkalinity	Total Hardness	Cl^-	F^-	SO_4^{-2}	NO_3-N	As	Co	Cr	Cu	Fe	Mn	Ni	Pb	Zn
MGW 33	60	7.3	BDL	BDL	466	391	303	32	0.4	35	BDL	-	-	-	-	-	-	-	-	-

Note: All units in mg/l except pH and colour; colour measured in colour units

WHO standard values are indicated below the name of the respective parameter. Higher observed values are highlighted.

Observation based on interaction with farmers on ground water:

1. Resident of village Sindhauli, Gula, Kulchha, Thiriya Brahmpur, Nagariya Sadat and Nausana informed that ground water from handpump/borewell turns yellowish after keeping it in vessels for few hours. Total 17 groundwater samples were collected from village Sindhauli (4 samples), Gula (3 samples), Kulchha (3 samples), Thiriya Brahmpur (2 samples), Nagariya Sadat (2 samples) and Nausana (3 samples). Out of 17 groundwater samples collected from above mentioned villages, seven groundwater samples (two samples from village Sindhauli and one sample each from above mentioned villages) were analysed for heavy metals. The groundwater analysis of samples from these villages suggests Fe value (Fe - 7.91 ppm) higher than WHO groundwater standard (1996) in one sample (village Kulcha) and higher than drinking water standard ISO:10500 (2012) in six samples (village Sindhauli, Gula, Kulcha, Nagariya Sadat and Nausana). All the samples were from depth 20-80 ft, which suggest that, the changes in colour of water to yellow after few minutes of storing might be due to oxidation of iron present in groundwater. Out of seven samples analysed for heavy metals three sample were from u/s of the unit and other four sample were d/s side of the unit.
2. Residents of Village Kulchha Khurd and Nausana informed that they are getting sick (majorly stomach related diseases and issue of stone formation) due to continuous consumption of groundwater for drinking purposes. Cattles are also getting sick due to continuous consumption of groundwater for drinking purposes. Total six samples were collected from village Kulchha Khurd (3 samples) and Nausana (3 samples); out of six samples two samples (MGW 19 and 21), one from each village show high TDS, Total Alkalinity and Total Hardness of 948 & 718 mg/l, 709 & 472 mg/l and 634 & 404 mg/l respectively for MGW 19 & 21, which may be the reason of gastro-intestinal issues. Both the samples were collected from 40-65 ft of depth from North & North -west direction of the unit.

Observations based on the analysis results of ground water:

1. **Colour** (24 & 96 hazen), **COD** (10 & 9 mg/l) and **TDS** (948 & 718 mg/l) were found higher than WHO prescribed limit at MGW 19 and 21, respectively, which is near left and right bank of Nahal canal, respectively. Both locations were u/s side of the unit having less potential of impact of any discharge on groundwater.
2. **COD** (6 & 29 mg/l), **TDS** (642 & 1014 mg/l), and **Alkalinity** (528 & 806 mg/l) were higher than WHO prescribed limit at MGW 3 and MGW 25, respectively. **TDS** (696 & 842 mg/l) and **Alkalinity** (580 & 617 mg/l) were higher than WHO prescribed limit at MGW 12 and MGW 30 respectively. All the mentioned samples were from shallow depth of 20-80ft of borewell/ handpump. All the locations were from outside 1 km of radial distance from the unit. Sample MGW 3 and MGW 25 were nearer to Nahal Canal and River Pilakhar at u/s side of the unit and MGW 12 and 30 were towards d/s side of the unit. Thus, both u/s and d/s side of the unit shows higher COD, TDS, and Alkalinity which do not show any distinct pattern of groundwater contamination.
3. All heavy metals are within WHO prescribed limit of groundwater quality except **Fe and Mn** at MGW – 21 & 25 (Fe – 7.94 & 7.88 mg/l and Mn – 1.14 & 1.57 mg/l, respectively at

MGW 21 and 25) and Mn at MGW 3, MGW 11, MGW 16, MGW 19, MGW 21 and MGW 25 (varies from 0.31 to 1.57 mg/l).

5.3. Assessment of crop damage

Observation based on interaction with farmers on crop damage:

- Sh. Sumeri Lal, a farmer and resident of village Sindhauli engaged in growing vegetables (cabbage and coriander) informed the pollution is caused by boiler ash from chimney of nearby sugar mill. He informed that boiler ash has adverse impact on yield/productivity in vegetables (loss by 30% in production), which results in less income from the vegetables. The same issues were informed in case of nearby Banana orchard. Photographic evidence of ash deposition on leaves of cabbage and nearby crops in vegetable field were collected.
- Residents of Village Nagariya Sadat informed that fly ash (boiler ash) coming from stack of nearby sugar mill cause difficulty in breathing and deposits over the crops resulting in damage to crops (in the form of low yield).

Observation based on assessment of Agricultural, Horticulture and Regional Forest Department on crop damage:

- District Agriculture Department, Bareilly has informed that around 2850 hectare of agriculture land exist around the DSM unit which is generally used for cultivation of sugar cane and others crops but no adverse impact has been found of crop damage in last five-years by district office during regular inspections.
- Based on the observation of District Horticulture Department, Bareilly, no evidence has been found of orchard/garden damage due to the pollution by DSM Meerganj unit in the surveyed areas.
- As informed by Regional Forest Department, Meerganj range, Bareilly, no evidence of damage has been found on trees due to the pollution by DSM Meerganj unit.
- It may be concluded from findings of survey conducted by District Agriculture, Horticulture and Forest departments and interaction with local farmers & residents that there are no evidence of loss of yield or damage to crop, however, deposition of fly ash on leaves of crops/ orchard & cloths of residents of nearby villages do occur which may cause inconvenience/ uneasiness.
- District Cane Officer, Bareilly vide letter dated 29.03.2022 has provided the statistical data of sugarcane crop production for the last 05 years (i.e. year 2017-18, 2018-19, 2019-20, 2020-21 and 2021-22) of nearby areas of M/s DSM, Meerganj, District Bareilly (Sugar Unit). **Annexure-2**
- District Horticulture Officer, Bareilly submitted that *there was no issue observed regarding any type of damage to gardens or orchard due to industrial pollution during survey of villages located nearby M/s DSM, Meerganj, District Bareilly (Sugar Unit).* **Annexure-6**
- Regional Forest Officer, Meerganj Range, Bareilly also reported that *there was no adverse impact of industrial pollution on vegetation found in villages located nearby M/s DSM, Meerganj, District Bareilly (Sugar Unit) and no evidence of any factor was observed regarding environmental damage.* **Annexure-7**

5.4. Survey and monitoring of Pilakhar river

Survey and monitoring of the river Pilakhar and its tributaries were carried out on 15th and 16th November 2021. River water samples were taken during monitoring to assess the river water quality. River Pilakhar originates from Bazpur area. River Pilakhar is a seasonal river and receive flow from local drains, canals and surface runoff during rainy season. Details of surveyed location are shown in Figure 5.3 and 5.4;

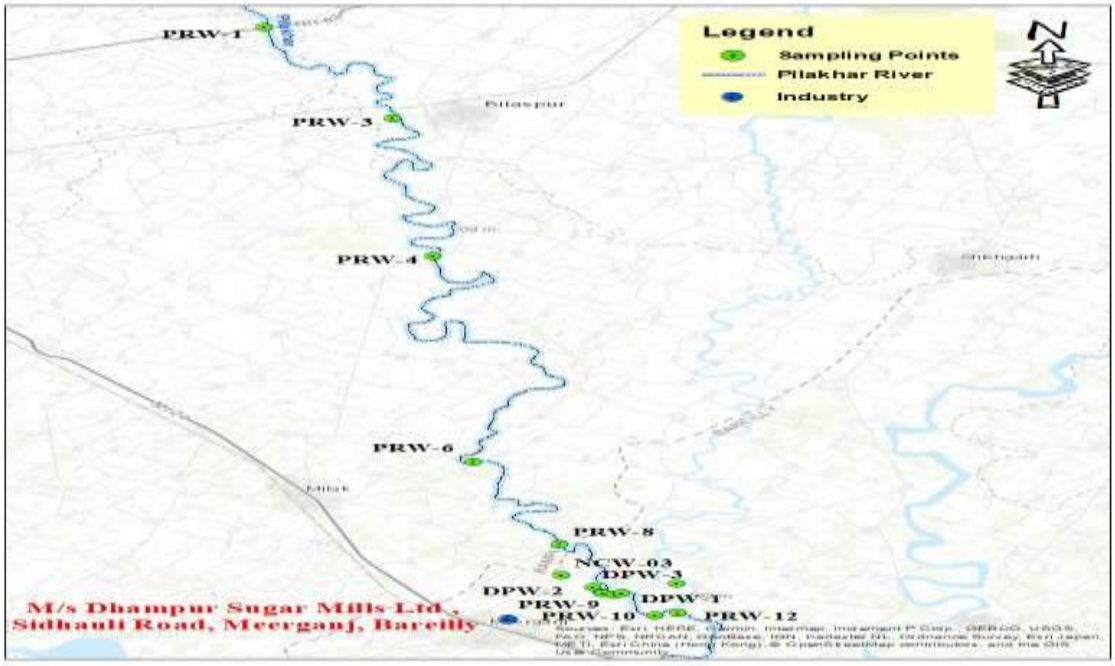


Figure 5.3 Sampling locations of Pilakhar river

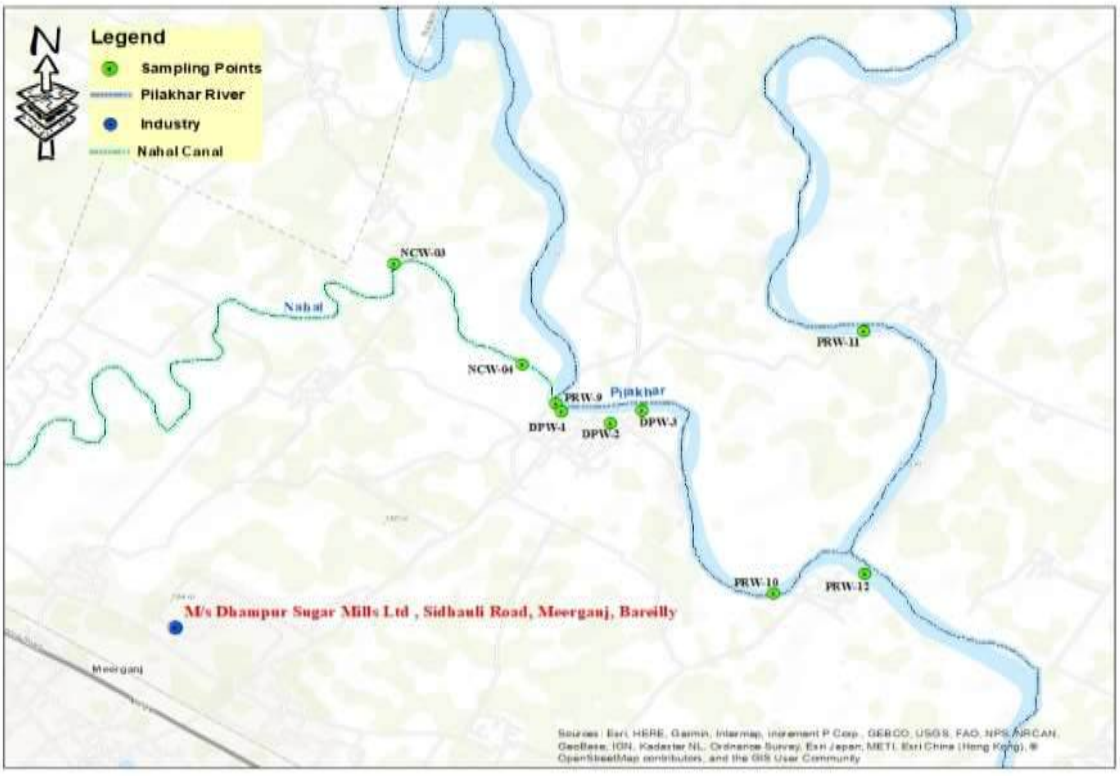


Figure 5.4 Sampling locations of Pilakhar river

Details of surveyed locations are tabled below:

Table 5.6 Details of surveyed locations of river Pilakhar

Location code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
Sampling details of river water e.g. Sot river					
PRW-1	River Pilakhar near Bhot Police station, Rampur-Bilaspur road, Lalavpur, UP	28.847994, 79.1587143	Flowing	Yes	• Flow is observed in Pilakhar River • As informed by locals the river water is being used for irrigation purpose.
PRW-2	River Pilkhar at Ashokpur village d/s to Bhot	28.831808, 79.164582	Flowing	No	• As informed by locals the river water is used for irrigation purpose. • No drains were observed to be discharging into the river.
PRW-3	River Pilkhar at Kemri dam bridge, Rampur Road	28.802164, 79.187453	Flowing	Yes	• River water was found being used for the irrigation purpose.
PRW-4	River Pilkhar at Simra, Rampur	28.733113, 79.196484	Stagnant water due to barrage	Yes	• Located on the passage-way bridge at Simra, Rampur.
PRW-5	River Pilkhar at Khamariya village d/s to Simra Rampur	28.699273, 79.190348	Stagnant	No	• No drains were observed to be discharging directly from the village to river Pilakhar during visit. • The river water was observed stagnant.
PRW-6	River Pilakhar at Pashupura bridge, near Zamapur, Dist. Rampur	28.629507, 79.205264	Stagnant	Yes	• The river water was observed stagnant at this location. • No drains were observed to be discharging into the river
PRW-7	River Pilakhar at Chak Behta d/s to Pashupura bridge, near Zamapur, Rampur	28.609064, 79.213309	Stagnant	No	• No drains were observed discharging directly from the village to river Pilakhar during visit. • The river water was observed stagnant
PRW-8	River Pilakhar at U/s of Sindhauli	28.588194,	Flowing	Yes	• Flow was observed in River

Location code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
	near village Saijna-Ki-Gotia	79.224394			• No pollution source was observed in nearby area.
NCW-01	River channel (Peria canal) near Saijana-Ki-Gotia before c/f with river Pilakhar (Dry/water body stagnant)	28.587313, 79.232517	Stagnant and dry at pockets	**No**	• As informed, Peria canal discharge into river Pilakhar • Peria canal was found having patches of water at upstream of road.
NCW-02	Nahal canal near Kulcha Khurd village U/s of Khamaraia Sani village	28.560123, 79.203597	Dry	No	• It is informed that Nahal canal which earlier discharged into river Pilakhar but found dry during survey. • Only backflow of river Pilakhar in monsoon period/ high flow reaches the upstream locations of its confluence with Pilakhar.
NCW-03	Nahal (Canal Channel) near village Khamaria Sani bridge	28.572361, 79.224893	Stagnant	Yes	• Only backflow of river Pilakhar in monsoon period/ high flow of Pilakhar reaches the location near Khamaria Sani. • Nahal Canal Water observed stagnant and clear in patches.
NCW-04	Nahal (Canal Channel) near Sindhauli bridge before C/f with river Pilakhar (Lean flow)	28.566242, 79.231911	Lean/meagre flow	Yes	• This sampling location on Nahal canal just 100 meters before confluence of river Pilakhar near cremation ghat. • Very lean flow was observed in Nahal canal during monitoring at this location.
PRW-9	River Pilakhar near Sindhauli bridge u/s of Sindhauli village after confluence of Nahal Channel	28.563889, 79.233761	Flowing	Yes	• River water at this location found muddy. • Depth of river water approximately was 8-10 feet and width were approximately 15 meters.

Location code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
					• Sindhauli drain -1 (DPW-01) was observed in D/s from this sampling location.
DPW-1	Drain-1 from Sindhauli village near Sindhauli bridge and Chaukidar house	28.56339, 79.234057	Flow observed but not measurable	Yes	• Drain was carrying domestic sewage & confluence at right bank of the river Pilakhar. • Lean flow was observed
DPW-2	Drain-2 from Sindhauli village near Purana Mandir, Sindhauli	28.562652, 79.236775	Flow observed but not measurable	Yes	• Drain carries domestic sewage from village and colour of the drain water was observed dark grey/black at the time of visit. • Flow was observed but flow not measurable due to lean flow • Drain was covered with solid waste and construction RCC material from nearby houses and old drain channel.
DPW-3	Drain-3 from Sindhauli village near Mathia D/s	28.56345, 79.238492	Flow observed	Yes	• Drain was carrying domestic sewage & confluence with at right bank of the river Pilakhar. • Lean flow was observed.
PRW-10	River Pilakhar before c/f with river Bhakhra at u/s of Jauner village near Shiv Mandir	28.552318, 79.245683	Flowing	Yes	• This sampling location of river Pilakhar is at U/s of Jauner village and before confluence with river Bhakhara. • No pollution source observed in vicinity.
PRW-11	River Bhakhra near Narkhera village, Brhamdev Mandir u/s of c/f with river	28.568276, 79.250597	Flowing	Yes	• Flow was observed in River. • No pollution source observed in vicinity.

Location code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
PRW-12	River Bhakhra after C/F of river Pilakhar at D/s of Jauner village	28.553501, 79.250693	Flowing	Yes	• River Bhakhara flows near the farm lands on bank of river, hazy water observed after confluence of river Pilakhar. • A drain from Jauner village was observed at D/s from this sampling locations discharging into river Bhakhara.

Analysis results of sample collected during survey and monitoring of Pilakhar river is tabled below:

Table 5.7 Analysis results of Pilakhar River/Canal/drain

	Location code	pH	Colour	COD	BOD	TSS	TDS	Cl^-	NO_3-N	SO_4^{2-}	PO_4-P	NH_3-N	DO	Cr	Cu	Fe	Mn	Ni	Pb	V	Zn
Stretch - I	PRW-1	8	103	8	1.7	40	498	20	0.5	118	BDL	0.4	7.9	BDL	BDL	1.35	0.06	BDL	BDL	BDL	0.02
	PRW-3	8.1	110	6	1.3	46	460	18	0.7	104	0.03	0.4	6.8	BDL	BDL	1.77	0.06	BDL	BDL	BDL	0.02
Stretch - II	PRW-4	8.1	138	8	1	61	440	14	0.7	94	0.05	0.4	7.2	BDL	BDL	1.34	0.1	BDL	BDL	BDL	0.02
	PRW-6	8	121	9	4	53	430	16	0.5	82	0.05	0.3	5.4	BDL	BDL	1.67	0.08	BDL	BDL	BDL	0.03
Stretch - III	PRW-08	8.1	106	12	1.3	56	406	14	0.3	79	0.03	0.4	7.5	BDL	BDL	1.84	0.08	BDL	BDL	BDL	0.01
	NCW-03	7.8	58	BDL	BDL	7	270	8	BDL	21	0.05	0.2	5.1	BDL	BDL	1.11	0.06	BDL	BDL	BDL	BDL
	NCW-04	7.8	37	13	1.1	29	438	14	0.6	86	0.09	0.5	5.3	BDL	BDL	0.42	0.33	BDL	BDL	BDL	BDL
Stretch - IV	PRW-09	8.1	169	7	1	61	330	10	0.4	55	0.09	0.4	7.8	BDL	BDL	1.88	0.07	BDL	BDL	BDL	0.02
	PRW-10	8.2	215	7	BDL	80	300	12	0.4	57	0.05	0.4	7.8	BDL	BDL	2.53	0.09	BDL	BDL	BDL	0.02
	DPW-1	7.3	112	252	127	89	904	147	9.1	116	0.152	44	-	BDL	0.03	1.28	0.36	BDL	BDL	0.09	0.03
	DPW-2	7.1	206	483	153	602	1160	22	8.51	177	0.202	55	-	0.02	0.04	**36**	1.53	0.02	0.03	0.06	0.12
	DPW-3	7.1	134	459	148	267	860	144	2.6	282	3.58	46	-	BDL	0.03	**6.38**	0.56	BDL	BDL	0.12	0.06
Stretch -	PRW-11	8.1	60	11	1.2	12	274	10	BDL	23	0.11	0.4	5.5	BDL	BDL	0.81	0.22	BDL	BDL	BDL	0.02
	PRW-12	8.1	115	5	BDL	39	372	12	0.6	68	0.06	0.3	7.1	BDL	BDL	1.62	0.07	BDL	BDL	BDL	0.01

Note: All units are in mg/l except pH and colour in colour unit (PR: River; NC: Canal; DP: drain)

Observation based on Interaction with Farmers on river Pilakhar/drains/Canal:

As per the water consent provided by UPPCB under Water (Prevention and Control) Act, 1974, M/s DSM, Meerganj has been authorized to utilize the treated effluent for irrigation/river through drain. The unit has laid about 3 km pipeline of treated sugar effluent from mill up to river Pilakhar via agricultural land of village Sindhauli. Residents of village Sindhauli informed that no treated effluent is provided by the sugar mill through irrigation pipeline and outlets are non-functional. Villagers also complained that the irrigation pipeline carries untreated effluent which is ultimately discharged to the river Pilakhar during every crushing season. However, during the visit outlet of the pipeline (i.e. 100 meters before Pilakhar River) was found covered with sacks, hay/agricultural waste and no discharge of treated/untreated effluent was observed in the river.

Physico-chemical characteristics of river Pilakhar/drains/Canal:

River Pilakhar originates from Bazpur area of Uttarakhand. It is a seasonal river and receives water from local drains, canals and surface runoff during rainy season. The River Pilakhar flows from North to South direction of DSM unit. The closest distance of river Pilakhar to the Unit is 2.5 km north east direction from the Unit. To monitor the river water quality, samples have been taken from river Pilakhar from Lalavpur, UP to Jauner, UP. Samples were also collected from Nahal Canal and River Bhakhra. Based on flow and water quality river Pilakhar was classified into five stretches for the study purpose.

1. Stretch – I - from village Lalavpur, UP to Kemri dam bridge, Rampur Road, UP. Two samples (PRW 1 and 3) were collected from this stretch, which is located in u/s side of the sugar unit. Water flow was observed in this stretch of river. Based on the analysis results of physiochemical parameters in this stretch the quality of river water was found clean as pH was found in the range 8-8.1, BOD 1.3-1.7mg/l & TSS- 40-46mg/l. All heavy metals were below detectable limit except Fe (1.3 to 1.8 mg/l), Mn (0.06 mg/l) and Zn (0.02 mg/l).
2. Stretch – II – from village, Simra Rampur to Zamapur, Rampur. Two samples (PRW 4 and 6) were collected from this stretch, both located in u/s side of the unit. Stagnant water was observed in this stretch. As per primary water quality criteria for bathing water all parameter were well within the limit. All heavy metals were below detectable limit except Fe (1.3 to 1.7 mg/l), Mn (0.08 – 0.1 mg/l) and Zn (0.02 mg/l).
3. Stretch – III – River Pilakhar u/s of Sindhauli, near village Saijna-ki-Gotia to confluence of Nahal canal with river Pilakhar. Three samples (PRW – 8, NCW – 3 and 4) were collected from this stretch, one sample from River Pilakhar and two samples from Nahal canal, all samples located in u/s side from the unit. Water flow was observed in this stretch of river Pilakhar. Stagnant water or dry condition was observed in Nahal canal at NCW-3 and lean flow at NCW-4. The physiochemical water quality parameters in this stretch were found satisfactory. All heavy metals were below detectable limit except Fe (1.1 to 1.84 mg/l), Mn (0.08 – 0.36 mg/l) and Zn (<0.01 mg/l).
4. Stretch – IV – River Pilakhar after confluence with Nahal Canal to before confluence with river Bhakhra. Two river water sample (PRW – 9 and 10) and three drain samples (DPW – 1, 2 and 3) were collected from this stretch.

Drain samples shows high colour (112 – 206 Hazen), COD (252 – 483 mg/l), BOD (127 – 153 mg/l) TSS (89 – 602 mg/l), TDS (860 – 1160 mg/l), Cl (22 – 147 mg/l), Nitrate (2.6 – 9.1 mg/l), ammoniacal nitrogen (44 - 55 mg/l), Fe (6.38 – 36 mg/l) and DO was nil.

The physiochemical water quality parameters in this stretch were found satisfactory. All heavy metals were below detectable limit except Fe (1.8 to 2.53 mg/l), Mn (0.07 – 0.09 mg/l) and Zn (0.02 mg/l).

5. Stretch – V – River Bhakhra before and after confluence of river Pilakhar. Two sample (PRW – 11 and 12) were collected in this stretch, both samples were from d/s side of the unit. After confluence of river Pilakhar high colour and TDS were observed. The physiochemical water quality parameters in this stretch were found satisfactory. All heavy metals were below detectable limit except Fe (0.81 to 1.62 mg/l), Mn (0.07 – 0.22 mg/l) and Zn (0.01 - 0.02 mg/l).

Conclusion of survey conducted in Meerganj:

1. Based on the soil analysis report of 22 samples collected, District Agriculture Department, Bareilly opined that pH of soil samples is normal and values of other parameters are also in range as found in this area.
2. The changes in colour of groundwater to yellow after few minutes of storing might be due to oxidation of iron and manganese present in groundwater. The geology of the area seems to have influence on groundwater parameters.
3. Cases of damage of trees/crop/orchard/garden due to the pollution by DSM Meerganj unit were not reported by concerned district agencies; however, deposition of fly ash/ dust on leaves were observed.
4. Flow in the River Pilakhar was observed in entire stretch. Water quality of river Pilakhar in terms of pH, COD and BOD varies from 8 – 8.1, 5-12 mg/l and BDL – 4 mg/l respectively. Three drains DPW 1, 2 and 3 discharge into stretch IV of river Pilakhar. These drains bring sewage having pH 7.1- 7.3; COD 252 - 483 mg/l; BOD 127 – 153 mg/l; TDS 860 – 1160 mg/l and ammoniacal nitrogen 44-55 mg/l, which shows impact of sewage in River Pilakhar in this stretch.
5. Groundwater samples indicating high values of COD (8 samples: MGW3, MGW4, MGW6, MGW9, MGW16, MGW17, MGW21 and MGW25), Alkalinity (5 samples: MGW3, MGW12, MGW19, MGW25 and MGW30) and TDS (10 samples: MGW3, MGW9, MGW12, MGW15, MGW16, MGW19, MGW25 and MGW30) than WHO prescribed limit were taken from shallow depth of 20-80ft. The locations where higher values of above parameters observed are random in nature and no specific pattern can be identified.
6. Chief Medical Officer, Bareilly vide letter dated 27.12.2021 capitulated that *health surveys of people/locals/villagers living in 08 villages (Sindhauli, Jauner, Khamaraia Sani, Narkhera, Mandanpur, Sahjana, Meerganj, Nagariya Sadat) located in the close vicinity of M/s DSM, Meerganj, District Bareilly (Sugar Unit) was conducted. During survey neither any adverse health impact nor any documented information regarding public health issue was available.* **Annexure-3**
7. Chief Veterinary Officer, Bareilly vide letter dated 17.12.2021 reported that *a survey dated 15.11.2021 and 16.11.2021 along with CPCB, UPPCB and other concerned district departments was conducted in nearby villages of M/s DSM, Meerganj, District Bareilly*

(Sugar Unit) wherein no adverse impact on health of domestic animals was found and no evidence of any factor was observed regarding environmental damage. **Annexure-4**

8. District Pisciculture Officer, Bareilly vide letter dated 17.12.2021 submitted that *in survey dated 15.11.2021 and 16.11.2021, no adverse impact observed due to the industrial pollution on aquatic animals which were found in ponds located in villages nearby to M/s DSM, Meerganj, District Bareilly (Sugar Unit) and Pilakhar river*. **Annexure-5**

Remedial measure for rejuvenation of Pilakhar River

Analysis results of water quality indicates that River Pilakhar is relatively clean in entire stretch. Three drains namely DPW 1, 2 and 3 which discharges untreated sewage into stretch IV of river Pilakhar shall be treated to mitigate the pollution impact of these drains on river Pilakhar water quality. CPCB guideline for "*Alternative treatment technologies for wastewater treatment of drains*" prepared in compliance of Hon'ble NGT direction in the matter of OA no. 06/2012 may be referred for interim measure.

Remedial measure for Groundwater contamination

As per Central Ground Water Board (CGWB), report on National Compilation on Dynamic Groundwater Resource of India, 2020, out of 16 monitored locations, four blocks/ towns of Bareilly fall under semi-critical area and Bareilly city under over-exploited area. As per published research papers (in journals like Pollution Research and Journal of Industrial Pollution Control), alkalinity, heavy metal like As & Fe was found higher than permissible limit suggesting their geogenic origin (Neetu Saxena and Harinder Kaur, 2004; Gaidhane et al., 2017). As per Uttar Pradesh Ground Water Department (UPGWD) on present survey/sampling report no adverse impact of industry in groundwater was found. However, it is recommended to:

1) Identify location of safe drinking groundwater and marking all unsafe groundwater to avoid their use for drinking purposes.
1) 33 groundwater samples were collected from borewell/ handpumps, tubewells around 11 villages. Ground water quality shows higher than WHO permissible limit for **Colour** at Village Nausana, Kulchha Khurd and Vllage Sanjarpur**; COD** at Village Sidhauli, Nagariya kalyanpur, Nagariya Sadat, Nausana, Kulchha Khurd and Sillapur; **TDS** at Village Sidhauli, Jauner, Gula, Nagariya Sadat, Nausana, Kulchha Khurd, Sillapur and Sanjarpur; Alkalinity at Village Sidhauli, Gula, Nausana, Sillapur and Sanjarpur; **Fe** at Village Kulchha Khurd and Sillapur; Mn at Village Kulchha Khurd, Sillapur , Sidhauli, Jauner , Nagariya Sadat and Nausana and **Zn** at Village Sidhauli at shallow depth. These villages need to get deep bore well by the unit or concerned district administration.
2) A detailed study may be carried out for groundwater quality and plan shall be made for recharge of ground water by state government agencies like ground water board or district administration.

Photographs taken during detailed study in Meerganj

Ground water sample from Sillapur Village

Soil Sample collection from Sanjarpur Village, Meerganj

Discharge outlet of irrigation pipeline (lat-28.555307, long-79.241068)

Outlet for treated effluent discharge for irrigation in agriculture fields

Deposition of boiler ash on leaf surface in the field of Sh. Sumeri lal, a farmer and resident of village Sindhauli

Ground water sample in Sindauli village

River pilkhar at Lalavpur, UP	River Pilakhar at U/s of Sindhauli near village Saijna-Ki-Gotia
River Bhakhra after C/F of river Pilakhar at D/s of Jauner village	Nahal (Canal Channel) near Sindhauli bridge before C/f with river Pilakhar
Drain from Sindhauli village near Sindhauli bridge and Chaukidar house	Drain from Sindhauli village near Mathia

6. Joint survey and monitoring in the surrounding areas of M/s Dhampur Sugar Mills Ltd., Asmoli, District Sambhal (Sugar unit) and Sot river on 17.11.2021 & 18.11.2021.

Four teams comprising of officials from CPCB, UPPCB, UPGWB and District administrative officials from Jal Nigam, Agriculture department, Horticulture department carried out survey and monitoring of 17 selected villages around the DSM unit and monitoring of river on 17.11.2021 & 18.11. 2021 to assess the impact on ambient environment. The peripheral area of 5 km was taken for grid sampling with each grid length of 1.25 km, sampling has been done from each grid. Sot river flows from north west (District Amroha) towards the south east (Tahsil Chandausi, district Sambhal). Based on the river catchment of Sot river contour gradient considered from the unit towards the flow direction of river in North- West to South-East direction.

Following 17 villages/ area are included in the study;

1. Village Ramnagar, Block-Asmoli, Dist.- Sambhal, U.P:
2. Village Bilalpat, Block-Asmoli, Dist.- Sambhal, U.P:
3. Village Safat Nagar, Block-Asmoli, Dist.- Sambhal, U.P:
4. Village Khanpur Band, Block-Asmoli, Dist.- Sambhal, U.P:
5. Village Asmoli, Block-Asmoli, Dist.- Sambhal, U.P:
6. Village Ekrotiya, Block-Asmoli, Dist.- Sambhal, U.P:
7. Village Madala Fatepur, Block-Asmoli, Dist.- Sambhal, U.P:
8. Village Rayan Bujurgh Block-Asmoli, Dist.- Sambhal, U.P:
9. Village Burra Begumpur, Block-Asmoli, Dist.- Sambhal, U.P:
10. Village Shahpur Sirpura, Block-Asmoli, Dist.- Sambhal, U.P:
11. Village Dawoi, Block-Asmoli, Dist.- Sambhal, U.P:
12. Village Akbarpur Gahra, Block-Asmoli, Dist.- Sambhal, U.P:
13. Village Dugawar, Block-Asmoli, Dist.- Sambhal, U.P:
14. Village Bela, U.P., Block-Asmoli, Dist.- Sambhal, U.P:
15. Village Heerapur, Block-Asmoli, Dist.- Sambhal, U.P:
16. Village Racheta, Block-Asmoli, Dist.- Sambhal, U.P:
17. Village Chandbar, Block-Asmoli, Dist.- Sambhal, U.P:

6.1. Assessment of contamination of soil

The joint team has surveyed the villages and collected soil samples from those agricultural field locations where the impact of the industrial contamination is expected. District agriculture department collected the soil samples as per protocol. Grid soil sampling was performed to evaluate the soil health in the study area. Total 25 samples were collected from different selected villages. Details of the soil sampling locations are tabled below;

Table 6.1 Description of soil samples collected from Asmoli block

Sample code	Sample location	Coordinate		Remark
		Latitude	Longitude	
ASS 1	Village-Ramnagar	28.702566	78.5572967	Potato
ASS 2	Village-Ramnagar	28.7087780	78.5616952	Ploughed Field
ASS 3	Village-Ramnagar	28.7034628	78.569347	Ploughed Field
ASS 4	Village-Ramnagar	28.7083791	78.552881	Ploughed Field
ASS 5	Village-Ramnagar	28.4158702	78.3320818	Mustard
ASS 6	Village-Bilalpat	28.6992740	78.5711746	Mustard
ASS 7	Village-Safat Nagar	28.703201	78.572769	Ploughed Field
ASS 8	Village-Khanpur Band	28.70206642	78.5473022	Ploughed Field
ASS 9	Village-Khanpur Band	28.6955986	78.549507	Mustard
ASS 10	Village-Khanpur Band	28.6984462	78.5519404	Mustard
ASS 11	Village Asmoli	28.70338821	78.5385055	Mango orchard
ASS 12	Village-Ekrotiya	28.700920	78.514926	Sugarcane
ASS 13	Village Burra Begumpur	28.700441	78.532188	Wheat
ASS 14	Village- Rayan Bujurgh	28.677364	78.516438	Potato
ASS 15	Village-Madala Fatepur	28.671684	78.539028	Potato
ASS 16	Village- Dawoi	28.729348	78.517838	Sugarcane
ASS 17	Village- Shahpur Sirpura	28.721993	78.505062	Sugarcane
ASS 18	Village- Akbarpur Gahra	28.7111403	78.527381	Ploughed Field
ASS 19	Village- Dugawar	28.710341	78.545611	Ploughed Field
ASS 20	Village- Dugawar	28.710026	78.547724	Ploughed Field
ASS 21	Village- Dugawar	28.719952	78.560638	Ploughed Field
ASS 22	Village Bela	28.71533	78.575297	Ploughed Field
ASS 23	Village Heerapur	28.729132	78.556389	Ploughed Field
ASS 24	Village Racheta	28.742234	78.541329	Ploughed Field
ASS 25	Village Chandbal	28.745012	78.536204	Ploughed Field

Location of soil samples collected with respect to the DSM unit are shown in figure below:

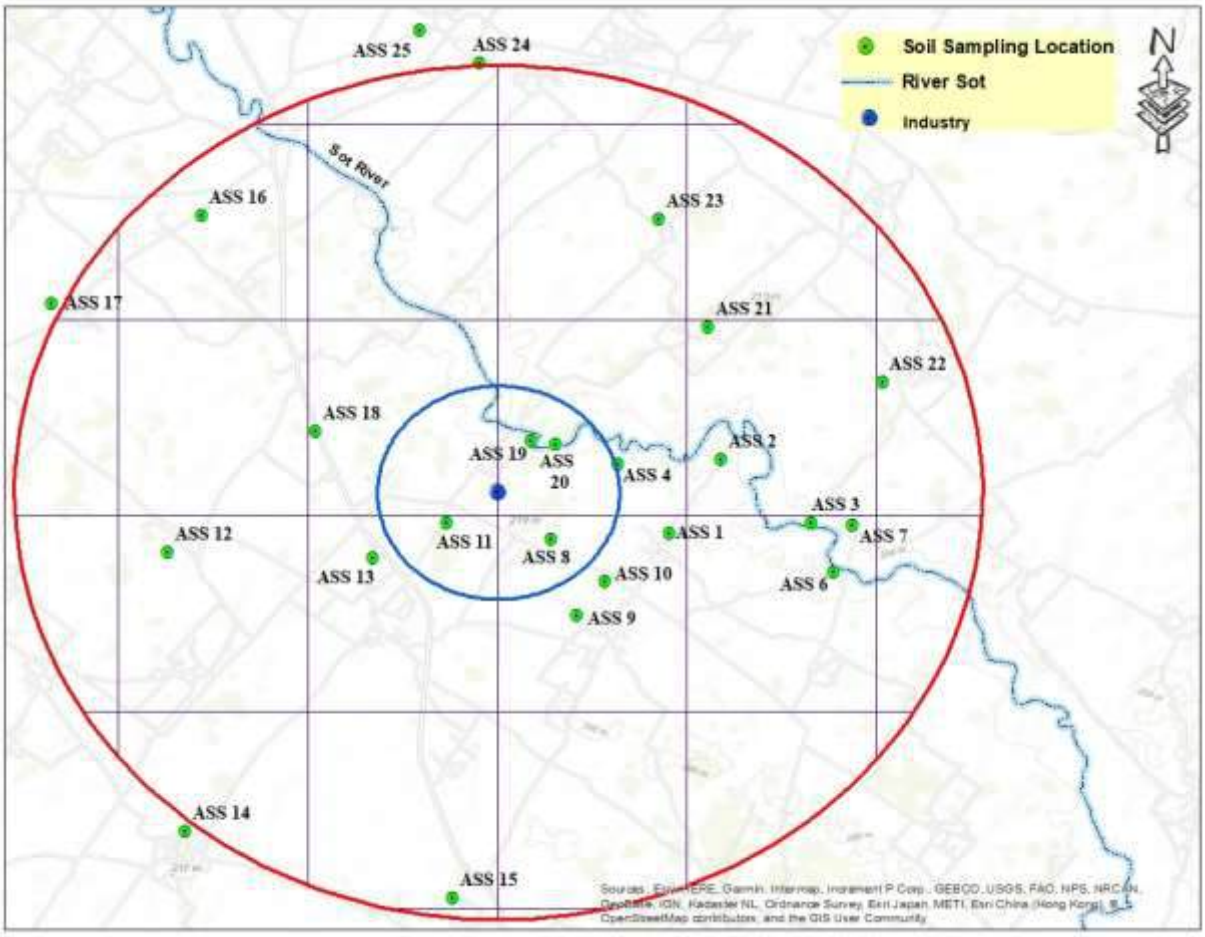


Figure 6.1 Sampling location of soil sample collected in Asmoli, Sambhal

The analysis results of the samples are mentioned below:

Table 6.2 Analysis results of physical parameters and macro-nutrients of soil sample collected from Asmoli block

Sample code	pH	EC	Organic Carbon		Available Nitrogen		Available Phosphorus		Available Potassium	
			(%)	Class	Value	Fertility Class	Value	Fertility Class	Value	Fertility Class
ASS 1	7.4	0.99	**0.28**	L	63	V.L	18	L	430.08	V.H
ASS 2	7.3	**1.51**	**0.28**	L	63	V.L	13.5	V.L	191.52	M.L
ASS 3	7.6	**1.38**	**0.28**	L	63	V.L	22.5	L	268.8	M
ASS 4	7.6	0.39	**0.28**	L	63	V.L	13.5	V.L	203.84	M.L
ASS 5	7.7	**1.07**	**0.28**	L	63	V.L	13.5	V.L	183.68	M.L

ASS 6	7.6	**1.16**	**0.35**	L	78.75	V.L	18	L	136.64	L
ASS 7	7.3	**1.1**	**0.42**	L	94.5	V.L	13.5	V.L	155.68	L
ASS 8	7.2	0.21	**0.28**	L	63	V.L	9	V.L	137.76	L
ASS 9	7.3	0.22	**0.35**	L	78.75	V.L	18	L	441.28	V.H
ASS 10	7.2	0.26	**0.35**	L	78.75	V.L	13.5	V.L	184.8	M.L
ASS 11	7.4	0.23	**0.42**	L	94.5	V.L	18	L	280	M
ASS 12	7.4	0.63	**0.28**	L	63	V.L	18	L	197.12	M.L
ASS 13	7.4	0.7	**0.28**	L	63	V.L	22.5	L	150.08	L
ASS 14	7.4	**1.12**	0.56	M	126	V.L	22.5	L	784	V.H
ASS 15	7.6	0.69	**0.28**	L	63	V.L	13.5	V.L	178.08	L
ASS 16	7.7	0.52	**0.35**	L	78.75	V.L	22.5	L	189.28	M.L
ASS 17	7.2	0.76	**0.35**	L	78.75	V.L	22.5	L	172.48	**L**
ASS 18	7.4	0.6	**0.28**	L	63	V.L	27	L	1120	V.H
ASS 19	7.2	**1.48**	1.19	H	267.75	L	22.5	L	676.48	V.H
ASS 20	7.4	**1.68**	0.98	H	220.5	L	27	L	1120	V.H
ASS 21	7.4	0.71	**0.28**	L	63	V.L	18	L	193.76	M.L
ASS 22	7.7	0.39	**0.35**	L	78.75	V.L	18	L	187.04	M.L
ASS 23	7.3	0.39	**0.21**	L	47.25	V.L	31.5	L	181.44	M.L
ASS 24	7.4	0.51	**0.14**	L	31.5	V.L	18	L	110.88	V.L
ASS 25	7.4	0.54	**0.28**	L	63	V.L	18	L	109.76	V.L

*** L- Low, V.L – very low, M - medium, H – High, M.L – medium low, V.H- very high**

Table 6.3 Analysis results of secondary and micro-nutrient of soil sample collected from Asmoli block

Sample code	Cu	Fe	Mn	Zn	S	Bo
ASS 1	0.24	3.96	3.1	0.89	9.5	0.64
ASS 2	0.4	5.9	3.9	2.6	8.82	0.44
ASS 3	0.34	6.3	3.68	2.31	13.44	0.72
ASS 4	0.25	4.15	3.15	0.75	9.8	0.49
ASS 5	0.34	6.2	3.64	1.18	10.32	0.57
ASS 6	0.38	7.5	4.6	2.13	12.2	0.74

ASS 7	0.44	6.8	4.8	2.17	14.22	0.71
ASS 8	0.49	6.7	5.5	2.5	13.05	0.68
ASS 9	0.31	5.91	2.84	1.44	10.6	0.51
ASS 10	0.45	6.92	5.1	2.94	13.8	0.7
ASS 11	0.36	4	2.9	1.6	11.82	0.56
ASS 12	0.35	6.85	3.8	1.91	12.4	0.56
ASS 13	0.42	7.25	3.81	2.32	13.8	0.6
ASS 14	0.31	6.4	3.35	1.35	12.62	0.59
ASS 15	0.34	6	2.89	1.16	11.75	0.59
ASS 16	0.38	7.02	4	2.39	14.05	0.52
ASS 17	0.3	5.9	3.2	1.74	13.4	0.56
ASS 18	0.36	4.8	4.2	1.5	10.02	0.51
ASS 19	0.23	3.96	3.28	0.96	9.1	0.62
ASS 20	0.31	5.2	2.75	1.03	13	0.4
ASS 21	0.39	6.02	2.86	1.55	12.55	0.46
ASS 22	0.21	5.75	3.4	1.63	11.6	0.61
ASS 23	0.37	4.84	3.7	1.38	12.16	0.65
ASS 24	0.19	3.82	2.98	0.75	9.6	0.6
ASS 25	0.32	5.6	3.6	1.2	11.9	0.77

Note: values of Boron (BO), Zinc (Zn), Copper (Cu), Iron (Fe), Manganese (Mn) and Sulphur (S) are in ppm and values of Nitrogen (N), Phosphorus (P) & Potassium (K) are in kg/hectare. Unit of Electrical conductivity is in deci Seimens per meter (dS m^{-1})

Observation based on the analysis report of soil samples:

As per analysis result of 25 soil samples collected from 17 villages located within 5 km peripheral area around the Unit, following observations were made:

1. pH, Electrical conductivity (EC) and Organic carbon (OC) value ranges from 7.2 - 7.7, 0.21 -1.68 dS m-1 and 0.14 – 1.19 %, respectively.
2. Nitrogen (N), Phosphorus (P), Potassium (K) and Sulphur (S) value ranges from 31.5 – 267.75 kg/hectare, 9.0 – 31.5 kg/hectare, 109.76 – 676.48 kg/hectare and 9.1 – 14.05 ppm, respectively
3. Boron (B), Zinc (Zn), Copper (Cu), Iron (Fe) and Manganese (Mn) value range from 0.4 – 0.77 ppm, 0.75 – 2.94 ppm, 0.19 - 0.49 ppm, 3.82 – 7.5 ppm and 2.86 – 5.5 ppm, respectively.

4. Soil nutrient status data of Asmoli Block, Sambhal district for 2017-18 and 2018-19 under soil health card scheme of Ministry of Agriculture and Farmer Welfare, also shows similar nutrient profile of soils parameters.

6.2. Assessment of contamination of ground water

47 groundwater samples were collected from borewells, hand pumps and tube-wells located in and around 17 villages. All samples were analyzed for general parameters. Analysis of heavy metals were carried out for 35 samples. DSM unit discharge into Sot river, flowing within 100 m distance in south east direction of the unit. Considering the contour gradient of study area towards flow direction of Sot river, villages located at the upstream of DSM unit discharge point may be considered as having less potential of impact of any discharge on ground water and villages located downstream of DSM discharge point may be considered having high potential of ground water contamination due to any discharge from industrial unit. 19 ground water samples were collected from U/s location and 28 were collected from D/s location of discharge point. The groundwater samples were compared with the prescribed specification of ionic concentration in groundwater by WHO standards (1996).

Location of ground water samples collected with respect to the DSM unit are cited in figure 6.2 below:

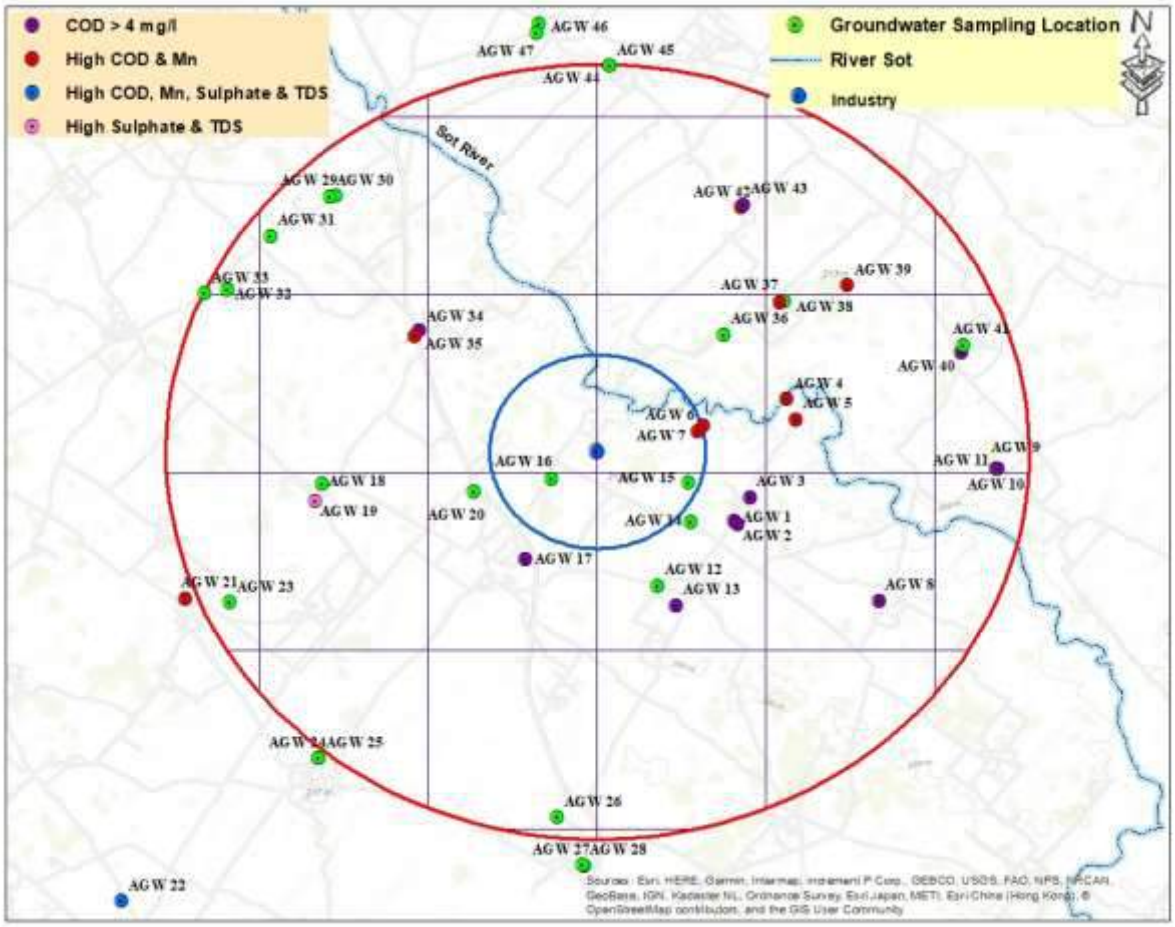


Figure 6.2 Sampling locations of ground water sample collected in Asmoli block

Description of the groundwater sampling locations are mentioned below;

Table 6.4 Details of ground water samples collected from Asmoli block

Sample code	Sample location	Bore well / Handpump	Depth (ft)	MOC of hand pump	Coordinate	
					Latitude	Longitude
AGW 1	Village-Ramnagar	Hand pump	250	GI pipe	28.6994991	78.555770
AGW 2	Village-Ramnagar	Hand pump	80	GI pipe	28.6992054	78.556106
AGW 3	Village-Ramnagar	Hand pump	150	GI pipe	28.7016955	78.557304
AGW 4	Village-Ramnagar	Borewell	220	MS pipe	28.710805	78.560783
AGW 5	Village-Ramnagar	Borewell	200	PVC pipe	28.708942	78.561676
AGW 6	Village-Ramnagar	Borewell	220	PVC pipe	28.708398	78.552879
AGW 7	Village-Ramnagar	Handpump	100	GI pipe	28.707809	78.552307
AGW 8	Village-Bilalpat	Handpump	150	GI pipe	28.692058	78.569534
AGW 9	Village-Bilalpat	Handpump fitted with submersible	200	GI pipe	28.704389	78.580665
AGW 10	Village-Safat Nagar	Handpump fitted with submersible	160	GI pipe	28.704389	78.580665
AGW 11	Village-Safat Nagar	Handpump fitted with submersible	100	GI pipe	28.704395	78.580787
AGW 12	Village-Khanpur Band	Handpump	120	GI pipe	28.693439	78.548515
AGW 13	Village-Khanpur Band	Handpump	105	MS pipe	28.691614	78.550281
AGW 14	Village-Khanpur Band	Borewell	280	GI pipe	28.69939	78.551751
AGW 15	Village Asmoli	Borewell	200	MS pipe	28.703020	78.551490
AGW 16	Village Asmoli	Handpump	Not known	GI pipe	28.703388	78.538505
AGW 17	Village Asmoli	Handpump	85	MS pipe	28.695913	78.536003
AGW 18	Village-Ekrotiya	Hand pump	180	Iron (MS/GI)	28.702931	78.51677
AGW 19	Village-Ekrotiya	Hand pump	90	Iron (MS/GI)	28.70132	78.516069

AGW 20	Village-Ekrotiya	Hand pump	70-72	Iron (MS/GI)	28.702147	78.531123
AGW 21	Village- Burra Begumpur	Hand pump	150	Iron (MS/GI)	28.692259	78.503784
AGW 22	Village- Burra Begumpur	Hand pump	150	Iron (MS/GI)	28.664063	78.497747
AGW 23	Village- Burra Begumpur	Hand pump	140	Iron (MS/GI)	28.691905	78.508045
AGW 24	Village- Rayan Bujurgh	Hand pump	160	Iron (MS/GI)	28.677364	78.516438
AGW 25	Village- Rayan Bujurgh	Hand pump	180	Iron (MS/GI)	28.677366	78.516433
AGW 26	Village-Madala Fatepur	Borewell	160	HDPE	28.671846	78.539018
AGW 27	Village-Madala Fatepur	Hand pump	100	Iron (MS/GI)	28.667357	78.541692
AGW 28	Village-Madala Fatepur	Borewell	80	Iron (MS/GI)	28.667436	78.541418
AGW 29	Village- Dawoi,	Borewell	200	Plastic, HDPE casing	28.729768	78.518062
AGW 30	Village- Dawoi,	Hand pump	95	Iron (MS/GI	28.729716	78.517463
AGW 31	Village- Dawoi,	Hand pump	90	Iron (MS/GI	28.726022	78.511912
AGW 32	Village- Shahpur Sirpura	Borewell	180	HDPE	28.721009	78.507731
AGW 33	Village- Shahpur Sirpura	Hand pump	180	HDPE	28.720672	78.505583
AGW 34	Village- Akbarpur Gahra	Hand pump	120	GI	28.717243	78.525916
AGW 35	Village- Akbarpur Gahra	Hand pump	90	GI	28.716664	78.525532
AGW 36	Village- Dugawar	Hand pump	240	GI	28.716847	78.55483
AGW 37	Village- Dugawar	Hand pump	150	MS	28.719888	78.560612
AGW 38	Village- Dugawar	Hand pump	120	MS	28.719802	78.560151

AGW 39	Village- Dugawar	Hand pump	210	MS	28.721407	78.566486
AGW 40	Village- Bela	Hand pump	220	GI	28.715201	78.577344
AGW 41	Village- Bela	Hand pump	150	MS	28.71579	78.57757
AGW 42	Village- Heerapur	Hand pump	220	GI	28.728683	78.556494
AGW 43	Village- Heerapur	Hand pump	150	MS	28.728947	78.556638
AGW 44	Village- Racheta	Hand pump	150	MS	28.741879	78.544018
AGW 45	Village- Racheta	Hand pump	220	GI	28.741867	78.544002
AGW 46	Village- Chandbar	Hand pump	220	GI	28.745823	78.537321
AGW 47	Village- Chandbar	Hand pump	150	MS	28.744914	78.537108

The Ground water samples were analyses for various physico-chemical parameters as well as for heavy metals with reference to BIS and WHO standards. The analysis results of Groundwater samples for physico-chemical parameters and heavy metals are mentioned in Table 6.4

Table 6.5 Analysis result of ground water samples collected from Asmoli

Sample code	Depth (ft)	pH	TDS	COD	BOD	TSS	Total Alkalinity	Total Hardness	Cl^-	F^-	SO_4^{-2}	NO_3-N	As	Cu	Fe	Mn	Ni	Pb	Zn
WHO Std.			**500**	**4.0**			**30-500**	**250-500**	**100**	**1.5 – 2.4**	**250**	**10-45**	**0.1**		**5.0**	**0.2-0.3**	**0.2**	**0.1**	**2.0**
AGW 1	250	7.3	**742**	**8**	-		**341**	**384**	132	0.3	143	6.3	-	-	-	-	-	-	-
AGW 2	80	7.2	**592**	**7**	-		**368**	**312**	60	0.1	65	**10**	BDL	BDL	**6.3**	0.01	BDL	BDL	0.1
AGW 3	150	7.3	**624**	**8**	-		**341**	**368**	54	0.2	106	**12.2**	-	-	-	-	-	-	-
AGW 4	220	7.5	320	**28**	BDL	38	**205**	**248**	74	0.3	18	0.5	0.01	BDL	**1.87**	**0.62**	BDL	BDL	BDL
AGW 5	200	7.4	356	**24**	**2**	25	**240**	**260**	58	0.2	47	0.5	BDL	BDL	**1.14**	**0.43**	BDL	BDL	BDL
AGW 6	220	7.2	**544**	**45**	**5**	20	**267**	**372**	200	0.2	73	0.6	**0.03**	BDL	**1.4**	**1.15**	BDL	BDL	0
AGW 7	100	7.6	230	**11**	-		167	**220**	16	0.2	73	0.4	**0.02**	BDL	**5.03**	**0.88**	BDL	BDL	0.8
AGW 8	150	7.6	242	**9**	-		**225**	**220**	5	0.4	6	1	BDL	BDL	**1.4**	0.03	BDL	BDL	0.1
AGW 9	200	7.6	226	**7**	-		**205**	**236**	12	0.5	6	BDL	-	-	-	-	-	-	-
AGW 10	160	7.6	242	BDL	-		**217**	**204**	8	0.3	5	0.5	BDL	BDL	0.1	0.09	BDL	BDL	0
AGW 11	100	7.3	452	**7**	-		**349**	**460**	50	0.2	26	4.6	-	-	-	-	-	-	-
AGW 12	120	7.6	342	BDL	-		**527**	**312**	14	0.3	9	BDL	BDL	BDL	**0.81**	**0.18**	BDL	BDL	0.1
AGW 13	105	7.2	**648**	**14**	-		**333**	**340**	82	BDL	24	2.8	BDL	BDL	**1.34**	**0.21**	0.02	BDL	0.2
AGW 14	280	7.6	276	BDL	-		**248**	**276**	16	0.2	7	0.9	BDL	BDL	0.16	0.06	BDL	BDL	BDL

Sample code	Depth (ft)	pH	TDS	COD	BOD	TSS	Total Alkalinity	Total Hardness	Cl^-	F^-	SO_4^{-2}	NO_3-N	As	Cu	Fe	Mn	Ni	Pb	Zn
AGW 15	200	7.5	326	BDL	-		**279**	**300**	12	0.4	26	1.4	-	-	-	-	-	-	-
AGW 16	Not known	7.4	428	2	-		**402**	**300**	18	0.3	17	0.3	BDL	BDL	**1.02**	**0.2**	BDL	BDL	0.1
AGW 17	85	7.3	**550**	**6**	-		**415**	**348**	56	1.2	37	3.8	BDL	BDL	**5.8**	**0.22**	BDL	BDL	0.6
AGW 18	180	7.6	442	BDL	-		**306**	**336**	30	0.3	31	**10.2**	-	-	-	-	-	-	-
AGW 19	90	7.5	**714**	BDL	-		**368**	**504**	108	0.3	**272**	2.1	BDL	**0.08**	**0.9**	**0.22**	BDL	BDL	0.9
AGW 20	70	7.6	304	BDL	-		**252**	**280**	20	0.2	26	7.9	-	-	-	-	-	-	-
AGW 21	150	7.6	470	**6**	3	29	**217**	**356**	35	0.4	247	BDL	0.02	0.82	**107**	**2.56**	**8.1**	**0.4**	**6.7**
AGW 22	150	7.7	**802**	**21**	2	12	**306**	**532**	52	0.4	**456**	0.6	BDL	BDL	**2.87**	**0.83**	BDL	BDL	0.1
AGW 23	140	7.8	348	BDL	-		167	**296**	12	0.2	204	0.3	-	-	-	-	-	-	-
AGW 24	160	7.5	244	BDL	-		194	**256**	15	0.3	13	0.8	-	-	-	-	-	-	-
AGW 25	180	7.3	480	BDL	-		**415**	**296**	42	0.2	32	2.5	BDL	BDL	**2.86**	**0.26**	BDL	BDL	0.4
AGW 26	160	7.6	294	BDL	-		**271**	**336**	16	0.3	27	2.5	-	-	-	-	-	-	-
AGW 27	100	7.2	**876**	BDL	-		**508**	**484**	108	0.3	90	**12.9**	BDL	BDL	0.02	0.14	BDL	BDL	BDL
AGW 28	80	7.3	**724**	BDL	-		**422**	**408**	94	0.2	44	**10.6**	BDL	BDL	**1.22**	**1.19**	BDL	BDL	0.2
AGW 29	200	7.5	226	BDL	-		**225**	**288**	12	0.3	6	0.7	BDL	BDL	**0.75**	**0.28**	BDL	BDL	0.1

Sample code	Depth (ft)	pH	TDS	COD	BOD	TSS	Total Alkalinity	Total Hardness	Cl^-	F^-	SO_4^{-2}	NO_3-N	As	Cu	Fe	Mn	Ni	Pb	Zn
AGW 30	95	7.6	222	BDL	-		**225**	**224**	12	0.2	BDL	BDL	BDL	BDL	**1.45**	0.01	BDL	BDL	3
AGW 31	90	7.2	472	BDL			**364**	**312**	54	0.1	39	2.6	-	-	-	-	-	-	-
AGW 32	180	7.6	226	BDL	-		**202**	**280**	4	0.1	11	BDL	BDL	0.01	**3.81**	**0.22**	BDL	BDL	2.1
AGW 33	180	7.7	204	BDL	-		174	**284**	10	0.3	36	0.3	-	-	-	-	-	-	-
AGW 34	120	7.8	300	**27**	-		**243**	**232**	20	0.2	25	BDL	BDL	BDL	**1.3**	**0.22**	BDL	BDL	0.3
AGW 35	90	7.6	408	**32**	1	12	**279**	**300**	46	0.1	39	BDL	BDL	BDL	**13.1**	**0.68**	BDL	BDL	1.4
AGW 36	240	8	234	**31**	-		174	184	18	0.3	5	BDL	BDL	BDL	BDL	0.07	BDL	BDL	BDL
AGW 37	150	7.8	196	BDL	-		143	148	16	0.1	BDL	0.8	BDL	0.02	**2.56**	**0.22**	BDL	BDL	0.1
AGW 38	120	7.1	**1142**	**72**	-		**465**	**412**	**215**	0.2	208	**12.9**	BDL	BDL	**0.91**	**1.13**	BDL	BDL	0.1
AGW 39	210	7.2	410	**14**	-		**376**	**280**	10	BDL	BDL	1.1	BDL	BDL	**1.86**	**0.43**	BDL	BDL	3.5
AGW 40	220	7.5	452	**31**	-		**366**	**292**	34	0.2	21	3.8	BDL	BDL	**2.58**	**0.14**	BDL	BDL	0.1
AGW 41	150	7.6	458	BDL	-		**395**	**308**	40	0.1	24	1.2	BDL	BDL	**0.67**	**0.37**	BDL	BDL	0.3
AGW 42	220	7.3	**526**	**19**	-		**264**	**304**	64	0.2	34	2.6	BDL	0.01	**3.66**	**0.38**	BDL	BDL	0.1
AGW 43	150	7.4	368	**28**	2	29	**384**	**320**	80	0.1	40	2.7	BDL	BDL	**9.04**	**0.21**	BDL	BDL	2.3
AGW 44	150	7.7	264	**11**	-		**244**	**352**	30	0.1	153	BDL	BDL	BDL	**7.32**	**0.38**	BDL	BDL	0.9

Sample code	Depth (ft)	pH	TDS	COD	BOD	TSS	Total Alkalinity	Total Hardness	Cl^-	F^-	SO_4^{-2}	NO_3-N	As	Cu	Fe	Mn	Ni	Pb	Zn
AGW 45	220	7.4	486	BDL	-		**248**	**312**	20	0.1	14	BDL	0.01	BDL	0.16	0.14	BDL	BDL	0.2
AGW 46	220	7.3	**740**	BDL	-		**368**	**344**	126	0.1	86	5	BDL	0.01	**0.5**	**0.34**	BDL	BDL	0.4
AGW 47	150	7.7	**508**	BDL	-		171	**324**	38	0.2	34	1.2	BDL	BDL	**0.78**	BDL	BDL	BDL	0.6

Note: All units in mg/l except pH and colour; colour measured in colour units

Note: WHO standard values are indicated below the name of the respective parameter. Higher observed values are highlighted.

Observation based on interaction with farmers on ground water:

1. Residents from Ramnagar Village, located at right bank of river Sot, around 1 km D/s direction of DSM unit, raised the issue of ground water pollution and yellow colour in the village and diseases like Jaundice etc. caused due to consumption of polluted/contaminated ground water. Analysis results of seven ground water samples collected from Ramnagar village show TDS in range of 230-742 mg/l, Iron in the range of 1.14-6.30 ppm & Manganese as 0.01-1.15 ppm. COD in the range of 7-45 mg/l is also detected in groundwater samples collected from village indicating the presence of organic matter in the ground water. TDS higher than WHO prescribed limit observed at four locations namely AGW1, 2, 3 & 6. High COD observed in the samples namely AGW 4 (28 mg/l), AGW 5 (24 mg/l) and AGW 6 (45 mg/l) collected at a depth of 200-220 ft. from close proximity of right bank for river Sot indicating the impact of pollution as the Sot River downstream of DSM, Asmoli carries only partially/ untreated effluent and sewage.
2. The groundwater analysis of samples from village Ramnagar indicates higher values of Fe (1.14-6.30ppm) against the permissible 0.3ppm as per drinking water standard ISO:10500 (2012) in all 05 samples analysed for heavy metals. Change in colour of water to yellow might be due to oxidation of iron present in groundwater.
3. No issues related to groundwater contamination raised by residents of villages namely Bilalphat and Safat Nagar, Khanpur Band**,** Ekrotiya, Asmoli, Rayan Bujurgh, Madala Fatepur, Dawoi, Dugawar, Racheta, Chandbar, Bela and Shahpur Sirpura.

Observations based on the analysis results of ground water:

1. All Heavy metals except Fe and Mn are within permissible limits except in the sample collected from village Burra Begumpur at a depth of 150 ft. at location **AGW 21**, which is located at a distance of around 3 km D/s of DSM unit, where BOD (3mg/l), COD (6 mg/l), TSS (29 mg/l), Fe (107 ppm), Mn (2.56 ppm), Ni (8.1 ppm), Pb (0.4 ppm) and Zn (6.7 ppm) higher than WHO prescribed limit were observed. Two samples were also collected from same village at a depth of 150-160 which doesn't show contamination of heavy metal except Fe (2.87 ppm) and Mn (0.83 ppm). Observed high values of heavy metals at location **AGW 21** might be due to the contamination by encasing Iron pipe of handpump.
2. COD (6 mg/l to 72 mg/l) higher than WHO prescribed limit of 4 mg/l were observed in 21 samples collected at a depth of 80-250 ft (7 in upstream and 14 in downstream of the unit).
3. COD (6 mg/l to 72 mg/l) and Mn (0.38 mg/l to 2.56 mg/l) higher than WHO prescribed limit were observed in 11 samples at a depth of 90-220 ft (five in upstream and six in downstream of the unit).
4. Sulphate concentration higher than WHO prescribed limit of 250 mg/l were observed at location AGW 19 (272 mg/l) & AGW 22 (456 mg/l) which are at around 2 and 5 km D/s of DSM unit respectively. Values observed are random in nature and doesn't reflect any pattern of groundwater contamination.

6.3. Assessment of damage to the crop

Observation based on interaction with farmers on crop damage:

1. In Village Akbarpur Gahra, Dugawar, Heerapur farmers informed that the black coloured ash settles down on the leaves of crops and trees and it affects the yield. Villagers also informed that, in the survey area, average yield of sugarcane is 50-60 quintals/bigha, Rice 350-400 quintals/bigha, wheat 2.5-3 quintals/bigha, cauliflower is 8-10 Quintals/bigha and Potato - 25 quintals/bigha.
2. In Village Ramnagar, farmers informed about problem of crop damage due to fly ash deposition.

Observation based on assessment of Horticulture Department:

1. District Horticulture Department, District Sambhal, informed that no adverse effect of M/s Dhampur Sugar Mills Ltd., Asmoli, were reported on the crops.
2. It is concluded based on joint survey conducted district agriculture, horticulture, forest department and interaction with farmer and residents that though there are no evidence of loss of yield or damage to crop, however deposition of fly ash on leaves of crops/orchard and cloths of residents of nearby villages do occur which may cause inconvenience/ uneasiness.

6.4. Survey and monitoring of Sot river

Inspection team has surveyed the Sot river on 17th & 18th of November 2021 and sampling was conducted to assess the impact of Sugar mill effluent on water quality of Sot River. River Sot is a seasonal river which originates from the District Amroha near Dhanaura block. The river has no perennial flow and flow in the river is reported during rainy season and ponding of water takes place after monsoon season on the river bed.

Details of surveyed location are shown in figure 6.3 and 6.4:

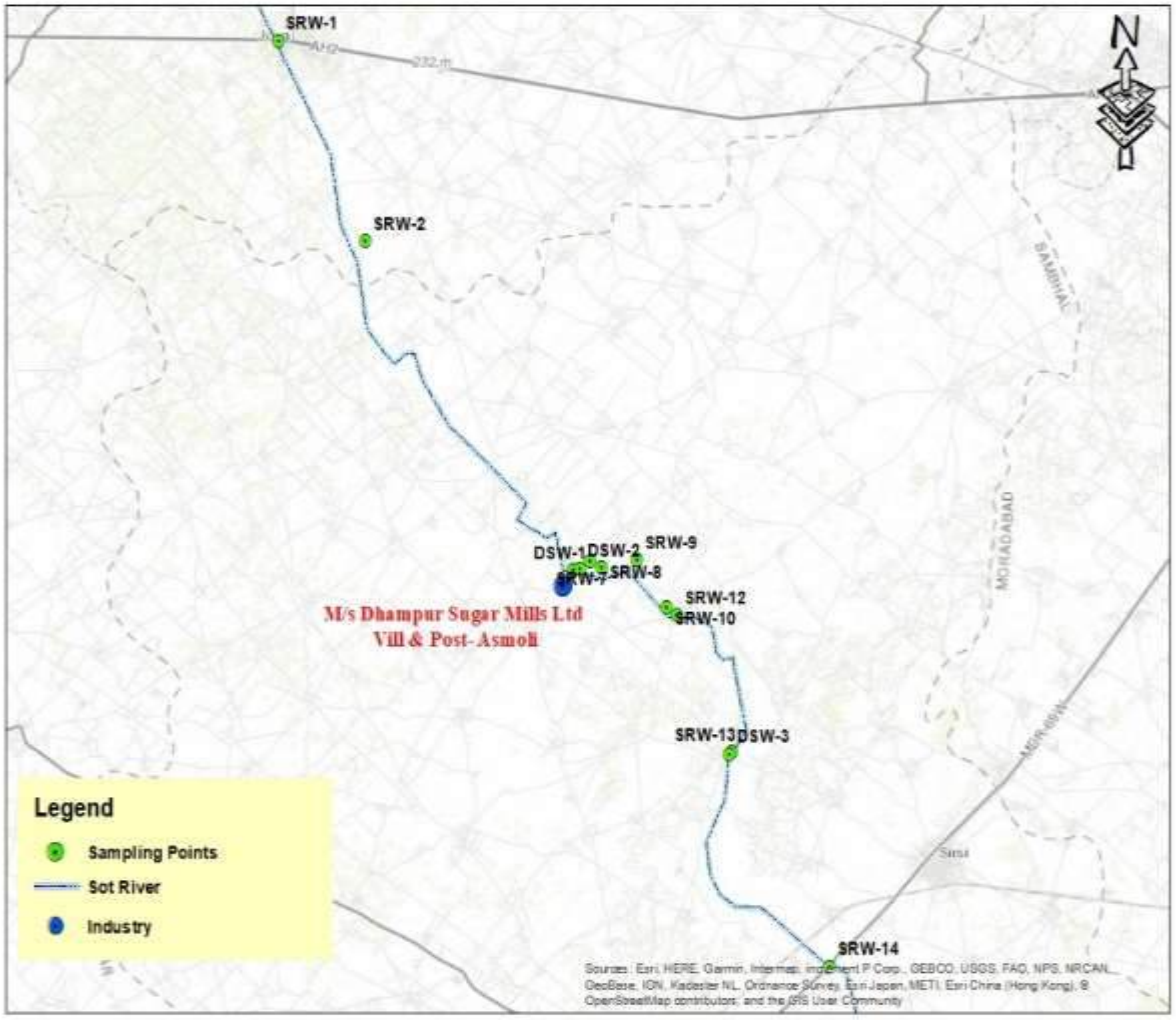


Figure 6.3 Sampling locations of Sot river

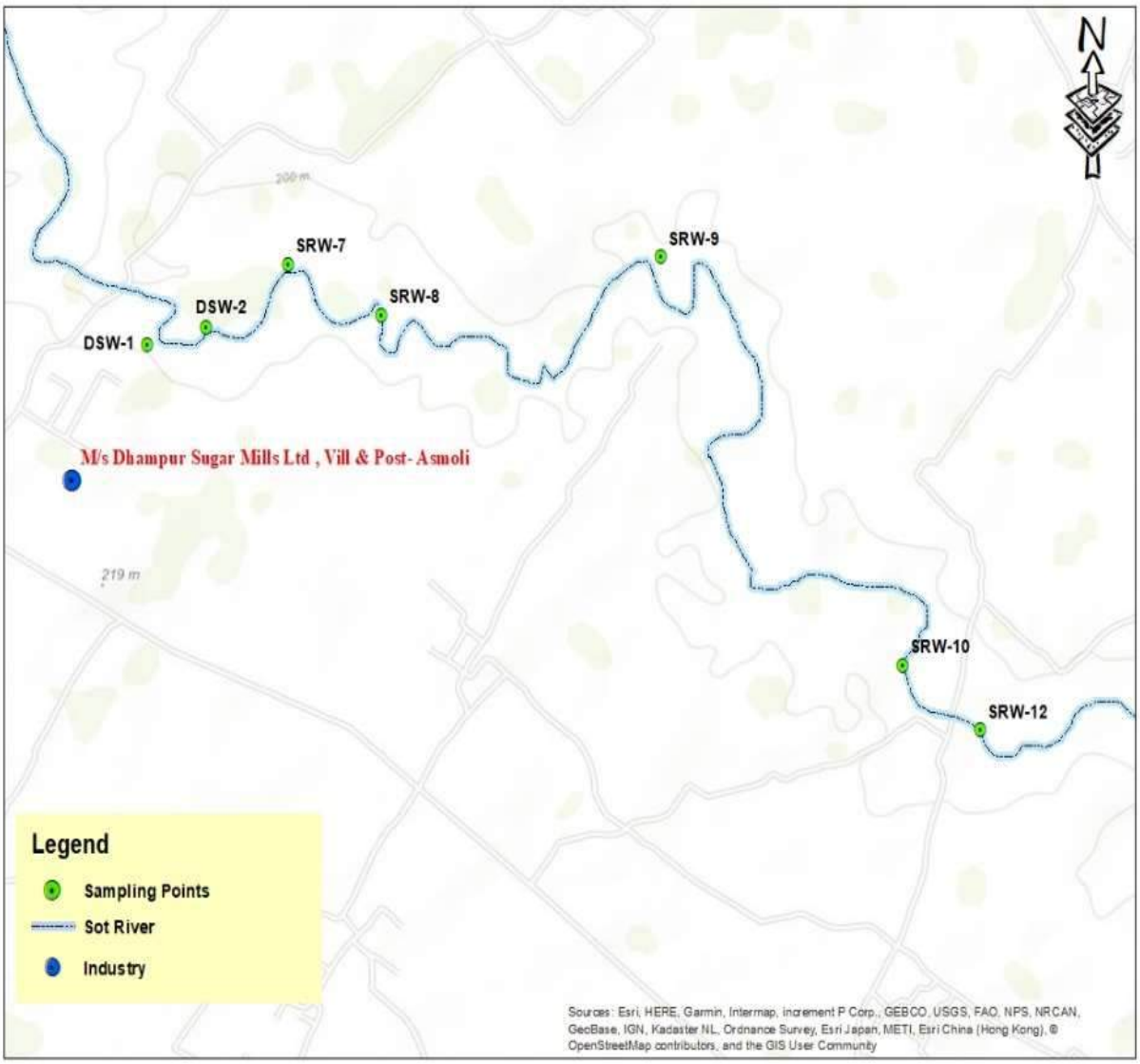


Figure 6.4 Sampling location of Sot river near DSM unit

Details of survey location along with observations for each location is tabled below:

Table 6.6 Details of Sot river surveyed location

Location code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
SRW -1	River Sot at Joya on NH24 road bridge u/s of Asmoli	28.835465, 78.466895	Flowing	Yes	• Flow in river observed at this location and mostly carries sewage from Joya town and nearby areas.

					• Solid waste dumping including medicine packets etc were observed dumped on the river bed.
SRW-2	River Sot near Mojahidpur-Salarpur village (near Palaula)	28.787891, 78.490085	Flowing	Yes	• Water from river Sot at this location was being used for irrigation purpose in nearby agriculture fields and diesel pump observed deployed by villagers for same.
SRW -3	Choiyya river near Salimpur Salar Village (Near Palaula) before c/f with Sot river	28.773817, 78.481337	Dry	No	• River Choiyya (tributary of river sot) at Salimpur Salar was found dry and farming being carried out on river bed. • Choiya river confluences with river Sot d/s of this location.
SRW-4	River Sot behind Bharat Petrol Pump near Manouta road on Sambhal-Joya Road u/s of Manouta bridge	28.73899, 78.52278	Dry	No	• River bed was found dry
SRW-5	River Sot at Manouta road bridge u/s of Asmoli on Sambhal-Joya Road	28.735449, 78.523976	Dry	No	• River Sot was found dry at immediate upstream and downstream to the Manouta bridge location which is located at around 5 Km upstream to the DSM Unit at Asmoli.
SRW-6	River Sot on Asmoli Madhan Road near Akbarpur Gohra u/s of DSM Unit Asmoli	28.7109541, 78.5437542	Dry	No	• River Sot on Asmoli-Madhan road near the DSM unit boundary was found dry on the culvert. • Ploughing of river bed observed behind the unit boundary for farming.

SRW-7	River Sot Near Asmoli Shamshan Ghat d/s of DSM unit	28.71199, 78.55002	Flowing	Yes	• The river bed at the location behind the DSM Asmoli unit, near Asmoli Shamshan Ghat was found dry with small patches of water. • Flow in river observed through a closed pipeline at this location near river boundry. • River at this location is largely fed with the wastewater coming from the mill as well as storm water during rain. • River bed observed dark-brown in colour.
SRW-8	River Sot near Dugawar Village d/s of DSM unit at Asmoli	28.710578, 78.553164	Flowing (meagre)	Yes	• River Sot at downstream of Asmoli Shamshan Ghat near Dugawar village found to have pooling of wastewater. • Physical appearance of river water was black coloured with dark background of river bed.
SRW-9	River Sot near Dugawar Shamshan Ghat	28.712195, 78.562499	Stagnancy observed (suspended ash)	Yes	• River Sot at near Dugawar Shamshan Ghat was observed to be having in the form of pool and no flow observed at the location. • River water observed blackish in color. • Suspended matter (ash like) was observed in sample collected.
SRW-10	River Sot near Bilal Pat village before diversion through pipeline near Karbala	28.70086, 78.57057	Flow to pipeline	Yes	• The river at this location was found diverted through a pipeline for an approximate distance of 300-400 meters.

SRW-11	River Sot near Bilal Pat-Ramnagar village road	28.699514, 78.572181	Dry	No	• River bed was found dry.
SRW-12	River Sot through pipeline observed near Bilal Pat	28.699059, 78.573172	Flow from pipe	Yes	• Flow observed at this location. • The colour of the sample visually appeared as brown at this location.
SRW-13	River Sot at Shahpur Sot village d/s of village	28.666493, 78.58772	Pooling observed (no flow d/s)	Yes	• Pooling of river Sot was observed at this location. Aquatic organism like fish also observed.
SRW-14	Road near Firozpur village - Sirsi	28.615644, 78.613987	Stagnant pockets	Yes	• Pooling of river Sot was observed at this location with green algae indicating stagnancy of water.
SRW-15	River Sot on Sambhal-Chandausi Road near Tigri village on Bhawanipur Pul (d/s of Sambhal town)	28.567729, 78.646872	Dry	No	• River bed at this location was observed as dry.
Sampling details of drains discharge into Sot river					
DSW-1	Outlet Drain coming from DSM unit near the boundary of DSM residential quarter	28.7097494, 78.5453367	Flowing	Yes	• Drain contains the discharge from residential area of DSM unit. • Drain joins the Sot river flow route at around 100-meter d/s of the location.
DSW-2	Drain from DSM unit u/s to Asmoli Shamshan Ghat (Near	28.710228, 78.547275	Flowing	Yes	• This drain contains the discharge of treated effluent from ETP of DSM unit.

	JCB work observed for pipeline)				• The work for pipeline implant was going on at the location on the edge of river bed downstream to this location.
DSW-3	Drain from Village Shahpur Sot before c/f with River Sot	28.666074, 78.587211	Flowing drain	Yes	• The domestic waste water from village reaches through the drain.

Analysis results of sample collected during survey and monitoring of Sot river for general parameters is tabled below;

Table 6.7 Analysis results of sample collected from Sot river and drains

Stretch	Location code	pH	COD	BOD	TSS	TDS	Colour	Cl-	NO_3-N	$SO4^{2-}$	PO_4-P	NH_3-N	DO	As	Cu	Fe	Mn	Zn
	Survey location of Sot river upstream of Dhampur sugar mill (Stretch-I)																	
Stretch - I	SRW-1	7.3	18	4	14	200	33	50	0.11	37	1.23	2	0	BDL	BDL	0.4	0.17	0.02
	SRW-2	7.4	32	7	14	236	29	56	0.46	38	0.14	6	0	BDL	BDL	0.91	0.21	BDL
Stretch - II	Sot River was found dry in this stretch, no sample was collected																	
	Survey location of Sot river downstream of Dhampur sugar mill (Stretch-III)																	
Stretch - III	SRW-7	6.8	46	14	52	108	11	71	0.32	146	0.16	1	0	BDL	0.03	3.36	0.21	0.14
	SRW-8	6.9	132	17	223	364	8	85	0.1	105	0.14	3	0	BDL	0.03	4.66	0.25	0.08
	SRW-9	6.8	**228**	**126**	**590**	460	20	104	0.1	96	0.14	6	0	BDL	BDL	2.55	0.41	0.03
	SRW-10	7.4	66	12	11	592	81	133	0.1	74	0.61	-	1.7					
	SRW-12	7.4	60	12	13	896	61	119	0.1	102	0.52	3	1.9	BDL	BDL	0.35	0.34	BDL
	SRW-13	7.5	29	7	22	128	28	13	BDL	26	0.52	2	5.2	BDL	BDL	1.68	0.15	0.02
	SRW-14	7.5	12	3	13	128	44	34	0.36	32	0.05	1	4.4	0.32	BDL	2.85	0.43	0.03
	DSW-1	7.3	72	24	19	716	34	221	0.1	158	BDL	2	-	BDL	BDL	0.06	0.08	BDL
	DSW-2	7.3	106	24	40	648	19	161	BDL	136	0.1	-	-					
	DSW-3	7.2	92	32	77	244	48	62	0.49	71	0.74	7	-	BDL	0.01	2.2	0.41	0.09

Note: All units in mg/l except pH and colour; colour measured in colour units (SR: River; DS: drain)

Physico-chemical characteristics of river Sot/drains

Sampling of river Sot was conducted from Joya town (upstream of DSM unit) to Tigri village located at around 10 km. downstream of DSM unit in District Sambhal. Based on the flow conditions Sot river can be divided into 3 stretches;

Stretch – I: From Joya to Mojahidpur. Flow in river observed in this stretch which is due to discharge of sewage from Joya town and nearby areas. River water quality in this stretch show pH values from 7.3 to 7.4, colour from 29 to 33 colour unit, BOD from 4 to 7 mg/l, COD from 18 to 32 mg/l, TSS 14 mg/l, TDS from 200 to 236 mg/l, Sulphate from 37 to 38 mg/l, nitrate from 0.11 to 0.46 mg/l and ammoniacal nitrogen from 2 to 6 mg/l.

Stretch – II: From Mojahidpur downstream to upstream of DSM unit at Asmoli. River Sot was found dry in this stretch.

Stretch – III: From downstream of DSM unit to Tigri village. No fresh water flow in river was observed in this stretch and river receives treated effluent from ETP lagoon of sugar unit, sewage from residential colony of DSM sugar unit and sewage from Sahpur village which contribute to its flow for few kilometers. River water quality in this stretch show pH values from 6.8 to 7.5, colour from 08 to 81 colour unit, BOD from 3 to 126 mg/l, COD from 12 to 228 mg/l, TSS 11 to 590 mg/l, TDS from 108 to 896 mg/l, Sulphate from 26 to 146 mg/l, nitrate BDL to 0.36 mg/l and ammoniacal nitrogen from 1 to 6 mg/l which indicate that river is polluted as it carries effluent and sewage. The work for pipeline laying was observed D/s of the unit at the time of inspection for release of treated industrial effluent in the agricultural field.

<u>Conclusion of survey conducted in Asmoli, District Sambhal</u>

1. Based on the soil analysis report pH of soil samples was normal and values of other parameters were also in range as found in this locality.
2. The changes in colour of groundwater water to yellow after few minutes of storing might be due to oxidation of iron and manganese present in groundwater. The geology of the area seems to have influence on groundwater parameters.
3. Evidence has not been found of damage to trees/crop/orchard/garden and fish breeding due to the pollution by DSM Asmoli unit.
4. River Sot in stretch – II, from Mojahidpur downstream to upstream of DSM unit at Asmoli, River Sot was found dry. In stretch – III, from downstream of DSM unit to Tigri village, river is polluted as it doesn't have any fresh water source and carries effluent from DSM, Asmoli unit and sewage from residential colony of the unit and nearby villages.
5. In Ramnagar village located on right bank of river d/s of DSM Asmoli unit, pollution on ground water samples even at a depth of 200-220 ft. was observed in terms of high values of COD (11-45mg/l).
6. Ground Water Department, District- Moradabad, vide letter dated 29.12.2021 reported that, *block-Asmoli was notified as semi-critical zone and provided the 05-year pre-& post monsoon ground water level data of Asmoli block i.e. average 17.34 meter* (**Annexure-8A).** Ground Water Department, District- Moradabad, vide letter dated 05.05.2022 reported following observations (**Annexure 8B**):
    a. *It was further noted that at sampling locations having higher concentration of COD along with chloride and Mn was also observed. Chloride is often the most serious*

source of interference in COD determination. This indicates the possible impact of industrial pollution or domestic wastewater as the Sot River downstream of DSM, Asmoli carries only partially/ untreated effluent and sewage. As reported by the villagers the cases of Jaundice are of concern, however the cause of this possibly is drinking water contaminated with Hepatitis virus which is unlikely to due to industrial discharge.

b. *The changes in colour of groundwater water to yellow after few minutes of storing might be due to oxidation of iron and manganese present in groundwater. The sources of these pollutants seem to be geogenic in origin. The geology of the area seems to have influence on groundwater parameters. The COD values also possibly get influenced by higher concentration of chloride and Mn concentrations. Further, the excessive use of pesticides and fertilizers in the area coupled with overexploitation of the ground water also may have contributed to the higher values of COD and Ammoniacal nitrogen.*

7. District Horticulture Officer, Asmoli, Sambhal informed that, *there is 600-700-hectare area for horticulture and 500-600-hectare area for vegetable cultivation is available in block Asmoli. Following crops are reported which are cultivated in 5-kilometer radius of M/s DSM, Asmoli: Potato (400-450 hectare), vegetable (20 hectare), Mango (63 hectare) and Guava (3.2 hectare). No adverse effect of industrial pollution (emission) occur on mango crop vegetable and potato crop. It is also reported that no complaint regarding above issues are received by the farmers of block Asmoli.* **Annexure-9**
8. District Pisciculture Officer, Asmoli, Sambhal vide letter dated 29.12.2021 submitted that*, in survey dated 17.11.2021 and 18.11.2021, no adverse impact observed due to the industrial pollution on pisciculture which were present in ponds located in the closed vicinity of M/s DSM, Asmoli and no complaint related to pisciculture against sugar mill was received.* **Annexure-10**

Remedial measure for rejuvenation of Sot River

Analysis results of water quality of Sot river in stretch- III down stream of DSM unit indicates that river water is polluted due to lack of any fresh water source. It carries effluent from DSM, Asmoli unit and sewage from residential colony of the unit and nearby villages. Ground water sample taken in this stretch located on right bank of river d/s of DSM unit reflect pollution on ground water in terms of high values of COD (11-45mg/l). No untreated effluent and sewage should be discharge into river. CPCB guideline for "*Alternative treatment technologies for wastewater treatment of drains*" prepared in compliance of Hon'ble NGT direction in the matter of OA no. 06/2012 may be referred for interim measure. Cost of the treatment system generally varies between 50 lacs to 1 crore per unit which shall be bear by either DSM unit or by other concern authority or both. The length of Constructed Wetland (CWS) and number of units depends on the flow of water, wastewater quality (BOD, COD, TSS and DO levels) and width of the drain. These systems can be installed and operated within short gestation period of around 12 - 24 months and not only treat the wastewater but also help in recharging of ground water. For designing of such system, expert institute like Centre for Environmental Management of Degraded Ecosystem (CEMDE), University of Delhi may also be approached for better technical know-how about the natural treatment system.

Remedial measure for Groundwater contamination

As per Central Ground Water Board (CGWB), report on National Compilation on Dynamic Groundwater Resource of India, 2020, out of 8 monitored locations, two blocks/ towns of Sambhal fall under semi-critical area, and five blocks/ towns under critical area. As per Uttar Pradesh Ground Water Department (UPGWD) on present survey/sampling report no adverse impact of industry in groundwater was found. However, it is recommended to:

1) Identify location of safe drinking groundwater and marking all unsafe groundwater to avoid their use for drinking purposes.
2) 47 groundwater samples were collected from borewells, hand pumps and tube-wells located in and around 17 villages. Out of these 17 villages ground water quality shows higher than WHO permissible limit for **TDS** at Village Ramnagar, Khanpur Band, Asmoli, Ekrotiya, Burra Begumpur, Madala Fatepur, Dugawar, Heerapur and Chandbar; **COD** at Ramnagar, Bilalpat, Safat Nagar, Khanpur Band, Asmoli, Burra Begumpur, Akbarpur Gahra, Dugawar, Bela, Heerapur and Racheta; **alkalinity** at Village Khanpur Band and Madala Fatepur; **Fe** at Village Ramnagar, Asmoli, Burra Begumpur, Akbarpur Gahra, Heerapur and Racheta; **Mn** at Village Ramnagar, Burra Begumpur, Madala Fatepur, Akbarpur Gahra, Dugawar, Bela, Heerapur, Racheta and Chandbar and **Zn** at Village Burra Begumpur at shallow depth. These villages need to get deep bore well/handpump by the unit or by concerned agencies.
3) A detailed study may be carried out for groundwater quality and plan shall be made for recharge of ground water by central and state government agencies like Central ground water board or concerned agencies.

Photographs taken during detailed study in Asmoli, Sambhal

Ground water sample collection in Erkotiya village	Ground water sample collection in Asmoli village

Soil sample collection in Asmoli village	Soil sample collection in Rushtampur village
GW sample collection in Ramnagar village near Sot river	GW sample collection in Ramnagar village near Sot river
River Sot at Joya on NH24 road bridge u/s of Asmoli	River Sot on Asmoli Madhan Road near Akbarpur Gohra u/s of DSM Unit Asmoli

Outlet Drain coming from DSM unit near the boundary of DSM residential quarter	River Sot near Dugawar Village d/s of DSM unit at Asmoli
Drain from Village Shahpur Sot before c/f with River Sot	River Sot on Sambhal-Chandausi Road near Tigri village on BhawanipurPul (d/s of Sambhal)

7. Joint survey and monitoring in the surrounding areas of M/s Dhampur Sugar Mills Ltd., Dhampur, District Bijnor (Sugar and Distillery unit) and Ikra Drain & Karula river during Dec. 1-2, 2021

Four teams comprising of officials from CPCB, UPPCB, UPGWB and District administrations, were deputed to carry out survey and monitoring on 01.12.21 & 02.12.21 to assess the damage caused to the environment of 21 selected villages/areas around the DSM unit and Ikra drain. The peripheral area of 4 km was taken for grid sampling with each grid length of 1.5 km, sampling has been done from each grid. The unit is located in between SH-49 and Ikra drain. Ikra drain flows north to south direction parallel to Karula River till Kiwar village, Dhampur, Bijnor, UP where it discharges into Karula river around 20 km south of the Unit. Based on the river catchment of Karula river and Ikra drain contour gradient considered from the unit towards flow direction of river and drain in North to South direction of the unit.

Following 21 villages/ area are included in the survey;

1. Village Peepla (Saidpur Veeru), Block-Dhampur, Dist- Bijnaur, U.P
2. Village Haizri (Nurrullapur Cheema), Block-Dhampur, Dist- Bijnaur, U.P
3. Village Mauhdi, Block-Dhampur, Dist- Bijnaur, U.P
4. Village kundipura, Block-Dhampur, Dist- Bijnaur, U.P
5. Village Mirjapur Palla, Block-Dhampur, Dist- Bijnaur, U.P
6. Village Mohda, Block-Dhampur, Dist- Bijnaur, U.P
7. Village Khai khera, Block-Dhampur, Dist- Bijnaur, U.P
8. Village Jaitra, Block-Dhampur, Dist- Bijnaur, U.P
9. City area Dhampur Dist- Bijnaur, U.P
10. Dhampur Hussainpur/Purana Dhampur, Dist- Bijnaur, U.P
11. Village Suhaghpur Block-Dhampur, Dist- Bijnaur, U.P
12. Village Rampur Bhola, Block-Dhampur, Dist- Bijnaur, U.P
13. Village Dittanpur, Block-Dhampur, Dist- Bijnaur, U.P
14. Village Alaipur, Block-Dhampur, Dist- Bijnaur, U.P
15. Village Alavalpur, Block-Dhampur, Dist- Bijnaur, U.P
16. Village- Wajidpur, Block-Dhampur, Dist- Bijnaur, U.P.
17. Village- Mohammad Alipur Bhikan, Block-Dhampur, Dist- Bijnaur, U.P.
18. Village- Nindru Khas, Block-Dhampur, Dist- Bijnor, U.P.
19. Village- Khujista Nagar, Block-Dhampur, Dist- Bijnor, U.P.
20. Village- Ajitpurdasi, Block-Dhampur, Dist- Bijnor, U.P.
21. Village- Naseerpur Banwari, Block-Dhampur, Dist- Bijnor, U.P.

7.1. Assessment of contamination of soil

29 soil samples were collected from 21 selected villages existing in 4 Km peripheral area around the DSM unit to assess the soil health with respect to pH, EC, organic carbon, available phosphate and available potash.

The location of soil samples collected with reference to the DSM unit is shown as figure 7.1:

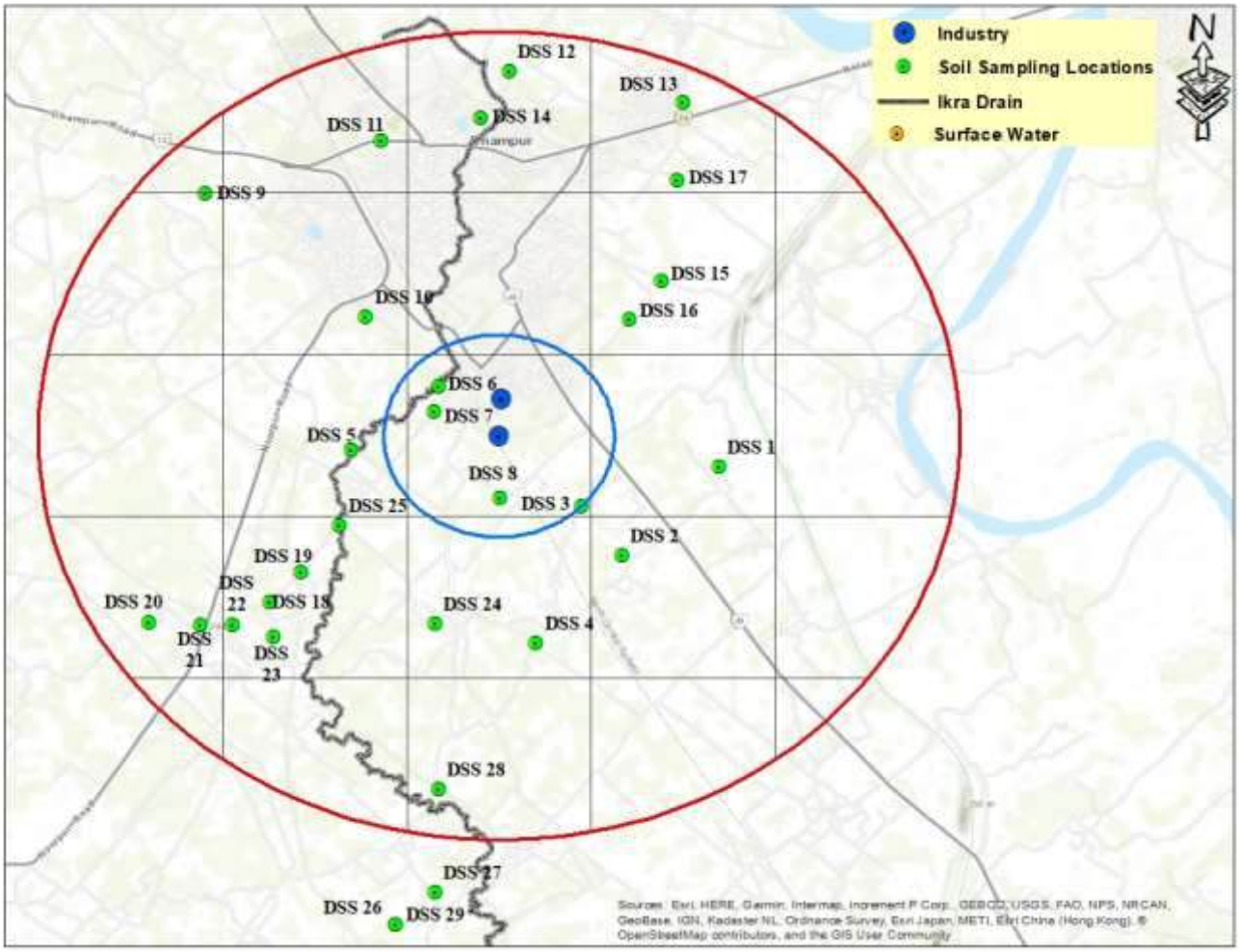


Figure 7.1 Soil sampling locations collected at Dhampur, Bijnor

Details of soil sample collected from 29 locations is tabled below;

Table 7.1 Details of soil samples collected from Dhampur block

Sample code	Sample location	Coordinate		Remark
		Latitude	Longitude	
DSS 1	Village Peepla (Saidpur Biro	29.282534	78.533764	Drain near the agricultural field of Sh. Lakshman Singh carry waste water and solid wastes in to the fields during rain, which affect the crop productivity.

Sample code	Sample location	Coordinate		Remark
		Latitude	Longitude	
DSS 2	Village Haizri (Nurrullapur Cheema)	29.274592	78.525038	Ploughed field
DSS 3	Village Mauhdi	29.279016	78.521434	Ploughed field
DSS 4	Village Kundipura	29.2667800	78.5174263	Ploughed field
DSS 5	Village Mirjapur Palla	29.284023	78.500944	Ploughed field
DSS 6	Village Mirjapur Palla	29.287585	78.508913	Mango orchard
DSS 7	Village Mohda	29.289683	78.508763	Ploughed field
DSS 8	Village Mohda	29.279799	78.514219	Ploughed field
DSS 9	Village Khai khera	29.306907	78.487825	Ploughed field
DSS 10	Jaitra	29.295933	78.502241	Ploughed field
DSS 11	Dhampur	29.311646	78.503618	Plough field
DSS 12	Village-Dhampur Hussainpur	29.317875	78.515049	Plough field
DSS 13	Village- Suhaghpur	29.315095	78.530566	Plough field
DSS 14	Village- Rampur Bhola	29.313641	78.512505	Potato field
DSS 15	Village- Dittanpur	29.299123	78.5286	Plough field
DSS 16	Village- Alaipur	29.295665	78.525726	Plough field
DSS 17	Village- Alavalpur	29.308074	78.530051	Plough field
DSS 18	Village- Wajidpur	29.270428	78.493618	Sugarcane field
DSS 19	Village- Wajidpur	29.273118	78.496383	Sugarcane field
DSS 20	Village- Mohammad Alipur Bhikan	29.268675	78.4828262	Sugarcane/Mustard
DSS 21	Village- Mohammad Alipur Bhikan	29.26846	78.487448	Sugarcane/Mustard
DSS 22	Village- Nindru Khas	29.268386	78.490289	Mustard
DSS 23	Village- Nindru Khas	29.26735877	78.49394226	Garlic
DSS 24	Village- Khujista Nagar	29.268493	78.508359	Sugarcane/Mustard

Sample code	Sample location	Coordinate		Remark
		Latitude	Longitude	
DSS 25	Village- Khujista Nagar	29.277284	78.499880	Sugarcane/Mustard
DSS 26	Village- Ajitpurdasi	29.241724	78.504849	Plough field
DSS 27	Village- Ajitpurdasi	29.244529	78.5084	Plough field
DSS 28	Village- Naseerpur banwari	29.253791	78.508727	Plough field
DSS 29	Village- Naseerpur banwari	29.241714	78.504849	Plough field

Analysis results of soil samples collected is tabled below:

Table 7.2 Analysis results of soil samples

Soil Sample code	pH	Available Organic Carbon		Available Phosphate		Available Potash		Electrical Conductivity	
		%	Fertility Class	%	Fertility Class	%	Fertility Class	Milli mhos/cm.	Class
DSS 1	7.6	0.35	L	27	M	209.44	M	0.35	Normal
DSS 2	7.5	0.56	M	27	M	179.2	M	0.56	Normal
DSS 3	7	0.21	L	9	V.L	143.36	M	0.45	Normal
DSS 4	7.4	0.07	V.L	13.5	L	168	M	0.55	Normal
DSS 5	7.1	0.63	M	40.5	H	434.56	H	0.4	Normal
DSS 6	7.3	0.84	H	67.5	H	553.28	H	0.46	Normal
DSS 7	7.5	0.28	L	13.5	V.L	115.36	M	0.53	Normal
DSS 8	7.2	0.35	L	13.5	L	143.36	M	0.49	Normal
DSS 9	7.2	0.28	L	22.5	M	129.92	M	0.33	Normal
DSS 10	7.4	0.14	V.L	9	V.L	88.48	L	0.43	Normal
DSS 11	7.2	0.41	L	36	M	204.96	M	0.48	Normal
DSS 12	7.2	0.38	L	31.5	M	126.56	M	0.46	Normal
DSS 13	7.7	0.67	M	45	H	173.6	M	0.54	Normal
DSS 14	7.1	0.31	L	18	L	170.2	M	0.34	Normal
DSS 15	7.1	0.14	V.L	13.5	H	209.44	M	0.43	Normal

Soil Sample code	pH	Available Organic Carbon		Available Phosphate		Available Potash		Electrical Conductivity	
		%	Fertility Class	%	Fertility Class	%	Fertility Class	Milli mhos/cm.	Class
DSS 16	7.3	0.53	M	27	M	116.48	M	0.37	Normal
DSS 17	7.4	0.28	L	40.5	H	92.96	L	0.41	Normal
DSS 18	7	0.28	L	13.5	L	234.08	M	0.42	Normal
DSS 19	7.1	0.25	L	4.5	V.L	119.84	M	0.35	Normal
DSS 20	7.2	0.21	L	4.5	V.L	157.92	L	0.42	Normal
DSS 21	7.1	0.48	**L**	9	V.L	412.16	H	0.34	Normal
DSS 22	7	0.56	M	9	V.L	400.96	H	0.31	Normal
DSS 23	7.7	0.56	M	27	M	143.36	M	0.33	Normal
DSS 24	7.2	0.49	L	9	V.L	145.6	M	0.42	Normal
DSS 25	6.9	0.24	L	22.5	M	230.72	M	0.37	Normal
DSS 26	7	0.35	L	18	L	439.04	H	0.41	Normal
DSS 27	7.2	0.28	L	18	L	155.68	M	0.32	Normal
DSS 28	6.9	0.21	L	9	V.L	394.24	H	0.34	Normal
DSS 29	7.3	0.29	L	9	V.L	203.84	M	0.35	Normal

*** L- Low, M - medium, S – small, V.L – very low**

Observations based on the analysis results of soil samples:

As per analysis result of 29 soil samples collected from 21 villages located within 4 km peripheral area around the Unit, following observations were made:

1. pH, Organic Carbon (OC), Potassium (K), Phosphate and Electrical Conductivity (EC) value ranges from 6.9- 7.6, 0.14-0.84 %, 92-553.28 %, 9 - 45 %, and 0.31 – 0.56Milli mhos/cm respectively
2. Soil nutrient status data of Dhampur Block of district Bijnor for 2017-18 and 2018-19 under soil health card scheme of Ministry of Agriculture and Farmer Welfare, also shows similar pattern of nutrient profile of soils parameters.

7.2. Assessment of contamination of ground water

53 groundwater sample were collected from 29 village. All samples were analysed for general parameter and analysis for heavy metals were carried out for 37 samples. Ikra drain flows west of the DSM unit and Preshak canal flows east of DSM unit around 2 Km from the unit. Both Ikra drain and Preshak canal flows from north to south. Considering contour gradient of the study area towards flow direction from north to south, villages/locations located at the

upstream of DSM unit may be considered as having less potential of impact of any discharge on ground water and villages located downstream of DSM discharge point may be considered having high potential of ground water contamination due to any discharge from industrial unit. 26 groundwater samples were collected from u/s locations and 27 groundwater samples were collected from d/s locations. The groundwater sample were compared with prescribed specification of ionic concentration in groundwater by WHO standards (1996).

The location of ground water and surface water sample collected with reference to the DSM unit is shown as figure 7.2:

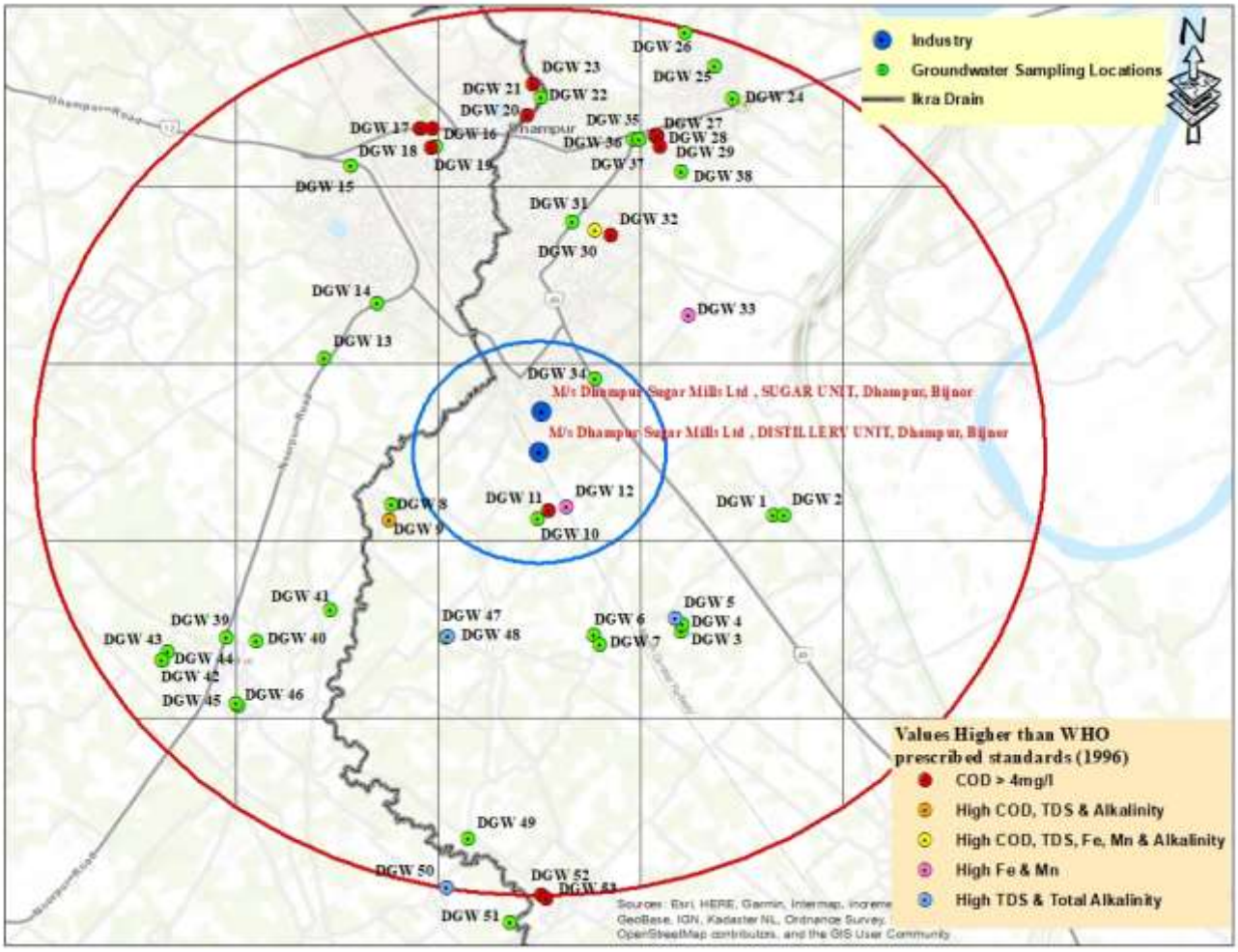


Figure 7.2 Sampling locations ground water and surface water samples collected from Dhampur, Bijnor

Details of ground water samples collected during survey are as under;

Table 7.3 Details of ground water samples collected

Sample code	Sample location	Bore well / Handpump	Depth (ft)	MOC of hand pump	Coordinates	
					Latitude	Longitude
DGW 1	Village Peepla (Saidpur Biro),	Handpump (Govt.)	120-170	GI	29.280163	78.533146
DGW 2	Village Peepla (Saidpur Biro),	Handpump (Pvt.)	50	MS	29.2801447	78.5339970
DGW 3	Village Haizri (Nurrullapur Cheema)	Handpump (Govt.)	150	GI	29.2706802	78.5256527
DGW 4	Village Haizri (Nurrullapur Cheema)	Handpump (Pvt.)	80	MS	29.271262,	78.525713
DGW 5	Village Haizri (Nurrullapur Cheema)	Handpump (Pvt.)	240	GI	29.2717363	78.52520602
DGW 6	Village Mauhdi	Handpump (Pvt.)	65	MS	29.2703673	78.5185559
DGW 7	Village Kundipura	Handpump (Govt.)	180	GI	29.269655	78.519040
DGW 8	Village Mirjapur Palla	Handpump (Govt.)	180	GI	29.2810147	78.5020338
DGW 9	Village Mirjapur Palla	Handpump (Pvt.)	100	MS	29.279747	78.501877
DGW 10	Village Mohda, Vidhan Sabha	Handpump (Govt.)	180	GI	29.279861	78.513945
DGW 11	Village Mohda, Vidhan Sabha	Handpump (Pvt.)	60	MS	29.280552	78.514849
DGW 12	Village Mohda, Vidhan Sabha	Handpump (Pvt.)	60	MS	29.280820	78.516336
DGW 13	Village Khai Khera	Handpump (Pvt.)	80-90	MS	29.292961	78.496625
DGW 14	Village Jaitra	Handpump (Govt.)	180	GI	29.297451	78.500862
DGW 15	Village Jaitra	Handpump (Govt.)	180	GI	29.308643	78.498759
DGW 16	Dhampur city near Saint Mary's school	Hand pump	180-200	Iron (MS/GI)	29.311646	78.505336

Sample code	Sample location	Bore well / Handpump	Depth (ft)	MOC of hand pump	Coordinates	
					Latitude	Longitude
DGW 17	Dhampur city near Saint Mary's school	Hand pump	180	HDPE	29.311625	78.504394
DGW 18	Dhampur city near Saint Mary's school	Hand pump	180	Iron (MS/GI)	29.310149	78.505681
DGW 19	Dhampur city near Saint Mary's school	Hand pump	180-190	Iron (MS/GI)	29.310124	78.50525
DGW 20	Village-Dhampur Hussainpur	Hand pump	180	Iron (MS/GI)	29.312716	78.513094
DGW 21	Village-Dhampur Hussainpur	Borewell	440-450	Iron (MS/GI)	29.311625	78.504394
DGW 22	Village-Dhampur Hussainpur	Hand pump	180	Iron (MS/GI)	29.314139	78.514242
DGW 23	Village-Dhampur Hussainpur	Hand pump	120	Iron (MS/GI)	29.31527	78.513586
DGW 24	Village-Suhaghpur	Hand pump	160	Iron (MS/GI)	29.31407	78.529841
DGW 25	Village-Suhaghpur	Hand pump	95	Iron (MS/GI)	29.31674	78.528383
DGW 26	Village-Suhaghpur	Hand pump	180	Iron (MS/GI)	29.319472	78.525963
DGW 27	Village- Rampur Bhola	Hand pump	180	Iron (MS/GI)	29.311072	78.5235577
DGW 28	Village- Rampur Bhola	Hand pump	240	Iron (MS/GI)	29.311029	78.523668
DGW 29	Village- Rampur Bhola	Hand pump	250	Iron (MS/GI)	29.310166	78.52392
DGW 30	Village- Dittanpur	Hand pump	110	Iron (MS/GI)	29.303997	78.516815
DGW 31	Village- Dittanpur	Hand pump	180	Iron (MS/GI)	29.303367	78.518656
DGW 32	Village- Dittanpur	Hand pump	180	Iron (MS/GI)	29.302941	78.519931
DGW 33	Village- Alaipur	Hand pump	30-40	Iron (MS/GI)	29.296431	78.526214
DGW 34	Village- Alaipur	Hand pump	170	Iron (MS/GI)	29.291274	78.518628
DGW 35	Village- Alaipur	Hand pump	200	Iron (MS/GI)	79.291337	78.5183

Sample code	Sample location	Bore well / Handpump	Depth (ft)	MOC of hand pump	Coordinates	
					Latitude	Longitude
DGW 36	Village- Alavalpur	Hand pump	270	Iron (MS/GI)	29.31076	78.52174
DGW 37	Village- Alavalpur	Hand pump	180	Iron (MS/GI)	29.31073	78.522231
DGW 38	Village- Alavalpur	Hand pump	180	Iron (MS/GI)	29.308113	78.525696
DGW 39	Village- Wajidpur	Handpump	180	GI pipe	29.270173	78.488647
DGW 40	Village- Wajidpur	Handpump	60	MS pipe	29.269886	78.491062
DGW 41	Village- Wajidpur	Borewell	120	MS pipe	29.272456	78.497119
DGW 42	Village- Mohammad Alipur Bhikan	Handpump	180	GI pipe	29.269061	78.483829
DGW 43	Village- Mohammad Alipur Bhikan	Handpump	180	GI pipe	29.268382	78.483446
DGW 44	Village- Mohammad Alipur Bhikan	Handpump	70	MS pipe	29.268351	78.483379
DGW 45	Village- Nindru Khas	Handpump	180	GI pipe	29.2646503	78.48960113
DGW 46	Village- Nindru Khas	Handpump	65	MS pipe	29.264814	78.489382
DGW 47	Village- Khujista Nagar	Handpump	140	GI pipe	29.2702064	78.5064849
DGW 48	Village- Khujista Nagar	Handpump	60	MS pipe	29.2702693	78.50663757
DGW 49	Village- Ajitpurdasi	Handpump fitted with submersible	150	GI pipe	29.253827	78.508287
DGW 50	Village- Ajitpurdasi	Handpump	65	MS pipe	29.249851	78.5065078
DGW 51	Village- Ajitpurdasi	Handpump	65	MS pipe	29.246974	78.511686
DGW 52	Village- Naseerpur Banwari	Handpump	70	MS pipe	29.249297	78.514217

Sample code	Sample location	Bore well / Handpump	Depth (ft)	MOC of hand pump	Coordinates	
					Latitude	Longitude
DGW 53	Village- Naseerpur Banwari	Handpump	240	GI pipe	29.2489509	78.51466369
Surface water sample collected						
SWS 1	Surface water (ponding)	ponding	Surface water ponding near the ash dumping site of M/s Dhampur Sugar Mills Ltd.		29.288670	78.524276

Analysis results of ground water samples collected during survey is tabled below;

Table 7.4 Analysis results of ground water samples collected from Dhampur

Sample Code	Depth (ft)	pH	COD	TSS	TDS	Total Alkalinity	Total Hardness	Cl^{-1}	F^{-}	SO_4^{-2}	NO_3-N	As	Cu	Fe	Mn	Zn
WHO Std.		**6.5-8.5**	**4.0**		**500**	**30-500**	**500**	**100**	**1.5 – 2.4**	**250**	**10-45**	**0.1**	**0.2**	**5.0**	**0.2**	**2-3**
DGW 1	120-170	7.7	BDL	-	222	209	275	10	0.3	BDL	BDL	BDL	BDL	0.38	0.1	0.13
DGW 2	50	7.2	BDL	-	488	345	303	48	0.2	23	BDL	BDL	BDL	1.31	0.1	0.2
DGW 3	150	7.7	BDL	-	228	202	295	14	0.3	BDL	BDL	BDL	BDL	1.05	0.08	0.09
DGW 4	80	7.7	BDL	-	228	178	275	8	0.3	BDL	12.8	-	-	-	-	-
DGW 5	240	7.1	BDL	-	778	554	453	114	0.2	81	1.4	BDL	BDL	0.61	**0.92**	0.09
DGW 6	65	7.4	BDL	-	360	205	384	14	0.2	10	BDL	BDL	BDL	2.75	0.11	0.09
DGW 7	180	7.6	BDL	-	230	178	267	8	0.4	BDL	BDL	BDL	BDL	0.64	0.06	0.07
DGW 8	180	7.7	BDL	13	238	221	263	12	0.6	BDL	13	BDL	BDL	1.34	0.09	0.03
DGW 9	100	7.8	8	20	1480	550	962	236	BDL	297	4.4	BDL	BDL	0.17	**0.92**	0.03
DGW 10	180	7.1	BDL	10	344	283	436	18	0.4	10	9	BDL	BDL	0.43	0.01	0.34
DGW 11	60	7	9	11	620	391	473	78	0.3	99	1.1	BDL	BDL	0.67	0.01	0.02
DGW 12	60	7.2	BDL	20	410	333	380	40	0.3	101	BDL	BDL	BDL	**7.85**	**1**	0.01
DGW 13	80-90	7.5	BDL	-	438	341	307	26	BDL	37	BDL	BDL	0.98	1.62	**0.5**	2.96

Sample Code	Depth (ft)	pH	COD	TSS	TDS	Total Alkalinity	Total Hardness	Cl^{-1}	F^{-}	SO_4^{-2}	NO_3-N	As	Cu	Fe	Mn	Zn
DGW 14	180	7.6	BDL	30	386	562	356	94	0.2	24	BDL	BDL	0.03	**9.39**	0.09	0.47
DGW 15	180	7.7	BDL	-	206	279	234	24	BDL	14	BDL	BDL	BDL	0.71	0.11	0.04
DGW 16	180-200	7.8	9	-	202	202	319	14	0.5	5	BDL	BDL	BDL	0.49	0.06	0.06
DGW 17	180	7.6	5	-	232	264	234	18	0.6	9	BDL	BDL	BDL	1.18	0.08	0.03
DGW 18	180	7.7	BDL	-	252	217	230	12	0.7	BDL	BDL	BDL	BDL	4.09	0.09	1.07
DGW 19	180-190	7.7	6	-	210	275	259	26	0.5	BDL	BDL	BDL	BDL	1.84	0.05	0.15
DGW 20	180	7.7	5	-	256	229	170	12	0.3	BDL	BDL	BDL	BDL	1.05	0.04	0.16
DGW 21	440-450	7.6	5	-	298	221	251	12	0.3	15	BDL	-	-	-	-	-
DGW 22	180	7.6	BDL	9	430	504	347	100	0.3	42	0.5	-	-	-	-	-
DGW 23	120	7.8	7	-	282	267	226	28	0.3	BDL	BDL	BDL	BDL	0.26	0.16	-
DGW 24	160	7.7	BDL	-	228	209	234	12	0.3	BDL	0.7	-	-	-	-	-
DGW 25	95	7.5	BDL	-	768	256	356	194	0.3	72	6.4	-	-	-	-	-
DGW 26	180	7.7	BDL	-	266	260	275	20	0.3	BDL	BDL	BDL	0.08	0.64	0.17	1.16
DGW 27	180	7.9	8	-	242	205	202	14	0.7	BDL	BDL	-	-	-	-	-
DGW 28	240	7.9	5	-	234	198	234	14	0.4	BDL	BDL	BDL	BDL	0.2	0.08	0.15

Sample Code	Depth (ft)	pH	COD	TSS	TDS	Total Alkalinity	Total Hardness	Cl^{-1}	F^{-}	SO_4^{-2}	NO_3-N	As	Cu	Fe	Mn	Zn
DGW 29	250	7.8	5	-	304	186	226	8	0.3	9	BDL	BDL	BDL	4.81	**0.99**	1
DGW 30	110	7.8	BDL	-	232	360	283	52	0.4	BDL	BDL	-	-	-	**-**	-
DGW 31	180	7.5	7	-	536	550	420	108	0.4	22	BDL	BDL	0.04	**14.5**	**0.64**	0.44
DGW 32	180	7.8	6	-	240	275	311	22	0.06	8	BDL	-	-	-	**-**	-
DGW 33	30-40	7.5	BDL	127	382	283	259	22	BDL	35	BDL	BDL	0.08	**16.7**	**0.87**	2.49
DGW 34	170	7.7	BDL	-	298	407	287	40	0.3	17	BDL	-	-	-	**-**	-
DGW 35	200	7.6	BDL	-	318	364	295	50	0.6	17	BDL	BDL	-	2.49	**0.4**	0.62
DGW 36	270	7.6	BDL	-	258	174	234	8	0.5	8	BDL	-	-	-	-	-
DGW 37	180	7.7	BDL	-	250	283	242	18	0.4	17	BDL	-	-	-	-	-
DGW 38	180	7.8	BDL	-	204	182	251	8	0.3	BDL	BDL	-	-	-	-	-
DGW 39	180	7.2	BDL	11	198	202	352	14	BDL	BDL	1.4	BDL	BDL	0.86	0.14	0.12
DGW 40	60	7.2	BDL	10	504	473	347	62	BDL	23	0.9	-	-	-	-	-
DGW 41	120	7.7	BDL	-	442	198	400	26	BDL	56	BDL	BDL	BDL	0.27	0.29	BDL
DGW 42	180	7.3	BDL	-	216	186	291	12	0.3	BDL	BDL	-	-	-	-	-
DGW 43	180	7.1	BDL	10	394	209	311	16	BDL	15	BDL	BDL	BDL	0.86	0.21	0.04

Sample Code	Depth (ft)	pH	COD	TSS	TDS	Total Alkalinity	Total Hardness	Cl^{-1}	F^{-}	SO_4^{-2}	NO_3-N	As	Cu	Fe	Mn	Zn
DGW 44	70	7.6	BDL	12	276	283	255	22	BDL	10	1.3	BDL	0.04	2.41	**0.51**	0.05
DGW 45	180	7	BDL	-	232	287	291	22	0.2	5	12.3	-	-	-	-	-
DGW 46	65	7.6	BDL	52	808	271	436	176	0.3	84	9.3	BDL	0.42	4.08	**0.35**	0.32
DGW 47	140	7.2	BDL	-	218	190	594	12	BDL	5	1.4	BDL	BDL	0.16	0.09	0.09
DGW 48	60	7.5	BDL	-	720	512	444	98	0.3	115	BDL	BDL	0.02	0.14	0.2	0.03
DGW 49	150	7	BDL	-	256	271	311	12	0.2	BDL	BDL	BDL	BDL	0.3	0.16	0.02
DGW 50	65	7	BDL	26	556	535	529	102	BDL	144	BDL	BDL	BDL	2.01	**0.38**	BDL
DGW 51	65	8	BDL	6	252	240	234	12	0.2	30	BDL	BDL	BDL	0.25	**0.45**	BDL
DGW 52	70	7	5	-	500	271	412	26	0.3	154	BDL	-	-	-	-	-
DGW 53	240	7	5	-	220	225	299	12	0.2	BDL	BDL	BDL	BDL	2.81	**0.31**	0.3

Note: All units in mg/l except pH and colour; colour measured in colour units

Note: WHO standard values are indicated below the name of the respective parameter. Higher observed values are highlighted.

Analysis results of surface water sample collected is tabled below:

Table 7.5 Characteristic of sample collected from surface water/ ponding

Sample code	**pH**	**COD**	**BOD**	**TSS**	**TDS**	**Color**	**Cl-1**	**SO4-2**	**PO4-P**	**NO3-N**
SWS 1	7.1	**2229**	**1306**	345	**2032**	**130**	177	**281**	2.47	8.63

Observations based on the interaction and analysis results of surface water samples:

Resident of village Nurrullapur Cheema informed about a waste material storage site owned by DSM, Dhampur near Alaipur village (lat. - 29.288670 and long. - 78.524276). The joint team visited the mentioned site which was located at aerial distance of about 1KM from the unit. The team found ponding of waste water and also dumping of glass wool/ industries scrap in the area of around one acre. The sample (SWS1) collected from the ponding on the site shows very high colour (130Hazen), BOD (1306 mg/l), COD (2229 mg/l), TDS (2032 mg/l) and Sulphate (281 mg/l) which indicates ponding of polluted wastewater.

Observation based on interaction with farmers on ground water:

1. Residents of village Saidpur Biro, Dhampur Hussainpur, Rampur Bhola, Alavalpur, Wajidpur, Mohammad Alipur Bhikan, Nindru khas, Khujista Nagar and Ajitpurdasi informed that the **color** of the ground water turns yellowish after keeping it in vessels for few hours. Total 25 groundwater samples were collected from village Saidpur Biro (2 samples), Dhampur Hussainpur (4 samples), Rampur Bhola (3 samples), Alavalpur (3 samples), Wajidpur (3 samples), Mohammad Alipur Bhikan (3 samples), Nindru khas (2 samples), Khujista Nagar (2 samples) and Ajitpurdasi (3 samples). Out of 25 groundwater samples 16 samples were analysed for heavy metals. The groundwater analysis of samples from these villages suggest **Fe** varying from 0.14 to 4.81 mg/l. Fe levels found within limit as per WHO standard limit of 5 mg/l in all sixteen samples. However, ten samples had higher Fe than Indian drinking water standard ISO:10500 (2012) of 0.3 mg/l. The changes in colour of water to yellow after few minutes of storing might be due to oxidation of iron present in groundwater. Out of 16 samples analysed for heavy metals four samples were from u/s of the unit and 12 samples from d/s of the unit.
2. Residents of village Mohammad Alipur Bhikan, Nindru khas, village Khujista Nagar and Ajitpurdasi raised issues regarding majorly stomach related diseases and issue of stone formation due to continuous consumption of groundwater for drinking purposes. Total ten samples were collected from mentioned villages, Alipur Bhikan (3 samples), Nindru khas (2 samples), village Khujista Nagar (2 samples) and Ajitpurdasi (3 samples). Samples from Nindru khas, village Khujista Nagar and Ajitpurdasi shows higher TDS and alkalinity or higher TDS and Chloride than WHO groundwater standards (1996). As informed by Health department, District- Bijnor, patients with seasonal disease are generally observed in this district and the unit has no contribution/role to these health-related diseases.

Observations based on the analysis results of ground water samples:

1. COD, TDS and alkalinity were found higher than WHO (1996) prescribed limit in groundwater at DGW 9 and DGW 31. TDS and Total Alkalinity was found on higher side at DGW 5, DGW 48 and DGW 50. Chloride was found higher than WHO (1996) prescribed limit of ionic concentration in groundwater at DGW 5, DGW 9, DGW 14, DGW 23, DGW 25 and DGW 31. All the mentioned samples were collected at depth range of 100-240 ft. These samples are randomly distributed and doesn't show any pattern of impact as samples DGW 14, DGW 23, DGW 25 and DGW 31 were from u/s of the unit and others samples from d/s of the unit.
2. COD higher than WHO prescribed limit was observed in 15 samples (11 in upstream and 4 in downstream of the unit). Out of total 15, three samples were collected from shallow depth of 60-120 ft. and remaining twelve samples were collected from deep depth ranging from 180-450 ft. In the samples from deep borewells higher COD values were observed. The 11 samples located u/s of the unit showing high COD values were collected from in and around Dhampur city, this might be due to contamination of groundwater aquifer due to percolation of wastewater/ sewage flows in the Ikra drain.
3. All heavy metals were well within WHO standard (1196) of groundwater except Fe at four locations (one downstream and three upstream of the unit) collected from shallow depth of 30-180 ft. and Mn at 13 locations (eight downstream and five upstream of the unit). Out of total 13 locations for Mn, eight samples were collected from shallow depth of 30-100 ft. and remaining five samples were collected from deep depth ranging from 180-250 ft.

7.3. Assessment of crop damage

Observation based on interaction with farmers on crop damage:

- Residents of village Saidpur Biro village informed that a local drain which flows approx. 200 m away from the agriculture fields. This drain carries waste water of Dhampur sugar mills in to the fields during discharge or whenever it rains, which affect the crop productivity. Villagers informed that average yield of Sugarcane in the area is around 60qtls/bigha.
- Residents of village Ajitpurdasi also raised the issue of crop damage due to overflow of Ikra drain into adjacent crop field. It was also reported that trees in mango orchard (at Lat-29.246974, Long-78.511686) are getting badly affected due to seepage of polluted water from nearby Ikra drain.
- Residents of village Haizri, Block Allahaipur and Mauhdi raised the issue related with the ash that it affects more when wind direction turns towards agricultural land. No issue related with crop productivity and plant diseases were raised.
- Farmers from village Mohra informed that average yield of Sugarcane in the village is around 85qtls/bigha.

Observation based on assessment of Agricultural Department on crop damage:

- District Agriculture Department, Bijnor, informed that soil at these 29 locations was found fertile and is capable for crop production. No impact of industrial pollution was observed on the soil samples.
- It is concluded based on the joint survey conducted by District Agriculture, Horticulture, & Forest Department and interaction with local farmers & residents that though there are no evidence of loss of yield or damage to crop, however, deposition of fly ash on leaves of crops/ orchard & cloths of residents of nearby villages do occur which may cause inconvenience/ uneasiness.

7.4. Survey and monitoring of Ikra drain

Ikra drain originates from a pond (also called "Jheel" by villagers) in Dhampur-Hussainpur village in Dhampur Tehsil of Bijnor district (Uttar Pradesh) and travels approximately 50 km before meeting river Karula near Kiwar village (Uttar Pradesh). Ikra drain receives wastewater from Dhampur city and traverses a distance of ~7-8 km before effluent from Dhampur Sugar Mill is discharged into the drain. Monitoring of Ikra drain was carried out from its origin in Dhampur-Hussainpur village (Uttar Pradesh) to confluence with river Karula near Kiwar village in Uttar Pradesh during Dec 01 – 02, 2021. Sampling locations on Ikra drain and river Karula are shown in Figure 7.3.

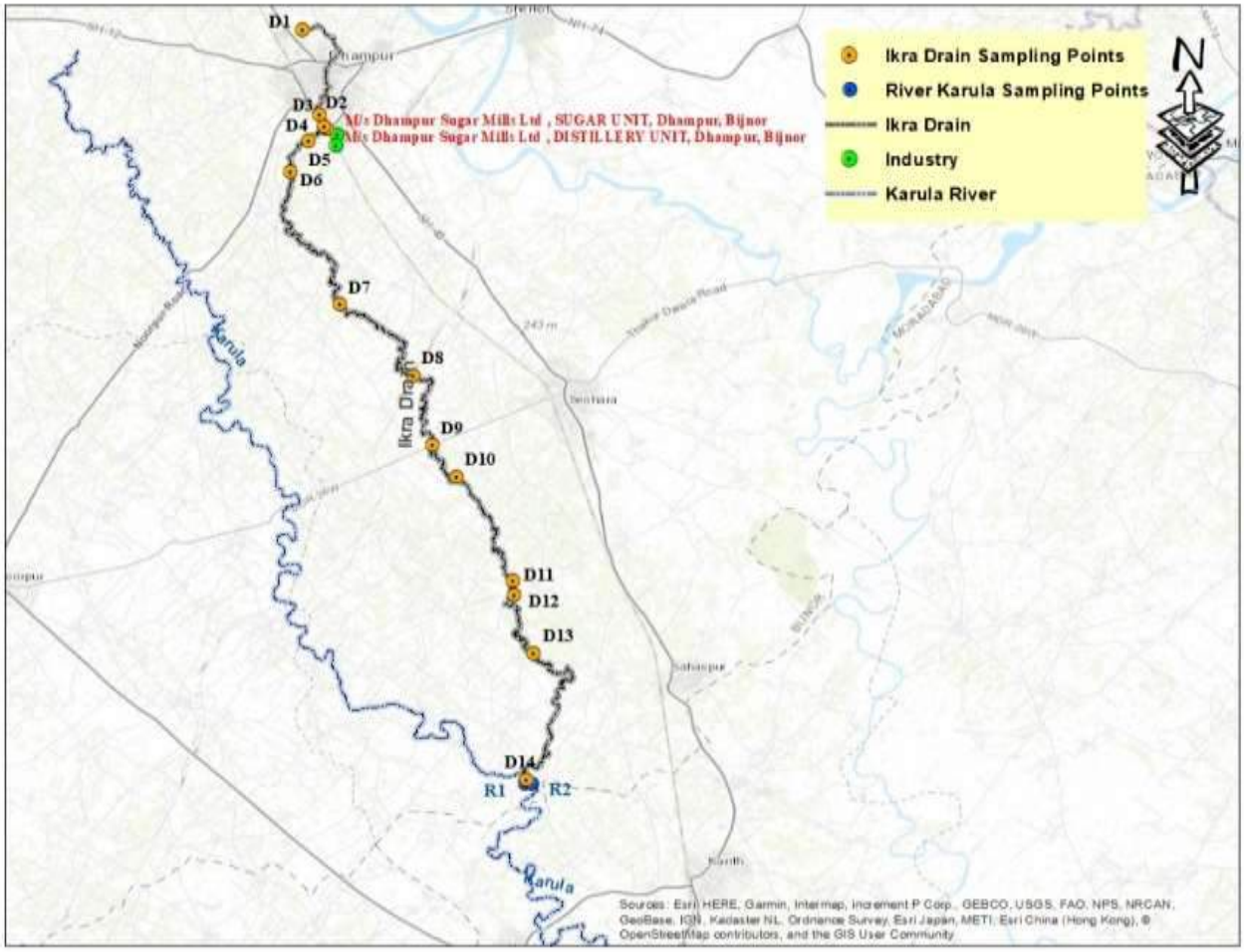


Figure 7.3 Sampling locations on Ikra drain and river Karula

Details of sample collected during survey and monitoring of Ikra drain & karula river is tabled below:

Table 7.6 Sampling details of Ikra drain from origin to confluence with river Karula

Sampling code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
D1	Origin point of Ikra drain i.e., Jheel in Dhampur-Hussainpur village	29.320961, 78.503635	Stagnant	Y	Origin point of Ikra drain is a pond in Dhampur-Hussainpur village which is ~ 7-8 km upstream of Dhampur Sugar Mill.
D2	Ikra drain u/s Dhampur Sugar Mill near Railway Crossing	29.294762, 78.508629	38.88	Y	Sewage from Dhampur city is discharged into Ikra drain at u/s of this location.

Sampling code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
D3	Drain from Dhampur Sugar Mill	29.290605, 78.510880	Lean flow	Y	• Lean flow was observed in the drain. • Wastewater analysis showed BOD-18 mg/l and COD-71 mg/l.
D4	Ikra drain d/s Dhampur Sugar Mill	29.291295, 78.510106	36.86	Y	-
D5	Ikra drain near compost yard of Dhampur Sugar Mill	29.286740, 78.505426	Not measured	Y	Sampling location was along the compost yard of Dhampur Sugar Mill.
D6	Ikra drain near Mirzapur Palla village	29.277206, 78.499738	27.64	Y	D/s of compost yard of DSM unit
D7	Ikra drain near Hariyana village	29.236208, 78.514790	34.56	Y	A villager informed that discharge of molasses in the drain has been observed during May-June months. He also informed that the groundwater is also contaminated at ~ 60-65 feets.
D8	Ikra drain near Alairpur village along Preshak Nahar	29.214444, 78.537310	Not measured	Y	• It was informed by a villager that the drain water was diluted using freshwater from Preshak Nahar on the day before the inspection. The pump was operated for ~ 22 hr. • In Ikra drain, BOD and COD were observed as 36 mg/l and 144 mg/l, respectively. • Also, at this location, a pit was located at the bed of the drain wherein yellow-coloured wastewater was found. Sample analysis showed BOD-29 mg/l, COD-133 mg/l, TDS-3264 mg/l and Sulphate-1271 mg/l. • A villager informed that industries dump chemicals in the drain at this location.

Sampling code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
D9	Ikra drain at Noorpur-Seohara Road	29.192780, 78.543179	30.21	Y	-
D10	Ikra drain near Rampur Krisna village	29.182949, 78.550581	35.36	Y	• Villager (Sh. Ravi) informed that discharge of effluent in Ikra drain 2-3 times in a year and during the rainy season, contaminated water from Ikra drain enters nearby agricultural fields.
D11	Ikra drain near Ratanpura village	29.151057, 78.567997	33.59	Y	• Sewage from Ratanpura village is discharged into the Ikra drain at this location. Samples from the Ikra drain were collected at d/s of sewage discharge location. • BOD-52 mg/l, COD-166 mg/l and TSS-182 mg/l were observed in the drain. • A villager (Sh. Ahmad Ali) informed that effluent from Dhampur Sugar Mill is discharged into the drain throughout the year.
D12	Ikra drain near Dhingrapur village	29.146727, 78.568389	Not measured	Y	• Mixing of irrigation water in Ikra drain near Dhingrapur village as cleaning work of sump in the irrigation canal. • Colour-31 mg/l, BOD-47 mg/l and COD-169 mg/l were observed in Ikra drain.
D13	Ikra drain near Gangadharpur village	29.128423, 78.574209	31.1	Y	• Colour-20 mg/l, BOD-13 mg/l and COD-76 mg/l were observed in Ikra drain.
R1	River Karula b/c Ikra drain	29.088383, 78.571697	Not measured	Y	• Water quality of river Karula b/c Ikra drain was meeting bathing criteria w.r.t. BOD-BDL (against < 3.0 mg/l), DO-10.2 mg/l (against > 5.0 mg/l) and pH-7.0 (against 6.5-8.5). However, water quality of river Karula at this location was not meeting the bathing criteria

Sampling code	Sampling location	Co-ordinate	Flow condition	Sample taken (Y/N)	Major observation
					w.r.t. fecal coliform-4900 MLN/100 ml (against 2500 MPN/100 ml).
D14	Ikra drain b/c river Karula near Kiwar village	29.089367, 78.572155	27.64	Y	• BOD-13 mg/l, COD-75 mg/l, colour-16 Hazen and Sulphate-45 mg/l.
R2	River Karula a/c Ikra drain	29.088338, 78.574015	Not measured	Y	• Water quality of river Karula a/c Ikra drain was meeting bathing criteria w.r.t. pH-7.3 (against 6.5-8.5), DO-9.6 mg/l (against > 5.0 mg/l) and fecal coliform-2300 MLN/100 ml (against 2500 MPN/100 ml) except BOD-4 mg/l (against < 3.0 mg/l).

Analysis results of sample collected during survey of Ikra drain and Karula river for general parameters is tabled below:

Table 7.7 Analysis results of sample collected from Ikra drain and Karula river

	Sampling code	pH	COD	BOD	TSS	TDS	NO_3-N	SO_4^{2-}	NH_3-N	Total coliform	Fecal coliform	Cr	Cu	Fe	Mn	Ni	Pb	Zn
Sampling location upstream of DSM sugar and distillery unit																		
Stretch - I	D1	7.8	25	4	17	246	0.6	6	0.6	-	-	BDL	BDL	1.27	0.04	BDL	BDL	0.04
	D2	7.1	135	54	64	292	2.08	136	34	-	-	BDL	0.03	1.27	0.18	BDL	BDL	0.17
	D3	7.2	71	18	29	424	1.08	70	7	-	-	0.04	0.17	11.02	0.34	0.02	0.03	0.3
Sampling location downstream of DSM and distillery unit																		
Stretch - II	D4	7.3	226	66	138	316	1.86	48	12	-	-	BDL	0.05	2.81	0.19	BDL	0.03	0.27
	D5	7	198	49	47	332	1.7	36	28	-	-	BDL	0.02	1.92	0.17	BDL	BDL	0.18
	D6	7	391	123	408	244	1.27	60	12	-	-	0.03	0.14	14.41	0.26	0.03	0.09	0.44
	D7	7.1	207	81	49	284	1.34	57	12	-	-	BDL	0.02	1.03	0.17	BDL	BDL	0.03
Stretch - III	D8	7.2	144	36	35	264	1.44	44	9	-	-	BDL	BDL	0.48	0.17	BDL	BDL	0.02
	D9	7.2	160	59	38	360	1.17	47	6	-	-	BDL	BDL	0.21	0.18	BDL	BDL	0.04
	D10	7.1	133	39	35	280	1.58	42	16	-	-	BDL	BDL	0.5	0.2	BDL	BDL	0.04
	D11	7.3	166	52	182	344	1.14	58	6	-	-	BDL	BDL	0.63	0.18	BDL	BDL	0.04
	D12	7.2	169	47	83	368	1.47	53	5	-	-	BDL	BDL	1.52	0.2	BDL	BDL	0.04
	D13	7.4	76	13	20	336	1.43	43	6	-	-	BDL	BDL	0.54	0.17	BDL	BDL	0.01
Stretch - IV	R1	7	12	BDL	15	234	2.6	7	BDL	54000	4900	BDL	BDL	0.03	0.01	BDL	BDL	BDL
	D14	7.5	75	13	19	324	0.93	45	13	3100	1700	BDL	BDL	0.72	0.12	BDL	BDL	0.04
	R2	7.3	18	4	16	110	1.4	13	3.1	7900	2300	BDL	BDL	0.76	0.15	BDL	BDL	0.01

Note: All parameters are expressed as mg/l except pH, conductivity (µmho/cm), colour (Hazen) and TC/FC (MPN/100 ml) (D: drain, R: river)

Physico-chemical characteristics of Ikra drain and Karula River:

Sampling location on Ikra drain and Karula river may be classified into three stretches

- Stretch – I – Ikra drain from origin to upstream of DSM sugar and distillery unit. Discharge of domestic sewage from Dhampur city into Ikra drain were observed in this stretch. Analysis results of two sample collected in this stretch show pH values from 7.1 to 7.8, colour from BDL to 29 colour unit, BOD from 4 to 54 mg/l, COD from 25 to 135 mg/l, TSS 17 to 64 mg/l, TDS from 246 to 292 mg/l, Sulphate from 06 to 136 mg/l, nitrate 0.6 to 2.08 mg/l and ammoniacal nitrogen from 0.6 to 34 mg/l which indicate that water in Ikra drain is polluted as it carries sewage from Dhampur city.
- Stretch – II -Downstream of DSM sugar and distillery unit to Ikra drain at Hariyana village, UP. Four samples (D4, 5, 6 and 7) were collected from this stretch. Waste water analysis shows high BOD (49-123 mg/l), COD (198-391 mg/l) and TSS (47-408). Maximum BOD (123 mg/l), COD (391 mg/l) and TSS (408 mg/l) of entire stretch of Ikra were observed at D6 located just after compost yard of DSM, Dhampur. Analysis results indicate that Ikra drain is more polluted in the stretch than stretch 1. However, no discharge from DSM unit was observed during survey.
- Stretch – III - Sampling location Ikra drain, Hariyana village, UP to confluence with Karula River. Six samples (D8, 9, 10, 11, 12,13 and 14) were collected from this stretch of Ikra drain. Most of the heavy metals are below detectable limit except Iron and Manganese. Analysis results indicate that quality of wastewater in Ikra drain improves in comparison to stretch II which might be due to dilution of Ikra drain by freshwater from Preshak canal on the day before inspection as informed by local residents.
- Stretch – IV – Karula river before and after discharge of Ikra drain. Two samples (R1 and R2) were collected from Karula River. After confluence with Ikra drain, increase in BOD, COD, TSS, TDS, Sulphate, Ammoniacal Nitrogen were observed from BDL to 4 mg/l, 12 to 18 mg/l, 15 to 16 mg/l, 110 to 234 mg/l, 1.4 to 2.6 mg/l, 7 to 13 mg/l and BDL to 3.1 mg/l respectively in Karula river. Results indicate that water quality of river Karula deteriorate slightly after confluence of Ikra drain.

Conclusion based on the survey in Dhampur, District Bijnor:

1. Based on the soil analysis report District agriculture officer, Bijnor, informed that the soil at all locations was found fertile and is capable for crop production. No impact of industrial pollution was observed on the soil samples.
2. The changes in colour of groundwater water to yellow after few minutes of storing might be due to oxidation of iron and manganese present in groundwater. The geology of the area seems to have influence on groundwater parameters.
3. Cases of damage of trees/crop/orchard/garden due to the pollution by DSM Dhampur unit were not reported by concerned district agencies; however, deposition of fly ash/ dust on leaves were observed.
4. Ikra drain is more polluted in D/s DSM unit (stretch II &III) than U/s of unit (stretch I). However, water quality of Ikra drain improve in stretch III before confluence with Karula river which might be due to dilution of Ikra drain by using freshwater from Preshak canal on the day before inspection as informed by local residents

5. Chief Medical Officer, Bijnor vide letter dated 22.12.2021 has submitted its health care report of District Bijnor consulted at Public Health Center (PHC) and Community Health Center (CHC) considering the crushing season from November to May and non-crushing season from June to October. *It is informed that most of the patient were suffering from seasonal cold cough, skin irritation, breathing problem and diseases related to stomach. All these patients are presently recovered from these health-related issues and are in healthy state now. He also informed that patients with seasonal disease are generally observed in this district and the unit M/s Dhampur Sugar Mills Ltd., Bijnor has no contribution/role to these health-related diseases.* **Annexure-11**

6. District Agriculture officer, Bijnor, vide letter dated 23.12.2021 informed that, *the analysis report of the 29 soil samples collected on 01.12.2021 and 02.12.2022 indicate that soil of the inspected area was found capable for crop production and no adverse impact of industrial pollution was observed on crop production. In addition, with this, sown crops were observed in normal condition during the inspection.* **Annexure-12**

7. District Horticulture Officer, Bijnor, vide letter dated 24.12.2021 reported that, *productivity of orchard in the area was normal and no adverse impact was observed.* **Annexure-13**

8. Executive Engineer, Uttar Pradesh Jal Nigam (Rural) vide letter dated 21.12.2021 provided the data of ground water samples collected from Dhampur, Block- Alahpur dated 22.11.2016, 20.4.2017, 09-10.08.2018, 2 24, 25.08.2018, 28.06.2019, 12.02.2020 and 21.08.2020 which is satisfactory as mentioned in the report. **Annexure-14**

9. Chief Executive Officer, Fisheries Development Agency, Bijnor, reported that, *no pollution generated problem in ponds of villages located in the vicinity of M/s DSM, Asmoli is existing.* **Annexure-15**

<u>Remedial measure for rejuvenation of Ikra drain</u>

Analysis results of water quality of Ikra drain shows that drain water is polluted in entire stretch as it carries sewage from Dhampur city. However, it is pertinent to mention that Ikra drain is more polluted in D/s DSM unit (stretch II & III) than U/s of unit (stretch I). No untreated effluent and sewage shall be discharge into drain. CPCB guideline for "*Alternative treatment technologies for wastewater treatment of drains*" prepared in compliance of Hon'ble NGT direction in the matter of OA no. 06/2012 may be referred for interim measure. Cost of the treatment system generally varies between 50 lacs to 1 crore per unit which shall be bear by either DSM unit or by other concern government agency or by both. The length of Constructed Wetland (CWS) and number of units depends on the flow of water, wastewater quality (BOD, COD, TSS and DO levels) and width of the drain. These systems can be installed and operated within short gestation period of around 12-24 months and not only treat the wastewater but also help in recharging of ground water. For designing of these system, expert institute like Centre for Environmental Management of Degraded Ecosystem (CEMDE), may also be engaged/approached for better technical know-how about the natural treatment system.

Remedial measure for Groundwater contamination

As per Central Ground Water Board (CGWB), report on National Compilation on Dynamic Groundwater Resource of India, 2020, out of 11 monitored locations, four blocks/ towns of Bijnor fall under semi-critical area and one under critical area. As per Uttar Pradesh Jal Nigam on present survey/sampling report no adverse impact of industry in groundwater was found, so, it is recommended to:

1) Identify location of safe drinking groundwater and marking all unsafe groundwater to avoid their use for drinking purposes.
2) 53 groundwater sample were collected from 29 village. Out of these 29 vilages ground water quality shows higher than WHO permissible limit for **COD** at Village Mirjapur Palla, Mohda, Dhampur city near Saint Mary's school, Dhampur Hussainpur, Rampur Bhola, Dittanpur and Naseerpur Banwari; **TDS** at Village Haizri (Nurrullapur Cheema), Mirjapur Palla, Mohda, Suhaghpur, Dittanpur, Wajidpur, Nindru Khas, Khujista Nagar, Ajitpurdasi and Naseerpur Banwari; Alkalinity at Village Haizri (Nurrullapur Cheema), Mirjapur Palla, Jaitra, Dhampur Hussainpur, Dittanpur, Khujista Nagar and Ajitpurdasi; **Fe** at Village Mohda, Vidhan Sabha, Jaitra, Dittanpur and Alaipur; **Mn** at Village Haizri (Nurrullapur Cheema), Mirjapur Palla, Mohda, Khai Khera, Rampur Bhola, Dittanpur, Alaipur, Wajidpur, Mohammad Alipur Bhikan, Nindru Khas, Khujista Nagar, Ajitpurdasi and Naseerpur; **Zn** at Village Khai Khera and Alaipur Banwari at shallow depth for drinking. These villages need to get deep bore well by the unit or by concerned district administration.
3) A detailed plan may be made by Central ground water board/ UPGWD for recharge of ground water.

Photographs taken during detailed study in Dhampur region.

GW sample collection in purana Dhampur	GW sample collection in Dhampur city
Soil sample collection in purana Dhampur	Soil sample collection in Dhampur
Origin point of Ikra drain i.e., Jheel in Dhampur-Hussainpur village	Ikra drain behind DSM unit

Drain from area in front of Dhampur Sugar Mill	Ikra drain near compost yard of Dhampur Sugar Mill
Ikra drain near AliArpur village along Preshak Nahar	River Karula A/c of Ikra drain

8. Recommendations

- The contamination in Ground Water has been observed at shallow depth handpumps/borewells, hence it is recommended that UPGWD & Nalkoop Vibhag may be asked to look into the matter, and arrangement for deep borewell shall be made.
- UPGWD to ensure marking and sealing of unsafe borewells/ handpumps.
- Also, for ensuring availability of safe drinking water to the residents of villages highlighted in the report UP Jal Nigam should make provisions for supplying tap water.
- Units shall ensure that installed ESP/ Bag filters are operated effectively.
- Feasibility of in-situ remediation for restoration & rejuvenation of River Sot shall be explored and action plan for the same to be prepared by the concerned department such as U.P. Irrigation Department in consultation with all the concerned agencies. If necessary an expert agency may be engaged.
- To prevent the impact of Ikra drain, Dhampur (Bijnor) on water quality of river Karula, feasibility of constructed wetland shall be explored before the confluence of Ikra drain into Karula river.
- UPPCB shall issue necessary directions to the units for ensuring that no discharge of partially treated/ untreated effluent takes place into Pilakhar River, Sot River & Ikra drain or any water body takes place.

Member list

Sr. No.	Members	Signature
1.	Sh. A.K. Vidyarthi, Scientist 'F', Director & DH-WQM- II, CPCB, Delhi	Ajit Kumar Vidyarthi
2.	Sh. Nazimuddin, Scientist 'F', DH- IPC-II, CPCB, Delhi	
3.	Mrs Reena Satavan, Scientist 'D', CPCB, Delhi	

Sr. No.	Members	Signature
4	District Magistrate, District- Bareilly	
5	Sh. Rohit Singh, Regional Officer, UPPCB, Regional Office- Bareilly	23/06/22

Sr. No.	Members	Signature
6	District Magistrate, District Sambhal	
7.1	Sh. Vikas Mishra, Regional Officer, UPPCB, Regional Office - Moradabad	
7.2	Sh. Vinay Kumar Mishra, Sub Divisional Magistrate, Tehsil Sambhal, District Sambhal	

Sr. No.	Members	Signature
8	Sub-Divisional Magistrate, Dhampur, District-Bijnor	
9	Sh. Ashutosh Chauhan, Regional Officer UPPCB, Regional Office- Bijnor	
10	Sh. Mahir Hussain, Assistant Environmental Engineer, UPPCB, Regional Office- Bijnor	Husain
11	Sh S.K. Tripathi, Scientific Assistant , UPPCB, Regional Office- Bijnor	

Annexure – I : Groundwater Quality index

Groundwater Quality Index

For computing WQI three steps are followed. In the first step, each of the 19 parameters has been assigned a weight (wi) according to its relative importance in the overall quality of water for drinking purposes (Table 1). The maximum weight of 5 has been assigned to the parameter nitrate due to its major importance in water quality assessment. Magnesium which is given the minimum weight of 1 as magnesium by itself may not be harmful. Other In the second step, the relative weight (Wi) is computed from the following equation:

$$W_i = \frac{w_i}{\sum_{i=1}^{n} w_i}$$

Where, W_i is the relative weight, w_i is the weight of each parameter and n is the number of parameters. Calculated relative weight (W_i) values of each parameter are also given in Table 1.

Table - Relative weight of chemical parameters

Parameter	BIS	Weight (w_i)	Relative Weight (W_i)
pH	6.5-8.5	4	0.117647
Total hardness (TH)	300-600	2	0.058824
Chloride	250-1,000	3	0.088235
Total dissolved solids (TDS)	500-2,000	4	0.117647
Fluoride	1-1.5	4	0.117647
Manganese	0.1-0.3	4	0.117647
Nitrate	45-100	5	0.147059
Iron	0.3-1.0	4	0.117647
Sulphate	200-400	4	0.117647
		$\sum$ wi = 34	$\sum$ Wi = 1.000

In the third step, a quality rating scale (q_i) for each parameter is assigned by dividing its concentration in each water sample by its respective standard according to the guidelines laid down in the BIS and the result multiplied by 100:

$q_i = (C_i / S_i) \times 100$

where qi is the quality rating, C_i is the concentration of each chemical parameter in each water sample in mg/L, and S_i is the Indian drinking water standard for each chemical parameter in mg/L according to the guidelines of the BIS 10500, 1991

For computing the WQI, the SI is first determined for each chemical parameter, which is then used to determine the WQI as per the following equation

$SI_i = W_i \cdot q_i$

$WQI = \sum SI_i$

SI_i is the subindex of i^{th} parameter; q_i is the rating based on concentration of i^{th} parameter and n is the number of parameters. The computed WQI values are classified into five types, “excellent water” to “water, unsuitable for drinking”.

WQI value	**Water quality**
<50	excellent
50-100	good water
100-200	poor water
200-300	very poor water
>300	Water unsuitable for drinking

Meerganj

Groundwater Quality

33 groundwater samples were collected from borewell/ handpumps and tubewells around 11 villages. All samples were analysed for general parameter and analysis for heavy metals were carried out for 11 samples (one sample from each village). River Pilakhar flows from north (Bazpur, Uttarakhand) towards south and confluence with river Bakhra at Village Jauner, Bareilly. Considering contour gradient of the study area towards confluence point of river Pilakhar with river Bakhra at Jauner Village, location upstream side (U/s) of the confluence point may be considered as having less potential of impact of any discharge on groundwater and villages/locations at downstream (D/s) side of confluence point may be considered as high potential of groundwater contamination due to any discharge from industrial unit. The groundwater samples were compared with prescribed specification of ionic concentration in groundwater by WHO standards (1996).

The determination of Physio-chemical parameters of groundwater samples was carried out by standard protocol given by APHA, 2012.

Out of 33 groundwater samples seventeen samples (MGW1, MGW2, MGW3, MGW4, MGW16, MGW17, MGW18, MGW19, MGW20, MGW21, MGW22, MGW23, MGW24, MGW25, MGW26, MGW27 and MGW28) located at upstream of the unit; twelve samples (MGW8, MGW9, MGW10, MGW11, MGW12, MGW13, MGW14, MGW29, MGW30, MGW31, MGW32 and MGW33) located at downstream side of the unit and four samples (MGW5, MGW6, MGW7 and MGW15) located within one km radial periphery of the unit.

Physio-chemical Characterization

The pH of the groundwater in the study area is neutral in both upstream and downstream and it varied from 7.1 to 7.7, falls into pH range of natural water (6.5 - 8.5).

The total dissolved solids content of groundwater in the upstream side varied from 316 to 1014 mg/l, 318 to 842 mg/l in downstream side and 288 to 546 mg/l within one km radial periphery of the unit. According to the classification of groundwater on the basis of TDS (Ahouansou et al., 2018), 3.03% of the total groundwater samples are of excellent water quality (<300 mg/l), 72.73% of good water quality (300-600 mg/l), 18.18% of fair water quality (600-900 mg/l) and 6.06% of poor water quality (900-1200 mg/l), indicated that groundwater quality good to fair in terms of TDS.

Table- Classification of water quality on the basis of total dissolved solids

TDS Value (mg/l)	Water Quality	No of Samples	Percentage of Samples
<300	Excellent	1	3.03
300 - 600	Good	24	72.73
600 - 900	Fair	6	18.18

900 -1200	Poor	2	6.06
>1200	unacceptable	0	0.00

Groundwater classification based on total hardness (TH) values, as TH<75 mg/l, 75-150 mg/l, 150-300 mg/l and >300mg/l, designated as soft, moderately hard, hard and very hard respectively (Sawyer and McCarty,1967). Thus, 51.52% belongs to hard water and rest 48.48% samples comprises very hard water. The result indicates that the groundwater quality in the study area is hard to very hard.

Alkalinity has direct relation with hardness and pH of the groundwater. It ranged from 262 to 806 mg/l in upstream side samples, 242 to 617 mg/l in downstream side of sample and 250 to 430 mg/l within one km radial periphery of the unit.

Table - Classification of water quality on the basis of total hardness

TH Value (mg/l)	Water Quality	No of Samples	Percentage of Samples
<75	soft	0	0
75-150	moderately hard	0	0
150-300	hard	17	51.52
>300	very hard	16	48.48

Colour was found in only two samples (MGW19 and MGW21) of upstream side of the unit and one of the samples (MGW31) of downstream side of the unit. COD varied from BDL to 29 mg/l in upstream side and its concentration were found below detectable limit in downstream and within one km radial periphery of the unit. The chloride concentration varied from 8 to 108 mg/l in upstream of the unit, 8 to 42 mg/l in downstream side and 8 to 18 mg/l in one km radial periphery of the unit. The fluoride concentration was found in only two samples (MGW25 and MGW 28) of upstream and five samples (MGW9, MGW11, MGW12, MGW14 and MGW33) of downstream and its concentration was below detectable limit in one km radial periphery of the unit. Fluoride concentration varied from 02. to 0.4 mg/l in upstream and downstream of the unit. Sulphate concentration varies from 27 to 273 mg/l in upstream side, 25 to 296 mg/l downstream side and 11 to 84 mg/l in one km radial periphery on the unit. Nitrate concentration was found only in four samples (MGW25 in upstream and three MGW9, MGW10, MGW30 in downstream sample) having concentration of 0.3 mg/l in upstream and 0.3 to 8.6 mg/l in downstream side of the unit.

The heavy metal concentration of As, Co, Cr, Cu, Ni and Pb were mostly below detectable limit or below WHO standard. Concentration of Fe varied from BDL to 7.94 mg/l in upstream, BDL to 2.58 mg/l in downstream and 1.98 mg/l in one of the samples within one km radial periphery of the unit. Manganese varied from BDL to 1.57 mg/l in upstream, BDL to 0.31 mg/l in downstream and BDL to 0.24 mg/l in one km radial periphery of the unit. Similarly, Zinc varied from BDL to 5.18 mg/l in upstream, BDL to 0.15 mg/l in downstream and BDL to 0.01 mg/l in one km radial periphery on the unit.

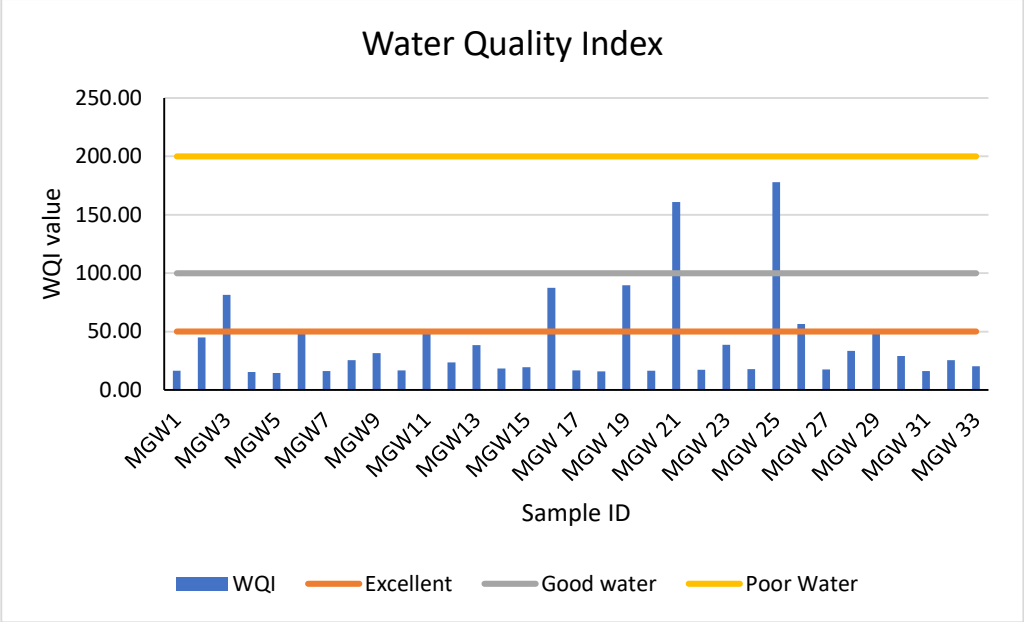
Groundwater Quality

Table - Water quality classification based on WQI value

WQI value	Water quality	No of Samples	Percentage of water samples
<50	excellent	25	75.76
50-100	good water	6	18.18
100-200	poor water	2	6.06
200-300	very poor water	0	0.00
>300	Water unsuitable for drinking	0	0.00

Groundwater quality index were calculated based on Ramakrishnaiah et al. 2009. For quality rating BIS standard as reference concentration were taken in calculation and for parameter where limits are in certain range, the higher value of the BIS standard was taken into consideration.

Groundwater quality index suggest that around 75.76% of sample collected is of excellent water quality, 18.18% of good water quality and 6.06% of poor water quality.


Water Quality Index
250.00
200.00
150.00
100.00
50.00
0.00
WQI value
MGW1
MGW3
MGW5
MGW7
MGW9
MGW11
MGW13
MGW15
MGW 17
MGW 19
MGW 21
MGW 23
MGW 25
MGW 27
MGW 29
MGW 31
MGW 33
Sample ID
WQI
Excellent
Good water
Poor Water

Asmoli

Groundwater Quality

47 groundwater samples were collected from borewells, hand pumps and tube-wells located in and around 17 villages. All samples were analyzed for general parameters. Analysis of heavy metals were carried out for 35 samples. DSM unit discharge into Sot river, flowing within 100 m distance in south east direction of the unit. Considering the contour gradient of study area towards flow direction of Sot river, villages located at the upstream of DSM unit discharge point may be considered as having less potential of impact of any discharge on ground water and villages located downstream of DSM discharge point may be considered having high potential of ground water contamination due to any discharge from industrial unit. The groundwater samples were compared with the prescribed specification of ionic concentration in groundwater by WHO standards (1996).

The determination of Physio-chemical parameters of groundwater samples was carried out by standard protocol given by APHA, 2012.

Out of 47 groundwater samples twenty one samples (AGW4, AGW5, AGW29, AGW30, AGW31, AGW32, AGW33, AGW34, AGW35, AGW36, AGW37, AGW38, AGW39, AGW40, AGW41, AGW42, AGW43, AGW44, AGW45, AGW46 and AGW47) located at upstream of the unit; twenty two samples (AGW1, AGW2, AGW3, AGW8, AGW9, AGW10, AGW11, AGW12, AGW13, AGW14, AGW17, AGW18, AGW19, AGW20, AGW21, AGW22, AGW23, AGW24, AGW25, AGW26, AGW27 and AGW28) located at downstream side of the unit and four samples (AGW6, AGW7, AGW15 and AGW16) located within one km radial periphery of the unit.

Physio-chemical Characterization

The pH of the groundwater in the study area is neutral in both upstream and downstream and it varied from 7.1 to 8.0, falls into pH range of natural water (6.5 - 8.5).

The total dissolved solids content of groundwater in the upstream side varied from 196 to 1142 mg/l, 226 to876 mg/l in downstream side and 230 to 544 mg/l within one km radial periphery of the unit. According to the classification of groundwater on the basis of TDS (Ahouansou et al., 2018), 29.79% of the total groundwater samples are of excellent water quality (<300 mg/l), 51.06% of good water quality (300-600 mg/l), 17.02% of fair water quality (600-900 mg/l) and 2.13% of poor water quality (900-1200 mg/l), indicates that groundwater quality of the area is under excellent to fair in terms of TDS.

Table- Classification of water quality on the basis of total dissolved solids

TDS Value (mg/l)	Water Quality	No of Samples	Percentage of Samples
<300	Excellent	14	29.79
300 - 600	Good	24	51.06

600 - 900	Fair	8	17.02
900 -1200	Poor	1	2.13
>1200	unacceptable	0	0.00

Groundwater classification based on total hardness (TH) values, as TH<75 mg/l, 75-150 mg/l, 150-300 mg/l and >300mg/l, designated as soft, moderately hard, hard and very hard respectively (Sawyer and McCarty,1967). Thus, 2.13% samples belong to moderately hard water, 46.81% to hard water and rest 51.06% samples comprises very hard water. The result indicates that the groundwater quality in the study area is hard to very hard.

Alkalinity has direct relation with hardness and pH of the groundwater. It ranged from 143 to 465 mg/l in upstream side samples, 167 to 527 mg/l in downstream side of sample and 167 to 402 mg/l within 1 km radial periphery of the unit.

Table - Classification of water quality on the basis of total hardness

TH Value (mg/l)	Water Quality	No of Samples	Percentage of Samples
<75	soft	0	0
75-150	moderately hard	1	2.13
150-300	hard	22	46.81
>300	very hard	24	51.06

Colour was not found in of the samples. COD varied from BDL to 72 mg/l in upstream side and BDL to 21 mg/l in downstream side and BDL to 45 mg/l within one km radial periphery of the unit. The chloride concentration varied from 4 to 215 mg/l in upstream of the unit, 5 to 132 mg/l in downstream side and 12 to 200 mg/l in one km radial periphery of the unit. Fluoride concentration varied from BDL to 0.3 mg/l in upstream side, BDL to 1.2 mg/l in downstream and 0.2 to 0.4 mg/l within one km radial periphery of the unit. Sulphate concentration varies from 5 to 208 in upstream side, 5 to 456 mg/l downstream side and 17 to 73 mg/l in one km radial periphery on the unit. Nitrate concentration varied from BDL to 12.9 mg/l in upstream side as well downstream side and 0.3 to 1.4 mg/l in one km radial periphery on the unit.

The heavy metal concentration of As, Co, Cr, Cu, Ni and Pb were mostly below detectable limit or below WHO standard. Concentration Fe varied from BDL to 13.1 mg/l in upstream, BDL to 107 in downstream and BDL to 5.03 mg/l within one km radial periphery of the unit. Manganese varied from BDL to 1.13 mg/l in upstream, BDL to 2.56 mg/l in downstream and BDL to 1.15 mg/l in one km radial periphery of the unit. Similarly, Zinc varied from BDL to 3.5 mg/l in

upstream, BDL to 6.7 mg/l in downstream and BDL to 0.8 mg/l in one km radial periphery on the unit.

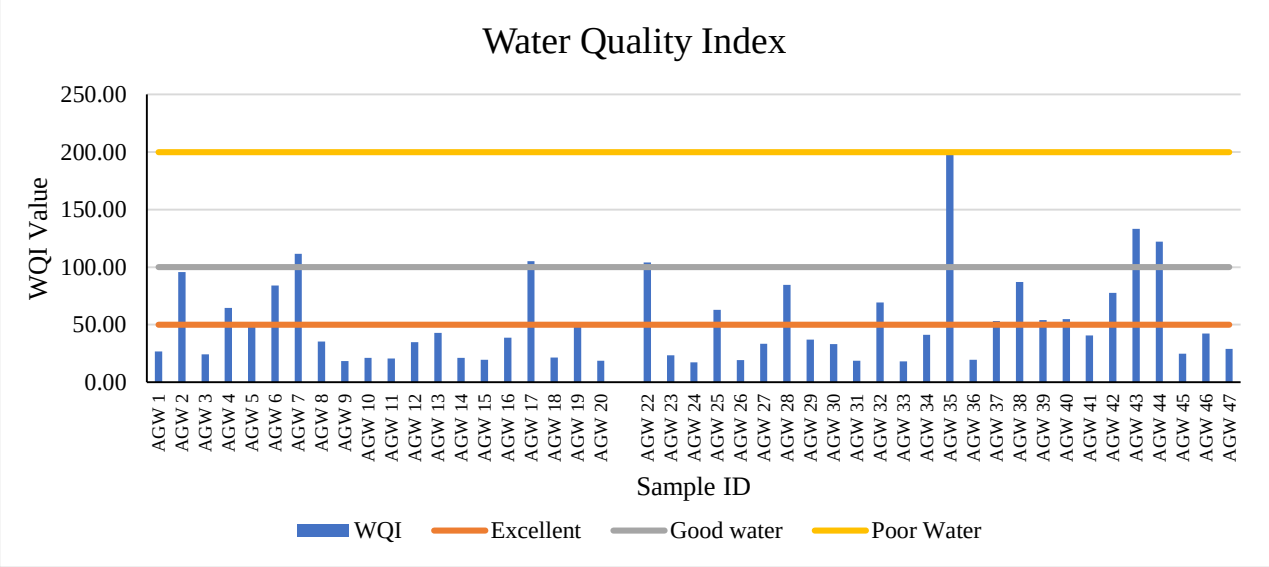
Groundwater Quality

Table - Water quality classification based on WQI value

WQI value	Water quality	Number of Samples	Percentage of water samples
<50	excellent	28	59.57
50-100	good water	12	25.53
100-200	poor water	6	12.77
200-300	very poor water	0	0.00
>300	Water unsuitable for drinking	1	2.13

Groundwater quality index were calculated based on Ramakrishnaiah et al. 2009. For quality rating BIS standard as reference concentration were taken in calculation and for parameter were limits are in certain range, the higher value of the BIS standard was taken into consideration.

Groundwater quality index suggest that around 59.57% of sample collected is of excellent water quality, 25.53% of good water quality, 12.77% of poor water quality and 2.13% of water unsuitable for drinking purpose indicates that groundwater quality falls under excellent to poor water quality in term of water quality index.



#Water quality index value of - AGW21 is 1386 which comes under unsuitable for drinking purpose.

Dhampur

Groundwater Quality

53 groundwater sample were collected from 29 village. All samples were analysed for general parameter and analysis for heavy metals were carried out for 37 samples. Ikra drain flows west of the DSM unit and Preshak canal flows east of DSM unit around 2 Km from the unit. Both Ikra drain and Preshak canal flows from north to south. Considering contour gradient of the study area towards flow direction from north to south, villages/locations located at the upstream of DSM unit may be considered as having less potential of impact of any discharge on ground water and villages located downstream of DSM discharge point may be considered having high potential of ground water contamination due to any discharge from industrial unit. The groundwater sample were compared with prescribed specification of ionic concentration in groundwater by WHO standards (1996).

The determination of Physio-chemical parameters of groundwater samples was carried out by standard protocol given by APHA, 2012.

Out of 53 groundwater samples twenty five samples (DGW13, DGW14, DGW15, DGW16, DGW17, DGW18, DGW19, DGW20, DGW21, DGW22, DGW23, DGW24, DGW25, DGW26, DGW27, DGW28, DGW29, DGW30, DGW31, DGW32, DGW33, DGW35, DGW36, DGW37 and DGW38) located at upstream of the unit; twenty four samples (DGW1, DGW2, DGW3, DGW4, DGW5, DGW6, DGW7, DGW8, DGW9, DGW39, DGW40, DGW41, DGW42, DGW43, DGW44, DGW45, DGW46, DGW47, DGW48, DGW49, DGW50, DGW51, DGW52 and DGW53) located at downstream side of the unit and four samples (DGW10, DGW11, DGW12 and DGW34) located within one km radial periphery of the unit.

Physio-chemical Characterization

The pH of the groundwater in the study area is neutral in both upstream and downstream and it varied from 7.0 to 8.0, falls into pH range of natural water (6.5 - 8.5).

The total dissolved solids content of groundwater in the upstream side varied from 202 to 768 mg/l, 198 to 1480 mg/l in downstream side and 298 to 620 mg/l within one km radial periphery of the unit. According to the classification of groundwater on the basis of TDS (Ahouansou et al., 2018), 58.49% of the total groundwater samples are of excellent water quality (<300 mg/l), 30.19% of good water quality (300-600 mg/l), 9.43% of fair water quality (600-900 mg/l) and 1.89% of unacceptable water quality (>1200 mg/l), indicates that groundwater quality of the area is under excellent to fair in terms of TDS.

Table- Classification of water quality on the basis of total dissolved solids

TDS Value (mg/l)	Water Quality	No of Samples	Percentage of Samples
<300	Excellent	31	58.49

300 - 600	Good	16	30.19
600 - 900	Fair	5	9.43
900 -1200	Poor	0	0.00
>1200	unacceptable	1	1.89

Groundwater classification based on total hardness (TH) values, as TH<75 mg/l, 75-150 mg/l, 150-300 mg/l and >300mg/l, designated as soft, moderately hard, hard and very hard respectively (Sawyer and McCarty,1967). Thus, 54.72% to hard water and rest 45.28% samples comprises very hard water. The result indicates that the groundwater quality in the study area is hard to very hard.

Alkalinity has direct relation with hardness and pH of the groundwater. It ranged from 174 to 562 mg/l in upstream side samples, 178 to 554 mg/l in downstream side of sample and 283 to 407 mg/l within one km radial periphery of the unit.

Table - Classification of water quality on the basis of total hardness

TH Value (mg/l)	Water Quality	No of Samples	Percentage of Samples
<75	soft	0	0
75-150	moderately hard	0	0
150-300	hard	29	54.72
>300	very hard	24	45.28

Colour was not found in of the samples. COD varied from BDL to 9 mg/l in upstream side and BDL to 8 mg/l in downstream side and BDL to 9 mg/l within one km radial periphery of the unit. The chloride concentration varied from 8 to 194 mg/l in upstream of the unit, 8 to 236 mg/l in downstream side and 18 to 78 mg/l in one km radial periphery of the unit. Fluoride concentration varied from BDL to 0.7 mg/l in upstream side, BDL to 0.6 mg/l in downstream and 0.3 to 0.4 mg/l within one km radial periphery of the unit. Sulphate concentration varies from BDL to 72 mg/l in upstream side, BDL to 297 mg/l downstream side and 10 to 101 mg/l in one km radial periphery on the unit. Nitrate concentration varied from BDL to 6.4 mg/l in upstream side, BDL to 13 mg/l in downstream side and BDL to 9 mg/l in one km radial periphery on the unit.

The heavy metal concentration of As, Co, Cr, Cu, Ni and Pb were mostly below detectable limit or below WHO standard. Concentration Fe varied from BDL to 16.7 mg/l in upstream, BDL to 4.08 mg/l in downstream and BDL to 7.85 mg/l within one km radial periphery of the unit. Manganese varied from BDL to 0.99 mg/l in upstream, BDL to 0.92 mg/l in downstream and BDL to 1 mg/l in one km radial periphery of the unit. Similarly, Zinc varied from BDL to 2.96

mg/l in upstream, BDL to 0.32 mg/l in downstream and BDL to 0.34 mg/l in one km radial periphery on the unit.

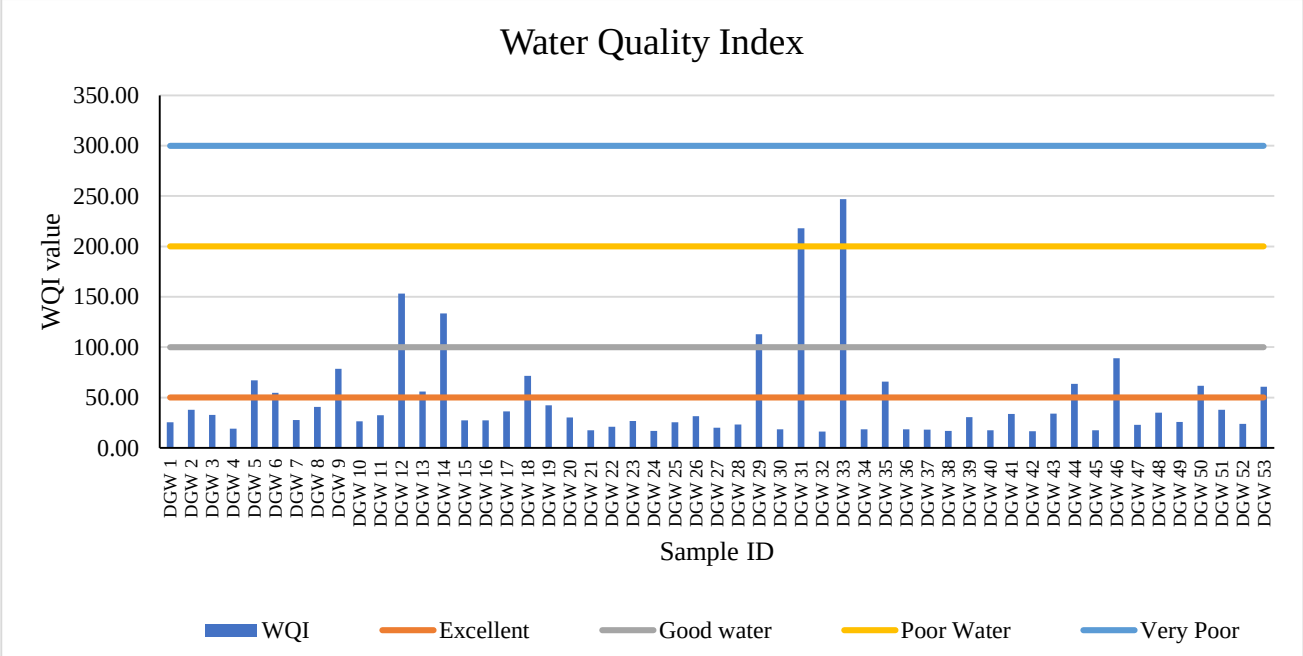
Groundwater Quality

Table - Water quality classification based on WQI value

WQI value	Water quality	Number of Samples	Percentage of water samples
<50	excellent	38	71.70
50-100	good water	10	18.87
100-200	poor water	3	5.66
200-300	very poor water	2	3.77
>300	Water unsuitable for drinking	0	0.00

Groundwater quality index were calculated based on Ramakrishnaiah et al. 2009. For quality rating BIS standard as reference concentration were taken in calculation and for parameter where limits are in certain range, the higher value of the BIS standard was taken into consideration.

Groundwater quality index suggest that around 71.7% of sample collected is of excellent water quality, 18.87% of good water quality, 5.66% of poor water quality and 3.77% of very poor water quality indicates that groundwater quality falls under excellent to poor water quality in term of water quality index.


Water Quality Index
WQI value
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
DGW 1
DGW 2
DGW 3
DGW 4
DGW 5
DGW 6
DGW 7
DGW 8
DGW 9
DGW 10
DGW 11
DGW 12
DGW 13
DGW 14
DGW 15
DGW 16
DGW 17
DGW 18
DGW 19
DGW 20
DGW 21
DGW 22
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DGW 25
DGW 26
DGW 27
DGW 28
DGW 29
DGW 30
DGW 31
DGW 32
DGW 33
DGW 34
DGW 35
DGW 36
DGW 37
DGW 38
DGW 39
DGW 40
DGW 41
DGW 42
DGW 43
DGW 44
DGW 45
DGW 46
DGW 47
DGW 48
DGW 49
DGW 50
DGW 51
DGW 52
DGW 53
Sample ID
WQI
Excellent
Good water
Poor Water
Very Poor

References:

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Ramakrishnaiah, C. R., C. Sadashivaiah, and G. Ranganna. "Assessment of water quality index for the groundwater in Tumkur Taluk, Karnataka State, India." *E-Journal of chemistry* 6.2 (2009): 523-530.

Sawyer, C.N., McCarty, P.L. (1967). Chemistry for sanitary engineers (2nd ed.). New York: McGraw-Hill Education

CSIR- National Environmental Engineering Institute, Hyderabad Zonal centre (2002). Assessment of the Groundwater and Soil around the Murdhawa Industrial Site, Renukoot, Sonebhadra

444 By hand Qurtam 24/03/22 **Annexure-1**

प्रेषक,

जिला कृषि अधिकारी
बरेली।

सेवा में,

क्षेत्रीय अधिकारी,
उ0प्र0. प्रदूषण नियन्त्रण बोर्ड.
बरेली।

पत्रांक- 153) /4-कृषि / कैम्प का0 बिल्वा/ रा0ह0अ0 / 2021-22 दिनांक 23-3-22

महोदय,

कृपया अपने कार्यालय के पत्र संख्या-1129/ O.A..NO.-539/19/ 2022 दिनांक-21.03.2022 का संदर्भ ग्रहण करने की कृपा करें, जिसके क्रम में आपको अवगत कराना है कि अधोहस्ताक्षरी द्वारा आख्या संख्या-1418/ कैम्प का0बिल्वा/ रा0ह0अ0/ 2021-22 दिनांक- 24.12.2021 पूर्व में आपको व्हाट्सप्प ग्रुप पर प्रेषित की गयी थी। आख्या पुनः संलग्न कर प्रेषित की जा रही है।

संलग्नक- उक्त आख्या।

EE

जिला कृषि अधिकारी
बरेली

SDM N.A.P.C.

Hardoi

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–: आख्या :–

मा0 राष्ट्रीय हरित अधिकरण के आ0ए0से 0539/2019 द्वारा मैसर्स धामपुर शुगर मिल लि0, मीरगंज बरेली के द्वारा की गयी पर्यावरण क्षति के आंकलन के सम्बन्ध में केन्द्रीय प्रदूषण नियन्त्रण बोर्ड, उ0प्र0 मा0 राष्ट्रीय हरित अधिकरण के आ0ए0से 0539/2019 द्वारा एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को संयुक्त रूप से किये गये निरीक्षण के सम्बन्ध में निरीक्षण आख्याः–

उपरोक्त सन्दर्भित अद्योग मैसर्स धामपुर शुगर मिल लि0, मीरगंज बरेली के सम्बन्ध में मा0 राष्ट्रीय हरित अधिकरण के आ0ए0से 0539/2019 द्वारा पर्यावरणीय क्षति के आंकलन के सम्बन्ध में जारी निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियन्त्रण बोर्ड बोर्ड के पत्र दिनांक 29.09.2021 से गठित संयुक्त समिति के क्रम में जिलाधिकारी, बरेली के पत्रांक सं0–686/ओ0ए0सं0–539/2019/2021 दिनांक 26.10.2021 एवं अपर जिला मजिस्ट्रेट (नगर) बरेली की अध्यक्षता सन्दर्भित प्रकरण के सम्बन्ध में जिला स्तरीय अधिकारियों की आहूत बैठक दिनांक12.11.2021 में दिये गये निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियन्त्रण बोर्ड के साथ को आहूत बैठक जिला प्रशासन से प्राप्त निर्देशों के अनुपालन में अधोहस्ताक्षकर्ताओं द्वारा केन्द्रीय प्रदूषण नियन्त्रण बोर्ड, उ0प्र0, प्रदूषण नियन्त्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को मैसर्स धामपुर शुगर मिल लि0, मीरगंज बरेली के आस–पास के स्थित ग्रामों यथा सिंधौली,जैनेर,खमरिया सानी,नरखेड़ा, मण्डनपुर, सहजना, मीरगंज एवं नगरिया सादात आदि के सर्वेक्षण एवं मृदा के नमूने एकत्रित किये गये। बिन्दुवार आख्या निम्नवत है :–

1. सर्वक्षण के दौरान सन्दर्भित उद्योग मैसर्स धामपुर शुगर मिल लि0, मीरगंज बरेली के आस–पास स्थित ग्रामों यथा सिंधौली,जैनेर,खमरिया सानी,नरखेड़ा, मण्डनपुर, सहजना, मीरगंज एवं नगरिया सादात आदि में उपरोक्त सन्दर्भित उद्योग से फसलों/कृषि उत्पादों को क्षति पहुँचने वाले कारकों के सम्बन्ध में कोई भी साक्ष्य प्राप्त नहीं हुए। इस सम्बन्ध में क्षेत्रीय कृषकों से भी कोई शिकायत अभी तक प्राप्त नहीं हुई है।
2. सर्वक्षण के दौरान 22 मृदा नमूना एकत्रित कर 22 मृदा नमूना का मृदा परीक्षण प्रयोगशाला में परीक्षण कराया गया, परीक्षण आख्या के अनुसार समस्त मृदा नमूना के पैरामीटर सामान्य प्रकृति के पाये गये। मृदा परीक्षण रिपोर्ट मृदा परीक्षण प्रयोगशाला बिलवा बरेली द्वारा सीधे ही प्रदूषण नियन्त्रण बोर्ड बरेली को प्रेषित कर दी गयी हैं। मृदा की मुख्यतः पी0एच0 सामान्य है।
3. सन्दर्भित उद्योग के आस–पास स्थित उक्त सिंधौली,जैनेर,खमरिया सानी,नरखेड़ा, मण्डनपुर, सहजना, मीरगंज एवं नगरिया सादात आदि में लगभग 2850 हेक्टेयर कृषि भूमि है। उक्त कृषि भूमि पर मुख्य रूप से गन्ने की खेती के साथ रबी/खरीफ एवं जायद की फसलें की जाती हैं। इस कार्यालय द्वारा समय–समय पर फसलों के सर्वेक्षण किया जाता है। सर्वेक्षण के दौरान उपरोक्त उद्योग से कृषि भूमि/फसलों में विगत 05 वर्षों से किसी भी प्रकार की कोई हानि होने के सम्बन्ध में कोई साक्ष्य प्राप्त नहीं हुआ। कार्यालय अभिलेखानुसार उक्त क्षेत्र में विगत वर्षों के सापेक्ष वर्तमान में फसल का उत्पादन सामान्य रहा।

उपरोक्तानुसार आख्या आपके अवलोकनार्थ अग्रिम आवश्यक कार्यवाही हेतु प्रेषित है।

(धीरेन्द्र सिंह चौधरी)
जिला कृषि अधिकारी
बरेली।

पत्रांक/ 1418 /कैम्प का0बिलवा/रा0ह0अ0/2021–22 दिनांक 24.12.2021

प्रतिलिपि–क्षेत्रीय अधिकारी केन्द्रीय प्रदूषण नियन्त्रण बोर्ड बरेली।

24-12-2021
जिला कृषि अधिकारी
बरेली।

Annexure-2

कार्यालय जिला गन्ना अधिकारी, बरेली

पत्र संख्या : 247 /क्रय–4/2021–22/ दिनांक : 29 मार्च 2022

क्षेत्रीय अधिकारी
उ.प्र. प्रदूषण नियंत्रण बोर्ड
बरेली

विषयः–मा.राष्ट्रीय हरित अधिकरण में दायर ओ. संख्या 539/2019 आदि अन्सारी बनाम मै. धामपुर शुगर मिल्स लि. एवं अन्य में पारित आदेश दिनांक 01.09.2021 के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के द्वारा अद्यतन दिनांक 15.03.2022 को विडियो कान्फ्रेशिंग के माध्यम से आहूत बैठक में दिये गये निर्देशों का अनुपालन सुनिश्चित कराये जाने के सम्बन्ध में।

कृपया उपरोक्त विषयक केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा जनपद बरेली के विभिन्न विभागों के साथ सन्दर्भित वाद में विचारणीय उद्योग मै. धामपुर शुगर मिल्स लि. मीरगंज के आस–पास के क्षेत्रों में पर्यावरणीय दृष्टिकोण से हुये प्रभाव का ऑकलन दिनांक 15.11.2021 एवं 16.11.2021 को किया गया था। उक्त के दौरान सन्दर्भित उद्योग के आस–पास के क्षेत्रों में फसल उत्पादन दर में परिवर्तन के तथा फसल के विभिन्न वर्षों की उत्पादन की मात्रा के सम्बन्ध में आख्या विषयक है।

उपरोक्त के सम्बन्ध में अवगत कराना है गन्ना विकास विभाग द्वारा चीनी मिल क्षेत्र के गन्ना विकास परिषद मीरगंज क्षेत्र में गन्ने के क्षेत्र एवं उत्पादन के सम्बन्ध में विगत पॉच वर्षों से सम्बन्धित परिषद मीरगंज एवं कार्यालय के सॉख्यिकी अनुभाग से प्राप्त सूचना आदि अग्रेतर कार्यवाही हेतु निम्नानुसार प्रेषित हैः–

क्र. सं.	नाम चीनी मिल	नाम परिषद	वर्ष 2021–22		वर्ष 2020–21		वर्ष 2019–20		वर्ष 2018–19		वर्ष 2017–18	
			गन्ना क्षेत्र (हे.)	गन्ना उत्पादन (लाख कु.) @ 771.88/ het.	गन्ना क्षेत्र (हे.)	गन्ना उत्पादन (लाख कु.) @ 768.88/het	गन्ना क्षेत्र (हे.)	गन्ना उत्पादन (लाख कु.) @ 747.40/het	गन्ना क्षेत्र (हे.)	गन्ना उत्पादन (लाख कु.) @ 800.92/het	गन्ना क्षेत्र (हे.)	गन्ना उत्पादन (लाख कु.) @ 691.48/het
1	मीरगंज	मीरगंज	10383	80.14	9550	73.42	9215	68.87	11089	88.81	9433	65.23

29.3.2022

(पी. एन. सिंह)
जिला गन्ना अधिकारी
बरेली

447 Byhand Gautam 01/04/2022

Annexure-3

कार्यालय मुख्य चिकित्सा अधिकारी, बरेली।

पत्रांक–मु0चि0अ0/पर्या0क्षति/2021–22/ दिनांक–27.12.2021

सेवा में,

क्षेत्रीय अधिकारी,
उ0प्र0 प्रदूषण नियंत्रण बोर्ड,
बरेली।

विषय– **मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के द्वारा की गयी पर्यावरणीय क्षति के आकलन के सम्बन्ध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को संयुक्त रूप से किये गये निरीक्षण की आख्या के सम्बन्ध में।**

उपरोक्त विषयक सन्दर्भित उद्योग मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के सम्बन्ध में मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0 539/2019 द्वारा पर्यावरणीय क्षति के आकलन के सम्बन्ध में जारी निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्र दिनांक 29.09.2021 से गठित संयुक्त समिति के कम में जिलाधिकारी, बरेली के पत्रांक सं0 686/ओ0ए0 सं0–539/2019/2021 दिनांक 26.10.2021 एवं अपर जिला मजिस्ट्रेट (नगर) बरेली की अध्यक्षता संदर्भित प्रकरण के सम्बन्ध में जिला स्तरीय अधिकारियों की आहूत बैठक दिनांक 12.11.2021 में दिये गये निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के साथ आहूत बैठक जिला प्रशासन से प्राप्त निर्देशों के अनुपालन में अद्योहस्ताक्षरकर्ताओं द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं अधीक्षक/प्रभारी अधिकारी, सामु0स्वा0केन्द्र मीरगंज, बरेली के साथ दिनांक 15.11.2021 तथा 16.11.2021 को मैसर्स, धामपुर शुगर मिल लि0, मीरगंज, बरेली के आस–पास के स्थित लगभग 08 ग्रामों (सिंधौली, जैनोर, खमरिया सानी, नरखेड़ा, मण्डनपुर, सहजना, मीरगंज, नगरिया सादात)का स्वास्थ्य सम्बन्धी सर्वेक्षण किया गया। सर्वेक्षण के दौरान संदर्भित उक्त उद्योग से आस–पास स्थित ग्रामों में निवास कर रहे स्थानीय निवासियों के स्वास्थ्य पर किसी भी प्रकार का कोई प्रतिकूल प्रभाव संज्ञान में नही आया तथा कार्यालय अभिलेखानुसार विगत में भी किसी प्रकार की सूचना कार्यालय में उपलब्ध नहीं है।

EE

उपरोक्तानुसार आख्या अग्रिम कार्यवाही हेतु सादर प्रेषित।

मुख्य चिकित्सा अधिकारी,
बरेली।

पत्रांक– मु0चि0अ0/पर्या0क्षति/2021–22/7083-1 तद्दिनांक–

प्रतिलिपि जिलाधिकारी महोदय, बरेली को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

मुख्य चिकित्सा अधिकारी,
बरेली।

Annexure-4

प्रेषक,

मुख्य पशुचिकित्सा अधिकारी,
बरेली।

सेवा में,

क्षेत्रिय अधिकारी उ0प्र0 प्रदूषण नियंत्रण बोर्ड,
बरेली।

पंत्राक 2152 /पी0सी0/2021–22 दिनांक 17.12.2021

विषय– मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के द्वारा की गयी पर्यावरणीय क्षति के आकलन के सम्बन्ध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को संयुक्त रूप से किये गये निरीक्षण के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक संदर्भ ग्रहण करने का कष्ट करें । मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के द्वारा की गयी पर्यावरणीय क्षति के आकलन के सम्बन्ध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को संयुक्त रूप से निरीक्षण किया गया इस कार्यालय से सम्बन्धित आख्या संलग्न कर आग्रिम आवश्यक कार्यवाही हेतु प्रेषित की जा रही है।

भवदीय,

(डा0 ललित कुमार वर्मा)
मुख्य पशु चिकित्सा अधिकारी,
बरेली।

मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के द्वारा की गयी पर्यावरणीय क्षति के आकलन के सम्बन्ध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को संयुक्त रूप से किये गये निरीक्षण के सम्बन्ध में आख्या—

उपरोक्त सन्दर्भित उद्योग मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के सम्बन्ध में मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा पर्यावरणीय क्षति के आकलन के सम्बन्ध में जारी निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्र दिनांक 29.09.2021 से गठित संयुक्त समिति के कम में जिलाधिकारी, बरेली के पत्रांक सं0 686/ओ0ए0 सं0–539/2019/2021 दिनांक 26.10.2021 एवं अपर जिला मिजिस्ट्रेट (नगर) बरेली की अध्यक्षता संदर्भित प्रकरण के सम्बन्ध में जिला स्तरीय अधिकारियों की आहूत बैठक दिनांक 12.11.2021 में दिये गये निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के साथ का आहूत बैठक जिला प्रशासन से प्राप्त निर्देशों के अनुपालन में अद्योहस्ताक्षकर्ताओं द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली में आस–पास स्थित ग्रामों का सर्वेक्षण किया गया। सर्वेक्षण के दौरान संदर्भित उद्योग मैसर्स धामपुर शुगर मिल, मीरगंज के आस–पास स्थित ग्रामों में निवासियों द्वारा पाले जा रहे पशुओं/जानवरों के स्वास्थ्य पर किसी भी प्रकार का कोई प्रतिकूल प्रभाव नहीं पाया गया। सर्वेक्षण के दौरान संदर्भित उक्त उद्योग से पर्यावरणीय क्षति पहुंचाने वाले कारको के सम्बन्ध में कोई भी साक्ष्य प्राप्त नहीं हुये।

उपरोक्तानुसार आख्या अग्रिम आवश्यक कार्यवाही हेतु सादर प्रेषित।

मुख्य पशु चिकित्साधिकरी
बरेली

Annexure-5

मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के द्वारा की गयी पर्यावरणीय क्षति के आकलन के सम्बन्ध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को संयुक्त रूप से किये गये निरीक्षण के सम्बन्ध में आख्या—

उपरोक्त सन्दर्भित उद्योग मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के सम्बन्ध में मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा पर्यावरणीय क्षति के आकलन के सम्बन्ध में जारी निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्र दिनांक 29.09.2021 से गठित संयुक्त समिति के कम में जिलाधिकारी, बरेली के पत्रांक सं0 686/ओ0ए0 सं0–539/2019/2021 दिनांक 26.10.2021 एवं अपर जिला मिजिस्ट्रेट (नगर) बरेली की अध्यक्षता संदर्भित प्रकरण के सम्बन्ध में जिला स्तरीय अधिकारियों की आहूत बैठक दिनांक 12.11.2021 में दिये गये निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के साथ का आहूत बैठक जिला प्रशासन से प्राप्त निर्देशों के अनुपालन में अद्योहस्ताक्षकर्ताओं द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली में आस–पास स्थित ग्रामों में स्थित तालाबो/पोखरों एवं पीलाखार नदी का सर्वेक्षण किया गया। सर्वेक्षण के दौरान ग्रामों में स्थित तालाबों/पोखरों एवं पीलाखार नदी में पाये जाने वाली जलीय जंतुओ पर किसी भी प्रकार का कोई प्रतिकूल प्रभाव नहीं पाया गया। सर्वेक्षण के दौरान संदर्भित उक्त उद्योग से पर्यावरणीय क्षति पहुंचाने वाले कारको के सम्बन्ध में कोई भी साक्ष्य प्राप्त नहीं हुये।

उपरोक्तानुसार आख्या अग्रिम आवश्यक कार्यवाही हेतु सादर प्रेषित।

जिला मत्स्य अधिकारी
बरेली।
सहायक निदेशक मत्स्य
बरेली

Annexure-6

मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के द्वारा की गयी पर्यावरणीय क्षति के आकलन के सम्बन्ध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को संयुक्त रूप से किये गये निरीक्षण के सम्बन्ध में आख्या—

उपरोक्त सन्दर्भित उद्योग मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के सम्बन्ध में मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा पर्यावरणीय क्षति के आकलन के सम्बन्ध में जारी निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्र दिनांक 29.09.2021 से गठित संयुक्त समिति के क्रम में जिलाधिकारी, बरेली के पत्रांक सं0 686/ओ0ए0 सं0–539/2019/2021 दिनांक 26.10.2021 एवं अपर जिला मजिस्ट्रेट (नगर) बरेली की अध्यक्षता संदर्भित प्रकरण के सम्बन्ध में जिला स्तरीय अधिकारियों की आहूत बैठक दिनांक 12.11.2021 में दिये गये निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के साथ का आहूत बैठक जिला प्रशासन से प्राप्त निर्देशों के अनुपालन में अद्योहस्ताक्षकर्ताओं द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के आस–पास के स्थित ग्रामो यथा सिंघौली, जैनोर, खमरिया सानी, नरखेड़ा, मण्डनपुर, सहजना, मीरगंज नगरिया सादत आदि का सर्वेक्षण के दौरान उद्योग के समीप बाग–बगीचों इत्यादि को किसी भी प्रकार की क्षति पहुचांने जैसी समस्या व्याप्त नहीं पायी गयी।

उपरोक्तानुसार आख्या आपके अवलोकनार्थ अग्रिम आवश्यक कार्यवाही हेतु प्रेषित है।

जिला उद्यान अधिकारी
बरेली।

Annexure-7

मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के द्वारा की गयी पर्यावरणीय क्षति के आकलन के सम्बन्ध में केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को संयुक्त रूप से किये गये निरीक्षण के सम्बन्ध में आख्या—

उपरोक्त सन्दर्भित उद्योग मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली के सम्बन्ध में मा0 राष्ट्रीय हरित अधिकरण के ओ0ए0 सं0539/2019 द्वारा पर्यावरणीय क्षति के आकलन के सम्बन्ध में जारी निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के पत्र दिनांक 29.09.2021 से गठित संयुक्त समिति के कम में जिलाधिकारी, बरेली के पत्रांक सं0 686/ओ0ए0 सं0–539/2019/2021 दिनांक 26.10.2021 एवं अपर जिला मिजिस्ट्रेट (नगर) बरेली की अध्यक्षता संदर्भित प्रकरण के सम्बन्ध में जिला स्तरीय अधिकारियों की आहूत बैठक दिनांक 12.11.2021 में दिये गये निर्देशों के अनुपालन में केन्द्रीय प्रदूषण नियंत्रण बोर्ड के साथ का आहूत बैठक जिला प्रशासन से प्राप्त निर्देशों के अनुपालन में अद्योहस्ताक्षकर्ताओं द्वारा केन्द्रीय प्रदूषण नियंत्रण बोर्ड, उ0प्र0 प्रदूषण नियंत्रण बोर्ड एवं विभिन्न सम्बन्धित विभागों के साथ दिनांक 15.11.2021 तथा 16.11.2021 को मैसर्स धामपुर शुगर मिल लि0, मीरगंज, बरेली में आस–पास स्थित ग्रामों का सर्वेक्षण किया गया। सर्वेक्षण के दौरान संदर्भित उद्योग मैसर्स धामपुर शुगर मिल, मीरगंज के आस–पास स्थित ग्रामों में होने वाली पेड़ पौधों पर किसी भी प्रकार का कोई प्रतिकूल प्रभाव नहीं पाया गया। सर्वेक्षण के दौरान संदर्भित उक्त उद्योग से पर्यावरणीय क्षति पहुंचाने वाले कारको के सम्बन्ध में कोई भी साक्ष्य प्राप्त नहीं हुये।

प्रभागीय वनाधिकारी
बरेली।

क्षेत्रीय वनाधिकारी
मीरगंज रेन्ज
बरेली

Annexure-8A

कार्यालय
अधिशासी अभियन्ता,
भूगर्भ जल विभाग खण्ड–मुरादाबाद,
निकट बी–161/4, जिगर विहार कालोनी,
सिविल लाइन,मुरादाबाद ।

पत्रांकः 86/भू0ज0वि0ख0–मुरा0/टी–4 दिनांकःमुरादाबादःदिसम्बर 29, 2021

विषयः–माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा ओ0ए0 सं0–539/2019, आदिल अंसारी बनाम मै0 धामपुर शुगर मिल्स एवं अन्य में पारित आदेश सं0–539/2019 (आई0ए0न0–376/2020) आर0ई0जी0आई0 के अनुपालन में गठित समिति द्वारा संयुक्त निरीक्षण की जांच आख्या के संबंध में।

क्षेत्रीय अधिकारी उ0प्र0 प्रदूषण नियंत्रण बोर्ड मुरादाबाद।

कृपया उपरोक्त विषयक एवं अपने पत्रांक सं0–1837/एन–13/539/2019/जनरल, 2021 दिनांक–21–12–2021, का सन्दर्भ ग्रहण करने का कष्ट करें। तत्क्रम में संबंधित पत्र का बिन्दु सं0–4 के क्रम में समिति द्वारा संयुक्त निरीक्षण किया गया तथा सरकारी गजट उत्तर प्रदेश प्रदेशीय सरकार द्वारा प्रकाशित,उत्तर प्रदेश शासन नमामि गंगे तथा ग्रामीण जलापूर्ति अनुभाग–3 सं0–331/76–3–2020–13,एन0जी0/2020, लखनऊ,दिनांक–17–06–2020, की अधिसूचना के अनुसार सम्भल जनपद के विकास खण्ड–असमोली क्षेत्र को अधिसूचित क्षेत्र घोषित किया गया है,(छायाप्रति संलग्न),केन्द्रीय भूमिगत जल प्राधिकरण के सार्वजिनक सूचना सं0–16/2021, नई दिल्ली दिनांक–12–10–2021, के क्रम मे उक्त विकास खण्ड सेमी किटिकल श्रेणी में वर्गीकृत किया गया है (छायाप्रति संलग्न) एवं विकास खण्ड असमोली का प्री0 एवं पोस्ट मानसून भूजल स्तर मापन डाटा विगत 05 वर्षो का औसतन भूजल मापन स्तर 17.34मी0 है,(छायाप्रति संलग्न)।

संलग्नक–उपरोक्तानुसार।

सहायक अभियन्ता
भूगर्भ जल विभाग, खण्ड–मुरादाबाद।

पत्रांकः /भू0ज0वि0ख0–मुरा0/तादिनांक।
प्रतिलिपि–जिलाधिकारी महोदय, सम्भल को सादर सूचनार्थ हेतु प्रेषित।

सहायक अभियन्ता
भूगर्भ जल विभाग, खण्ड–मुरादाबाद।

GROUND WATER DEPARTMENT, DIVISION-MORADABAD

WATER TABLE LEVEL (BGL) (in Meter) From 2017 to 2021 Pre and Post Mansoon

(Block-Asmoli, District-Sambhal)

DISTRICT	BLOCK	HYDROGRAPH STATION	PRM_17	PTM_17	PRM_18	PTM_18	PRM_19	PTM_19	PRM_20	PTM_20	PRM_21	PTM_21	Avg WL Per Hydrograph Station (Meter)
SAMBHAL	ASMOLI	AICHORA KAMBHOH	–	–	–	19.45	–	20.65	21.40	21.15	22.90	22.78	21.39
SAMBHAL	ASMOLI	ASMOLI *	16.29	–	–	–	–	–	–	–	18.25	17.75	17.43
SAMBHAL	ASMOLI	DABOI KHUDR*	15.75	15.50	18.05	16.50	17.10	17.68	18.40	18.80	23.15	19.95	18.09
SAMBHAL	ASMOLI	GNGADASHPUR*	16.95	16.45	18.55	16.85	17.15	17.62	18.55	16.85	19.52	19.55	17.80
SAMBHAL	ASMOLI	HARTHALA*	15.85	15.60	16.40	16.00	16.10	15.90	17.20	17.85	18.50	18.28	16.77
SAMBHAL	ASMOLI	MANAUTA*	15.81	15.60	17.11	15.30	17.30	16.15	17.18	17.05	17.82	17.68	16.70
SAMBHAL	ASMOLI	SAHWAJPUR*	11.28	11.10	16.63	15.80	15.70	15.90	17.20	17.16	17.89	17.55	15.62
SAMBHAL	ASMOLI	MALPUR	13.40	13.15	14.55	13.60	13.80	14.18	14.80	14.92	15.60	15.03	14.30
SAMBHAL	ASMOLI	KHASPUR	16.25	16.00	17.55	16.60	16.60	17.10	17.82	18.34	18.92	18.80	17.40
SAMBHAL	ASMOLI	VIKAS KHAND (NHP)	–	–	–	–	–	–	–	–	18.07	17.76	17.92
Average Ground Water Level Data Last Five Year 2017-2021 Pre & Post Mansoon (Block-Asmoli, District Sambhal) In Meter													17.34

3/12/2021

विवेक कुमार

अवर अभियन्ता

भूगर्भ जल विभाग खण्ड-

मुरादाबाद

सौरभ साह 3/12/21

सहायक अभियन्ता

Assistant Engineer

Ground Water Department

Division-Moradabad

Annexure-8B

प्रेषक,

अधिशासी अभियन्ता,
भूगर्भ जल विभाग, खण्ड–मुरादाबाद।

सेवा में,

क्षेत्रीय अधिकारी,
उ0प्र0 प्रदूषण नियंत्रण बोर्ड,
मुरादाबाद।

पत्रांक: 46/भू0ज0वि0खं0–मुरा0/एन0जी0टी0 /दिनांक/मुरादाबाद/मई 05,2022

विषयः–**Joint Survey of M/S Dhampur Sugar Mills Ltd, Asmoli District-Sambhal in compliance to Hon ble NGT order Dated-01-09-2021 in the matter of Adil Ansari Vs Dhampur Sugar Mills in O.A. N0.539/2019 reg.**

महोदय,

कृपया उपरोक्त विषयक जिलाधिकारी सम्भल (बहजोई) के पत्र सं0–387/N-13/539/2019 /General, दिनांक–18–04–2022, का सन्दर्भ ग्रहण करने की कृपा करें। केन्द्रीय प्रदूषण नियंत्रण बोर्ड के प्रस्तुत कि गई ड्राफ्ट रिर्पोट के अनुसार ब्लॉक असमौली के आस–पास 17 ग्रामों के भूगर्भीय जल के एकत्र नमूने का विश्लेषण किया गया था। उक्त ड्राफ्ट रिर्पोट पर भूगर्भ जल विभाग, द्वारा तीन बिन्दुओं पर संशोधन किया गया है।

संलग्नक–उपरोक्तानुसार।

अधिशासी अभियन्ता,
भूगर्भ जल विभाग, खण्ड–मुरादाबाद।

पत्रांक: /भू0ज0वि0खं0–मुरा0/**तादिनांक।**

प्रतिलिपि–जिलाधिकारी, महोदय सम्भल(बहजोई) को सूचनार्थ प्रेषित ।

अधिशासी अभियन्ता,
भूगर्भ जल विभाग, खण्ड–मुरादाबाद।

Observation based on interaction with farmers on ground water:

Residents from Ramnagar Village, located at right bank of river Sot, around 1 km D/s direction of DSM unit, raised the issue of ground water pollution & yellow colour in the village and diseases like Jaundice etc. caused due to consumption of polluted/contaminated ground water. Analysis results of total seven ground water samples collected from Ramnagar village show TDS in range of 230-742 mg/l, Iron in the range of 1.14-6.30 ppm & Manganese as 0.01-1.15 ppm. COD in the range of 7-45 mg/l is also detected in all groundwater samples collected from village indicating the presence of organic matter in the ground water. TDS Higher than WHO prescribed limit observed at four locations namely AGW1, 2, 3 & 6. High COD observed in the samples namely AGW 4 (28 mg/l), AGW 5 (24 mg/l) and AGW 6 (45 mg/l) collected at a depth of 200-220 ft. from close proximity of right bank for river Sot. It was further noted that at these sampling locations, higher concentration of COD along with chloride and Mn was also observed. Chloride is often the most serious source of interference in COD determination. This indicates the possible impact of industrial pollution or domestic wastewater as the Sot River downstream of DSM, Asmoli carries only partially/ untreated effluent and sewage. As reported by the villagers the cases of Jaundice is of concern, however the cause of this possibly is drinking water contaminated with Hepatitis virus which is unlikely to due to industrial discharge. **(Point add a report page number 45)**

Conclusion of survey conducted in Asmoli, District Sambhal

2. The changes in colour of groundwater water to yellow after few minutes of storing might be due to oxidation of iron and manganese present in groundwater. The sources of these pollutants seems to be geogenic in origin. The geology of the area seems to have influence on groundwater parameters. The COD values also possibly get influenced by higher concentration of chloride and Mn concentrations. Further, the excessive use of pesticides and fertilizers in the area coupled with overexploitation of the ground water also may have contributed to the higher values of COD and Ammoniacal nitrogen. **(Point add a report page number 54)**

Recommendations

- The contamination in Ground Water has been observed at shallow depth handpumps/borewells, hence it is recommended that Jal Nigam, Jalkal Department & Nalkoop Vibhag may be asked to look into the matter, and arrangement for deep borewell shall be made. **(Point add a report page number 82)**

Annexure-9

जिला उद्यान अधिकारी
सम्भल

सेवा में,

क्षेत्रीय अधिकारी
क्षेत्रीय कार्यालय, उ०प्र० प्रदूषण नियंत्रण बोर्ड,
आवास विकास कालोनी, बड़ी मिस्कार, मुरादाबाद।

पत्रांक: 832 /उद्यान/2021-22/ दिनांक: 29.12.2021

विषय: एन०जी०टी० आर्डर दिनांक 21 सितम्बर 2021 आदिला अंसारी V/S धामपुर शुगर मिल्स - असमौली के सम्बन्ध में।

महोदय,

उपर्युक्त विषयक आपके पत्र संख्या 1837/N-13/539/2019/ जनरल/ दिनांक 21.12.2021 के परिपालन में अवगत कराना है कि विकास खण्ड असमौली में स्थित मैसर्स धामपुर शुगर मिल्स लि० (शुगर एंड आसवनी इकाई) असमौली जनपद सम्भल के संयुक्त निरीक्षण दिनांक 17 व 18.12.2021 में उल्लेखित उद्यान विभाग से सम्बन्धित एवं डाटा निम्न विवरण अनुसार आपकी सेवा में आवश्यक कार्यवाही हेतु प्रेषित है।

1- विकास खण्ड असमौली में बागवानी के अन्तर्गत क्षेत्रफल 600 से 700 है०
2- विकास खण्ड असमौली में शाकभाजी के अन्तर्गत क्षेत्रफल 500 से 600 है०

धामपुर शुगर मिल्स लि० के 5 किलोमीटर रेडियस में उत्पादित की जाने वाली औद्यानिक फसलों का आच्छादन है०में।

1-	ग्रामों की संख्या	- 40
2-	आलू का क्षेत्रफल	- 400 — 450 है०
3-	सब्जी का क्षेत्रफल	- 20 है०
4-	आम का क्षेत्र फल	- 63 है०
5-	अमरूद का क्षेत्र फल	- 3.2 है०

शुगर मिल के चलने का समय नवम्बर से अप्रैल तक होता है इससे हमारी फल वाली फसलों के उत्पादन पर कोई विपरीत प्रभाव नहीं पड़ता है क्योंकि आम की फसल में बौर का समय माह फरवरी से प्रारम्भ होता है तथा माह मार्च में आम बनना प्रारम्भ होता है तथा अप्रैल माह तक आम का साइज छोटा होता है जिससे आम की फसल पर इसका कोई दुष्प्रभाव नहीं पड़ता है। इसी प्रकार आलू एवं सब्जी की खेती पर भी चीनी मिल के धुंवे का कोई अधिक प्रभाव नहीं पड़ता है। विकास खण्ड असमौली क्षेत्र के कृषकों से भी इस सम्बंध में कभी कोई शिकायत प्राप्त नहीं हुयी है। रिपोर्ट सेवा में सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है।

भवदीय
29/12/2021
जिला उद्यान अधिकारी

कार्यालय– मुख्य कार्यकारी अधिकारी मत्स्य, सम्भल।

पत्रांक : 662/रिट/2021–22

दिनांक 29/12/2021

सेवा में,

क्षेत्रीय कार्यालय
उ0प्र0 प्रदूषण नियंत्रण बोर्ड
1/ए/आई0एन0एस0–1 आवास विकास कालोनी बौद्ध विहार
दिल्ली रोड मुरादाबाद।

विषयः धामपुर शुगर मिल असमौली जनपद सम्भल में मत्स्य विभाग से सबन्धित सूचना/आख्या/डेटा के प्रेषण के सम्बन्ध में।

महोदय,

उपरोक्त विषयक सादर अवगत कराना है कि दिनांक 17.11.2021 एवं 18.11.2021 को मैसर्स धामपुर शुगर मिल्स लि0 (शुगर एवं आसवन ईकाई) असमौली जनपद सम्भल के सयुंक्त निरीक्षण के दौरान मत्स्य विभाग जनपद सम्भल द्वारा धामपुर शुगर मिल के क्षेत्र से सम्बन्धित तालाबों में पल रहीं मछलियों पर कोई विपरीत प्रभाव नही पड़ा है न ही सम्बन्धित क्षेत्र से उक्त शुगर फैक्टरी के विरूद्व मत्स्य पालन से सम्बन्धित कोई शिकायत प्राप्त नहीं हुई है। सूचना आपकी सेवा में आवश्यक कार्यवाही हेतु सूचनार्थ प्रेषित।

भवदीय

मुख्य कार्यकारी अधिकारी
मत्स्य विभाग, सम्भल

Annexure-11

कार्यालय–प्रभारी चिकित्साधिकारी प्रा0स्वा0के0धामपुर जनपद बिजनौर।

पत्रांक–पी0एच0सी/के0नि0प्र0/2021–22/65/संशोधित रिपोर्ट दिनांक–22.12.2021

सेवा में,

श्रीमान मुख्य चिकित्साधिकारी,

जनपद बिजनौर।

विषय–**HON BLE NGT ORDER DATED 1, SEPTEMBER, 2021 IN THE MATTER OF ADIL ANSARI V/S M/S DHAMPUR SUGAR MILLS & Ors (O.A. NO.539(I.A.NO.376/2020) reg.**

महोदय,

आपको अवगत कराना है कि केन्द्रीय प्रदूषण नियन्त्रण बोर्ड– दिल्ली के पत्रांक –**B-19123/QM-II/LEGAL/NGT-6/CPCB/2020-21** दिनांक–10.12.2021 जो कि कार्यालय जिला अधिकारी महोदय बिजनौर के पृठांक पत्र संख्या–1841/ई0आर0के0 के माध्यम से इस कार्यालय में दिनांक 15.12.2021 प्राप्त हुए है का सन्दर्भ में जिसमें माननीय राष्ट्रीय हरित अधिकरण नई दिल्ली में योजित ओ0ए0 संख्या–539/2019 आदिल अंसारी बनाम धामपुर शुगर मिल लि0 में पारित आदेश संख्या–दिनांक–01.09.2021 के अनुपालन में आपको अवगत कराना है कि

स्वास्थ्य विभाग की रिपोर्ट धामपुर शुगर मिल के कसिग सीजन जो कि नवम्बर से मई तथा नान कसिग सीजन जो कि यह जून से अक्टूबर तक पी0एच0सी0 तथा सी0एच0सी0 धामपुर पर देखे गये मरीज जो कि अधिकतर स्किन एलर्जी, खांसी, सांस की बीमारी, **EYE IRRITATION** तथा पेट में इन्फेक्सन वाले सामान्य मरीज मिले है। इसमें खुजली के 04, सामान्य मौसमी खांसी,जुकाम, के 03, पेट के मरीज–02 तथा आखों की खुजली व लालीमा–02 के मरीज आस–पास गांव के मिलें उनको दवाई देकर पी0एच0सी0 पर उपचार किया गया है,तथा वर्तमान में यह मरीज पूर्णतः स्वस्थ है।

धामपुर ब्लॉक/तहसील क्षेत्र के अन्तर्गत यह सामान्य एवं मौसमी बीमारियॉ पायी जाती है, धामपुर चीनी मिल के पर्यावण से इनका कोई संबंध नही है।

प्रभारी चिकित्साधिकारी
प्रा० स्वा० केन्द्र धामपुर
प्रा0स्वा0केन्द्र धामपुर।

Counter Signed.

Chief Medical Officer
BIJNOR

Annexure-12

23-12-2021

प्रेषक,

जिला कृषि अधिकारी,
बिजनौर।

पत्रांक.....1636.....
दिनांक..23-12-2021
पत्रावली सं०N-20/जनरल-202

सेवा मे,

क्षेत्रीय अधिकारी,
उत्तर प्रदेश प्रदूषण नियन्त्रण बोर्ड,
बिजनौर।

पत्रांक 1376 /4-कृषि/सामान्य/2021–22/दिनांक 22.12.2021।

महोदय,

कृपया अपने कार्यालय पत्र संख्या 611/एन 20/जनरल–2021 दिनांक–18.12.2021 का सन्दर्भ ग्रहण करने का कष्ट करे, जिसके द्वारा मा0 राष्ट्रीय हरित अधिकरण नई दिल्ली मे योजित ओ0ए0 संख्या–539/2019 आदिल अंसारी बनाम धामपुर शुगर मिल्स लि0 मे पारित आदेश दिनांक 01.09.2021 के अनुपालन मे दिनांक 01.12.2021 एवं 02.12.2021 को मैसर्स धामपुर शुगर मिल्स लि0 (शुगर एवं आसवनी इकाई) धामपुर बिजनौर के संयुक्त निरीक्षण के दौरान अपने विभाग से संबधित सूचना/आख्या/डेटा उपलब्ध कराने का अनुरोध किया गया है।

तत्क्रम मे अवगत कराना है कि विभाग से संबंधित विगत तीन वर्षो के जनपद के आच्छादन, उत्पादन एवं उत्पादकता के आंकड़े तथा भूमि परीक्षण प्रयोगशाला, बिजनौर को उपलब्ध कराये गये 29 मृदा नमूनो की विश्लेषण रिपोर्ट (सूक्ष्म पोषक तत्वो की विश्लेषण रिपोर्ट छोड़कर) मृदा नमूनो की रिपोर्ट के आधार पर निरीक्षित क्षेत्र की मृदा फसल उत्पादन के योग्य है और फसलोत्पादन पर कोई विपरीत प्रभाव पड़ने संबंधी तथ्य नही पाया गया, साथ ही निरीक्षण तिथि 01 व 02 दिसम्बर 2021 को चिन्हित क्षेत्रो के निरीक्षण के समय भी बोई गई फसले सामान्य दशा मे पायी गयी। उक्त सूचना पत्र के साथ संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित की जा रही है।

भवदीय

जिला कृषि अधिकारी,
बिजनौर।

AFR2

23/12/21

पृष्ठांकन सख्या /उक्त दिनांक

प्रतिलिपि:–निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. उप कृषि निदेशक, बिजनौर।
2. मुख्य विकास अधिकारी, बिजनौर।
3. जिलाधिकारी महोदय, बिजनौर की सेवा मे अवलोकनार्थ प्रेषित।

जिला कृषि अधिकारी,
बिजनौर।

भूमि परीक्षण प्रयोगशाला बिजनौर

मृदा नमूनों में प्रमुख पोषक तत्वों के विश्लेषण परिणाम

दिo 22-12-2021

क्र० सं०	प्रयोगशाला संख्या	खेत की पहचान/ कोड सं०	मृदा नमूना जमा करने की तिथि	पी० एच० मान	उपलब्ध जीवांश कार्बन		उपलब्ध फास्फेट		उपलब्ध पोटाश		वि० सं०	
					प्रतिशत	उर्वरता श्रेणी	किग्रा/ हे०	उर्वरता श्रेणी	किग्रा/ हे०	उर्वरता श्रेणी	कि० मैग्नीज/मिली०	श्रेणी
1	205	N·B/23	03-12-2021	7.300	0.29	L	09	V.L	203.84	M	0.35	Normal
2	206	AL·B/98	03-12-2021	7.100	0.48	L	09	V.L	412.16	H	0.34	"
3	207	AL·B/90	03-12-2021	7.200	0.21	L	4.50	V.L	157.92	L	0.42	"
4	208	ND·K/93	03-12-2021	7.000	0.56	M	09	V.L	400.96	H	0.31	"
5	209	ND·K/89	03-12-2021	7.700	0.56	M	27	M	143.36	M	0.33	"
6	210	KH·N/59	03-12-2021	7.2	0.49	L	09	V.L	145.60	M	0.42	"
7	211	AJ·D/106	03-12-2021	7.0	0.35	L	18	L	439.04	H	0.41	"
8	212	A·D·I/24	03-12-2021	7.2	0.28	L	18	L	155.68	M	0.32	"
9	213	N·D/123	03-12-2021	6.9	0.21	L	09	V.L	394.24	H	0.34	"
10	214	V·P/151	03-12-2021	7.01	0.25	L	4.50	V.L	119.84	M	0.35	"
11	215	KH·N/01	03-12-2021	6.9	0.24	L	22.50	M	230.72	M	0.37	"
12	216	V·P/148	03-12-2021	7.0	0.28	L	13.50	L	234.08	M	0.42	"

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वै० अधि०

	217	XY-9	03-12-2021	7.0	0.21	L	85	V.L	143.36	M	0.45	Normal	(3)
	218	XY-10	03-12-2021	7.2	0.35	L	13.50	L	143.36	M	0.49	"	
15	219	XY-7	03-12-2021	7.4	0.14	V.L	09	V.L	88.48	L	0.43	"	
16	220	XY-6	03-12-2021	7.2	0.28	L	22.50	M	129.92	M	0.33	"	
17	221	XY-8	03-12-2021	7.5	0.56	M	27.00	M	179.20	M	0.56	"	
18	222	XY-1	03-12-2021	7.5	0.28	L	13.50	V.L	115.36	M	0.53	"	
19	223	XY-2	03-12-2021	7.3	0.84	H	67.50	H	553.28	H	0.46	"	
20	224	XY-3	03-12-2021	7.6	0.35	L	27.00	M	209.44	M	0.35	"	
21	225	XY-4	03-12-2021	7.1	0.63	M	40.50	H	434.56	H	0.40	"	
22	226	XY-5	03-12-2021	7.4	0.07	V.L	13.50	L	168.0	M	0.55	"	
23	227	DTNS	03-12-2021	7.1	0.14	V.L	49.50	H	209.44	M	0.43	"	
24	228	RPBS	03-12-2021	7.1	0.31	L	18.00	L	170.24	M	0.34	"	
25	229	SRS	03-12-2021	7.7	0.67	M	45.00	H	173.60	M	0.54	"	
26	230	DHPS	03-12-2021	7.2	0.38	L	31.50	M	126.56	M	0.46	"	
27	231	MVS	03-12-2021	7.3	0.53	M	27.00	M	116.48	M	0.37	"	
28	232	ALS	03-12-2021	7.4	0.28	L	40.50	H	92.96	L	0.41	"	
29	233	DPS1	03-12-2021	7.2	0.49	L	36.00	M	204.96	M	0.48	"	

भूमि परीक्षण प्रयोगशाला 403
बिजनौर

Annexure-13

खरीफ वर्ष 2018–19 से वर्ष 2020–21 तक आच्छादन, उत्पादन एवं उत्पादकता संबंधी आंकड़ जनपद -बिजनौर

क्र0सं0	फसल का नाम	वर्ष	क्षेत्रफल (हे0 मे)	उत्पादन (मै0टन मे)	उत्पादकता (कु0 / हे0)
1	धान	2018–19	54482	131629	24.16
		2019–20	57985	153950	26.55
		2020–21	54801	163362	29.81
2	उर्द	2018–19	1403	1118	7.82
		2019–20	1646	1472	8.94
		2020–21	1694	1657	9.78
3	अरहर	2018–19	4	3	7.39
		2019–20	6	9	15.00
		2020–21	6	40	6.67
4	मूंगफली	2018–19	807	802	9.94
		2019–20	752	2049	27.25
		2020–21	1299	15705	12.09
5	तिल	2018–19	109	25	2.29
		2019–20	26	5	1.92
		2020–21	14	40	2.86
6	मक्का	2018–19	14	30	21.35
		2019–20	88	141	16.02
		2020–21	1	30	30.00

जिला कृषि अधिकारी
बिजनौर।

रबी वर्ष 2018–19 से वर्ष 2020–21 तक आच्छादन, उत्पादन एवं उत्पादकता संबंधी आंकड़े

जनपद–बिजनौर।

क्र0सं0	फसल का नाम	वर्ष	क्षेत्रफल (हे0 मे)	उत्पादन (मै0टन मे)	उत्पादकता (कु0/हे0)
1	गेहूँ	2018–19	148627	557500	37.51
		2019–20	145884	510446	34.99
		2020–21	155416	591669	38.07
2	जौं	2018–19	3	9	30.67
		2019–20	4	13	32.50
		2020–21	4	13	32.50
3	चना	2018–19	14	18	12.51
		2019–20	42	56	13.44
		2020–21	24	29	12.08
4	मटर	2018–19	38	39	10.23
		2019–20	99	121	12.25
		2020–21	82	90	10.97
5	मसूर	2018–19	745	804	8.11
		2019–20	697	949	13.61
		2020–21	900	1235	13.72
6	सरसो/तोरिया	2018–19	4519	6375	14.11
		2019–20	8005	10038	12.54
		2020–21	26785	25552	9.54

जिला कृषि अधिकारी
बिजनौर।

वर्ष 2018–19 से वर्ष 2020–21 तक गन्ने का आच्छादन, उत्पादन एवं उत्पादकता संबंधी आंकड़ जनपद–बिजनौर

क्र0सं0	फसल का नाम	वर्ष	क्षेत्रफल (हे0 मे)	उत्पादन (मै0टन मे)	औसत उत्पादकता (कु0/हे0)
1	गन्ना	2018–19	220368	18941070	859.52
		2019–20	221753	19179860	864.92
		2020–21	247471	21411438	865.21

जिला कृषि अधिकारी
बिजनौर।

24-12-2021

प्रेषक,

जिला उद्यान अधिकारी
बिजनौर

सेवा में,

उत्तर प्रदेश प्रदूषण नियन्त्रण बोर्ड
क्षेत्रीय कार्यालय महर्षि दयानन्द नगर,
निकट सैण्टमेरी स्कूल, आदमपुर–चक्कर रोड,
बिजनौर–246701

पत्रांक 1642
दिनांक 24-12-2021
पत्रावली सं० N-30/जनरल

पत्रांक:– 1135-39 /सामान्य/2021–22/दिनाक 23-12-2021

विषयः– Hon'ble NGT order dated 1st September 2021 in the matter of Adil Ansari V/s M/s Dhampur Sugar Mills & Ors (O.A. no. 539/2019 (I.A. No. 376/2020) reg.

महोदय,

उपरोक्त विषयक आपके पत्रांक 611/एव–20/जनरल–2021/दिनाक 18–12–2021 के क्रम मे श्री त्रिभुवन कुमार उ0नि0 एवं श्री अरविन्द्र कुमार सहायक उद्यान निरीक्षक कार्यालय अधोहस्ताक्षरी के द्वारा जांच टीम के साथ संयुक्त जांच हेतु निर्देशित किया गया था। अतः उनकी जांच आख्या के अनुसार अवगत कराया गया है कि प्रथम दृष्टया बागानो की उपज एवं उत्पादकता सामान्य पाई गयी। सामान्य रूप से नकारात्मक प्रभाव दृष्टिगत नही पाया गया।

भवदीय

(जितेन्द्र कुमार)
जिला उद्यान अधिकारी
बिजनौर

पृष्ठांकन सं0:– दिनांक उक्त

प्रतिलिपिः– निम्न की सेवा में सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1–जिलाधिकारी महोदय, बिजनौर।
2–सदस्य सचिव महोदय, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ।
3–मुख्य पर्यावरण अधिकारी (वृत्त–1), उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ।
4–श्री ए0के0 विद्यार्थी, एडीशनल डायरेक्टर एवं इन्चार्ज, डब्ल्यू0क्यू0एम0– द्वितीय, केन्द्रीय प्रदूषण नियन्त्रण बोर्ड, परिवेशीय भवन, पूर्वी अर्जून नगर, दिल्ली।

जिला उद्यान अधिकारी
बिजनौर

1701

Annexure-14

21-12-2021

कार्यालय, अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0जल निगम(ग्रामीण),

लडापुरा वाटर वर्क्स के निकट, झालू रोड, बिजनौर(उ0प्र0)
(दूरभाष/फैक्स : 01342–252649)
E-mail: ee_bjn_cdupjn@yahoo.co.in

पत्रांकः 3185/ निरीक्षण /37 दिनांकः– 21-12-2021

सेवा में,

क्षेत्रीय अधिकारी,
उत्तर प्रदेश प्रदूषण नियन्त्रण बोर्ड,
आदमपुर–चक्कर रोड
बिजनौर।

पत्र सं0 1611
दि0 21-12-2021
पावती सं0 N-20/जनरल

विषयः– आपके पत्र सं0 611/एन0–20/जनरल–2021 दिनांक 18.12.2021 के सम्बन्ध में।

महोदय,

उपरोक्त विषयक आपके कार्यालय पत्रांक 611/एन–20/जनरल–2021 दिनांक 18.12.2021 के द्वारा चाही गयी सूचना निर्धारित प्रारुप पर संलग्न कर आपको प्रेषित है।

संलग्नकः– उपरोक्तानुसार।

भवदीय

(भरत सिंह)
अधिशासी अभियन्ता

पृ0सं0 एवं दिनांक उपरोक्तानुसार

प्रतिलिपिः–

1– श्री के0के0शर्मा, सहायक अभियन्ता।

अधिशासी अभियन्ता

कार्यालय अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0 जल निगम
लडापुरा जलकल प्रांगण, झालू रोड, बिजनौर
(जल परीक्षण रिपोर्ट)

सेवा में श्री संदीप कुमार सक्सेना
सहायक अभियन्ता
नि0ख0उ0प्र0 जल निगम, बिजनौर

तहसीलः—धामपुर
विकास खण्डः—अल्हेपुर
दिनाकः— 22/11/2016

प्रयोगशाला पंजिका का सन्दर्भ पी0ए0टी0/24
आपके पत्रांक 146/जल परीक्षण/13 दिनाक 12/1/17 के सन्दर्भ में आख्या सख्या भेजी जा रही है।

क्र0स0	ग्राम/नगर/लोकेशन	स्रोत	रंग	गंध	टी0डी0 एस0 (पी0पी0एम0)	पी0 एच0	रसायनिक परीक्षण पी0पी0एम0 में							टिप्पणी
							क्लोराइड	फ्लोराइड	सम्पूर्ण कठोरता	सल्फेट	आयरन	नाइट्रेट	एल्केनिटी	
1	ग्राम अलीपुर भिक्कन बस स्टैण्ड इदरीस के पास	हैण्प0	रंगहीन	गंधहीन	340	7.5	90.0	0.5	260	38.4	0.3	2.66	200	संतोषजनक
2	ग्राम जैतरा शिव मन्दिर	"	"	"	300	7.5	25.0	0.1	200	9.6	0.4	8.86	240	संतोषजनक
3	ग्राम तैय्यब सराय आर0आइ0एम0जू0हा0 स्कूल	"	"	"	260	7.1	30.0	0.3	220	19.2	0.5	4.43	280	संतोषजनक
4	ग्राम बकशनपुर कब्रिस्तान पर	"	"	"	280	7.8	50.0	0.2	260	28.8	0.6	16.83	260	संतोषजनक
5	धामपुर शुगर मिल टक यूनियन कार्यालय	"	"	"	300	7.9	40.0	0.5	280	9.6	0.1	15.06	240	संतोषजनक
6	ग्राम नंगला नेनसी नौबहार सिहं के पास	"	"	"	380	8.1	60.0	0.4	200	28.8	0.3	4.43	200	संतोषजनक
7	ग्राम सिपाहीवाला आदेश विद्य मन्दिर स्कूल	"	"	"	420	8.2	20.0	0.3	240	19.2	0.2	8.86	220	संतोषजनक
8	ग्राम वाजीदपुर नौन्दडू कब्रिस्तान पर	"	"	"	440	8.4	30.0	0.1	220	9.6	0.3	15.06	240	संतोषजनक
9	ग्राम सरकडा प्रथ्वीराज चौहान इ0आफ एजुकेशन	"	"	"	280	8.0	50.0	0.2	280	28.8	0.1	11.52	260	संतोषजनक
10	ग्राम सरकडा लालटेन वाले बाबा के थले पर	"	"	"	340	8.2	100.0	0.4	260	38.4	0.4	8.86	280	संतोषजनक
11	ग्राम गॉबडी हबीबवाला चमुण्डा देवी के मन्दिर पर	"	"	"	300	8.5	90.0	0.5	220	19.2	0.3	4.43	220	संतोषजनक
12	ग्राम बेरखेडा टाडा शमशान घाट पर	"	"	"	280	7.9	70.0	0.6	300	9.6	0.1	8.86	240	संतोषजनक

नोट— 1 सी0पी0एच0ई0ओ0 के मानक में उल्लिखित सीमा से अधिक को रेखांकित किया गया है।
2 मानको के लिये पृष्ठ दो का सन्दर्भ लें।
3 आयरन विश्लेषण हेतु नमूने एसिडिक में भेजें।

प्रतिहस्ताक्षरित

केमिस्ट

जूनियर इंजी0

सहायक अभियन्ता

Alhepur

कार्यालय अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0 जल निगम
लडापुरा जलकल प्रांगण, झालू रोड, बिजनौर
(जल परीक्षण रिपोर्ट)

सेवा में श्री संदीप कुमार मेहरा
सहायक अभियन्ता
नि0ख0उ0प्र0 जल निगम, बिजनौर

तहसीलः—धामपुर
विकास खण्डः—अल्हेपुर
दिनाकः— 22/11/2016

प्रयोगशाला पंजिका का सन्दर्भ पेज नं0 85
आपके पत्रांक 141/जल परीक्षण/13 दिनाक 12/1/17 के सन्दर्भ में आंख्या सख्या भेजी जा रही है।

क्र0स0	ग्राम/नगर/लोकेशन	स्रोत	रंग	गंध	टी0डी0 एस0 (पी0पी0एम0)	पी0 एच0	रसायनिक परीक्षण पी0पी0एम0 में							टिप्पणी
							क्लोराइड	फ्लोराइड	सम्पूर्ण कठोरता	सल्फेट	आयरन	नाइट्रेट	एल्केनिटी	
1	ग्राम अमखेडा प्रमोद कुमार के पास	है0प0	रंगहीन	गंधहीन	300	8.2	60.0	0.1	340	28.8	0.2	11.52	220	संतोषजनक
2	ग्राम अमखेडा प्रवेन्द्र सिहं के पास	"	"	"	360	8.5	40.0	0.2	300	19.2	0.1	8.86	200	संतोषजनक
3	ग्राम अलादीनपुर भटपुरा बाबू पूर्व प्रधान	"	"	"	420	8.1	50.0	0.1	320	9.6	0.1	4.43	200	संतोषजनक
4	ग्राम बुडेरन (मलकपुर)जमालुदीन की जयारत पर	"	"	"	480	7.5	70.0	0.5	280	28.8	0.4	8.86	280	संतोषजनक
5	ग्राम मौ0 अलीपुर लालमन उदयवीर सिहं डीलर के पास	"	"	"	400	7.9	30.0	0.4	300	19.2	0.3	11.52	300	संतोषजनक
6	ग्राम नूरपुर छिबडी जयपाल सिहं के पास	"	"	"	280	7.9	20.0	0.3	260	9.6	0.1	15.06	260	संतोषजनक
7	ग्राम हकीमपुर मेधा सुरेश के पास	"	"	"	260	8.0	80.0	0.2	300	38.4	0.2	16.83	320	संतोषजनक
8	ग्राम पिपरजीत म0 दीलावर की बैठक में	"	"	"	240	8.1	70.0	0.1	340	9.6	0.1	4.43	240	संतोषजनक
9	ग्राम पृथ्वीपुर वनवारी हसीनुदीन पुत्र जमीर अहमद	"	"	"	400	8.3	50.0	0.4	240	28.8	0.2	8.86	220	संतोषजनक
10	ग्राम पृथ्वीपुर वनवारी रदीसा पुत्र तसलीम	"	"	"	540	8.5	80.0	0.3	260	19.2	0.3	11.52	200	संतोषजनक

नोट— 1 सी0पी0एच0ई0ओ0 के मानक में उल्लिखित सीमा से अधिक को रेखांकित किया गया है।
2 मानको के लिये पृष्ठ दो क सन्दर्भ लें।
3 आयरन विश्लेषण हेतु नमूने एसिडिक में भेजें।

प्रतिहस्ताक्षरित

केमिस्ट

जूनियर इंजी0

सहायक अभियन्ता

Alhepur

कार्यालय अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0 जल निगम
लडापुरा जलकल प्रांगण, झालू रोड, बिजनौर
(जल परीक्षण रिपोर्ट)

सेवा में श्री संदीपकुमार तोमर
सहायक अभियन्ता
निर्माण खण्ड उ0प्र0 जल निगम, बिजनौर

तहसीलः—धामपुर
विकास खण्डः—अल्हेपुर
दिनाकः— 20/04/2017

प्रयोगशाला पंजिका का सन्दर्भः पी0ए0(2)

आपके पत्रांक ..... दिनाक ..... के सन्दर्भ में आख्या संख्या भेजी जा रही है।

क्र0स0	ग्राम/नगर/लोकेशन	स्रोत	रंग	गंध	टी0डी0 एस0 (पी0पी0एम0)	पी0 एच0	रसायनिक परीक्षण पी0पी0एम0 में								
							क्लोराइड	फ्लोराइड	सम्पूर्ण कठोरता	सल्फेट	आयरन	नाइट्रेट	एल्केनिटी	जीवाणु परीक्षण	टिप्पणी
1	ग्राम नीन्दडु अकीरः के पास	है0प0	रगंहीन	गंधहीन	240	7.5	45	0.1	260	19.2	0.2	8.86	160	Nil	सन्तोषजनक
2	ग्राम सलावा मस्जिद के पास	"	"	"	220	7.9	20	0.4	270	28.8	0.1	4.43	180	Nil	सन्तोषजनक
3	ग्राम नीन्दडु अन्दोत्या स्कूल के पास	"	"	"	280	7.8	50	0.2	300	9.6	0.3	11.52	200	Nil	सन्तोषजनक
4	ग्राम तपसेला धर्मपाल के पास	"	"	"	260	7.5	70	0.3	270	19.2	0.2	8.86	190	Nil	सन्तोषजनक
5	ग्राम मानपुरी शिवपुरी चन्द्रपाल के पास	"	"	"	300	7.9	25	0.1	280	28.8	0.4	16.83	140	Nil	सन्तोषजनक
6	धामपुर नगर (न्यू सराय) मस्जिद के पास	"	"	"	290	8.0	20	0.2	230	9.6	0.1	4.43	120	Nil	सन्तोषजनक
7	ग्राम जैतरा (नांगला गुगा) काके के पास	"	"	"	310	8.1	45	0.3	300	19.2	0.2	2.66	160	Nil	सन्तोषजनक
8	ग्राम अजीतपुर दर्जी मोहनदास के आश्रम पर	"	"	"	340	8.3	25	0.2	310	28.8	0.3	5.32	170	Nil	सन्तोषजनक

नोट— 1 सी0पी0एच0ई0ओ0 के मानक में उल्लिखित सीमा से अधिक को रेखांकित किया गया है।
2 मानको के लिये पृष्ठ दो का सन्दर्भ लें।
3 आयरन विश्लेषण हेतु नमूने एसिडिक में भेजें।

केमिस्ट

जूनियर इंजी0

प्रतिहस्ताक्षरित
सहायक अभियन्ता

Alhepur

कार्यालय अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0 जल निगम
लडापुरा जलकल प्रांगण, झालू रोड, बिजनौर
(जल परीक्षण रिपोर्ट)

सेवा में श्री के0के0शर्मा,

सहायक अभियन्ता
निर्माण खण्ड, उ0प्र0 जल निगम, बिजनौर

तहसीलः— धामपुर
विकास खण्डः— अल्हैपुर
दिनाकः— 09—10/08/2018

प्रयोगशाला पंजिका का सन्दर्भः.....
आपके पत्रांक 2977/ अति परिक्षण/18 दिनाक 14/08/18 के सन्दर्भ में आख्या सख्या भेजी जा रही है।

क्र0 सं0	ग्राम/नगर/लोकेशन	स्रोत	रंग	गंध	टी0डी0 एस0 (पी0पी0एम0)	पी0 एच0	रसायनिक परीक्षण पी0पी0एम0 में							
							क्लोराइड	फ्लोराइड	सम्पूर्ण कठोरता	सल्फेट	आयरन	नाइट्रेट	एल्केनिटी	टिप्पणी
1	ग्राम कोपा नंगला/श्री महेश पुत्र श्री करन सिंह के पास	हैण्डपम्प	रंगहीन	गंधहीन	200	7.5	70.00	0.5	340	48.0	0.5	11.08	80	संतोषजनक
2	ग्राम नाथाडोई/डा0भीमराव अम्बेडकर जू0हाई स्कूल	हैण्डपम्प	रंगहीन	गंधहीन	280	7.3	20.00	0.2	300	24.0	0.2	7.97	200	संतोषजनक
3	ग्राम नंदगांव/श्री महेन्द्र सिह पूर्व प्रधान के पास	हैण्डपम्प	रंगहीन	गंधहीन	580	7.4	50.00	0.4	270	28.8	0.3	11.96	90	संतोषजनक
4	ग्राम रमनावाला/हरिजन धर्मशाला	हैण्डपम्प	रंगहीन	गंधहीन	560	7.2	40.00	0.3	280	19.2	0.1	13.29	150	संतोषजनक
5	ग्राम रमनावाला/बड़ा शिव मन्दिर	हैण्डपम्प	रंगहीन	गंधहीन	460	7.0	45.00	0.1	420	9.6	0.1	15.06	110	संतोषजनक
6	ग्राम हादकपुर/श्री रमेश पुत्र हरिया के पास	हैण्डपम्प	रंगहीन	गंधहीन	480	8.0	30.00	0.3	340	38.4	0.2	5.32	170	संतोषजनक
7	ग्राम भिर्जापुर/श्री रविन्द्र पुत्र शंकर लाल शर्मा	हैण्डपम्प	रंगहीन	गंधहीन	380	7.6	80.00	0.2	350	9.6	0.4	6.20	140	संतोषजनक
8	ग्राम भिर्जापुर/हरिजन धर्मशाला	हैण्डपम्प	रंगहीन	गंधहीन	300	7.2	90.00	0.6	290	19.2	0.1	5.76	120	संतोषजनक
9	ग्राम टिबड़ी/पीपल देवता पर	हैण्डपम्प	रंगहीन	गंधहीन	270	7.1	35.00	0.1	300	24.0	0.2	6.66	150	संतोषजनक
10	ग्राम चकशाहजनी/सैनी बस्ती में	हैण्डपम्प	रंगहीन	गंधहीन	400	7.4	20.00	0.2	380	24.0	0.3	4.43	180	संतोषजनक
11	ग्राम हबीबवाला/श्री आकिल पूर्व प्रधान के पास	हैण्डपम्प	रंगहीन	गंधहीन	270	7.5	30.00	0.4	320	9.6	0.4	8.86	200	संतोषजनक
12	ग्राम कोड़ीपुरा/श्री ब्रहमपाल सैनी के पास	हैण्डपम्प	रंगहीन	गंधहीन	290	7.3	60.00	0.3	300	48.0	0.2	10.63	110	संतोषजनक
13	ग्राम सुहागपुर/श्री जबर सिंह पूर्व प्रधान के पास	हैण्डपम्प	रंगहीन	गंधहीन	320	7.2	55.00	0.1	360	19.2	0.1	8.42	100	संतोषजनक
14	ग्राम मनौटी/श्री मूला सिंह पुत्र लल्लू के पास	हैण्डपम्प	रंगहीन	गंधहीन	280	7.6	75.00	0.2	320	28.8	0.3	9.75	90	संतोषजनक
15	ग्राम भनौटी/देवता पर	हैण्डपम्प	रंगहीन	गंधहीन	440	7.5	100.00	0.4	340	38.4	0.5	17.72	140	संतोषजनक
16	ग्राम भिक्कावाला/श्री राहुल पुत्र नरेन्द्र के पास	हैण्डपम्प	रंगहीन	गंधहीन	360	7.4	120.00	0.3	280	19.2	0.4	16.83	150	संतोषजनक
17	ग्राम भिक्कावाला/चुधिंया महाराज	हैण्डपम्प	रंगहीन	गंधहीन	300	7.0	30.00	0.5	380	9.6	0.2	14.62	170	संतोषजनक
18	ग्राम शेरकोट नगर/वार्ड नं01 चामुण्डा मात का थला	हैण्डपम्प	रंगहीन	गंधहीन	420	7.1	80.00	0.2	220	57.6	0.3	15.51	180	संतोषजनक
19	ग्राम कोपा नंगला/श्री सीताराम पुत्र होरी के पास	हैण्डपम्प	रंगहीन	गंधहीन	350	7.3	70.00	0.6	260	57.6	0.1	7.97	110	संतोषजनक
20	ग्राम नसीरदोवाला/श्री विपिन के पास	हैण्डपम्प	रंगहीन	गंधहीन	290	7.2	50.00	0.3	250	48.0	0.3	7.09	100	संतोषजनक
21	ग्राम उमरपुर बांगर/श्री संजू चौहान के पास	हैण्डपम्प	रंगहीन	गंधहीन	220	7.2	45.00	0.3	280	24.0	0.4	6.66	120	संतोषजनक
22	ग्राम करमावाला/पिण्ड स्थल पर	हैण्डपम्प	रंगहीन	गंधहीन	390	7.1	30.00	0.2	300	19.2	0.1	8.86	140	संतोषजनक

Water 1 Allehpur (2)

23	ग्राम गजरौला/श्री राजेन्द्र सिंह के पारा	हैण्ड	रंगहीन	गंधहीन	480	7.3	90.00	0.2	360	38.4	0.5	5.32	160	संतोषजनक
24	ग्राम सरकथल माछो/चामुण्डा मन्दिर पर	हैण्ड	रंगहीन	गंधहीन	340	7.2	140.00	0.1	280	9.6	0.2	4.43	180	संतोषजनक
25	ग्राम पुराना धामपुर/श्री भूपेन्द्र सिंह के पास	हैण्ड	रंगहीन	गंधहीन	280	7.4	130.00	0.3	290	19.2	0.3	10.63	190	संतोषजनक
26	ग्राम पुराना धामपुर/नत्थन की समाधि	हैण्ड	रंगहीन	गंधहीन	340	7.7	140.00	0.3	320	28.8	0.2	8.86	150	संतोषजनक
27	ग्राम गोयली/श्री बन्टी पुत्र श्री धूम सिंह के पास	हैण्ड	रंगहीन	गंधहीन	280	7.6	70.00	0.3	260	9.6	0.3	11.52	100	संतोषजनक
28	ग्राम रामठेरा/श्री राम सरस्वती विद्या मन्दिर	हैण्ड	रंगहीन	गंधहीन	380	7.5	80.00	0.1	280	19.2	0.1	13.29	80	संतोषजनक
29	ग्राम रामठेरा/शिव मन्दिर पर	हैण्ड	रंगहीन	गंधहीन	540	7.3	20.00	0.2	340	24.0	0.2	15.95	120	संतोषजनक
30	ग्राम गन्धौरा/श्री किरनपाल/छोटे के पास	हैण्ड	रंगहीन	गंधहीन	400	7.2	50.00	0.4	250	38.4	0.1	21.26	200	संतोषजनक
31	ग्राम जैतरा/श्री गंगाराम/मुन्ना सीमेंट वाले	हैण्ड	रंगहीन	गंधहीन	330	7.1	70.00	0.3	240	48.0	0.3	8.86	120	संतोषजनक
32	ग्राम पालकी अमन/श्री अशोक के पास	हैण्ड	रंगहीन	गंधहीन	280	7.0	60.00	0.2	220	19.2	0.2	7.09	140	संतोषजनक
33	ग्राम कोपा/गोरखनाथ मन्दिर	हैण्ड	रंगहीन	गंधहीन	330	7.3	90.00	0.1	200	9.6	0.4	9.30	150	संतोषजनक
34	ग्राम भावनवाला/चामुण्डा मन्दिर पर	हैण्ड	रंगहीन	गंधहीन	250	7.5	100.00	0.1	300	38.4	0.5	5.32	170	संतोषजनक

नोट– 1 सी0पी0एच0ई0ओ0 के मानक में उल्लिखित सीमा से अधिक को रेखांकित किया गया है।

2 मानको के लिये पृष्ठ दो का सन्दर्भ लें।

3 आयरन विश्लेषण हेतु नमूने एसिडिक में भेजें।

जूनियर इंजी0

प्रतिहस्ताक्षरित

सहायक अभियन्ता

कार्यालय अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0 जल निगम

लडापुरा जलकल प्रांगण, झालू रोड, बिजनौर

(जल परीक्षण रिपोर्ट)

सेवा में श्री के0के0शर्मा,

सहायक अभियन्ता
निर्माण खण्ड, उ0प्र0 जल निगम, बिजनौर

तहसीलः— धामपुर
विकास खण्डः— अल्हैपुर
दिनाकः— 23, 24, 25/08/2018

प्रयोगशाला पजिंका का सन्दर्भः.....

आपके पत्रांक 3237/ जलपरीक्षण/ 101 दिनांक 5/9/18 के सन्दर्भ में आख्या सख्या भेजी जा रही है।

क्र0स0	ग्राम/नगर/लोकेशन	स्रोत	रंग	गंध	टी0डी0 एस0 (पी0पी0एम0)	पी0 एच0	रसायनिक परीक्षण पी0पी0एम0 में							
							क्लोराइड	फ्लोराइड	सम्पूर्ण कठोरता	सल्फेट	आयरन	नाइट्रेट	एल्केनिटी	टिप्पणी
1	ग्राम सुहागपुर/मदरसे के पास	है0प0	रंगहीन	गंधहीन	190	7.5	60.00	0.2	220	19.2	0.3	9.30	150	संतोषजनक
2	ग्राम सुहागपुर/विनोद कुमार के पास	है0प0	रंगहीन	गंधहीन	280	7.2	30.00	0.1	260	9.6	0.2	5.32	140	संतोषजनक
3	ग्राम सुहागपुर/श्री गोपाल पुरिया के पास	है0प0	रंगहीन	गंधहीन	200	7.1	20.00	0.3	300	28.8	0.4	16.83	110	संतोषजनक
4	ग्राम सुहागपुर/आर0एस0एम0 डिग्री कॉलेज	है0प0	रंगहीन	गंधहीन	340	7.3	40.00	0.4	200	19.2	0.1	7.09	130	संतोषजंनक
5	ग्राम सुहागपुर/श्री लतीफ के पास	है0प0	रंगहीन	गंधहीन	300	7.4	70.00	0.5	320	24.0	0.2	14.18	160	संतोषजनक
6	ग्राम सुहागपुर/श्री टेगबहादुर के पास	है0प0	रंगहीन	गंधहीन	180	7.0	25.00	0.2	380	38.4	0.1	5.76	190	संतोषजनक
7	ग्राम सुहागपुर/आर0एस0एम0 इण्टर कॉलेज	है0प0	रंगहीन	गंधहीन	250	7.0	60.00	0.1	280	9.6	0.3	8.86	130	संतोषजनक
8	ग्राम सुहागपुर/बडी मस्जिद के पास	है0प0	रंगहीन	गंधहीन	260	7.3	45.00	0.3	250	19.2	0.2	6.66	230	संतोषजनक
9	ग्राम सुहागपुर/शहनाई मण्डप के पास	है0प0	रंगहीन	गंधहीन	380	7.2	50.00	0.2	260	48.0	0.4	4.43	170	संतोषजनक
10	ग्राम सलावा/श्री मदन के घर के पास	है0प0	रंगहीन	गंधहीन	420	7.4	80.00	0.1	350	57.6	0.5	2.66	130	संतोषजनक
11	ग्राम सलावा/ प्राथनिक स्कूल में	है0प0	रंगहीन	गंधहीन	150	7.1	90.00	0.4	320	28.8	0.2	11.08	140	संतोषजनक
12	ग्राम सलावा/श्री गंगाराम के पास	है0प0	रंगहीन	गंधहीन	360	7.7	110.00	0.5	310	19.2	0.1	10.63	90	संतोषजनक
13	ग्राम सलावा/ श्री रामसिंह के पास	है0प0	रंगहीन	गंधहीन	340	7.5	120.00	0.6	380	9.6	0.3	7.53	110	संतोषजनक
14	ग्राम जगुपुरा/ श्री धर्मपाल के पास	है0प0	रंगहीन	गंधहीन	240	7.6	75.00	0.3	200	38.4	0.2	14.62	140	संतोषजनक
15	ग्राम जगुपुरा/ मोड पर	है0प0	रंगहीन	गंधहीन	160	7.2	50.00	0.2	190	28.8	0.4	17.72	180	संतोषजनक
16	ग्राम जगुपुरा/स्कूल में।	है0प0	रंगहीन	गंधहीन	350	7.0	20.00	0.1	260	19.2	0.5	15.95	200	संतोषजनक
17	ग्राम जगुपुरा/ श्री धर्मपाल पुत्र ओमप्रकाश के पास	है0प0	रंगहीन	गंधहीन	320	7.1	25.00	0.3	270	9.6	0.2	9.30	150	संतोषजनक
18	ग्राम अल्हैपुर नगर/ श्री चेतराम सैनी के पास	है0प0	रंगहीन	गंधहीन	400	7.3	35.00	0.1	340	9.6	0.1	4.43	170	संतोषजनक
19	ग्राम अल्हैपुर नगर/ श्री मनोज कुमार के पास	है0प0	रंगहीन	गंधहीन	420	7.2	30.00	0.2	250	24.0	0.3	11.52	210	संतोषजनक
20	ग्राम अल्हैपुर नगर/रानी फूल कुमारी स्कूल	है0प0	रंगहीन	गंधहीन	380	7.4	40.00	0.3	350	24.0	0.3	8.86	130	संतोषजनक
21	ग्राम अल्हैपुर नगर/ श्री नूतन के पास	है0प0	रंगहीन	गंधहीन	360	7.3	70.00	0.4	380	48.0	0.4	2.66	160	संतोषजनक

54	ग्राम अलादीनपुर/श्री यामिन के पास	है0प0	रंगहीन	गंधहीन	180	6.9	20.00	0.1	360	9.6	0.6	5.32	80	संतोषजनक
55	ग्राम जमालपुर आलम/वाल्मिकी बस्ती	है0प0	रंगहीन	गंधहीन	160	7.0	25.00	0.3	260	19.2	0.3	2.22	100	संतोषजनक
56	ग्राम सब्दुल्ला खानपुर/देवता पर	है0प0	रंगहीन	गंधहीन	340	7.7	40.00	0.4	280	28.8	0.2	10.63	140	संतोषजनक
57	ग्राम नाथाडोई/प्राथमिक स्कूल	है0प0	रंगहीन	गंधहीन	280	8.0	50.00	0.3	250	24.0	0.1	11.08	120	संतोषजनक
58	ग्राम भूतपूरी/श्री नन्हे बी0डी0सी0के पास	है0प0	रंगहीन	गंधहीन	370	7.3	45.00	0.5	350	57.6	0.1	9.30	150	संतोषजनक
59	ग्राम चकशाह जनी/श्री रामप्रसाद के पास	है0प0	रंगहीन	गंधहीन	350	7.2	60.00	0.1	380	19.2	0.3	5.32	160	संतोषजनक
60	ग्राम चकशाह जनी/चामुण्डा मन्दिर पर	है0प0	रंगहीन	गंधहीन	420	7.5	30.00	0.2	330	9.6	0.2	7.09	180	संतोषजनक

नोट– 1 सी0पी0एच0ई0ओ0 के मानक में उल्लिखित सीमा से अधिक को रेखांकित किया गया है।

2 मानको के लिये पृष्ठ दो का सन्दर्भ लें।

3 आगरण विश्लेषण हेतु नमूने एतिछिक में भेजें।

जूनियर इंजी0

प्रतिहस्ताक्षरित

सहायक अभियन्ता

कार्यालय अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0 जल निगम
लडापुरा जलकल प्रांगण, झालू रोड, बिजनौर
(जल परीक्षण रिपोर्ट)

सेवा में श्री के0के0शर्मा,

सहायक अभियन्ता
निर्माण खण्ड, उ0प्र0 जल निगम, बिजनौर

तहसील:– धामपुर
विकास खण्ड:– अल्हैपुर
दिनाक:– 28/06/2019

प्रयोगशाला पजिंका का सन्दर्भ.....

आपके पत्रांक 1661/जल परीक्षण/55 दिनाक 01/07/19 के सन्दर्भ में आख्या सख्या भेजी जा रही है।

क्र0 स0	ग्राम/नगर/लोकेशन	स्रोत	रंग	गंध	टी0डी0 एस0 (पी0पी0एम0)	पी0 एच0	रसायनिक परीक्षण पी0पी0एम0 में							
							क्लोराइड	फ्लोराइड	सम्पूर्ण कठोरता	सल्फेट	आयरन	नाइट्रेट	एल्केनिटी	टिप्पणी
1	ग्राम निन्दडू खास/ श्री कृपाल पुत्र श्री परमुला	हैण्डपम्प	रंगहीन	गंधहीन	284	7.1	80.00	0.2	220	9.6	0.2	9.30	90	संतोषजनक
2	ग्राम अजीतपुर दासी/श्री राजपाल की समाधी पर	हैण्डपम्प	रंगहीन	गंधहीन	274	7.3	90.00	0.1	240	19.2	0.1	21.26	180	संतोषजनक
3	ग्राम सरकथल/श्रीनति कुसुमलता के पास	हैण्डपम्प	रंगहीन	गंधहीन	282	7.2	20.00	0.3	280	38.4	0.2	17.29	110	संतोषजनक
4	ग्राम ऊमरपुर खादर/ श्री नरेश पुत्र श्री अमीर सिंह	हैण्डपम्प	रंगहीन	गंधहीन	302	7.4	70.00	0.2	300	48.0	0.1	15.06	170	संतोषजनक
5	ग्राम देवनगर/श्री दीपक बिश्नोई	हैण्डपम्प	रंगहीन	गंधहीन	300	7.1	35.00	0.1	340	24.0	0.3	14.18	120	संतोषजनक
6	ग्राम बुआपुर नत्थू/ श्री राजकुमार के प्लाट पर	हैण्डपम्प	रंगहीन	गंधहीन	256	7.2	60.00	0.4	280	28.8	0.2	8.86	140	संतोषजनक
7	ग्राम सुहागपुर/श्री घासीराम पुत्र श्री बुद्धु सिंह	हैण्डपम्प	रंगहीन	गंधहीन	258	7.0	40.00	0.2	320	19.2	0.4	5.32	150	संतोषजनक
8	ग्राम चकसाह जानी/श्री फकीरा के पास	हैण्डपम्प	रंगहीन	गंधहीन	275	7.3	45.00	0.1	260	19.2	0.5	6.66	130	संतोषजनक
9	ग्राम पालकी गेमल/श्री रमेश बाल्मिकी	हैण्डपम्प	रंगहीन	गंधहीन	308	7.2	50.00	0.3	250	9.6	0.1	7.09	100	संतोषजनक
10	ग्राम नौरंगाबाद/श्री राजेन्द्र पुत्र श्री जाहर सिंह	हैण्डपम्प	रंगहीन	गंधहीन	420	7.1	70.00	0.1	360	24.0	0.2	15.95	190	संतोषजनक
11	ग्राम भिर्जापुर/जूनियर हाई स्कूल	हैण्डपम्प	रंगहीन	गंधहीन	342	7.4	75.00	0.4	380	38.4	0.1	4.43	130	संतोषजनक
12	ग्राम सरकड़ा/श्री लिटिल की दुकान	हैण्डपम्प	रंगहीन	गंधहीन	376	7.3	80.00	0.3	230	19.2	0.3	11.52	120	संतोषजनक
13	ग्राम कलियापुर/श्री गणेश पुत्र श्री राजेन्द्र	हैण्डपम्प	रंगहीन	गंधहीन	267	7.5	100.00	0.5	240	48.0	0.1	17.28	100	संतोषजनक
14	ग्राम जगुपुरा/हरिजन धर्मशाला	हैण्डपम्प	रंगहीन	गंधहीन	250	7.2	20.00	0.1	270	9.6	0.4	10.63	90	संतोषजनक
15	ग्राम सदोतर/श्री बिटटू चौहान	हैण्डपम्प	रंगहीन	गंधहीन	242	7.1	25.00	0.2	300	38.4	0.2	15.06	80	संतोषजनक

16	ग्राम नूरपुर/चामुण्डा मन्दिर	हैण्डपम्प	रंगहीन	गंधहीन	296	7.0	40.00	0.1	320	28.8	0.1	11.08	120	संतोषजनक
17	ग्राम सिबड़ी/सैनी धर्मशाला	हैण्डपम्प	रंगहीन	गंधहीन	292	7.0	30.00	0.3	310	28.8	0.3	8.86	110	संतोषजनक

नोट– 1 पी0पी0एच0ई0ओ0 के मानक में उल्लिखित सीमा से अधिक को रेखांकित किया गया है।

2 आयरन विश्लेषण हेतु नमूने एसिडिक में भेजें।

प्रतिहस्ताक्षरित

जूनियर इंजी0

सहायक अभियन्ता

कार्यालय अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0 जल निगम
लडापुरा जलकल प्रांगण, झालू रोड, बिजनौर
(जल परीक्षण रिपोर्ट)

सेवा में श्री के0के0शर्मा
सहायक अभियन्ता
नि0ख0, उ0प्र0 जल निगम, बिजनौर
प्रयोगशाला पंजिका का सन्दर्भ:.....

तहसील:–धामपुर
विकास खण्ड– अल्हैपुर
दिनाक:– 21/08/2020

आपके पत्रांक 1556/Lab Water/42 दिनाक 27/8/20 के सन्दर्भ में आंख्या सख्या भेजी जा रही है।

क्र0स0	ग्राम/नगर/लोकेशन	स्रोत	टी0डी0 एस0 (पी0पी0	पी0 एच0	रसायनिक परीक्षण पी0पी0एम0 में							
					क्लोराइड	फ्लोराइड	सम्पूर्ण कठोरता	सल्फेट	आयरन	नाइट्रेट	एल्केनिटी	टिप्पणी
1	ग्राम गजपुरा/देवता स्थल	हैं0प0	270	7.6	70.00	0.2	230	9.6	0.3	5.32	220	संतोषजनक
2	ग्राम नसीरपुर दनवारी/तेजपाल के पास	हैं0प0	240	7.5	80.00	0.3	260	12.0	0.4	6.66	190	संतोषजनक
3	ग्राम नवादा केशो/हरीश के पास	हैं0प0	420	7.4	100.00	0.4	240	24.0	0.4	8.86	90	संतोषजनक
4	ग्राम अजीतपुर दासी/नरेश के पास,	हैं0प0	370	7.2	30.00	0.1	280	48.0	0.5	10.63	100	संतोषजनक
5	ग्राम हैजरी/मयंक के पास	हैं0प0	330	7.3	45.00	0.1	270	28.8	0.6	6.66	130	संतोषजनक

नोट-- 1 सी0पी0एच0ई0ओ0 के मानक में उल्लिखित सीमा से अधिक को रेखांकित किया गया है।
2 आयरन विश्लेषण हेतु नमूने एसिडिक में भेजें।

जूनियर इंजी0

प्रतिहस्ताक्षरित
सहायक अभियन्ता
8/8/20

कार्यालय अधिशासी अभियन्ता निर्माण खण्ड, उ0प्र0 जल निगम
लडापुरा जलकल प्रांगण, झालू रोड, बिजनौर
(जल परीक्षण रिपोर्ट)

सेवा में श्री के0के0शर्मा
सहायक अभियन्ता
नि0ख0जल निगम, बिजनौर।

तहसील:— धामपुर
विकास खण्ड:— अल्हैपुर
दिनाक:— 12/02/2020

प्रयोगशाला पंजिका का सन्दर्भ:
आपके पत्रांक 409/जल परीक्षण/07 दिनाक 13/02/20 के सन्दर्भ में आख्या सख्या भेजी जा रही है।

क्र0स0	ग्राम/नगर/लोकेशन	स्रोत	टी0डी0 एस0 (पी0पी0एम0)	पी0 एच0	रसायनिक परीक्षण पी0पी0एम0 में							
					क्लोराइड	फ्लोराइड	सम्पूर्ण कठोरता	ग़ल्केट	आयरन	नाइट्रेट	एल्केनिटी	टिप्पणी
1	ग्राम हाफिजाबाद/श्री विजेन्द्र के घर के पास	है0प0	360	7.2	80.00	0.1	250	19.2	0.3	9.30	120	संतोषजनक
2	ग्राम हाफिजाबाद/भवानी माता मन्दिर के पास	है0प0	420	7.3	90.00	0.2	420	48.0	0.2	14.18	100	संतोषजनक
3	ग्राम नूरपुर छिबरी/श्री अमर सिंह के घर के पास	है0प0	320	7.1	60.00	0.4	360	9.6	0.4	10.63	130	संतोषजनक

नोट— 1 सी0पी0एच0ई0ओ0 के मानक में उल्लिखित सीमा से अधिक को रेखांकित किया गया है।
2 आयरन विश्लेषण हेतु नमूने एसिडिक में भेजें।

जूनियर इंजी0

प्रतिहस्ताक्षरित
सहायक अभियन्ता

Annexure-15

प्रेषक,

मुख्य कार्यकारी अधिकारी
मत्स्य पालक विकास अभिकरण,
बिजनौर ।

सेवा में,

क्षेत्रीय अधिकारी,
उत्तर प्रदेश प्रदूषण नियन्त्रण बोर्ड,
निकट सेन्टमेरी स्कूल,बिजनौर ।

पत्रांक:– 1325 /एन0जी0टी0/2021–22 दिनांक:– 22–12–2021

विषय:– Hon,ble NGT order dated 1st september'2021 in the matterof Adil Ansari v/s. M/S Dhampur sugar Mills &ors(I.A.No. 376/2020)reg.

महोदय,

कृपया उपरोक्त विषयक आपके कार्यालय सन्दर्भ सं0 611/पी0ए0/जनरल–2021 दिनांक 18.12.2021 के क्रम में अवगत कराना है कि धामपुर शूगर मिल के निकट सम्बन्धित ग्रामों से किसी भी राजस्व ग्रामों के तालाबों में प्रदूषण की कोई समस्या वर्तमान में विद्यमान नही है । सूचना आपकी सेवा में सादर प्रेषित ।

भवदीय,

मुख्य कार्यकारी अधिकारी
मत्स्य पालक विकास अभिकरण,
बिजनौर ।

INSPECTION REPORT

OF

1. M/S DHAMPUR BIO-ORGANICS LTD., ASMOLI (SUGAR UNIT)

2. M/S DHAMPUR BIO-ORGANICS LTD., MEERGANJ (SUGAR UNIT)

3. M/S DHAMPUR SUGAR MILLS LTD., DHAMPUR (SUGAR UNIT)

4. M/S DHAMPUR SUGAR MILLS LTD., DHAMPUR (DISTILLERY UNIT)

IN COMPLIANCE TO

HON'BLE SUPREME COURT ORDER DATED 06.09.2024

IN THE MATTER OF

[CA No. 5975/2021]

M/S DHAMPUR BIO-ORGANICS LTD. & Ors.

VS

ADIL ANSARI & Ors.

-PREPARED BY-

THE JOINT COMMITTEE OF CPCB AND UPPCB

(DECEMBER 2024)

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2.3 Conclusion and recommendations of M/s Dhampur Sugar Mills Limited, Village Alhaipur, Tehsil Dhampur, District Bijnor (Sugar Unit)

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ABBREVIATIONS

AAQ	Ambient Air Quality
ACF	Activated Carbon Filter
APCD	Air Pollution Control Device
BOD	Biological Oxygen Demand
CAAQMS	Continuous Ambient Air Quality Monitoring Station
CCA	Consolidated Consent& Authorization
CGWA	Central Ground Water Authority
CIP	Cleaning in Process
COD	Chemical Oxygen Demand
CPCB	Central Pollution Control Board
CPU	Condensate Polishing Unit
DG	Diesel Generator
DO	Dissolved Oxygen
EC	Environment Clearance
EIA	Environment Impact Assessment
EMC	Environmental Management Cell
ENA	Extra Neutral Alcohol
ESP	Electrostatic Precipitator
ETP	Effluent Treatment Plant
KL	Kilo Litre
KLD	Kilo Litre Per Day
KVA	Kilo Volte Ampere
KWH	Kilo Watt Hour
MBBR	Moving Bed Biofilm Reactor
MCF	Micron Cartridge Filter
MEE	Multi Effect Evaporator
Mg/L	Milligram Per Litre
MGF	Multi Grade Filter
MLSS	Mixed Liquor Suspended Solids
MLVSS	Mixed Liquor Volatile Suspended Solids
MoEF&CC	Ministry of Environment, Forest & Climate Change
MPR	Multi Pressure Distillation
MT	Metric Ton
NGT-PB	National Green Tribunal- Principal Bench
NOC	No Objection Certificate
NSI	National Sugar Institute
OCEMS	Online effluent & emission monitoring systems
PM	Particulate Matter
PTZ	Pan, Tilt & Zoom
RO	Reverse Osmosis
STP	Sewage Treatment Plant
TCD	Ton Cane Crushing Per Day
TPH	Ton per Hour
TSDF	Treatment, Storage, and Disposal Facility
UF	Ultra filtration
UGR	Underground Reservoir
UPGWD	Uttar Pradesh Ground Water Department
UPPCB	Uttar Pradesh Pollution Control Board
UV	Ultraviolet
ZLD	Zero Liquid Discharge

Joint report of Central Pollution Control Board (CPCB) and Uttar Pradesh Pollution Control Board (UPPCB) in compliance to Hon'ble Supreme Court Order dated 06 September 2024 in the matter C.A. No. 5975/2021 of Dhampur Bio-organics & Ors Vs Adil Ansari & Ors.

1. Background

1.1 Hon'ble NGT order dated 09-11-2020 in OA no 539/2019

Hon'ble National Green Tribunal, Principal Bench (NGT-PB) issued an order on 09-11-2020 in Original Application (**O.A.**) No 539 of 2019 - Adil Ansari Vs M/s Dhampur Sugar Mills Ltd. and Ors, directed Central Pollution Control Board (CPCB) and U.P. State Pollution Control Board (**UPPCB**) to undertake inspection of four industrial units namely- (i) M/s Dhampur Bio-Organics Mills Ltd., Asmoli (Sugar Unit) Dist- Sambhal (U.P), (ii) M/s Dhampur Bio-Organics Mills Ltd., Meerganj, Dist Bareilly (U.P), (iii) M/s Dhampur Sugar Mills Ltd., (Sugar Unit), Dhampur, Dist- Bijnor (U.P) and (iv) M/s Dhampur Sugar Mills Ltd., (Distillery Unit), Dhampur, Dist- Bijnor (U.P). (hereafter referred as "the four units").

Hon'ble NGT order dated 09-11-2020 is annexed at **Annexure-1A.**

In compliance to the order, the joint team of CPCB and UPPCB carried out inspections of the four industrial units referred above during January-Feb 2021 and report was submitted on **26-03-2021** to Hon'ble NGT-PB. Hereinafter referred to as joint inspection report dated 26-03-2021.

1.2 Hon'ble NGT order dated 01-09-2021 in OA no 539/2019

Subsequently, Hon'ble NGT-PB passed judgement on 01-09-2021 in the above matter, directing all the four units referred above to pay environmental compensation (EC) of Rs 5 crores each and directing CPCB, UPPCB and District Administration to constitute a committee to carry out a detailed study regarding the extent of damage caused to the environment by these units. The Hon'ble NGT also directed all the units to ensure compliance of following directions:

1. *All the Units must ensure continuous running of ETPs even during the non-crushing season for the adequate maintenance of required bio-mass so that the ETP is able to take the load/shock when it receives the pollution load/effluent at the start of the crushing season.*
2. *All the Units in question must provide for separate Energy Meter for entire ETP setup including its accessory units with data logging facility which shall be inspected by UPPCB and CPCB from time to time.*
3. *UPPCB must ensure Interlocking of Pollution Control Devices with production processes (one way but not vice versa) so as to ensure that whenever ETPs/PCDs are intentionally closed, the production also comes to halt.*

4. *Regular inspections should be carried out by the statutory authorities in both halves of the crushing season and also at least once in non-crushing season.*
5. *Since the Asmoli Unit falls in the critical zone with respect to ground water withdrawal, an assessment of water recharge needs to be carried out by CGWA or UPGWB before* issuance of NOC.

Hon'ble NGT judgement dated 01-09-2021 is annexed at **Annexure 1B.**

The concerned industrial units filed a Civil Appeal (C.A. No. 5975/2021) before Hon'ble Supreme Court of India on **20-09-2021** against Hon'ble NGT judgement dated 01-09-2021.

1.3 The Hon'ble Supreme Court order dated 08-10-2021 in CA no 5975/2021

The Hon'ble Supreme Court of India passed an order dated 08-10-2021 directing for conduct of the detailed study as directed in order impugned (Hon'ble NGT order dated 01-09-2021). The Hon'ble Supreme Court of India order dated 08-10-2021 is annexed at **Annexure-1C.**

In compliance to Hon'ble NGT order dated 01-09-2021 and Hon'ble Supreme Court order dated 08-10-2021, a joint team from CPCB, UPPCB and District Administration carried out a detailed study during Nov-Dec 2021 to assess the extent of damage caused to the environment by the concerned industrial units and report titled "Detailed study report on Extent of damage caused to the environment" was submitted before Hon'ble Supreme Court of India in Jan 2023, hereinafter referred as detailed report Jan 2023.

1.4 The Hon'ble Supreme Court order dated 06-09-2024 in CA no 5975/2021

The Hon'ble Supreme Court of India vide order dated **06-09-2024** further directed CPCB and SPCB to file a joint report indicating compliances of directions of the Hon'ble NGT, subsequent committee reports and conditions specified in environmental clearances. The Hon'ble Supreme Court of India order dated 06-09-2024 is annexed at **Annexure-1D.**

2. Compliance of the Hon'ble Supreme Court order dated 06-09-2024

The joint committee of CPCB & UPPCB carried out inspection of the four industrial units (referred above) during October 2024. Also, it is pertinent to mention that earlier all units were part of M/s Dhampur Sugars Ltd. Now, after demerger of companies, units in Asmoli and Meerganj belong to the company namely "M/s Dhampur Bio-organics Ltd." and units in Dhampur belong to the company namely "M/s Dhampur Sugars Ltd".

During inspection, the team collected the samples from aeration tanks of effluent treatment plants (ETPs), Sewage Treatment Plant (STP), bore wells

and recipient drain and checked logbooks for ETPs, STPs, bore wells, ash & sludge generation, energy consumption. The team also verified the compliance status on the recommendation of past reports namely a) detailed report Jan 2023, b) joint inspection report dated 26-03-2021, c) Hon'ble NGT order dated 01-09-2021 and d) specific conditions in environmental clearance.

During visit, all units were found non-operational. Three sugar mills were non-operational due to closing of crushing season and the fourth unit, a distillery, was non-Operational due to shortage of raw material (molasses / grain). However, it is proposed that UPPCB shall carry out random inspections of the units in operational condition.

The detailed site inspection reports of the four industrial units are annexed as **Annexure-A to Annexure-D**. The compliance of general conditions of environmental clearance is mostly covered within the information provided in the report and the compliance status in respect of specific/salient conditions of environmental clearance is provided in a separate section in individual reports. Report of each industrial unit, as at **Annexure -A to Annexure-D** is divided into six parts:

Part A: General information

Part B: Verification of compliance status on the findings/recommendation of the detailed report Jan 2023

Part C: Verification of compliance status on the findings/recommendation of joint inspection report dated 26-03-2021

Part D: Verification of compliance of the directions of Hon'ble NGT judgement dated 01.09.2021.

Part E: Verification of specific/salient conditions of Environmental Clearance

Part F: Conclusion & Recommendations

Unit wise conclusions and recommendations are reproduced below:

2.1 M/s Dhampur Bio Organics Ltd., Unit-Asmoli, District Sambhal (Sugar Unit)

Conclusion:

1. Unit was non-operational during joint site inspection by CPCB and UPPCB on 10.10.2024 due to non-crushing season. During survey of the surroundings of the unit and Sot river, no coloured water was visible at the time of visit.
2. The ground water sample analysis result does not indicate impact due to the industry.
3. The unit has complied with the recommendations of Joint Inspection report dated 13th January 2021. Details of the same are mentioned in Part C of the report.

4. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.
5. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part E of the report. The unit has not compiled with the following conditions:
   i. No rainwater harvesting system was observed in the plant.
   ii. Not installed CAAQMS.

Inspections by third party institutes authorised by CPCB in the past:

A third party technical institutes authorised by CPCB carried out inspection of the unit in operational condition on 20-02-2022 and 01-03-2023 and unit was found complying standards during both inspections.

Recommendations:

1. The unit shall maintain the ash disposal record with respect to disposal and distribution.
2. Unit shall implement a system for interlocking of the pollution control plants / devices and the production process, as directed by Hon'ble NGT-PB.
3. UPPCB shall carry out random inspection of the unit in operational condition.
4. Unit shall comply with following EC conditions:
   i. Install CAAQMS stations as per EC condition.
   ii. Make provision for rain water harvesting as per EC condition.

2.2 M/s Dhampur Bio Organics Ltd., Unit-Meerganj, District Bareilly (Sugar Unit)

Conclusion:

1. Unit was non-operational during joint site inspection by CPCB and UPPCB on 18.10.2024 due to non-crushing season. During survey of the surroundings of the unit and Sot river, no coloured water was visible at the time of visit.
2. The ground water sample analysis result does not indicate impact due to the industry.
3. The unit has complied with the recommendations of Joint Inspection report dated 13th January 2021. Details of the same are mentioned in Part C of the report.
4. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.
5. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part E. The unit has not compiled with the following conditions:

   i. No rainwater harvesting system was observed in the plant.
   ii. Not installed CAAQMS.

Inspections by third party institutes authorised by CPCB in the past:

A third party technical institutes authorised by CPCB carried out annual inspection of the unit in operational condition on 17-01-2022 and 15-02-2023 and unit was found complying standards during both inspections.

Recommendations:

1. The unit shall maintain the ash disposal record with respect to disposal and distribution.
2. Unit shall implement a system for interlocking of the pollution control plants / devices and the production process, as directed by Hon'ble NGT-PB.
3. UPPCB shall carry out random inspection of the unit in operational condition.
4. Unit shall comply with following EC conditions:
    i. Install CAAQMS stations as per EC condition.
    ii. Make provision for rain water harvesting as per EC condition.

2.3 M/s Dhampur Sugar Mills Limited, Village Alhaipur, Tehsil Dhampur, District Bijnor (Sugar Unit)

Conclusion

1. Unit was non-operational during joint site inspection by CPCB and UPPCB on 16.10.2024 due to non-crushing season.
2. Analysis results of samples collected from Ikra drain and bore well indicate no industrial impact.
3. The unit has complied with recommendations of Joint Inspection report dated 02-03 Feb 2021 (detailed findings in Part C), except following:

    a. Unit has not reclaimed/filled up 4000 m^3 capacity lagoon near its agricultural fields completely. It was partially filled with mud and rainwater and HDPE lining still exists.
    b. Unit has not implemented the suggestion to enhance capacity of water tank for filter backwashing The unit explained that the existing capacity has been sufficient which can be verified in periodic inspections of the unit in operational condition by UPPCB.

4. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.

Inspections by third party institutes authorised by CPCB in the past

A third party technical institutes authorised by CPCB carried out annual inspection on 12-01-2022 and 14-02-2023. Unit was found not complying standards during inspection on 12-01-2022 and UPPCB issued show-cause notice to the unit on 22-

02-2022 which was later withdrawn as unit was found complying standards in subsequent inspection by UPCB. Unit was found complying standards during inspection on 14-02-2023 by third party technical institute authorised by CPCB.

Recommendations:

1. The unit shall either cover the 4000 m3 capacity earthen lagoon, which was used for storing treated effluent in the past, with brick-lining or reclaim/fill up it completely.
2. Unit shall implement a system for interlocking of the pollution control plants / devices and the production process, as directed by Hon'ble NGT-PB.
3. UPPCB shall carry out random inspection of the unit in operational condition.

2.4 M/s Dhampur Sugar mills limited Chemical Division., (Distillery Division) Dhampur District Bijnor on 16.10.2024

Conclusion:

1. Unit was non-operational during joint site inspection by CPCB and UPPCB on 16.10.2024 due to shortage of raw material (molasses & grain).
2. The unit has complied with the recommendations of Joint Inspection report dated 02nd Feb 2021. Details of the same are mentioned in Part B of the report.
3. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part C. The unit has not compiled with the following conditions:
    a. DG is not provided with acoustic enclosure.

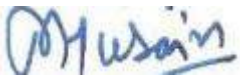
Inspections by third party institutes authorised by CPCB in the past:

A third party technical institutes authorised by CPCB carried out annual inspection of the unit in operational condition on 15.01.2022 and 18.03.2023 and the unit was found complying no effluent discharge condition during both inspections.

Recommendations:

1. Unit shall provide acoustic enclosure at the DG set.
2. UPPCB shall carry out random inspection of the unit in operational condition.

Signature of Inspection Team

S.No.	Inspecting Officials	Signature
CPCB officials (Inspected all four units)		
1.	Sh. Nazimuddin, Scientist 'F', DH- IPC-II, CPCB, Delhi	
2.	Mrs Reena Satavan, Scientist 'E', CPCB, Delhi	
UPPCB Officials (concerned Regional Office)		
M/s Dhampur Bio Organics Ltd., Unit-Asmoli, District Sambhal (Sugar Unit)		
3.	Sh. Ashutosh Chauhan, **Regional Officer- Moradabad**, UPPCB,	
4.	Shri J. N Tiwari, AEE, UPPCB	
M/s Dhampur Bio Organics Ltd., Unit-Meerganj, District Bareilly (Sugar Unit)		
5.	Sh. Chandresh Kumar, **Regional Officer- Bareilly**, UPPCB	
6.	Sh. S.S Chauhan, ASO, Regional Office-Bareilly, UPPCB	
M/s Dhampur Sugar Mills Limited, Village Alhaipur, Tehsil Dhampur, District Bijnor (Sugar & Distillery Unit)		
7.	Sh. Vijay, **Regional Officer- Bijnor**, UPPCB	
8.	Sh. Mahir Hussain, AEE, UPPCB	

Annexure-A

Detailed site visit report of M/s Dhampur Bio Organics Ltd., Unit-Asmoli, District Sambhal (Sugar Unit) on 10.10.2024

Part A: General Information

1.	**Name of the unit with complete postal address**	M/s Dhampur Bio Organics Ltd, Unit- Asmoli, Division-Sugar (formerly M/s DSM Sugar Asmoli), Village & Post- Asmoli, Sambhal,(U.P) Pin.244304
2.	**Spatial Co-ordinates Latitude and longitude**	Latitude: 28.708025 Longitude: 78.542197
3.	**Year of commissioning**	1994-95
4.	**Category**	Sugar refinery with power cogeneration of 41 MW
5.	**Start period of crushing season**	07th November 2023 (closed on 09.04.2024)
6.	**No. of Operational days**	149
7.	**Operational status during visit**	Non-operational (due to off-season)
8.	**Consented capacity of sugar Mill (TCD)**	12500 ton cane crushing per day (TCD)

Consent & EC status

9.	**Consent status & its Validity with date**	Consolidated Consent, 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, and Authorization (CCA) issued by UPPCB dated 04.09.2023 with validity upto 31.12.2024. Consolidated consent is attached at **Annexure-2A.**
10.	**Environmental Clearance (EC)**	Yes, EC issued on 22nd June 2023 for capacity expansion from 9000 TCD to 14000 TCD. EC is attached at **Annexure-2B.**

Source of Fresh Water

12	**Bore well/Tube well/ Any other & its No's**	3 Numbers of borewell
	Flow meter Installation at wells (Yes/No)	Yes
13.	**NOC from CGWA/UPGWD & its Validity with date**	Unit has UPGWD NOC for groundwater abstraction from 03 no. of bore well, having validity up to 26.06.2026. As per the conditions of NOC of UPGWD, the unit can abstract groundwater at a maximum rate of 138000 KL/annum (60000 KL/annum from bore well -1, 60000 KL/annum from borewell -2 and 18000 KL/annum from borewell -3 annually). NOC for groundwater abstraction from 03 bore wells are attached at **Annexure-2C-a, 2C-b and 2C-c.** As per the records it was observed that the unit has abstracted total 13609 KL of fresh water from 03 borewells in the month of March 2024 i.e. 439 KLD, which is within the permissible limit of 1800

		KL/day groundwater abstraction mentioned in the No Objection Certificate (NOC) issued by UPGWD.

Process Effluent Treatment Plant

14.	**Treatment ETP Capacity**	2800 KLD
15.	**Treatment ETP Scheme**	Oil skimmer→ Equalization Tank→ Primary Clarifier→ lamella Clarifier→ Buffer Tank→ Anaerobic Digester followed by Aeration Tank→ Clarifiers → Multi Grade Filter & Activated Carbon Filter→ lagoon→ irrigation
16.	**Disposal/reuse of treated effluent**	01 no. of brick-lined treated effluent storage lagoon of capacity 16000m^3 On the day of the visit the lagoon was found dry and empty. During sugar crushing season, after treatment, the unit stores its treated effluent in the lagoon of capacity 16000m^3 for further use in irrigation. Unit is having irrigation management plan prepared by NSI, Kanpur for Command area 215 Hectare.

Process Condensate Polishing Plant (CPU)

17.	**Treated capacity of Condensate polishing system adopted by the unit**	To treat the process condensate, unit has installed condensate polishing unit (CPU) of capacity 36 m3/hr
18.	**Treated scheme of the CPU**	Multi Grade Filter (MGF), Activated Carbon Filter (ACF), followed by Fouling resistance membrane Reverse Osmosis system
19.	**Use of treated Condensate**	Treated condensate from CPU is used for make-up of Co-Gen Cooling Tower

Sewage Treatment Plant

20.	**Operational Status**	Operational
21.	**Treatment Capacity (KLD)**	60 KLD
22.	**Source of domestic sewage**	Staff quarters, worker's colony, guest houses, canteens etc.
23.	**Treated Scheme**	Holding tank → Equalization tank → Aeration tank (MBBR technology) → Multi grade Filter and Activated Carbon Filter
24.	**Flow meters at inlet and outlet of STP**	Installed
25.	**Treated water re-use/disposal**	As per the consent the treated effluent has to be recycled to the maximum extent and should be reused within the premises for gardening etc. As observed by the team, the treated effluent from STP was being used for gardening purpose within the premises and the overflow was discharged into the drain located behind the premises.

Air Pollution Sources

26.	**Details of Boilers, type of fuel used,**	**Boilers** (all boiler are bagasse-fired)	**Steam Generation Capacity** (Ton Per Hour)	**APCD installed**	**Stack No.**	**Stack height**
		Boiler-1	170	ESP	1	72 mtrs
		Boiler-2	70	Wet Scrubber	1 Common stack	60 mtrs
		Boiler-3	50	ESP		
27.	**Online emission (OCEMS) monitoring system installed**	Installed and connected with CPCB & SPCB server for Particulate Matter (PM)				

Ash Generation Details

28.	**Ash Generation**	Ash generation for the period from Nov, 2023 to March 2024 was as follows:

Month	**Nov**	**Dec**	**Jan**	**Feb**	**March**	**April**
Ash generation (Ton)	1287.78	1730.38	1499	1635	1784	222.89

29.	**Ash management and Disposal**	Ash is mixed with Press mud and used as manure by local farmers.

Part B: Verification of detailed report Jan 2023

During 17th-18th Nov 2021, survey and monitoring of nearby villages around the Dhampur Bio-Organics Ltd., Asmoli unit and monitoring of Sot River was carried out to assess the impact on ambient environment. For assessment of present situation, team carried out survey of surroundings of the unit, Sot river and ground water sampling.

Survey of the surrounding

i. The joint team visited the drain located behind the boundary wall of the unit adjacent to ETP and STP area. It was observed that the over flow from STP outlet after reuse in gardening was being discharged into the drain which finally meets Sot River. Sample from the drain was collected. The analysis result **(Annexure 2D)** of the samples are as follows:

Table :1 Analysis Results of drain outside the unit premises

Parameters	Analysis Results	General Discharge standards
pH	8.1	**5.5-9.0**
COD (mg/l)	BDL	**250**
BOD (mg/l)	BDL	**30**

TSS (mg/l)	16	**100**
TDS (mg/l)	364	**-**
PO4-P	0.5	**-**
NO_3-NO (mg/l)	0.68	**-**
NH3-N	2	**50**

ii. Team also surveyed the stretch of Sot River from upstream of unit (Asmoli Madhan road near the boundary wall of unit, Lat.28.71078 Long. 78.54396) to the confluence of unit drain effluent channel in the river. (Lat.28.71205 Long. 78.56318). The team observations vis-a-vis observations as per visit 17-18th Nov, 2021 are tabulated below:

Table 2: Observations on Sot River

S.No	Location	Observations as per visit 17-18 Nov 2021	Observations as per visit 10 Oct 2024
1.	River Sot on Asmoli Madhan Road near Akbarpur Gohra u/s of DSM Unit Asmoli (28.7109541 Long. 78.5437542)	- River Sot on Asmoli-Madhan road near the DSM unit boundary was found dry on the culvert. - Ploughing of river bed observed behind the unit boundary for farming.	At this location stagnant rain water was observed in the river.
2.	Behind the boundary wall of the unit.	-	River was found dry with patches of rain water. Parallel to river, drain from the unit carrying overflow of STP treated effluent was observed. The samples from STP was collected from the drain and the analysis results (depicted in table-1) indicates no industrial impact
3.	River Sot Near Asmoli Shamshan Ghat d/s of DSM unit (Lat. 28.71199, Long. 78. 55002)	- The river bed at the location behind the DSM Asmoli unit, near Asmoli Shamshan Ghat was found dry with small patches of water. - Flow in river observed through a closed pipeline at this location near river boundry.	Stagnant water was observed in the river which was largely fed with rain water and the effluent of the unit's drain/pipeline. No coloured water was visible at the time of visit, however it is pertinent to mention that unit was non-operational due to non-crushing season.

		- River at this location is largely fed with the wastewater coming from the mill as well as storm water during rain. - River bed observed dark-brown in colour.	
4.	Confluence of unit drain in the river. (Lat.28.71205 Long. 78.56318).	-	At the confluence point of River sot and drain, the river was found covered with water hyacinth.

Ground water Assessment

To assess the quality of ground water, the team collected ground water sample from borewell of school located in Ram Nagar Village (located on Right bank of Sot River). Analysis results are attached at **Annexure 2D** and are tabulated below:

Table 3: Analysis results of samples collected from Borewell

Parameters	Analysis Results	BIS IS 10500:2012 (Permissible limit in absence of alternative source)
pH	7.3	**6.5-8.5**
Conductivity (µmho/cm)	715	**-**
Color (colour units)	BDL	**15**
TSS (mg/l)	11	**-**
BOD (mg/l)	BDL	**-**
COD (mg/l)	04	**-**
TDS (mg/l)	400	**2000**
Total hardness as $CaCO_3$ (mg/l)	323	**600**
Total alkalinity as $CaCO_3$(mg/l)	310	**600**
PO4	0.08	**-**
NO3-N	1.93	**-**
F-	BDL	**1.5**
Chloride (mg/l)	17	**1000**
Sulfate (mg/l)	58	**400**
As (mg/l)	BDL	**0.05**
Cd (mg/l)	BDL	**0.003**
Co (mg/l)	BDL	**-**
Cr (mg/l)	BDL	**0.05**
Cu (mg/l)	BDL	**1.5**
Fe (mg/l)	0.031	**0.3**

Mn (mg/l)	0.174	**0.3**
Ni (mg/l)	BDL	**0.02**
Pb (mg/l)	BDL	**0.01**
Sb (mg/l)	BDL	**-**
Se (mg/l)	BDL	**0.01**
V (mg/l)	BDL	**-**
Zn (mg/l)	0.033	**15**

Analysis results of the samples collected from the ground water of Village Ram Nagar indicates no industrial impact.

Part C: Verification of the recommendations of joint inspection report dated 26-03-2021

S.No.	Recommendations by Joint inspection report dated 26-03-2021	Verification by joint team as on date 10-10-2024
1.	The unit shall provide suitable capacity dosing pump for dosing of chemicals like lime and polyelectrolyte solution for optimum utilization of chemical as per feed flow condition.	Lime dosing pump was installed before equalization tank & poly dosing pumps were found installed at the primary clarifier outlet. Also, poly dosing pumps in decanter Feed line were observed.
2.	The unit shall safely dispose scrap/metal	The unit has sold 1450 kg of scrap to M/s A.S scrap traders in the month of August 2024. The copy of invoice for selling scrap is annexed at **Annexure-2E**
3.	The unit shall commission decanter for better sludge management	Decanter of capacity 05 m^3/hr was found installed. ***(refer Photograph no. 4)***
4.	The unit shall repair partition wall sludge drying bed	Unit has dismantled the sludge beds and has installed decanter of capacity 05 m^3/hr for sludge management.
5.	The unit shall install condensate Polishing unit	Condensate polishing unit (CPU) of capacity 36m^3/hr has been installed for treatment of cooling tower & boiler blowdown. The treatment scheme of CPU is as follows: ***Condensate underground reservoir (UGR) tank→transfer pump→ Multigrade filter (MGF) → Activated carbon filter (ACF)→***

<table>
<tr><td></td><td></td><td>bag filter→micron cartridge filter→Reverse Osmosis (RO)→ RO reject goes to ETP and RO permeate (treated condensate) is used in co-gen & cooling tower</td></tr>
<tr><td>6.</td><td>The unit shall install STP for treatment of sewage generated from residential colony as soon as possible.
The unit shall restrict the drainage of domestics sewage into irrigation channel coming from residential area.</td><td>The unit has installed sewage treatment plant (STP) of capacity 60 KLD for treatment of domestic effluent generated from the staff quarters, worker’s colony, guest houses, canteens, bathrooms, kitchen and laundry etc.
The STP consist of the following scheme:

Holding tank → Equalization tank → Aeration tank (MBBR technology) →Multi grade Filter and Activated Carbon Filter

STP treated effluent is used for gardening purpose.
• On the day of the visit, Sewage Treatment Plant (STP) was found operational. Untreated and treated sewage samples were collected from the inlet and final outlet of STP.
• Flow meters were found installed at the inlet & outlet of STP.
○ Reading of STP inlet flowmeter: Instantaneous-6.82m^3/hr; Totalizer- 34608 m^3
○ Reading of STP outlet flowmeter: Instantaneous- 3.7m^3/hr; Totalizer 32721.4 m^3
• Unit has maintained logbook of STP operations. Logbooks of STP inlet and outlet were collected for the month of September 2024 and the details are as follows:
<table><tr><th>Month</th><th>No of days</th><th>STP Inlet (kl)</th><th>STP Outlet (kl)</th></tr><tr><td>Sept. 2024</td><td>30</td><td>999</td><td>959</td></tr></table>Average flow: Inlet-33.3KLD & Outlet-31.9KLD</td></tr>
</table>

Table 4: Analysis results of samples collected from STP

Sr. No.	Location	pH	COD (mg/l)	BOD (mg/l)	TSS (mg/l)	TDS (mg/l)	PO4-P (mg/l)	NH3-N	NO_3-N (mg/l)
1.	STP Inlet	7.1	45	16	15	376	0.3	-	BDL
2.	STP Outlet	8.2	BDL	BDL	BDL	496	4.3	1	8.26
Standards mentioned in CCA issued by UPPCB on 19.09.2022		5.5 – 9.0	-	30					

STP was found complying w.r.t. the standards prescribed in the Consent issued by UPPCB

7.	The unit shall obtain the NOC from ground water department, UP as soon as earliest	The unit has obtained NOC from Uttar Pradesh Ground Water Department (UPGWD) dated 06.07.2021 for groundwater abstraction from 03 no. of bore wells, having validity up to 26.06.2026. As per the conditions of NOC, the unit can abstract groundwater at a maximum rate of 138000 KL/annum (60000 from bore well -1, 60000 from borewell -2 and 18000 from borewell -3 annually).

Part D: Verification of the directions of Hon'ble NGT judgement dated 01.09.2021.

S.No.	Recommendations of Hon'ble NGT Judgement dated 01-09-2021	Compliance status as on 10-10-2024
1.	All the Units must ensure continuous running of ETPs even during the non-crushing season for the adequate maintenance of required bio-mass so that the ETP is able to take the load/shock when it receives the pollution load/effluent at the start of the crushing season.	At the time of visit, the unit was non-operational due to off-season. Team observed that the ETP was under stabilization. For the maintenance of adequate bio-mass aeration tank was found operational. Sample was collected from the aeration tank and the analysis results are as follows: MLSS = 1916 mg/l MLVSS =1323 mg/l Analysis results showed MLVSS/MLSS ratio as 0.69 which indicates that unit is in process of developing active biomass for stabilizing ETP prior to commencement of crushing season.

<table>
<tr><td>2.</td><td>All the Units in question must provide for separate Energy Meter for entire ETP setup including its accessory units with data logging facility which shall be inspected by UPPCB and CPCB from time to time.</td><td>Separate energy meter was found installed for the ETP. The unit has maintained log book of energy consumption. The team collected log book of energy meter for the period from Nov 2023 to March 2024 and the details are as follows:
<table>
<tr><th>Month</th><th>Consumption(KWH)</th></tr>
<tr><td>Nov, 2023</td><td>66176.0</td></tr>
<tr><td>Dec, 2023</td><td>59564.8</td></tr>
<tr><td>Jan 2024</td><td>73886.4</td></tr>
<tr><td>Feb, 2024</td><td>64409.6</td></tr>
<tr><td>March, 2024</td><td>65481.6</td></tr>
<tr><td>April, 2024</td><td>53547.2</td></tr>
<tr><td>May, 2024</td><td>54556.8</td></tr>
<tr><td>June 2024</td><td>24297.9</td></tr>
<tr><td>July,2024</td><td>41588.8</td></tr>
<tr><td>Aug,2024</td><td>34528.0</td></tr>
<tr><td>Sep,2024</td><td>34636.96</td></tr>
</table></td></tr>
<tr><td>3.</td><td>UPPCB must ensure Interlocking of Pollution Control Devices with production processes (one way but not vice versa) so as to ensure that whenever ETPs /PCDs are intentionally closed, the production also comes to halt.</td><td>UPPCB directed the unit to comply this direction of Hon’ble NGT. The unit represented in this regard that sugar production is a continuous process and if the production process is stopped suddenly the sugarcane juice and juice concentrates in the process will clog and it will be very difficult to clean the plant and resume production.</td></tr>
<tr><td>4.</td><td>Regular inspections should be carried out by the statutory authorities in both halves of the crushing season and also at least once in non-crushing season.</td><td>During crushing season 2022-23 and 2023-24, sampling was carried out three times i.e. on 14-02-2023, 21-03-2023 & 09.12.2023 by UPPCB. Unit was found complying standards during all these inspections. Analysis reports are attached at Annexure 2F-a, 2F-b and 2F-c.
Also, third party technical institutes authorised by CPCB carried out inspection on 20-02-2022 & 01-03-2023 and unit was found complying standards during both inspections. The reports are attached at Annexure 2F-d and Annexure 2F-e.</td></tr>
<tr><td>5.</td><td>Since the Asmoli Unit falls in the critical zone with respect to ground water withdrawal, an assessment of water recharge needs to be carried out by CGWA or UPGWB before issuance of NOC.</td><td>As per notification dated 06-02-2024 regarding amendment in Section 9 of Uttar Pradesh Ground Water (Management and Regulation) Act, 2019 (Uttar Pradesh Act No. 13 of 2019), districts are divided into blocks and as per categorisation of blocks based on water depletion updated during 2023, Asmoli block now falls under semi critical zone. Reference for same is attached at Annexure 2G.</td></tr>
</table>

		Unit has obtained valid ground water for groundwater abstraction from 03 no. of Borewell dated 06.07.2021having validity upto 26.06.2026 with NOC no. NOC012653, NOC039759 and NOC034938. As per the conditions of NOC of UPGWD, the unit can abstract groundwater at a maximum rate of 138000 KL/annum (60000 from bore well -1, 60000 from borewell -2 and 18000 from borewell -3 annually).

Part E: Verification of specific/salient conditions of Environmental Clearance (EC):

The Unit has obtained Environment Clearance (EC) dated 22.06.2023 from Ministry of Environment, Forest & Climate Change (MoEF&CC) for expansion of existing sugar unit from 9000 TCD to 14000 TCD without change in existing co gen power capacity 41 MW within existing industry premises. During visit on 10.10.2024 team verified the compliance of the major EC conditions.

The status of specific/salient EC conditions is mentioned below;

1. Compliance status of specific conditions:

I. Discharge should be as per MoEF&CC Guidelines.

Status as verified by team:

i. The unit has installed effluent treatment plant of capacity 2800KLD having treatment scheme up to tertiary treatment level. The scheme is as follows:

Equalization Tank→Primary Clarifier→ lamella Clarifier→ Buffer Tank→Anaerobic Digester followed by Aeration Tank→Clarifiers →MGF & ACF

However, ETP was found under stabilization at the time of visit due to off-season. Therefore, sampling was done only from aeration tank and quality & quantity of discharge can't be verified. Sample analysis of aeration tank indicated MLSS: 1916 mg/l and MLVSS: 1323 mg/l.

ii. The unit has installed **Sewage Treatment Plant (STP)** of 60KLD to treat domestic sewage, which was found operational on the day of visit. As per the analysis results the STP was found complying the standards prescribed in the Consent. The details are already mentioned at Point 6 of above Part C.

II. PP shall install Continuous Ambient Air Quality Monitoring Station (CAAQMS)

Status as verified by team:

i. CAAQMS has not been installed by the PP.

III. **Disposal of fly ash shall be done within the premises.**

Status as verified by team:

i. As informed by the unit representative the ash is mixed with Press mud and given to local farmers to be used as manure. However, at the time of visit, as the unit was non-operational therefore, no fly ash was observed by the team within the premises.

IV**. Three tier green belt shall be developed with native species all along the periphery of the project. Site survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years (Miyawaki method to be adopted for plantation)**

Status as verified by team:

i. A three-tier green belt is a plantation with three layers of trees, shrubs, and grasses, designed to help control pollution and improve the environment. It was observed that the unit has developed lawns in front of guest house followed by shrubs and trees.
ii. Out of total plant area of 34.5 hectare, green belt has been developed on 10.52-hectare area i.e 30.4% of which 6.39 ha is green area and 4.13 ha is landscape area.
iii. During visit team observed that green belt is majorly developed near ETP & STP area, guest house and colony. Dense plantation was observed near ETP area which was developed using Miyawaki technique. Also, trees of Shisham, Neem, Mango, Arjun, Jamun, etc. were observed along the roadside & industry periphery. Green patches were also developed in between the plant area. As per the details provided by the unit, the details of existing trees/shrubs at project site is as follows:

Sl. No.	Location	No. of Plants	Species Details
1	Near Colony & Roadside	5050	Shisham,Neem, Pakad, Pahadi neem, mango, Arjun, jamun, Shaguan etc.
2	Near ETP (Miyawaki)	6000	Kaim,Haldu, Desi Babool, Saaja, doodhi,Neem, Pipal, Guava, Ficus,Shami,mahua, Kosum, Aamla, Dhak,

			Baheda, Karanz, Amaltas, Satavari,Jamun, sadabahar, Khazur,Kaans, Sheesham etc.
3	Along the Periphery and inside the Plants	5500	Semal, Moorpankh, Ashok, Mango, Neem, Banyan,Bottles Brush, Kadamb, Silver Oak, Pal Tree, Gul Mohar, Goolar, kaner, Harsingar, Plumeria Alba, Saguan,Pilkhan- etc.
Total		**16550**	

V. Performance test shall be conducted on all pollution control system every year and report shall be submitted to regional office of the MoEF and CC.

Status as verified by team:

Unit conducts analysis of ETP (inlet & outlet) samples and stack monitoring through third party (NABL accredited) laboratory and submits the reports along with 6 Monthly Compliance Report to MoEF&CC. As per reports, last ETP monitoring was carried out on 20-03-2024 and ambient air quality monitoring was conducted on 16-02-2024.

ETP inlet sample results indicate pH- 5.8, BOD- 412 mg/l, COD- 2872 mg/l, TSS-196 mg/l, TDS- 1360 mg/l and Oil & Grease-13.4 mg/l whereas ETP outlet sample results indicate pH- 7.6, BOD- 14 mg/l, COD- 92 mg/l, TSS-10.4 mg/l, TDS- 1660 mg/l and Oil & Grease-BDL. ETP results indicate compliance w.r.t notified discharge norms.

Ambient air quality monitoring was conducted on 16.02.2024 near main gate, boiler, gahre ki madaiyanan and Asmoli village are as follows:

Location	**PM 10 (µg/m³)**	**PM 2.5 (µg/m³)**	**SO_2 (µg/m³)**	**NOx (µg/m³)**
Near Main gate	88.4	53.58	14.98	22.15
Near Boiler	79.4	48.75	13.22	20.58
Near gahre ki madaiyan	75.9	47.32	13.42	19.85
Near Village Asmoli	76.3	46.01	12.49	17.55
Standard	**100**	**60**	**80**	**80**

Analysis results indicate compliance w.r.t notified parameters.

Unit has carried out adequacy assessment of ETP by NSI, Kanpur on 26-27 Oct 2023. As per adequacy report, the capacity of existing ETP to work as common ETP is considered adequate @14000 TCD with maximum effluent generation of 200 L/ton of cane.

***VI.* Greening and paving shall be implemented in the plant area to arrest soil erosion and dust pollution due to exposed soil surface.**

Status as verified by team:

In plant area team observed patches of greenery and tiled paved surface ***(refer photograph no. 12).***

VII. Properly covered vehicles shall be used while transporting material and product.

Status as verified by team:

At the time of visit no transportation of material and product was taking place as the unit was non-operational.

VIII. Allergy test should also be included in health check-up of works.

Status as verified by team:

Health check-up of all the employees for identification of occupational health hazard on bi-annual basis is being conducted by the unit where blood tests, eye check-up, telemetry test, respiratory system check-up were done by panel of MBBS doctors. Sample report of an employee is attached as **Annexure 2H** for reference.

IX. Industry should comply with the CPCB charter guidelines for sugar units and treated effluent shall be used for the different purposes as per the requirements in the industry

Status as verified by team:

i. The compliance status of salient points of Sugar Charter are as following:
   a) The unit has tertiary level effluent treatment plant of 2800 KLD capacity.
   b) Installed electromagnetic flow meters at ETP inlet, outlet and all three borewells.
   c) Maintained daily records of fresh water consumption, effluent discharge, regular analysis of ETP effluent parameters, energy consumption, CPU & STP operations etc.
   d) Installed CPU of capacity 36m^3/hr.
   e) Installed decanter of 5 m^3/hr capacity for sludge handling.
   f) Developed environmental laboratory for the analysis of DO, pH, BOD, COD, TSS & TDS and MLSS parameters of ETP inlet and outlet.
   g) Developed Environmental Management Cell (EMC)
   h) Prepared Irrigation Management Plan from NSI, Kanpur for 215hectare command area. Have lagoon of capacity 16000m^3 capacity for storage of the treated effluent to be used for irrigation purpose.
   i) As per adequacy assessment of ETP carried out by NSI, Kanpur on 26-27 Oct 2023, the capacity of existing ETP to work as common ETP is considered adequate @14000 TCD with maximum effluent generation of 200 L/ton of cane.

j) Installed Online effluent & emission (OCEMS) monitoring system at ETP outlet & boiler stack respectively and provided its connectivity to CPCB and SPCB servers

2. Compliance status of major standard conditions:

I. **Statutory Compliance**:

i. The unit has obtained Consolidated Consent & Authorization issued by UPPCB dated 04.09.2023 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 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 with a validity upto 31.12.2024.

ii. The unit has obtained UPGWD NOC for groundwater abstraction from 03 no. of borewell, having validity upto 26.06.2026. As per the conditions of NOC of UPGWD, the unit can abstract groundwater at a maximum rate of 138000 KL/annum (60000 from bore well -1, 60000 from borewell -2 and 18000 from borewell -3 annually).

II. **Air Quality Monitoring & Preservation:**

i. Online Continuous Effluent Monitoring System (OCEMS) is installed in all the Boiler Stacks & it is connected to CPCB & UPPCB Server.

ii. Unit carries out Ambient Air Quality (AAQ) monitoring at four designated locations which were residential colony, near Boiling house, Co-Gen near DM plant and ETP area. The last monitoring was carried out on 16.02.2024 by NABL accredited & EPA recognised laboratory. Analysis results are mentioned in point V of EC conditions.

iii. Installed an Electrostatic Precipitator (ESP) on the stack of the 170 Ton Per Hour (TPH) boiler and a Wet Scrubber on the common stack of the 70 TPH and 50 Ton Per Hour (TPH) boilers.

iv. The unit doesn't use any coal rather it exclusively uses bagasse as fuel in all the three Boilers of capacity 170 Ton Per Hour (TPH), 70 Ton Per Hour (TPH) & 50 Ton Per Hour (TPH). These boilers are equipped with two stacks, with heights of 72 meters (170 TPH) and 60 meters (common for 70 & 50 TPH).

v. It was observed that unit has 01 DG set of capacity 750 KVA having Stack height of 16 mtrs.

III. **Water quality monitoring and preservation**

i. Flow meters were found installed at the inlet and outlet of ETP and same are connected to CPCB & UPPCB Server. ***(refer photograph no 5 & 6)***

ii. Separate storm water drain was observed within the premises.

iii. As the unit was non-operational hence, the compliance of ETP with discharge norms couldn't be verified.

iv. Unit has obtained UPGWD NOC for groundwater abstraction from 03 no. of borewell, having validity upto 26.06.2026. As per the records it was observed that the unit has abstracted total 13609 KL of fresh water from 03 borewells in the month of March 2024 i.e. 439 KLD, which is within the permissible limit of 1800 KL/day groundwater abstraction mentioned in the No Objection Certificate (NOC) issued by UPGWD.

v. The unit has Effluent Treatment Plant (ETP) of capacity 2800 KLD. During visit the unit was found non-operational due to season off, however the Effluent Treatment Plant (ETP) was under stabilization.

IV. **Noise monitoring and preservation**

i. DG Set is provided with acoustic enclosure. ***(refer photograph no. 17)***

V. **Waste Management**

i. ETP Sludge is used as manure.

ii. Hazardous waste like Used Oil is sent to TSDF. The unit has TSDF member ship with Bharat oil and waste management limited. Unit has submitted the copy of form-10 for the month of May, 2024. As per the document the unit has transported 70 kg of sludge, 28.7 kg cotton rags and 40 kg empty drums to Bharat oil ltd.,

iii. As waste minimization measures, unit has installed automated filling and Hydro-jetting for cleaning of vessels.

VI. **Green Belt**

i. Details about green belt along with details of trees & shrubs are mentioned in above Para IV of specific EC conditions.

Part F: Conclusion & Recommendations

Conclusion:

1. Unit was non-operational due to non-crushing season. During survey of the surroundings of the unit and Sot river, no coloured water was visible at the time of visit.
2. The ground water sample analysis result does not indicate impact due to the industry.
3. The unit has complied with the recommendations of Joint Inspection report dated 13th January 2021. Details of the same are mentioned in Part C of the report.
4. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.
5. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part E. The unit has not compiled with the following conditions:

iii. Not installed CAAQMS.
iv. No rainwater harvesting system was observed in the plant.

Recommendations:

- Unit shall maintain the ash disposal record with respect to disposal and distribution.
- Unit shall implement a system for interlocking of the pollution control plants / devices and the production process, as directed by Hon'ble NGT-PB.
- Unit shall comply with following EC conditions:
  - Install CAAQMS stations as per EC condition.
  - Make provision for rain water harvesting as per EC condition.

Inspection Team

S.No.	Inspecting Officials	Signature
1.	Sh. Nazimuddin, Scientist 'F', DH- IPC-II, CPCB, Delhi	
2.	Mrs Reena Satavan, Scientist 'E', CPCB, Delhi	
3.	Sh. Ashutosh Chauhan, Regional Officer- Moradabad, UPPCB,	
4.	Shri J. N Tiwari, AEE, UPPCB	

Photographs

Pic :1 Effluent treatment scheme

Pic : 2 ETP tank

Pic :3 Lagoon for storage of ETP treated effluent

Pic:4 Decanter

Pic: 5 Flow meter at the inlet of ETP

Pic: 6 Flow meter at the outlet of ETP

Pic: 7 lime dosing pump

Pic: 8 Flow meter at the inlet of STP

Pic: 9 Sewage Treatment plant

Pic: 10 STP inlet

Pic: 11 MGF and ACF units of STP

Pic: 12 Green belt area

Pic: 13 Drain outside the units premises

Pic:14 Water hyacinth at the confluence point of drain and Sot River

Pic 15: Paved area near plants

Pic 16 : Rain water accumulated in River SOT

Pic 17 : DG set

Annexure-B

Detailed site visit report of M/s Dhampur Bio Organics Ltd., Unit-Meerganj, District Bareilly (Sugar Unit) on 18.10.2024

Part A: General Information

1.	**Name of the unit with complete postal address**	M/s Dhampur Bio Organics Ltd, Unit- Meerganj, Division-Sugar, Village & Post- Meerganj, Bareilly ,(U.P) Pin Code - 243504
2.	**Spatial Co-ordinates Latitude and longitude**	Latitude: 28.549419° Longitude: 79.213158°
3.	**Year of commissioning**	1995
4.	**Category**	Sugar with power cogeneration of 22.5 MW
5.	**Co-Generation Capacity, MW**	22.5 MW
6.	**Start period of crushing season**	07th November 2023 (crushing season closed on 09.04.2024)
7.	**No. of Operational days**	136
8.	**Operational status during visit**	Non-operational (due to off-season)
9.	**Consented capacity of sugar Mill (TCD)**	9000 ton cane crushing per day (TCD)

Consent & EC status

10.	**Consent status & its Validity with date**	Consolidated Consent & Authorization (CCA) issued by UPPCB dated 19.06.2023 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 with validity upto 31.12.2024. Consolidated consent is attached at **Annexure-3A.**
11.	**Environment Clearance (EC)**	Yes, EC issued on 27th March 2023 for capacity expansion from 5000 TCD to 11000 TCD. EC is attached at **Annexure-3B.**

Source of Fresh Water

12.	**Bore well/Tube well/ Any other & its No's**	4 Numbers of borewell
	Flow meter Installation at wells (Yes/No)	Yes
13.	**NOC from CGWA/UPGWD & its Validity with date**	Unit has UPGWD NOC for groundwater abstraction from 04 no. of borewell, having validity upto 18.05.2026. As per the conditions of NOC of UPGWD, the unit can abstract groundwater at a maximum rate of 166100 KL/annum or 730 KLD (55800 from bore well -1, 55800 from borewell - 2, 18000 from borewell-3 and 36500 from borewell - 4 annually). NOC for groundwater abstraction from 03 bore wells are attached at **Annexure-3C-a, 3C-b and 3C-c.** As per the records it was observed that the unit has abstracted total 50373 kl from 04 borewells (i.e. 14250 KL

		in the month of Nov. 2023, 9232 KL in Dec, 2023, 7530 KL in Jan, 2024, 9344 KL in Feb,2024 and 10017 KL in March, 2024) against the permissible limit of 166100 KL/annum which is as per NOC.

Process Effluent Treatment Plant

14.	**Treatment ETP Capacity**	The unit has installed ETP of 2200 KLD capacity.
15.	**Operational Status**	ETP was not in operation due to non-crushing season however, was found under stabilization at the time of visit.
16.	**Treatment ETP Scheme**	Equalization Tank→ Primary Clarifier→ Aeration Tank→ Secondary Clarifiers → Filter & Activated Carbon unit → storage lagoon→ irrigation
17.	**Flowmeters installed**	The unit has installed flow meter at the inlet, outlet of ETP
18.	**Disposal/reuse of treated effluent**	For storage of treated effluent, the unit is having one brick-lined treated effluent storage lagoon of capacity 5000 m^3 from where the treated effluent from the lagoon is used in irrigation. To record the quantity of treated effluent being used for irrigation purpose, flow meter was found installed and unit maintains log-book of the same. However, due to non-crushing season on the day of visit the lagoon was found dry and empty.

Sewage Treatment Plant

19.	**Operational Status**	Operational
20.	**Treatment Capacity (KLD)**	50 KLD
21.	**Source of domestic sewage**	Staff quarters, guest houses, offices etc.
22.	**Treated Scheme**	Sump →Equalization tank →MBBR-1→MBBR-2 →Tube Settler→Chlorine contact tank→ Filtration unit and Activated Carbon unit→Treated effluent tank→irrigation
23.	**Flow meters at inlet and outlet of STP**	Installed at inlet & outlet of STP.
24.	**Condition as per the Consent issued by SPCB**	The treated effluent shall be reused to the maximum extent within the premises for gardening. Quality of the treated effluent shall meet to the general standards as prescribed under Environment (Protection) Rules, 1986.
25.	**Observation w.r.t reuse of treated water from STP outlet**	At the time of visit the entire treated effluent from STP outlet was being used in the plantation around STP area through closed pipeline. Samples were also collected from STP inlet & outlet.

Air Pollution Sources

26.	**Details of Boilers & type of fuel used**	**Boilers**	**Type of fuel**	**Steam generation Capacity (Ton Per Hour)**	**APCD installed**	**Stack No.**	**Stack height**
		Boiler-1		80	Water scrubber	1	Common stack of

		Boiler-2	Bagasse	55	Water Scrubber		height 50 mtrs

Ash Generation Details

27.	**Ash Generation**	Ash generation for the period from Nov, 2023 to March 2024 was as follows:

Month	**Nov**	**Dec**	**Jan**	**Feb**	**March**
Ash generation (MT)	754.2	905.6	914.8	860.3	662.4

28.	**Ash management and Disposal**	Mixed with Press mud and use as manure.

Part B: Verification of findings of detailed report Jan 2023

During 15th-16th Nov 2021, survey and monitoring of nearby villages around the Dhampur Bio-Organics Ltd., Meerganj unit and monitoring of Pilakhar River was carried out to assess the impact on ambient environment.
For assessment of present situation, team visited the industrial premises and surroundings. The findings of the team are mentioned below:

i. To assess the quality of ground water, the team collected ground water sample from borewell located within the unit premises. Analysis results of the sample collected are attached at **Annexure-3D** and is tabulated below**:**

Table 1: Analysis results of samples collected from Hand pump

Parameters	**Analysis Results**	**BIS standards (10500)**
pH	7.7	**6.5-8.5**
Conductivity (µmho/cm)	589	**-**
Color (colour units)	BDL	**15**
TSS (mg/l)	BDL	**-**
BOD (mg/l)	BDL	**-**
COD (mg/l)	BDL	**-**
TDS (mg/l)	386	**2000**
Total hardness as CaCO3 (mg/l)	160	**600**
Total alkalinity as CaCO3(mg/l)	255	**600**
Sulfate (mg/l)	59	**400**
As (mg/l)	BDL	**0.05**
Cd (mg/l)	BDL	**0.003**
Co (mg/l)	BDL	**-**
Cr (mg/l)	BDL	**0.05**
Cu (mg/l)	BDL	**1.5**
Fe (mg/l)	0.031	**0.3**
Mn (mg/l)	0.174	**0.3**

Ni (mg/l)	BDL	**0.02**
Pb (mg/l)	BDL	**0.01**
Sb (mg/l)	BDL	**-**
Se (mg/l)	BDL	**0.01**
V (mg/l)	BDL	**-**
Zn (mg/l)	0.033	**15**

Analysis results of the samples collected from the ground indicates no industrial impact.

ii. The unit was non-operational and no discharge was observed from the industrial premises.

Part C: Verification of the recommendations of the joint inspection report dated 26-03-2021

<table>
<tr><th>S.No.</th><th>Recommendations in Joint inspection report dated 26-03-2021</th><th>Verification by joint team as on date 18.10.2024</th></tr>
<tr><td>1.</td><td>ETP inlet flowmeter should be installed at the main inlet of ETP.</td><td>The unit has installed flowmeter at the inlet of ETP. (refer photograph no. 1)</td></tr>
<tr><td>2.</td><td>Periodic removal of sludge shall be ensured</td><td>On the day of the visit, the plant was found non-operational due to season off. No stored sludge was observed in the unit premises.
The team collected log book of ETP sludge for the period from Nov, 2024 to March 2024. The details are as follows;
<table>
<tr><th>Month</th><th>Sludge generation (kg)</th></tr>
<tr><td>Nov, 2023</td><td>7374</td></tr>
<tr><td>Dec, 2023</td><td>18868</td></tr>
<tr><td>Jan, 2024</td><td>18475</td></tr>
<tr><td>Feb, 2024</td><td>17369</td></tr>
<tr><td>March, 2024</td><td>18073</td></tr>
</table>
The logbook data indicates that’s the unit removes its ETP sludge periodically.</td></tr>
<tr><td>3.</td><td>Flow meter shall be installed at mill house for monitoring of generated effluent.</td><td>The unit has installed flow meter at the mill house. (refer photograph no. 2)</td></tr>
<tr><td>4.</td><td>The oil skimmer shall be installed in the ETP within a tank having approximately retention time of 45 min.</td><td>The unit has installed an oil & grease trap in the ETP, however due to non-operational of the plant the working of oil skimmer could not be verified. (refer photograph no. 3 & 4)</td></tr>
</table>

<table>
<tr><td>5.</td><td>The treated effluent discharges for irrigation shall comply with MoEF & CC notification dated 14.01.2016 for land disposal</td><td>The plant was non-operational due to which the sampling could not be done.</td></tr>
<tr><td>6.</td><td>The unit shall install STP for treatment of generated sewage. Treated sewage shall be utilized for irrigation & other purposes.</td><td>• The unit has installed one sewage treatment plant (STP) of capacity 50 KLD for treatment of domestic effluent generated from the staff quarters, worker's colony, guest house, offices etc.
• The STP consist of the following;
Holding tank →Oil & Grease Trap→Equalization tank →MBBR-1→MBBR-2 →Tube Settler→Chlorine Contact tank→Multi grade Filter and Activated Carbon Filter→treated effluent tank→irrigation
• On the day of the visit, Sewage Treatment Plant (STP) was found operational. Samples were collected from the inlet and final outlet of STP.
• Flow meters were found installed at the inlet & outlet of STP.
• Unit has maintained logbook of STP operations. Logbooks of STP inlet and outlet were collected for the month of September 2024 and the details are as follows;
<table>
<tr><th>Month</th><th>No of days</th><th>STP Inlet (kl)</th><th>STP Outlet (kl)</th></tr>
<tr><td>Sept. 2024</td><td>30</td><td>613</td><td>515</td></tr>
</table>
Average flow: at inlet – 20.43 KLD; outlet: 17.16 KLD
The logbook indicates that about 515 KL sewage was treated in STP in September 2024.</td></tr>
<tr><td></td><td colspan="2">Table 2: Characteristics of samples collected from STP
<table>
<tr><th>Sr. No.</th><th>Location</th><th>pH</th><th>colour</th><th>COD (mg/l)</th><th>BOD (mg/l)</th><th>TSS</th><th>TDS</th><th>NH2 -N</th><th>NO_3-N (mg/l)</th></tr>
<tr><td>1.</td><td>STP Inlet</td><td>7.2</td><td>BDL</td><td>55</td><td>16</td><td>11</td><td>248</td><td>0.22</td><td>2.62</td></tr>
<tr><td>2.</td><td>STP Outlet</td><td>8.2</td><td>BDL</td><td>39</td><td>12</td><td>BDL</td><td>368</td><td>0.52</td><td>1.75</td></tr>
<tr><td colspan="2">Standards mentioned in CCA issued by UPPCB on 19.09.2022</td><td>5.5 – 9.0</td><td></td><td>-</td><td>30</td><td></td><td></td><td></td><td></td></tr>
</table>
STP was found complying w.r.t. the standards prescribed in the Consent</td></tr>
</table>

7.	The unit shall keep only single arrangement to pump the treated effluent from the irrigation & other purposes.	The unit has dismantled the pumping arrangement available after secondary clarifier from where the treated effluent was pumped for irrigation. Now only single arrangement to pump the treated effluent for irrigation is available at storage lagoon. ***(Refer photograph no. 5)***

Part D: Verification of the recommendations of Hon'ble NGT Judgement dated 01.09.2021.

<table>
<tr><th>S.No.</th><th>Recommendations of Hon'ble NGT Judgement dated 01.09.2021</th><th>Complying status as on 18-10-2024</th></tr>
<tr><td>1.</td><td>All the Units must ensure continuous running of ETPs even during the non-crushing season for the adequate maintenance of required bio-mass so that the ETP is able to take the load/shock when it receives the pollution load/effluent at the start of the crushing season.</td><td>At the time of visit, the unit was non-operational due to off-season. Team observed that the ETP was under stabilization and aeration was being done to maintain active bio mass to enable smooth ETP operations in the crushing season. For the maintenance of adequate bio-mass aeration tank was found operational.
Sample was collected from the aeration tank and the analysis results are as follows:
MLSS = 1625mg/l
MLVSS =1159mg/l
Analysis results showed MLVSS/MLSS ratio as 0.71 which indicates that unit is in process of developing active biomass for stabilizing ETP prior to commencement of crushing season.</td></tr>
<tr><td>2.</td><td>All the Units in question must provide for separate Energy Meter for entire ETP setup including its accessory units with data logging facility which shall be inspected by UPPCB and CPCB from time to time.</td><td>The unit has installed separate energy meter for the ETP. The unit has maintained log book for the same. The team has collected log book of energy meter for the month of April 2024 and the details are as follows;
<table>
<tr><th>Month</th><th>Consumption(KWH)</th></tr>
<tr><td>Nov, 2023</td><td>77648</td></tr>
<tr><td>Dec, 2023</td><td>98400</td></tr>
<tr><td>Jan, 2024</td><td>111496</td></tr>
<tr><td>Feb, 2024</td><td>111584</td></tr>
<tr><td>March, 2024</td><td>114160</td></tr>
</table>
From the data it was observed that the energy consumption has been steadily increasing over the past five months. From 77,648 KWh in November 2023, it rose to 114,160 KWh</td></tr>
</table>

		in March 2024. This represents a consistent upward trend, indicating that the plant has been using more energy each month.
3.	UPPCB must ensure Interlocking of Pollution Control Devices with production processes (one way but not vice versa) so as to ensure that whenever ETPs/PCDs are intentionally closed, the production also comes to halt.	UPPCB directed the unit to comply this direction of Hon'ble NGT. The unit represented in this regard that sugar production is a continuous process and if the production process is stopped suddenly the sugarcane juice and juice concentrates in the process will clog and it will be very difficult to clean the plant and resume production.
4.	Regular inspections should be carried out by the statutory authorities in both halves of the crushing season and also at least once in non-crushing season.	During crushing season 2023-24, sampling was carried out six times i.e. on 19-01-2024, 29-01-2024, 07-02-2024, 14-02-2024, 24-02-2024, 06-03-2024 by UPPCB. Unit was found complying standards during all these inspections. Analysis reports are attached at **Annexure 3E-a, 3E-b, 3E-c, 3E-d, 3E-e & 3E-f.** Also, third party technical institutes authorised by CPCB carried out annual inspection on 17-01-2022 & 15-02-2023 and unit was found complying standards during both inspections. The reports are attached at **Annexure 3E-g & 3E-h.**

Part E: Verification of specific conditions of Environmental Clearance (EC):

The Unit has obtained Environment Clearance (EC) dated 27.03.2023 from Ministry of Environment, Forest & Climate Change (MoEF&CC) for expansion of existing sugar unit from 5000 TCD to 11000 TCD without change in existing co gen power capacity 43.5 MW within existing industry premises. During visit on 18.10.2024 team verified the compliance of the major EC conditions.

The status of the EC conditions is mentioned below;

1. Compliance status of specific conditions:

I. Notification dated 14.01.2016 of MoEF&CC regarding discharge of treated effluent shall be complied with.

Status as verified by team:

iii. The unit has installed effluent treatment plant of capacity 2200KLD having treatment scheme up to tertiary treatment level. The scheme is as follows:

Equalization Tank→Primary Clarifier→ Aeration Tank→Secondary Clarifiers → Filter & Activated Carbon unit →storage lagoon→irrigation
However, ETP was found under stabilization at the time of visit due to off-season. Therefore, sampling was done only from aeration tank and quality & quantity of discharge can't be verified. Analysis of sample collected from the aeration tank indicate MLSS: 1625mg/l and MLVSS: 1159mg/l.

iv. The unit has installed **Sewage Treatment Plant (STP)** of 50KLD to treat domestic sewage, which was found operational on the day of visit. As per the analysis results the STP was found complying w.r.t. standards prescribed in the Consent. The details are already mentioned at Point 6 of above Part C.

II. Ash generated will be stored in dedicated areas with proper fencing.

Status as verified by team:

As informed by the unit representative the ash is mixed with Press mud in 1:2 ratio and given to local farmers free of cost to be used as manure. However, at the time of visit, as the unit was non-operational therefore, no fly ash was observed by the team within the premises

III. The project proponent will install 3 Continuous Ambient Air Quality Monitoring Station (CAAQMS) in consultation with UPPCB.

Status as verified by team:

No CAAQMS has not been installed by the PP

***IV*. Three tier green belt shall be developed with native species all along the periphery of the project. Site survival rate of green belt developed shall be monitored on periodic basis to ensure that damaged plants are replaced with new plants in the subsequent years (Miyawaki method to be adopted for plantation)**

Status as verified by team:

- A three-tier green belt is a plantation with three layers of trees, shrubs, and grasses, designed to help control pollution and improve the environment. It was observed that the unit has developed lawns in front of guest house followed by shrubs and trees.
- Out of total plant area of 55.8466 hectare, green belt has been developed on 14.16-hectare area i.e 25.35 % of which 8.62 ha is green area and 5.54 ha is landscape area.
- During visit team observed that green belt is majorly developed near ETP & STP area, guest house and colony. Dense plantation was observed near ETP area. Also, trees of Shisham, Neem, Mango, Arjun, Jamun, etc. were observed along the roadside & industry periphery. Green patches were also developed in

between the plant area. As per the details provided by the unit, the details of existing trees/shrubs at project site is as follows

- The unit has developed green belt inside the unit premises, near ETP area, near guest house, and sugar cane farm was also observed within the premises. The details of plantation are as follows;

Sl. No.	Location	No. of Plants	Species Details	Year of Plantation
1	Near Godown Area	5000	Jamun, sahjan, Amrud, Bottle Brush, Kanji, Sisam, Shirish, Kadam, Arjun, kachnar neem.	2024
2	Near STP Area	5000	Jamun, Sahjan, Amrud, Anaar, kanji etc.	2023
3	Near Plant gate	1800	Neem, Mango, Mahogany, Jamun, Kachnar, Champa, Semal etc.	2022
Total		**11800**		

V. **Performance test shall be conducted on all pollution control system every year and report shall be submitted to regional office of the MoEF and CC.**

Status as verified by team:

Unit conducted analysis of ETP (inlet & outlet) samples and stack monitoring through third party (NABL accredited) laboratory and submitted the reports along with 6 Monthly Compliance Report to MoEF&CC. As per reports last ETP monitoring was carried out on 15.04.2024 & stack monitoring was conducted on 29.02.2024.

ETP inlet sample results indicate pH- 6.9, BOD- 188 mg/l, COD- 1692 mg/l, TSS-228 mg/l, TDS- 1286 mg/l and Oil & Grease-14.6 mg/l whereas ETP outlet sample results indicate pH- 7.3, BOD- 15 mg/l, COD- 120 mg/l, TSS-16.8 mg/l, TDS- 824 mg/l and Oil & Grease-BDL. ETP results indicate compliance w.r.t notified discharge norms.

Ambient air quality monitoring was conducted on 29.02.2024 near main gate, Village Nagaria Sadat, Village Jatan and village Sindhauli are as follows

Location	**PM 10 (µg/m³)**	**PM 2.5 (µg/m³)**	**SO_2 (µg/m³)**	**NOx (µg/m³)**
Near main gate	81.2	51.54	14.23	20.86
Village Nagaria Sadat	78.5	49.08	12.43	17.69
Village Jatan	75.4	46.93	12.31	18.05
Village Sindhauli	76.4	48.65	12.43	17.82
Standard	**100**	**60**	**80**	**80**

Ambient air quality monitoring results indicate compliance w.r.t notified standards.

Monitoring results of common stack attached to 80 Ton Per Hour (TPH) & 55 Ton Per Hour (TPH) boilers indicate PM: 75.8 mg/Nm^3, SO2: 5.9 mg/Nm^3 and NOx- 26 mg/Nm^3.

The unit has carried out adequacy assessment of ETP by NSI during 17-18 Jan 2024. As per adequacy report, the capacities of existing ETP equipment's are adequate on licensed crush rate of 9000 TCD @ effluent flow rate 183.27/ 200 litres/ ton of cane.

VI. **Greening and paving shall be implemented in the plant area to arrest soil erosion and dust pollution due to exposed soil surface.**

Status as verified by team:

In plant area team observed patches of greenery and tiled paved surface***.***

(refer pic no. 9)

VII. Properly covered vehicles shall be used while transporting material and product.

Status as verified by team:

At the time of visit no transportation of material and product was taking place as
the unit was non-operational.

VIII. Allergy test should also be included in health check-up of works.

Status as verified by team:

Health check-up of all the employees for identification of occupational health hazard on bi-annual basis is being conducted by the unit where blood tests, eye check-up, telemetry test, respiratory system check-up were done by panel of MBBS doctors. Sample report of an employee is attached as **Annexure 3F** for reference. Also, unit organised free eye-check up camp for nearby villagers.
Annual Health check-up is conducted by Unit & health reports are submitted to concern authorities. The unit organised a free eye and health check-up camp on 13-01-2024.

IX. Industry should comply with the CPCB charter guidelines for sugar units and treated effluent shall be used for the different purposes as per the **requirements in the industry**

Status as verified by team:

ii. The compliance status of salient points of Sugar Charter are as following:
   a) The unit has tertiary level effluent treatment plant of 2200KLD capacity.

b) Installed electromagnetic flow meters at ETP inlet, outlet and all three borewells.
c) Maintained daily records of fresh water consumption, effluent discharge, regular analysis of ETP effluent parameters, energy consumption, & STP operations etc.
d) Developed environmental laboratory for the analysis of DO, pH, BOD, COD, TSS & TDS and MLSS parameters of ETP inlet and outlet.
e) Developed Environmental Management Cell (EMC)
f) Prepared Irrigation Management Plan from NSI, Kanpur for 137.80-hectare command area. Have lagoon of capacity 16000m^3 capacity for storage of the treated effluent to be used for irrigation purpose.
g) As per adequacy assessment of ETP carried out by NSI during 17-18 Jan 2024, the capacities of existing ETP equipment's are adequate on licensed crush rate of 9000 TCD @ effluent flow rate 183.27/ 200 litres/ ton of cane.
h) Installed Online effluent & emission (OCEMS) monitoring system at ETP outlet & boiler stack respectively and provided its connectivity to CPCB and SPCB servers

2. Compliance status of major standard conditions:

II. **Statutory Compliance**:

iii. The unit has obtained Consolidated Consent & Authorization issued by UPPCB dated 04.09.2023 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 and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 with a validity upto 31.12.2024.
iv. The unit has obtained UPGWD NOC for groundwater abstraction from 04 no. of borewell, having validity upto 18.05.2026. As per the conditions of NOC of UPGWD, the unit can abstract groundwater at a maximum rate of 166100 KL/annum (55800 from bore well -1, 55800 from borewell -2, 18000 from borewell-3 and 36500 from borewell - 4 annually).

II. **Air Quality Monitoring & Preservation:**

i. Online Continuous Effluent Monitoring System (OCEMS) is installed in all the Boiler Stacks & it is connected to CPCB & UPPCB Server.
ii. Unit carries out Ambient Air Quality (AAQ) monitoring at four designated locations. The last monitoring was carried out on 29.02.2024 by NABL accredited & EPA recognised laboratory. The analysis results are mentioned at point V of EC conditions.
iii. Installed Wet Scrubber on the common stack of the 80 Ton Per Hour (TPH) and 55 Ton Per Hour (TPH) boilers.
iv. The unit doesn't use any coal rather it exclusively uses bagasse as fuel in all the two Boilers of capacity 80 Ton Per Hour (TPH) & 55 Ton Per Hour (TPH)H. These boilers are equipped with common stack, of 50 meters' height.

v. The unit is having 02 nos. of DG sets of capacity 625 KVA each kept inside acoustic room.

III. **Water quality monitoring and preservation**

i. Flow meters were found installed at the inlet and outlet of ETP and same are connected to CPCB & UPPCB Server.
ii. Separate storm water drain was observed within the premises.
iii. As the unit was non-operational hence, the compliance of ETP with discharge norms couldn't be verified.
iv. Unit has obtained UPGWD NOC for groundwater abstraction from 04 no. of borewell, having validity upto 18.05.2026. As per the records it was observed that the unit has abstracted an average of 360 KLD of fresh water from 04 borewells during Nov, 2023 to March 2024 which is within the permissible limit of 420 KL/day groundwater abstraction mentioned in the No Objection Certificate (NOC) issued by UPGWD.
v. The unit has Effluent Treatment Plant (ETP) of capacity 2200 KLD. During visit the unit was found non-operational due to season off, however the Effluent Treatment Plant (ETP) was under stabilization.

IV. **Noise monitoring and preservation**

i. The unit is having 02 nos. of DG sets of capacity 625 KVA each kept inside acoustic room. ***(refer photograph no.7)***

V. **Waste Management**

i. ETP Sludge is used as manure.
ii. Unit has an agreement for Disposal of Hazardous Waste to TSDF M/s Bharat Oil and Hazardous waste like Used Oil are sent to TSDF.
iii. As waste minimization measures, unit has installed automated filling and Hydro-jetting for cleaning of vessels.

VI. **Green Belt**

i. Details about green belt along with details of trees & shrubs are mentioned in above Para IV of specific EC conditions.

Part F: Conclusion and Recommendations

Conclusion:

1. The unit was non-operational and no discharge was observed from the Industrial Premises.
2. The ground water sample analysis result does not indicate impact due to the industry.

3. The unit has complied with the recommendations of Joint Inspection report dated 14th January 2021. Details of the same are mentioned in Part C of the report.
4. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.
5. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part E. The unit has not compiled with the following conditions:
    i. CAAQMS not installed.
    ii. Rainwater harvesting system was not observed in the plant.

Recommendations:

- The unit shall maintain the ash disposal record with respect to disposal and distribution.
- Unit shall implement a system of interlocking of the pollution control plants / devices and the production process, as directed by Hon'ble NGT-PB.
- Unit shall comply with following EC conditions:
    - Install CAAQMS stations as per EC condition.
    - Make provision for rain water harvesting as per EC condition.

Inspection Team

S.No.	Inspecting Officials	Signature
1.	Sh. Nazimuddin, Scientist 'F', DH- IPC-II, CPCB, Delhi	
2.	Mrs Reena Satavan, Scientist 'E', CPCB, Delhi	
3.	Sh. Chandresh Kumar, Regional Officer, UPPCB, Regional Office- Bareilly	
4.	Sh. S.S Chauhan, ASO, Regional Office- Bareilly	

Photographs

Pic 1: Flow meter at the inlet of ETP

Pic 2: Flow meter at the mill boiling house

Pic 3 : Oil and Grease tank

Pic 4 : Oil and Grease tank

Pic 5: Dismantled the pumping arrangement

Pic 6: Sewage Treatment Plant

Pic: 7 D.G Acoustic room

Pic 8: Green belt within the premises

Pic 9 : Paved surface near plantation

Annexure-C

Detailed site visit report of M/s Dhampur Sugar Mills Limited, Village Alhaipur, Tehsil Dhampur, District Bijnor (Sugar Unit) on 16.10.2024

Part A: General Information

1.	**Name of the unit with complete postal address**	M/s Dhampur Sugar Mills Limited, Village Alhaipur, Tehsil Dhampur, District Bijnor (Uttar Pradesh) Pin Code- 246761
2.	**Spatial Co-ordinates Latitude and longitude**	Latitude: 29.290506 Longitude: 78.514081
3.	**Year of commissioning**	1933
4.	**Sugar with Distillery (Yes/No)**	Yes
5.	**Category**	Sugar refinery with power cogeneration of 60 MW
6.	**Co-Generation Capacity, MW**	60 MW
7.	**Start period of crushing season**	30.10.2023 (Crushing season closed on 06.04.2024)
8.	**No. of Operational days at the time of inspection**	167
9.	**Operational status during visit**	Non-operational (due to off-season)
10.	**Consented capacity of sugar Mill (TCD)**	14000 ton cane crushing per day (TCD)

Consent Section

11.	**Consent status & its Validity with date**	Consent under section 25/26 of The Water (Prevention and control of Pollution) Act, 1974 issued on 27.03.2020, valid upto 31.12.2024. Copy of same is attached at **Annexure-4A.** Consent under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981 issued on 31.12.2021, valid upto 31.12.2026. Copy of same is attached at **Annexure-4B.** Authorization under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 issued on 28.12.2020, valid upto 28.12.2025. Copy of same is attached at **Annexure-4C.**
12.	**Environmental Clearance (EC)**	Environment Impact Assessment (EIA) notification regarding prior Environmental Clearance (EC) notified in 2006 includes Sugar Industry in the schedule. The unit was originally commissioned in 1933 and it was informed by the Unit and UPPCB that no expansion in production capacity has been done after EIA notification hence EC has not been obtained from MoEF&CC

Source of Fresh Water		
13.	**Bore well/Tube well/ Any other & its No's**	4 Numbers of borewell
	Flow meter Installation at wells (Yes/No)	Yes
14.	**NOC from CGWA /UPGWD & its Validity with date**	Unit has UPGWD NOC for groundwater abstraction from 04 no.s of borewell, having validity upto 27.04.2027 (3 borewels) and 07.05.2027 (1 borewell). Copy of NOC for groundwater abstraction are attached at **Annexure-4D-a, 4D-b, 4D-c.** As per the conditions of NOC from UPGWD, the unit can abstract groundwater at a maximum rate of 346000 KL/annum or 947.94 KLD (Borewell 1- 126000 KL, Borewell 2- 84000 KL, Borewell 3- 73000 KL, Borewell 4- 63000 KL annually) As per the records it was observed that the unit has abstracted total 140833 kl from 04 borewells for last crushing season (Nov 2023-April 2024) (i.e. 24549 KL in the month of Nov. 2023, 25237 KL in Dec, 2023, 26610 KL in Jan, 2024, 24380 KL in Feb,2024, 25317 KL in March, 2024 and 14740 KL in April 2024) or 791.19 KL/day against the permissible limit of 947.94 KL/day which is as per NOC

Process Effluent Treatment Plant		
15	**Treatment ETP Capacity**	The unit has installed ETP of 4500 KLD capacity.
16	**Operational Status**	ETP was not in operation due to non-crushing season however, ETP was found under stabilization at the time of visit.
17	**Treatment ETP Scheme**	Oil skimmer→ Screen→ Equalization Tank→ pH Correction Tank → Primary Clarifier→ Aeration Tank → Secondary Clarifier → Treated effluent Collection pit → Dual media filter → Activated Carbon Filter→ Lagoon → For irrigation Spray pond overflow → Chemical dosing → Reaction Tank → Primary Clarifier → Aeration tank → Secondary Clarifier → Treated effluent collection pit
18	**Flowmeters installed**	The unit has installed flow meter at the inlet and outlet of ETP
19	**Disposal/reuse of treated effluent**	For storage of treated effluent, the unit is having one brick-lined treated effluent storage lagoon of 10,000 m^3 capacity, from where the treated water is used in irrigation. To record the quantity of treated effluent being used for irrigation purpose, flow meter was found installed and unit maintains log-book of the same. However, due to non-crushing season on the day of visit the lagoon was found dry and empty.

Process Condensate Polishing Plant (CPU)		
20	**Treated capacity of Condensate polishing system adopted by the unit**	Unit has installed CPU of 72 m^3/hr capacity to treat the process condensate.
21	**Treated scheme of the CPU**	Process condensate → Multi Grade Filter → Activated Carbon Filter → Micron Cartridage → Micron bag filter → High pressure pump → RO membrane system
22	**Use of treated Condensate**	Treated condensate from CPU is used for make-up of Co-Gen Cooling Tower.

Sewage Treatment Plant

23	**Operational Status**	Operational
24	**Treatment Capacity (KLD)**	220 KLD (common for Sugar & Distillery)
25	**Source of domestic sewage**	Staff quarters, guest houses, offices etc.
26	**Treated Scheme**	Sewage collection tank → MBBR I → MBBR II → Tube Settler → Storage Tank → Multi Grade filter → Activated Carbon Filter → Outlet
27	**Flow meters at inlet and outlet of STP**	Installed at inlet & outlet of STP
28	**Condition as per the Consent issued by SPCB**	Domestic effluent shall be treated in the treatment plant so that it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules 1986 as amended. TSS – 100 mg/l BOD-30 mg/l Oil & Grease – 10 mg/l COD – 250 mg/l Quantity of discharge – 50 KLD
29	**Observations w.r.t reuse of treated water from STP outlet**	At the time of visit the entire treated effluent from STP outlet was being used in the plantation through flexible pipeline. Samples were also collected from STP inlet & outlet.

Detail of Air Pollution Control System

30	**Details of Boilers, type of fuel used,**	**No. of Boilers**	**Type of fuel**	**Steam generation capacity (Ton Per Hour)**	**APCD installed**	**Stack No.**	**Stack height**
		Boiler-1	Bagasse	170	ESP	1	Common stack of height 90 meter
		Boiler-2	Bagasse	170	ESP		
31	**Online emission (OCEMS) monitoring system installed**	Installed and connected with CPCB and SPCB server for Particulate Matter (PM)					

Ash Generation Details

32	**Ash Generation**	Ash generation for the period from Oct, 2023 to April 2024 was as follows:

Month	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**March**	**April**
Ash generation (MT)	75	2786.2	3348.5	3405.4	3004.7	2683.1	481.1

33	**Ash management and Disposal**	Mixed with press mud and being sold to farmers as bio manure

Part B: Verification of detailed report Jan 2023

During 01-02 Dec 2021, the nearby area around the Dhampur Sugar Mills Ltd and Ikra drain was visited to assess the impact on environment. For assessment of present situation, team visited the industrial premises and surroundings. The findings of the team are mentioned below:

Survey of Surrounding

During visit on 16-10-2024, team surveyed the stretch of Ikra drain from upstream of unit (near the boundary wall of unit) till bio-compost yard (approx. 3-4 kms) (Lat: 29.28781, Long:78.50618). The team observations vis-a-vis observations as per visit 01-02 Dec, 2021 are tabulated below:

Table 1: Observations on Ikra drain on 16-10-2024 vis-à-vis 01-02 Dec 2021

S.No	Location	Observations as per visit 01-02 Dec, 2021	Observations as per visit 16 Oct 2024
1.	Ikra drain u/s Dhampur Sugar mill (Lat: 29.29198, Long: 78.51010)	- The analysis results of sample showed pH-7.1, BOD-54 mg/l, COD-135 mg/l, TDS-292 mg/l, NH3-N-34 mg/l, Sulphate-136 mg/l. The results indicated that water in Ikra drain is polluted as it carries sewage from Dhampur city.	The drain sample was collected from the same location and analysis results are as: pH-7.7, BOD-68 mg/l, COD-152 mg/l, TDS-380 mg/l, NH3-N- 28 mg/l, Sulphate- 31 mg/l. Analysis results are attached at **Annexure-4E.** Ikra drain carries sewage from Dhampur City.
2.	Ikra drain near Compost yard of Dhampur Sugar mill (Lat: 29.28781, Long:78.50618)	The analysis results of sample showed pH-7, BOD-123 mg/l, COD-391 mg/l, TDS-244 mg/l, NH3-N-12 mg/l, Sulphate-60 mg/l. The results	The drain sample was collected from the same location and analysis results showed pH-7.6, BOD-86 mg/l, COD-158 mg/l, TDS-370 mg/l, NH3-N-31 mg/l, Sulphate- 36 mg/l. Analysis results are attached at

		indicated more pollution load at this location in comparison to upstream location.	**Annexure-4E.** Ikra drain carries sewage from Dhampur City. Unit was non-operational due to non-crushing season.

Groundwater assessment

i. To assess the quality of ground water, the team collected ground water sample from borewell located within the unit premises. Analysis results of the sample are attached at **Annexure- 4E** is tabulated below:

Table 2: Analysis results of samples collected from Hand pump

Parameters	**Bore-well**	**BIS IS 10500:2012 (Permissible limit in absence of alternative source)**
pH	7.6	**6.5-8.5**
Conductivity (µmho/cm)	882	**-**
Color (Hazen)	BDL	**15**
COD (mg/l)	2	-
TSS (mg/l)	BDL	-
TDS (mg/l)	462	**2000**
Total hardness as $CaCO_3$ (mg/l)	301	**600**
Total alkalinity as $CaCO_3$ (mg/l)	316	**600**
Chloride (mg/l)	53	**1000**
Sulfate (mg/l)	85	**400**
Fluoride (mg/l)	0.34	**1.5**
NO_3-N (mg/l)	BDL	**45**
PO4-P (mg/l)	0.09	**-**

Analysis results of the samples collected from the ground indicates no industrial impact.

Part C: Verification of the recommendations of the joint inspection report dated 23.03.2021

S.No.	**Recommendations by Joint inspection report dated 26-03-2021**	**Verification by joint team as on dated 16.10.2024**
1.	The unit shall take measures to stop discharge of spillage/ surface runoff containing waste water from industrial premises into drain (Ikra drain and drain coming from city along boundaries of sugar unit)	Unit was found non-operational due to non-crushing season. However, samples from Ikra drain were collected during visit. Details are tabulated in Table 1.

	and shall maintain water quality of the drain.	
2.	The unit shall install CPU for high pressure boiler at earliest.	It was observed that unit has installed CPU of 72 m3/hour capacity. CPU details are mentioned in above Part A (point no 20-22) ***(refer photograph no. 8)***
3.	The unit shall install Sewage Treatment Plant (STP) for sewage generated from colony at the earliest.	The unit has installed sewage treatment plant (STP) of capacity 220 KLD for treatment of domestic effluent generated from the staff quarters, worker's colony, guest houses etc. Since Sugar and distillery units are located within same premises, therefore unit has installed common STP. The STP consist of the following scheme ***Sewage collection tank → MBBR I → MBBR II → Tube Settler → Storage Tank → Multi Grade filter → Activated Carbon Filter → Outlet*** STP treated effluent is used for gardening purpose. • On the day of the visit, Sewage Treatment Plant (STP) was found operational. Samples were collected from the inlet and final outlet of STP. • Flow meters were found installed at the inlet & outlet of STP. o Reading of STP inlet flowmeter: Instantaneous- 4.47m^3/hr; Totalizer- 113670 m^3 o Reading of STP outlet flowmeter: Instantaneous- 2.775m^3/hr; Totalizer- 70394 m^3 • Unit has maintained logbook of STP operations. Logbooks of STP inlet and outlet were collected for the month of September 2024 and the details are as follows;

<table>
<tr><td></td><td></td><td>
<table>
<tr><th>Month</th><th>No of days</th><th>STP Inlet (KL)</th><th>STP Outlet (KL)</th></tr>
<tr><td>Sept. 2024</td><td>30</td><td>2620</td><td>2521</td></tr>
</table>
Average flow: Inlet-87.3KLD & Outlet- 84.03KLD
</td></tr>
<tr><td></td><td colspan="2">
Table 3: Analysis results of samples collected from STP
<table>
<tr><th>Sr. No.</th><th>Location</th><th>pH</th><th>COD (mg/l)</th><th>BOD (mg/l)</th><th>TSS</th><th>TDS</th><th>Color</th><th>NO2-N</th><th>NO3-N (mg/l)</th></tr>
<tr><td>1.</td><td>STP Inlet</td><td>7.4</td><td>57</td><td>6</td><td>11</td><td>400</td><td>BDL</td><td>0.01</td><td>BDL</td></tr>
<tr><td>2.</td><td>STP Outlet</td><td>8.3</td><td>18</td><td>3</td><td>BDL</td><td>376</td><td>BDL</td><td>0.37</td><td>BDL</td></tr>
<tr><td colspan="2">Standards mentioned in CCA issued by UPPCB on 19.09.2022</td><td>-</td><td>250</td><td>30</td><td>100</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
</table>
STP was found complying w.r.t. the standards prescribed in the Consent.
</td></tr>
<tr><td>4.</td><td>The unit shall convert 4000 m^3 capacity lagoon into lined impermeable lagoon to avoid any possibility of leakages and must ensure the compliance of stored treated effluent w.r.t notified discharge standards under E(P) Rules, 1986.</td><td>It was observed that 4000 m^3 capacity lagoon near agricultural fields of the unit has not been reclaimed /filled completely by unit and it was partially filled with mud and rainwater. It was used in the past for treated effluent storage and HDPE lining still exists. During visit, grass and shrubs were observed to be grown in the lagoon. (Refer photograph no 2)</td></tr>
<tr><td>5.</td><td>The unit shall dismantle the sump having capacity of 100 KL located in bio compost yard 10 acres.</td><td>The unit has dismantled the 100 KL sump in bio-compost yard. (Refer photograph no 15)</td></tr>
<tr><td>6.</td><td>Unnecessary lines for ETP feed near falling structure shall be dismantled immediately.</td><td>The unit explained that there are no unnecessary pipe lines in ETP area. The unit was instructed to use different colour coding for effluent pipe lines.</td></tr>
<tr><td>7.</td><td>Abandoned old pumping station alongwith connected line shall be dismantled.</td><td>Old pumping station along with connected line was found to be dismantled. It was observed that unit has constructed new pumping station for feeding raw effluent to ETP. (Refer photograph no 11 & 12)</td></tr>
<tr><td>8.</td><td>Filter backwashing tank of suitable design capacity shall be installed for filter backwashing.</td><td>The suggestion to enhance capacity of water tank for filter backwashing has not been implemented.</td></tr>
</table>

	Existing fresh water line in ETP area shall be dismantled.	Freshwater line in ETP was disconnected during visit. ***(Refer photograph no 13)***
9.	Provision shall be made for DM plant cleaning in process (CIP) reject shall be treated in ETP only.	Unit informed that the DM plant CIP reject is treated in the ETP when unit is operated. Compliance need to be verified by SPCB when unit resumes operation

Part D: Verification of the recommendations of NGT Judgement dated 01.09.2021.

S.No.	**Recommendations of NGT Judgement dated 01.09.2021.**	**Compliance status as on 16-10-2024**
1.	All the Units must ensure continuous running of ETPs even during the non-crushing season for the adequate maintenance of required bio-mass so that the ETP is able to take the load/shock when it receives the pollution load/effluent at the start of the crushing season.	At the time of visit, the unit was non-operational due to off-season. Team observed that the ETP was under stabilization and aeration was being done to maintain active bio mass to enable smooth ETP operations in the crushing season. For the maintenance of adequate bio-mass aeration tank was found operational. Unit has two aeration tanks and samples were collected from both tanks. Analysis results are as follows: Aeration tank 1: MLSS = 737 mg/l MLVSS =463 mg/l Aeration tank 2: MLSS = 812 mg/l MLVSS =590 mg/l Analysis results showed MLVSS/MLSS ratio as 0.62 and 0.72 for both tanks which indicates that unit is in process of developing active biomass for stabilizing ETP prior to commencement of crushing season.

<table>
<tr><td>2.</td><td>All the Units in question must provide for separate Energy Meter for entire ETP setup including its accessory units with data logging facility which shall be inspected by UPPCB and CPCB from time to time.</td><td>The unit has installed separate energy meter for the ETP. The unit has maintained log book for the same. The team has collected log book of energy meter for the last crushing season from Nov 2023-March 2024 and the details are as follows:
<table>
<tr><th>Month</th><th>Consumption(KWH)</th></tr>
<tr><td>Nov, 2023</td><td>22204</td></tr>
<tr><td>Dec, 2023</td><td>34048</td></tr>
<tr><td>Jan, 2024</td><td>35601</td></tr>
<tr><td>Feb, 2024</td><td>31213</td></tr>
<tr><td>March, 2024</td><td>32975</td></tr>
</table>
</td></tr>
<tr><td>3.</td><td>UPPCB must ensure Interlocking of Pollution Control Devices with production processes (one way but not vice versa) so as to ensure that whenever ETPs/PCDs are intentionally closed, the production also comes to halt.</td><td>UPPCB directed the unit to comply this direction of Hon’ble NGT. The unit represented in this regard that sugar production is a continuous process and if the production process is stopped suddenly the sugarcane juice and juice concentrates in the process will clog and it will be very difficult to clean the plant and resume production.</td></tr>
<tr><td>4.</td><td>Regular inspections should be carried out by the statutory authorities in both halves of the crushing season and also at least once in non-crushing season.</td><td>During crushing season 2022-23 & 2023-24, sampling was carried out six times i.e. on 05-04-2023, 30-05-2023, 22-11-2023, 12-12-2023, 06-04-2024, 10-10-2024 by UPPCB. Unit was found complying standards during all these inspections. Analysis reports are attached at Annexure 4F-a, 4F-b, 4F-c, 4F-d, 4F-e & 4F-f.

Also, third party technical institutes authorised by CPCB carried out annual inspection on 12-01-2022 & 14-02-2023. Unit was found not complying standards during inspection on 12-01-2022 and unit was issued show-cause notice by UPPCB on 22-02-2022 which was later withdrawn as unit was found complying standards in subsequent inspection. The reports are attached at Annexure 4F-g & 4F-h.</td></tr>
</table>

Conclusion

1. Unit was non-operational due to non-crushing season. Analysis results of samples collected from Ikra drain and bore well indicate no industrial impact. Unit was non-operational due to non-crushing season.
2. The unit has complied with recommendations of Joint Inspection report dated 02-03 Feb 2021 (detailed findings in above Part C) except following:

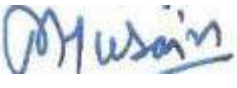
a. Unit has not reclaimed/filled up 4000 m^3 capacity lagoon near its agricultural fields completely. It was partially filled with mud and rainwater and HDPE lining still exists.
b. Unit has not implemented the suggestion to enhance capacity of water tank for filter backwashing The unit explained that the existing capacity has been sufficient which can be verified in periodic inspections of the unit in operational condition by UPPCB

3. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.

Recommendations:

1. The unit shall either cover the 4000 m3 capacity earthen lagoon, which was used for storing treated effluent in the past, with brick-lining or reclaim/fill up it completely.
2. Unit shall implement a system for interlocking of the pollution control plants / devices and the production process, as directed by Hon'ble NGT-PB.

Inspection Team

S.No.	Inspecting Officials	Signature
1.	Sh. Nazimuddin, Scientist 'F', DH- IPC-II, CPCB, Delhi	
2.	Mrs Reena Satavan, Scientist 'E', CPCB, Delhi	
3.	Sh. Vijay, Regional Officer UPPCB, Regional Office- Bijnor	
4.	Sh. Mahir Hussain, AEE, Regional Office-Bijnor	

Photographs

Fig 1: 10000 m3 brick-lined lagoon

Fig 2: Kaccha lagoon (4000 m^3)

Fig 3: Dismantled old pumping station

Fig 4: Pipeline from lagoon for irrigation

Fig 5: ETP scheme

Fig 6: STP scheme

Fig 7: City drain for seage within unit premises

Fig 8: Condensate Polishing Unit

Fig 9: Common stack for both boilers

Fig 10: Aeration

Fig 11: Pumps dismantled

Fig 12: Connecting line with old pumping station blocked

Fig 13: Freshwater line to ETP dismantled

Fig 14: STP inlet flowmeter

Fig 15: Dismantled sump

Fig 16: Entrance gate

Annexure-D

Detailed site visit report of M/s Dhampur Sugar mills limited Chemical Division., (Distillery Division) Dhampur District Bijnor on 16.10.2024

Part A: General Information

1.	**Name of the unit with complete postal address:**	Dhampur Sugar Mills Ltd., Chemical Unit Dhampur, Bijnor (UP) 246761
2.	**Spatial Co-ordinates (Latitude & longitude**	Latitude: 29.28548 Longitude: 78.51535
3.	**Category**	Molasses and Grain based Distillery
4.	**Operational Status**	Non-Operational (The unit provided a copy of vide letter dated 12.10.2024 wherein it has informed to UPPCB that the unit has closed down its manufacturing operations from 12.10.2024 due to non- availability of raw material (molasses & Grain).

Consent & EC Status (common for both molasses and grain based distillery)

5.	**Consent status**	The unit is having common Consolidated Consent to Operate under section 25 of the Water (Prevention and control of Pollution) Act, 1974 and under section 21 of the Air (Prevention and control of Pollution) Act, 1981 issued on 06.04.2023 for production of 455 KLD Ethanol/Rectified Spirit/ ENA by using B Heavy molasses / grain or 490 KLD Ethanol/Rectified Spirit/ ENA by using cane juice syrup, 140 KLD Ethyl Acetate and 10.5 MW cogeneration power which is valid upto 31.12.2027. Consolidated consent is attached at **Annexure-5A.**
6.	**Hazardous waste Authorization**	Authorization under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 issued on 16.05.2021, valid upto 16.05.2026. Hazardous waste authorization is attached at **Annexure- 5B.**
7.	**Environment Clearance (EC)**	Unit has provided a copy of Environmental Clearance dated 20.03.2019 issued by MoEF&CC for expansion of molasses/grain based distillery from 200 KLPD to 350 KPD. Copy of same is attached at **Annexure- 5C.**

Source of Fresh Water (Borewell common for both molasses and grain based distillery)

8.	**No. of bore well and flow meters installation status**	02 number of Borewells, both having electromagnetic flowmeters
9.	**No Objection Certificate (NOC) for groundwater abstraction from CGWA/UPGWD & its Validity with date**	• Unit has obtained NOC from UPGWD for groundwater abstraction from 02 nos. of Borewell, both NOCs having validity upto 05.04.2029. • As per NOC, the unit can abstract total 830375 KL/annum or 2275 KL/day of freshwater combined from both Borewells (Borewell 1: 438000 KL/annum and Borewell 2: 392375 KL/annum). Copy of NOC for groundwater abstraction is attached at **Annexure- 5D-a and 5D-b)** • As per the records provide by unit, the unit has abstracted fresh water @162.4 KLD during July to October 2024 (July-

		9082.7 kl, Aug-7280.6 kl, Sept. 9812.8 kl and Oct. 1977.9 kl)], which is within the permissible limit of 2275 KL/day mentioned in NOC.

Production process - Molasses based distillery

10.	**Raw material:** B-Heavy Molasses & C-heavy Molasses	
11.	**Production**	
	a. Consented value	100 KL per day (Dual mode) + 250 KL per day (molasses) =350 KL per day
12.	**Manufacturing Process** ***Molasses (raw material) – Fermentation – Distillation – Alcohol (product)***	
	a. Consented discharge condition	Zero Liquid Discharge (ZLD)
	b. Type of Fermentation technology adopted	Batch type
	c. Type of Distillation technology adopted	Multi pressure distillation (MPR)
13.	**Production process-Grain based distillery**	
	Raw material	Maize , Broken rice (grain)
	Consented Production value	100 KL per day
	Manufacturing Process ***Grain – Fermentation – Distillation – Alcohol (product)***	
	Consented discharge value	ZLD
	Type of Fermentation technology adopted	Batch type
	Type of Distillation technology adopted	Multi pressure distillation (MPR)

14.	**Effluent Management scheme** **a. For Molasses** High strength effluent: Raw Spent wash→ Multi-Effect Evaporator →Incineration boiler→Ash provided to third party for granulation Low strength effluent: Blowdowns from Cooling towers & boilers, Multi-Effect Evaporator condensate etc. → Condensate Polishing Unit (CPU) **b. For Grain** Multi-Effect Evaporator →Decanter →Dryer→Dry distillers grain soluble (DDGS) sold to vendors	
15.	**Details of Multi-Effect Evaporator (MEE) (for Molasses)**	
	a. No. of MEE	02 Numbers (Stand-alone Multi-Effect Evaporator & Integrated Multi-Effect Evaporator)
	b. Capacity and stages of MEE	02, 1260 falling film (4) and forced circulation (3) +2150 m^3/day falling film (4) and forced circulation
	Details of Multi-Effect Evaporator (MEE) (for Grain)	
	a. No. of MEE	01
	b. Capacity and stages of MEE	1080, Two Stage

16.	**Condensate Polishing Unit (common CPU for both grain and molasses distillery)**	
	a. CPU , Capacity	4500 KLD
	b. CPU Scheme Equalization-Anaerobic Treatment- Aerobic Treatment-Secondary Clarifier- MFG-ACF-UF-RO-UV	
	c. Use of treated Condensate	Cooling Tower Makeup + Fermentation
	d. CPU reject	MEE

17.	**Incineration Boiler (molasses based)**			
	a. Boiler capacity, fuel used, installed capacity, Air Pollution Control Device (APCD) installed and stack height			
	Boiler capacity	Fuel used	Air Pollution Control Device (APCD)	Stack height
	75 Ton Per Hour (TPH) (old incineration boiler)	Slop & Bagasse	Bag Filter	84 m
	55 Ton Per Hour (TPH) (new incineration boiler)	Slop & Bagasse	Electro Static Precipitator (ESP)	82 m
	b. Mode of ash disposal	Boiler Ash is provided to third party for granulation		
18.	**Dryer Details (Grain based)**			
	a. Dryer Capacity	70 TPD		
	b. No. of dryers	01		

19. **Lagoon Details:**

Presently there are 02 number of lagoon of total capacity 6000 m^3. The details are as below

No. of Lagoons	**Capacity (m^3)**	**Present Status**
Lagoon -1	2500	Filled with sludge and spent wash
Lagoon -2	3500	Raw spent was observed

Sewage Treatment

Unit has installed a STP of capacity 220 KLD which is common for treatment of sewage generated from industrial complex (Sugar & Distillery units) & residential colony. The details about the STP and sampling carried out by the joint team are incorporated in the relevant section of M/s Dhampur Sugar Mills Ltd., Sugar report. Also the analysis results of ground water sample are included in the report of sugar unit.

Part B: Verification of the recommendations of joint inspection report dated 26-03-2021

S. No	**Recommendations by Joint inspection report dated 26-03-2021**	**Verification by joint team as on date 16-10-2024**
1.	The unit has total 03 nos. of bore wells against 02 nos. of permitted borewells as per CGWA NOC. The unit shall	On the day of the visit, the joint team observed that the unit has dismantled 3rd borewell. ***(refer photograph no.2)***

	dismantle the 3rd non-operational borewell.	Now unit is having 02 nos. of permitted tube wells as per UPGWD NOC which is valid till 05.04.2029.
2.	The unit shall obtain hazardous waste authorization from the respective state pollution control board.	The unit has obtained authorization under the Hazardous and Other Waste (Management and Trans-Boundary Movement) Rules, 2016 vide letter dated 16-05-2021. The authorization is valid upto 16-05-2026**.** Copy of same is attached at **Annexure 5B.**
3.	The unit shall complete the construction work of STP at the earliest and shall treat the sewage generating from the residential colony as well as industrial plants in STP only.	The unit has installed STP of 220 KLD capacity and the same was found operational on the day of visit. The details of STP are mentioned in the sugar report.
4.	The unit shall ensure complete filling of both the (spent wash) lagoons of capacity 6159.60 KL and 10,173 KL with ash.	During visit both the lagoons of capacity 6159.60 KL and 10,173 KL were found filled and levelled with ash. ***(Refer photograph no. 6).***
5.	If the concerned state pollution control board allows the unit to carry out temporary bio-composting for utilization of bio-methanated sludge/spent wash, in that case the unit shall comply with the following: 1) The unit shall ensure to consume the bio-methanated spent wash in bio-composting before monsoon season. 2) After completion of the temporary bio-composting, the unit shall completely dismantle the pump sump of MEE concentrate, which is located at bio-compost yard of 10 acres. 3) After completion of the temporary bio-composting, the unit shall completely dismantle the newly built pipeline.	• UPPCB vide letter dated 23.02.2021 granted permission for the unit to consume the stored **30,000 KL** of bio-methanated spent wash through MEE followed by bio-composting between **05.03.2021 to 15.05.2021**. • Accordingly, unit informed that it has consumed bio-methanated spent wash in bio-composting after routing through MEE (log book attached). • Team verified the logbook and as per the records, the unit commenced its bio-composting cycle from 05.03.2021 to 15.05.2021, during which a total of 13,500 KL (approx. 50 % vol reduction) of concentrated spent wash was consumed. • During visit, it was observed that after consumption of bio-methanated spent wash, the unit has converted its bio-digester to molasses storage tank no.2 of capacity 10395.520 kl. (***refer photograph no.6)*** • No pipelines to carry spent wash were observed at the bio-composting yard as unit has dismantled all the pipelines.

		• The unit has dismantled and levelled the pump sump tank of MEE concentrate of capacity 300 kl. **(*refer photograph no. 3*)**

Part C: Verification of specific conditions of Environmental Clearance (EC):

The Unit has obtained Environment Clearance (EC) dated 20.03.2019 from Ministry of Environment, Forest & Climate Change (MoEF &CC) for expansion of molasses/grain based distillery from 200 KLPD to 350 KPD. During visit on 16.10.2024 team verified the compliance of the major EC conditions.

Point wise status of the EC conditions as mentioned under para 9 of EC dated 20.03.2019 is as follows:

Condition no. 9	**Status a on date 16.10.2024**
a) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	The unit has obtained the requisite **Consents** from the Uttar Pradesh Pollution Control Board (UPPCB). The details of the same are mentioned in above part A (point 6)
b) As already committed by the project proponent. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.	To maintain zero liquid discharge in molasses based distillery the unit has installed Multi effect evaporator followed by Incineration boiler. Further for treatment of condensate and other low strength effluent, the unit has installed a condensate polishing unit of capacity 4500m^3.However, during the site visit on **16.10.2024**, the unit was found non-operational due to non-availability of raw material and the zero liquor discharge status could not be verified.
c) Necessary authorization required under the Hazardous and Other Waste (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	The unit has obtained authorization under the Hazardous and Other Waste (Management and Trans-Boundary Movement) Rules, 2016, which is valid until **16-05-2026**. The details of the same are mentioned in above part A (point 7)
d) To control source and the fugitive emissions, suitable pollution control device shall be installed to meet the	The unit has installed **two slop-fired incinerator boilers** with capacities of **75** Ton Per Hour (TPH) and **55** Ton Per

prescribed norms and /or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Hour (TPH). To control air pollution, the unit has installed **Bag filters**, **Scrubber, and Electrostatic Precipitators (ESP)** systems along with the stacks of height 84 m & 82 m.
e) Total fresh water requirement shall not exceed 2275 cum/day proposed to be met from ground water. Prior Permission shall be obtained from the concerned regulatory authority/CGWA in this regard.	Unit has UPGWD NOC for groundwater abstraction for 02 no. of Borewell, having validity upto 05.04.2029 for combined abstraction of 830375 KL/annum or 2275 KL/day from both Borewell. The details of the same are mentioned in above part A (point 11)
(f) The spent wash shall be taken to multi effect evaporators (MEE) and the concentrated spent wash shall be incinerated in the boiler along with bagasse. & g) The distillery shall be permitted to operate throughout the year as proposed.	The unit has installed 02 Multi effect evaporators of capacity of 3419 KLD and 02 Incineration boilers of capacity 75 Ton Per Hour (TPH) & 55 Ton Per Hour (TPH). However due to non-availability of raw material unit was found non-operational.
k) The company shall undertake waste minimization measures as below: i. Metering and control of quantities of active ingredients to minimize waste. ii. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. iii. Use of automated filling to minimize spillage iv. Use of close feed system into batch reactors v. Venting equipment through vapour recovery system vi. Use of high pressure hoses for equipment clearing to reduce wastewater generation.	Waste minimization measures undertaken by the unit could not be verified as the unit was found non-operational on the day of visit.
l) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	Out of total plant area of 16 hectares (as per EC dated 20.03.2019), green belt has been developed on 5.4-hectare area i.e. 34.02 %. Both sugar and distillery unit were observed to be located within the same premises. During visit team observed that green belt is majorly developed near ETP & STP

	area, guest house and colony. Trees of guava, Sagwan, Shisham, Neem, Mango, Jamun, bamboo, babool, hibiscus etc. were observed along industry periphery.
o) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	The unit is having DG set of 750 KVA having stack height of 6 mtrs, however team observed that DG is not provided with acoustic enclosure. ***(refer photograph no. 8)***
q) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	As per the details provided by the unit, blood donation camp was organized on 15.06.2024 and eye checkup camp was held on 12.08.2024.
r) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places. & v) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.	Team observed that unit is having adequate parking space earmarked for various purposes.
s) Storage of raw materials shall be either stored in stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	It was observed that unit is storing the raw material in silos , however the same were found empty during visit.
t) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the date to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.	Unit has installed monitoring system for stack emissions on both Boilers of capacities 75 Ton Per Hour (TPH) & 55 Ton Per Hour (TPH) and is connected to CPCB & UPPCB server For online continuous monitoring of effluent, unit has installed 02 PTZ cameras and both are connected to CPCB & UPPCB server.

Inspections by third party institutes authorised by CPCB in the past

A third party technical institutes authorised by CPCB carried out annual inspection of the unit in operational condition on 15.01.202 & 18.03.2023 and the unit was found complying no effluent discharge condition during both inspections. The reports are attached at **Annexure 5 E & 5 F.**

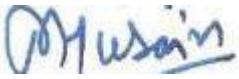
Conclusion:

1. Non-Operational due to non- availability of raw material (molasses & Grain).
2. The unit has complied with the recommendations of Joint Inspection report dated 02nd Feb 2021. Details of the same are mentioned in Part B of the report.
3. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part C. The unit has not compiled with the following conditions:
   a) DG is not provided with acoustic enclosure.

Recommendations

1. Unit shall provide acoustic enclosure at the DG set.

Inspection Team

S.No.	Inspecting Officials	Signature
1.	Sh. Nazimuddin, Scientist 'F', DH- IPC-II, CPCB, Delhi	
2.	Mrs Reena Satavan, Scientist 'E', CPCB, Delhi	
3.	Sh. Vijay, Regional Officer UPPCB, Regional Office- Bijnor	
4.	Sh. Mahir Hussain, AEE, Regional Office- Bijnor	

Photographs

Pic : 1 Entarance gate of the Unit

Pic:2 Dismantled 3rd borewell and concrete the area with cement

Pic: 3 Pump Sump system dismantled in bio-compost yard

Pic: 4 Silos for storage of grain

Pic: 5 Sewage Treatment Plant

Pic: 6 Levelled and filled lagoon of capacity 6159.60 m^3 &10173 m^3

Pic: 7 Sludge and spent wash found stored in settling tank of capacity 2500m3

Pic: 8 DG set

Pic: 9 boiler ash was found stored in bio-compost yard

Annexure VI

IN THE SUPREME COURT OF INDIA
CIVIL APPELLATE JURISDICTION

CIVIL APPEAL NO(S).5975/2021

M/S DHAMPUR BIO ORGANICS LIMITED & ORS. **Appellant(s)**

VERSUS

ADIL ANSARI & ORS. **Respondent(s)**

O R D E R

1. This appeal arises out of the judgment and order passed by the National Green Tribunal[1] dated 01.09.2021 in Original Application No.539 of 2019 as per which the Tribunal passed the following Order:

> **"157. We are further of the opinion that following directions are necessary for ensuring compliance of environmental norms by the units:-**
>
> **i.) All the Units must ensure continuous running of ETPs even during the non-crushing season for the adequate maintenance of required bio-mass so that the ETP is able to take the load/shock when it receives the pollution load/ effluent at the start of the crushing season.**
> **ii.) All the Units in question must provide for separate Energy Meter for entire ETP setup including its accessory units with data logging facility which shall be inspected by UPPCB and CPCB from time to time.**
> **iii.) UPPCB must ensure Interlocking of Pollution Control Devices with production processes (one way but not vice-versa) so as to ensure that whenever ETPs/PCDs are intentionally closed, the production also comes to halt.**

1"Tribunal"

iv.) Regular inspections should be carried out by the statutory authorities in both halves of the crushing season and also at least once in non-crushing season.

v.) Since the Asmoli Unit falls in the critical zone with respect to ground water withdrawal, an assessment of water recharge needs to be carried out by CGWA or UPGWB before issuance of NOC.

The Statutory Authorities are directed to ensure the above directions strictly so that industries may run without causing damage or loss to the environment as well as to the local inhabitants and farmers residing nearby the Units."

2. While issuing notice, this Court on 08.10.2021 passed an interim order to the following effect:

"Issue notice, returnable in six weeks.

In the meanwhile there will be a stay of the order impugned to restricted to the direction for payment of compensation of Rs.5,00,00,000/- (Rupees five crores only) in respect of each unit and to the costs of Rs.10,00,000/- imposed on the Respondent Nos. 1 to 3.

A committee may be constituted to make a detailed study as directed by the order impugned, but no further steps shall be taken by the Committee for a period of six weeks from date."

3. Pending disposal of the appeal on 06.09.2024, we directed for a joint report by the Central Pollution Control Board (CPCB) and the State Pollution Control Board indicating the compliances as per the directions of the National Green Tribunal.

4. In furtherance of our direction, a joint report dated 20.12.2024 is filed. The joint report speaks about the compliances rather non-compliances by the four units, the relevant portion of the report is as under:

"7.1 M/s Dhampur Bio Organics Ltd., Unit-Asmoli, District Sambhal(Sugar Unit)

Conclusion:

1. Unit was non-operational during joint site inspection by CPCB and UPPCB on 10.10.2024 due to non-crushing season. During survey of the surroundings of the unit and Sot river, no coloured water was visible at the time of visit.

2. The ground water sample analysis result does not indicate impact due to the industry.

3. The unit has complied with the recommendations of Joint Inspection report dated 13th January 2021. Details of the same are mentioned in Part C of the report.

4. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.

5. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part E of the report. The unit has not compiled with the following conditions:

i.No rainwater harvesting system was observed in the plant.
ii.Not installed CAAQMS.

Inspections by third party institutes authorised by CPCB in the past:

A third party technical institutes authorised by CPCB carried out inspection of the unit in operational condition on 20-02-2022 and 01-03-2023 and unit was found complying standards during both Inspections.

Recommendations:

1. The unit shall maintain the ash disposal record with respect to disposal and distribution.

2. Unit shall implement a system for interlocking of the pollution control plants / devices and the production process, as directed by Hon'ble NGT-PB.

3. UPPCB shall carry out random inspection of the unit in operational condition.

4. Unit shall comply with following EC conditions:

i. Install CAAQMS stations as per EC condition.

ii. Make provision for rain water harvesting as per EC condition.

7.2 M/s Dhampur Bio Organics Ltd., Unit-Meergani, District Bareilly (Sugar Unit)

Conclusion:

1. Unit was non-operational during joint site inspection by CPCB and UPPCB on 18.10.2024 due to non-crushing season. During survey of the surroundings of the unit and Sot river, no coloured water was visible at the time of visit.

2. The ground water sample analysis result does not indicate impact due to the industry.

3. The unit has complied with the recommendations of Joint Inspection report dated 13th January 2021. Details of the same are mentioned in Part C of the report.

4. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.

5. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part E. The unit has not compiled with the following conditions:

i. No rainwater harvesting system was observed in the plant.
ii. Not installed CAAQMS.

Inspections by third party institutes authorised by CPCB in the past:

A third party technical institutes authorised by CPCB carried out annual inspection of the unit in operational condition on 17-01-2022 and 15-02-2023 and unit was found complying standards during both

inspections.

Recommendations:

1. The unit shall maintain the ash disposal record with respect to disposal and distribution.

2. Unit shall implement a system for interlocking of the pollution control plants/devices and the production process, as directed by Hon'ble NGT-PB.

3. UPPCB shall carry out random inspection of the unit in operational condition.

4. Unit shall comply with following EC conditions:

i. Install CAAQMS stations as per EC condition.
ii. Make provision for rain water harvesting as per EC condition.

7.3 M/s Dhampur Sugar Mills Limited, Village Alhaipur, Tehsil Dhampur, District Bijnor (Sugar Unit)

Conclusion

1. Unit was non-operational during joint site inspection by CPCB and UPPCB on 16.10.2024 due to non-crushing season.

2. Analysis results of samples collected from Ikra drain and bore well indicate no industrial impact.

3. The unit has complied with recommendations of Joint Inspection report dated 02-03 Feb 2021 (detailed findings in Part C), except following:

a. Unit has not reclaimed/filled up 4000 m3 capacity lagoon near its agricultural fields completely. It was partially filled with mud and rainwater and HDPE lining still exists.

b. Unit has not implemented the suggestion to enhance capacity of water tank for filter backwashing. The unit explained that the existing capacity has been sufficient which can be verified in periodic inspections of the unit in operational condition by UPPCB.

4. The details of the verification of the directions of Hon'ble NGT passed vide judgement dated 01.09.2021 are mentioned in Part D of the report. Unit has

complied all the points except the directions regarding interlocking of Pollution Control Devices with production processes.

Inspections by third party institutes authorised by CPCB in the past

A third party technical institutes authorised by CPCB carried out annual inspection on 12-01-2022 and 14-02-2023. Unit was found not complying standards during inspection on 12-01-2022 and UPPCB issued show-cause notice to the unit on 22-02-2022 which was later withdrawn as unit was found complying standards in subsequent inspection by UPCB. Unit was found complying standards during inspection on 14-02-2023 by third party technical institute authorised by CPCB.

Recommendations:

1.The unit shall either cover the 4000 m3 capacity earthen lagoon, which was used for storing treated effluent in the past, with brick-lining or reclaim/fill up it completely.

2. Unit shall implement a system for interlocking of the pollution control plants / devices and the production process, as directed by Hon'ble NGT- PB.

3. UPPCB shall carry out random inspection of the unit in operational condition.

7.4 M/s Dhampur Sugar mills limited Chemical Division.,(Distillery Division) Dhampur District Bijnor on 16.10.2024

Conclusion:

1. Unit was non-operational during joint site inspection by CPCB and UPPCB on 16.10.2024 due to shortage of raw material (molasses & grain).

2. The unit has complied with the recommendations of Joint Inspection report dated 02nd Feb 2021. Details of the same are mentioned in Part B of the report.

Conclusion:3. The detailed compliance status of Environmental Clearance (EC) conditions is mentioned at Part C. The unit has not compiled with the following conditions:

a. DG is not provided with acoustic enclosure.

Inspections by third party institutes authorised by CPCB in the past:

A third party technical institutes authorised by CPCB carried out annual inspection of the unit in operational condition on 15.01.2022 and 18.03.2023 and the unit was found complying no effluent discharge condition during both inspections.

Recommendations:

1. Unit shall provide acoustic enclosure at the DG set.

2. UPPCB shall carry out random inspection of the unit in operational condition.

8. That in addition to the aforesaid submissions, it is humbly submitted that this Answering Respondent shall abide by any/all orders or directions passed by this Hon'ble Court."

5. It is evident from the above that there are certain directions of the National Green Tribunal which have been complied and some directions are not yet complied with. We are of the opinion that it would be appropriate if we direct the Tribunal to monitor the compliances and ensure that its judgment dated 01.09.2021 is fully implemented. After ensuring implicit compliances of the directions, the Tribunal may revisit the directions with respect to payment of compensation and pass such orders as may be necessary.

6. Before issuing any further directions, the Tribunal shall hear all the parties to the proceedings.

7. Pending disposal of the original application, the interim order(s) passed by this Court shall continue until modified by the National Green Tribunal, at its own discretion.

8. The Civil Appeal is disposed of in terms of the above.

.....J.
[PAMIDIGHANTAM SRI NARASIMHA]

.....J.
[MANOJ MISRA]

New Delhi
January 07, 2025.

ITEM NO.19 COURT NO.12 SECTION XVII

S U P R E M E C O U R T O F I N D I A
RECORD OF PROCEEDINGS

Civil Appeal No(s). 5975/2021

M/S DHAMPUR BIO ORGANICS LIMITED & ORS. Appellant(s)

VERSUS

ADIL ANSARI & ORS. Respondent(s)

(IA No. 123838/2021 - EXEMPTION FROM FILING C/C OF THE IMPUGNED JUDGMENT; IA No. 123839/2021 - EXEMPTION FROM FILING O.T.; IA No. 123836/2021 - STAY APPLICATION)

Date : 07-01-2025 These matters were called on for hearing today.

CORAM :
HON'BLE MR. JUSTICE PAMIDIGHANTAM SRI NARASIMHA
HON'BLE MR. JUSTICE MANOJ MISRA

For Appellant(s) Ms. Amita Gupta Katragadda, Adv.
Mr. Vikash Kumar Jha, Adv.
Ms. Namrata Sadhnani, Adv.
Ms. Ena Kapur, Adv.
M/S. Cyril Amarchand Mangaldas Aor, AOR

For Respondent(s) Ms. Aishwarya Bhati,, A.S.G.
Ruchi Kohli, Adv.
Swarupama Chaturvedi, Adv.
Chitrangda Rastravara, Adv.
Shraddha Deshmukh, Adv.
Dr. N. Visakamurthy, AOR

Mr. Saurabh Mishra, AOR
Mr. Shrimay Mishra, Adv.
Mr. Nirbhaya S Tewari, Adv.
Mr. Rakesh Chander, Adv.

Mr. Pradeep Misra, AOR
Mr. Daleep Dhyani, Adv.
Mr. Suraj Singh, Adv.

Ms. Preeti Singh, AOR

UPON hearing the counsel the Court made the following
O R D E R

1. The Civil Appeal is disposed of in terms of the signed order.

2. Pending application(s), if any, shall stand disposed of.

(INDU MARWAH)
AR-cum-PS

(NIDHI WASON)
COURT MASTER (NSH)

(Signed order is placed on the file)