Letter No.-NGT-236/81-7-2024

From,

Ashok Kumar Pandey,
Deputy Secretary,
Environment, Forest and Climate Change Department,
State of Uttar Pradesh.

To,

The Registrar General,
Hon'ble, National Green Tribunal,
Principal Bench,
Faridkot House, Copernicus Marg,
New Delhi- 110001

Environment, Forest & Climate Change Section-7

Lucknow : Dated : 08 April, 2024

Sub:- Compliance Report of Hon'ble National Green Tribunal order dated 29.01.2024 passed in O.A. No. 632/2022 V.K. Tyagi Vs State of Uttarakhand.

Sir,

In compliance of order dated 29.01.2024 passed by the Hon'ble National Green Tribunal, New Delhi in O.A. No. 632/2022 V.K. Tyagi Vs State of Uttarakhand, the Compliance Report on behalf of State of Uttar Pradesh is being annexed herewith.

It is requested that the afforesaid Compliance Report be presented before the Hon'ble Tribunal for kind perusal and consideration.

Encl:- As above.

Your Sincerely,

Digitally Signed by अशोक कुमार पाण्डेय
Date: 08-04-2024 15:10:46
Reason: Approved

(Ashok Kumar Pandey)
Deputy Secretary.

Copy to:.- Mr. Bhanwar Pal Singh Jadon, Standing Counsel Govt. of Uttar Pradesh, Hon'ble National Green Tribunal, New Delhi.

Compliance Report in pursuance to the Order dated 29.01.2024 passed by the Hon'ble National Green Tribunal in the matter of O.A. No. 632/2022, V.K. Tyagi Vs State of Uttarakhand

1. That with reference to the O.A. No. 632/2022 V.K. Tyagi Vs State of Uttarakhand, Hon'ble NGT on 29.01.2024 issued the following directions :

"..... 6. Mr. Vikas Tyagi, Executive Engineer, Irrigation Department has appeared online by submitting that he is appearing for Respondent No. 7. Respondent no. 7 is the Chief Secretary of the State of Uttar Pradesh. On the previous date on 10.10.2023, the Counsel for Respondent Nos. 7 to 9 had sought time to file response. No response has been filed on behalf of respondent no. 7. Page 241 of the paper-book has been referred by the Executive Engineer as also Counsel for the State submitting that it is response of the respondent no. 7 but on perusal thereto, we do not find it to be the response as Page 241 appears to be some unsigned, undated note and page 242 and 243 are some internal correspondences. Hence, the previous order of the Tribunal has not been complied with. Learned Counsel for State of UP submits that he is representing respondent no. 7. The Tribunal does not appreciate the practice of any Officer appearing at the instance of any other Officer and making the submission without Tribunal's direction though the concerned impleaded Officer is already represented though the Counsel. Learned Counsel for respondent no. 7 submits that response on behalf of respondent no. 7 will be filed within one week.

7. The response of NMCG has been filed stating the following:-

> *"5. That the concerned activities along the Sonali river falls under the administrative control and maintained by the Irrigation department of the State of U.P. However, over a period of time,*

the direction of river flow has moved towards agricultural land belonging to the private individual person.

6. That the State Government may take necessary steps for Interception & Diversion (I&D) of the above mentioned drains to the existing STP as the existing STP in Roorkee is hardly getting 20% of its design capacity flows at present.

7. That as regards the flood plain zonation, the necessary steps may also be taken by the State Government."

8. It will be open to the State Authorities to duly consider the response of the NMCG and take appropriate remedial action and also to file their proposed action/action taken report in pursuance to the response of the NMCG.

9. List this matter on 10.04.2024."

2. That in compliance to the direction of Hon'ble Tribunal dated 05.07.2023, 10.10.2023 and 29.01.2024, Department of Environment, Forest and Climate Change (DoEF&CC), Government of Uttar Pradesh (GoUP) directed to Principal Secretaries of Namami Gange and Irrigation & Water Resources Departments of GoUP to comply with the directions and file the compliance before Hon'ble Tribunal vide letters dated 21.07.2023, 03.01.2024 and 19.03.2024. Copies of these letters issued by DoEF&CC, GoUP are enclosed as **Annexure 1,2 &3**.

3. That in compliance to the directions of Hon'ble Tribunal, the Action Taken Report of GoUP as provided by the respective departments is as follows-

a) **Compliance Status provided by the Irrigation and Water Resource Department, GoUP:**

That in response to the letter No. NGT-98/81-7-2024, dated-19.03.2024 issued by the Under Secretary, Environment, Forest and Climate Change, Section- 7, U.P., the Joint Secretary, Irrigation and Water Resources, Section-4, U.P. vide his letter No. 776/24-27-सिं-4-14(रिट)(N-G.T.)/2023 C.N.-1749961, dated-28.03.2024 has provided the compiled information related to the action Plan for demarcation of Flood Plain Zone and removal of encroachments of Solani River as under :

S.No.	Details of Activity	Northern Division Ganga Canal, Roorkee		Drainage Division – I st, Meerut,		Irrigation Construction Division, Saharanpur	
		Reach – 1.500 km (1 km in u/s and 0.5 km in d/s of Solani Aqueduct)		Reach – 40 km length from confluence point		Reach – 21 km length from origin	
		Proposed Time Line	Remarks	Proposed Time Line	Remarks	Proposed Time Line	Remarks
1	Removal of encroachments from the water way of river Solani in segment comes under the control of Uttar Pradesh Irrigation and Water Resources Department.	Up to 11.04.2023	Completed/ Rechecking is being done	No encroachment		-	-
2	Preliminary survey	Up to 15.06.2024	-	Upto 30.06.2024	-	Upto 30.06.2024	-

	and Temporary demarcation of river land with coordination of Revenue Department/ Irrigation Department of Uttarakhand/ Uttar Pradesh State Government.						
3.	Ascertain of Flood Plain Zone considering with the observed / evaluated discharge at 1:25, 1:50 and 1:100 years frequency as deemed fit for this area; and establishment of boundary pillars.	Upto 30.09.2024	-	Upto 30.09.2024	-	Up to 30.09.2024	-

The copy of the letter No. 776/24-27-सिं-4-14(रिट)(N-G.T.)/2023 C.N.-1749961, dated-28.03.2024 issued by Joint Secretary, Irrigation and

Water Resources, Section-4, U.P. along with all the enclosures is enclosed as **Annexure 4**.

Compliance Status provided by the U.P. Pollution Control Board:

i. That with respect to pollution source mapping of Solani River, Regional Officer, U.P. Pollution Control Board, Muzaffarnagar has sent a report dated 03.04.2024 which relies mainly on the Report of Joint Committee constituted vide order dated 14.08.2023 Passed by Hon'ble NGT in OA No. 495/2023 Mohd. Amjad Vs. State of Uttar Pradesh & Ors. with O.A. No. 530/2022 Anuj Kumar Vs. State of Uttarakhand & Ors. The copy of the report of Regional Officer, Muzaffarnagar dated 03.04.2024 is enclosed as **Annexure 5**.

ii. That O.A. No. 495/2023 Mohd. Amjad Vs State of Uttar Pradesh & Ors. with O.A. no. 530/2022 Anuj Kumar Vs State of Uttarakhand & Ors. is presently under consideration before Hon'ble NGT which relates to the water pollution in river Solani and river Ban Ganga originating from Uttarakhand and passing through District Muzaffarnagar. In compliance to the directions of Hon'ble NGT in the aforesaid O.A.'s, the joint committee comprising of Central Pollution Control Board (CPCB), Uttar Pradesh Pollution Control Board (UPPCB), Uttarakhand Pollution Control Board (UKPCB), Ministry of Environment, Forest & Climate Change (MoEFCC), National Mission for Clean Ganga (NMCG) and District Administration, Uttarakhand & Uttar Pradesh conducted site surveys from Roorkee (Uttarakhand) till downstream of Shukratal (Muzaffarnagar) of river Ban Ganga, river Solani and river Ganga passing through Shukratal. The joint survey was conducted on 14-

15 September 2023 and post-monsoon committee visited on 11-12 October, 2023.

iii. The joint committee during the survey, inspected several points/villages from where the river Ban Ganga and river Solani passes from Roorkee till d/s of Shukratal with the objective to conduct pollution source mapping of both rivers. Several samples were collected from both the rivers traversing from the area of Uttarakhand and Uttar Pradesh. A joint report was prepared with all the facts and pollution source, mapping of rivers and the report was submitted to Hon'ble NGT by the joint committee. The joint committee report is enclosed as **Annexure 6**.

iv. That the Solani River originates from the Himalayan foothills, near Dehradun and runs along an approximate length of 145 km through Biharigarh, Bhagwanpur, Roorkee, Laksar city/towns of State of Uttarakhand before its confluence into River Banganga at upstream of Shukratal. River Solani is a rain fed river. For pollution source mapping, joint team carried out monitoring and sampling of River during October 11 to 12, 2023. During the pollution mapping and exploratory survey, the course of Solani river was mapped from upstream of Roorkee till confluence into the River Banganga.

v. That four samples from River Solani and one sample from the tributary River Ratmau were collected to analyze the status of river water quality and to understand the characteristics of possible polluting sources at different locations along the course of the river.

vi. That during mapping joint teams observed that apart from rain water, the river receives discharge of untreated sewage from major towns (Bhagwanpur, Roorkee) and several villages along its stretch including discharge of treated sewage from 33 MLD STP in Roorkee city and all the above fall in the State of Uttarakhand. **Therefore, as per the detailed survey done by the Joint Committee, source of pollution of River Solani does not exist in State of Uttar Pradesh.**

4. That the State of Uttar Pradesh is committed and taking all necessary steps for maintaining the water quality of River Solani.

Therefore, the compliance report for the State of Uttar Pradesh alongwith its respective annexure is being filed for the perusal and consideration of this Hon'ble Tribunal.

Lucknow :

Dated :08 April, 2024

(Ashok Kumar Panday)
Deputy Secretary,
Department of Environment,
Forest & Climate Change,
State of Uttar Pradesh.

Annexure - 1

File No:81-7005(099)/52/2023-07-,

उत्तर प्रदेश शासन
पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग–7
संख्या–मु0स0–54/81–7–2023
लखनऊ : दिनांक : 21 जुलाई, 2023

अपर मुख्य सचिव/प्रमुख सचिव,
सिंचाई एवं जल संसाधन/
नमामि गंगे एवं ग्रामीण जलापूर्ति विभाग,
उ0प्र0 शासन।

कृपया मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0 संख्या–632/2022 वी.के. त्यागी बनाम उत्तराखण्ड राज्य व अन्य में पारित मा0 अधिकरण के आदेश दिनांक 05.07.2023 का अवलोकन करने का कष्ट करें, जिसके सुसंगत अंश निम्नवत् है :–

".....4. In view of these facts and circumstances of the case, we consider the presence of the State of Uttar Pradesh through Chief Secretary Government of Uttar Pradesh, the Ministry of Jal Shakti and the Central Water Commission to be essential for just and proper adjudication of the questions involved and they are impleaded as respondents no. 7 to 9. The Registry is directed to amend the memo of parties to the application. Notices be issued to newly impleaded respondents no. 7 to 9 requiring them to file their reply/response within two months by email at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.

5. Learned Counsel for the State of Uttarakhand seeks time to file additional reply giving details of further action taken.

6. Additional reply on behalf of State of Uttarakhand be also filed within two months by email at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.

7. List for further consideration on 10.10.2023."

2– उल्लेखनीय है कि प्रश्नगत प्रकरण में श्री वी.के. त्यागी, निवासी चाउ मंडी, रूड़की, हरिद्वार, उत्तराखंड द्वारा प्रेषित पत्र याचिका, जिसे मूल आवेदन मानकर पंजीकृत किया गया है, में शिकायत की गयी है कि गंगा नदी की सहायक नदी सोनाली की जमीन पर खेती के लिए अतिक्रमण कर लिया गया है, जिससे गंगा के प्रवाह में बाधा उत्पन्न हो रही है। सोनाली नदी में अनुपचारित सीवेज भी छोड़ा जा रहा है, जिससे मछलियाँ और अन्य जलीय जीव मर रहे हैं। नदी को नाले में बदल दिया गया है, जो भूजल को प्रदूषित कर रहा है फलतः पर्यावरण का क्षरण हो रहा है।

प्रकरण में मा0 अधिकरण द्वारा पारित उक्त आदेश के अनुपालन में कार्यवाही सिंचाई एवं जल संसाधन विभाग तथा नमामि गंगे एवं ग्रामीण जलापूर्ति विभाग के स्तर से की जानी है।

3– अतः इस संबंध में मुख्य सचिव कार्यालय, उ0प्र0 शासन के पत्र संख्या–1097/

पी.एस.एम.एस./एस.ओ./2023, दिनांक 14.07.2023 एवं पत्र संख्या–1100/पी.एस.एम.एस./एस.ओ./2023, दिनांक 14.07.2023 की छायाप्रति संलग्न कर प्रेषित करते हुए अनुरोध है कि प्रश्नगत प्रकरण में मा0 अधिकरण द्वारा पारित आदेश दिनांक 05.07.2023 के अनुपालन में समयान्तर्गत आवश्यक कार्यवाही सुनिश्चित करते हुए कृत कार्यवाही से मुख्य सचिव कार्यालय, उ0प्र0 शासन तथा पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, उ0प्र0 शासन को तत्काल अवगत कराने का कष्ट करें।

संलग्नक–यथोक्त।

Signed by मनोज सिंह
Date: 21-07-2023 16:57:16
Reason: Approved

(मनोज सिंह)
अपर मुख्य सचिव।

संख्या एवं दिनांक तदैव

प्रतिलिपि–सदस्य सचिव, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ को मुख्य सचिव कार्यालय, उ0प्र0 शासन के उक्त पत्रों दिनांक 14.07.2023 की छायाप्रति सहित सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

आज्ञा से,

(मनोज सिंह)
अपर मुख्य सचिव।

Annexure - 2

File No.81-7005(099)/52/2023-07-, **23**

I/461990/2024

उत्तर प्रदेश शासन
पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग–7
संख्या–एन.जी.टी.–619/81–7–2023
लखनऊ : दिनांक : 03 जनवरी, 2024

अपर मुख्य सचिव/प्रमुख सचिव,
सिंचाई एवं जल संसाधन/
नमामि गंगे एवं ग्रामीण जलापूर्ति विभाग,
उ0प्र0 शासन।

कृपया ओ0ए0 संख्या–632/2022 वी.के. त्यागी बनाम उत्तराखण्ड राज्य व अन्य में पारित मा0 अधिकरण के आदेश दिनांक 10.10.2023 का अवलोकन करने का कष्ट करें, जिसके सुसंगत अंश निम्नवत् हैं :–

"1. Reply has been filed by respondent no. 6-District Magistrate, Haridwar vide email dated 25.09.2023.

2. As per office report notices have been duly served on newly added respondents no. 7 to 9- the State of U.P., the Ministry of Jal Shakti and the Central Water Commission respectively.

3. Mr. Ankit Verma, Advocate has appeared for respondent no. 7-State of U.P. and Mr. Gi Gi George, Advocate has appeared respondents No. 8 and 9- Ministry of Jal Shakti (NMCG) and the Central Water Commission.

4. Learned counsel for respondents no. 1 to 4 and 6 seeks time to file additional reply on their behalf.

5. Learned counsel for respondents no. 7 to 9 also seek time to file reply/response on their behalf.

6. Additional reply by the State of Uttarakhand and replies/responses by respondents no. 7 to 9 be filed within two months by email at judicialngt@gov.inpreferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.

7. List for further consideration on 29.01.2024."

2– अवगत कराना है कि प्रश्नगत प्रकरण में मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा पारित आदेश दिनांक 05.07.2023 के अनुपालन में कार्यवाही सिंचाई एवं जल संसाधन विभाग तथा नमामि गंगे एवं ग्रामीण जलापूर्ति विभाग के स्तर से की जानी थी। तत्क्रम में पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग–7, उ0प्र0 शासन के पत्र संख्या–मु0स0– 54/81–7–2023, दिनांक 21.07.2023 द्वारा मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0 संख्या–632/2022 वी.के. त्यागी बनाम उत्तराखण्ड राज्य व अन्य में पारित मा0 अधिकरण के आदेश दिनांक 05.07.2023 के अनुपालन में समयान्तर्गत आवश्यक कार्यवाही सुनिश्चित करते हुए कृत कार्यवाही से मुख्य सचिव कार्यालय, उ0प्र0 शासन तथा पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, उ0प्र0 शासन को तत्काल अवगत कराने का अनुरोध किया गया है। वांछित कृत कार्यवाही की सूचना अद्यतन अप्राप्त है।

3– शासन के उक्त पत्र दिनांक 21.07.2023 द्वारा प्रकरण में पारित मा0 अधिकरण के पूर्व आदेश दिनांक 05.07.2023 के अनुपालन में किये गये अनुरोधानुसार सिंचाई एवं जल संसाधन विभाग तथा नमामि गंगे एवं ग्रामीण जलापूर्ति विभाग द्वारा कोई कार्यवाही न करते हुए उत्तर/रिस्पॉन्स दाखिल नहीं किया गया और न ही राज्य की ओर से सुनवाई के दौरान कोई उपस्थित हुआ।

4— उल्लेखनीय है कि प्रश्नगत प्रकरण गंगा नदी की सहायक नदी सोनाली की जमीन पर खेती के लिए अतिक्रमण करने से संबंधित है, जिससे गंगा के प्रवाह में बाधा उत्पन्न हो रही है। सोनाली नदी में अनुपचारित सीवेज भी छोड़ा जा रहा है, जिससे मछलियाँ और अन्य जलीय जीव मर रहे हैं। नदी को नाले में बदल दिया गया है, जो भूजल को प्रदूषित कर रहा है फलतः पर्यावरण का क्षरण हो रहा है।

प्रकरण में मा0 अधिकरण द्वारा पारित उक्त आदेश के अनुपालन में कार्यवाही सिंचाई एवं जल संसाधन विभाग तथा नमामि गंगे एवं ग्रामीण जलापूर्ति विभाग के स्तर से की जानी है।

5— अतः इस संबंध में श्री अंकित वर्मा, स्टैण्डिंग काउंसेल, उ0प्र0 राज्य के पत्र दिनांक 18.10.2023 एवं प्रकरण में पारित मा0 अधिकरण के आदेश दिनांक 10.10.2023 की छायाप्रति संलग्न कर प्रेषित करते हुए अनुरोध है कि प्रश्नगत प्रकरण में मा0 अधिकरण द्वारा पारित आदेश दिनांक 05.07.2023 एवं 10.10.2023 के अनुपालन में समयान्तर्गत उत्तर/रिस्पॉन्स दाखिल करते हुए कृत कार्यवाही की सूचना से मुख्य सचिव कार्यालय, उ0प्र0 शासन तथा पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, उ0प्र0 शासन (Email-soenvups@rediffmail.com) को तत्काल अवगत कराने का कष्ट करें।

संलग्नक—यथोक्त।

Digitally Signed by मनोज सिंह
(मनोज सिंह)
Date: 30.12.2024 16:20:39
Reason: Approved
अपर मुख्य सचिव।

संख्या एवं दिनांक तदैव

प्रतिलिपि – सदस्य सचिव, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ को उनके पत्र संख्या—जी—42010/सी—3/एनजीटी—357/2023, दिनांक 24.11.2023 के संदर्भ में श्री अंकित वर्मा, स्टैण्डिंग काउंसेल, उ0प्र0 राज्य के पत्र दिनांक 18.10.2023 एवं प्रकरण में पारित मा0 अधिकरण के आदेश दिनांक 10.10.2023 की छायाप्रति सहित आवश्यक कार्यवाही हेतु प्रेषित।

आज्ञा से,

(मनोज सिंह)
अपर मुख्य सचिव।

बैठक दिनांक 21.03.2024 को मध्यान्ह 12:00 बजे
संख्या–एन0जी0टी0–98/81–7–2024

प्रेषक,

देवेन्द्र सिंह चौहान,
अनु सचिव,
उ0प्र0 शासन।

सेवा में,

1– **अपर मुख्य सचिव/प्रमुख सचिव,**
सिंचाई एवं जल संसाधन/
नमामि गंगे एवं ग्रामीण जलापूर्ति विभाग,
उ0प्र0 शासन।

2– **सदस्य सचिव,**
उ0प्र0 प्रदूषण नियंत्रण बोर्ड,
लखनऊ।

पर्यावरण, वन एवं जलवायु पविर्तन अनु–7 **लखनऊ : दिनांक : 19 मार्च, 2024**

विषय–मा0 एन0जी0टी0 नई दिल्ली में विचाराधीन ओ0ए0 संख्या–623/2022 वी.के. त्यागी बनाम उत्तराखण्ड राज्य व अन्य में पारित आदेश दिनांक 29.01.2024 के अनुपालन के संबंध में बैठक।

महोदय,

उपर्युक्त विषयक शासन के पत्र संख्या–एन0जी0टी0–619/81–7–2023, दिनांक 03.01.2024 का संदर्भ ग्रहण करने का कष्ट करें, जिसमें मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0 संख्या–623/2022 वी.के. त्यागी बनाम उत्तराखण्ड राज्य व अन्य में पारित मा0 अधिकरण के आदेश दिनांक 10.10.2023 के अनुपालन में समयान्तर्गत उत्तर/रिस्पॉस दाखिल करते हुए कृत कार्यवाही की सूचना से मुख्य सचिव कार्यालय उ0प्र0 शासन तथा वन, पर्यावरण एवं जलवायु परिवर्तन विभाग, उ0प्र0 शासन को तत्काल अवगत कराने का अनुरोध किया गया है।

2– मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0 संख्या–623/2022 वी.के. त्यागी बनाम उत्तराखण्ड राज्य व अन्य में पारित मा0 अधिकरण के आदेश दिनांक 29.01.2024 के सुसंगत अंश निम्नवत् हैं:–

".....6. Mr. Vikas Tyagi, Executive Engineer, Irrigation Department has appeared online by submitting that he is appearing for Respondent No. 7. Respondent no. 7 is the Chief Secretary of the State of Uttar Pradesh. On the previous date on 10.10.2023, the Counsel for Respondent Nos. 7 to 9 had sought time to file response. No response has been filed on behalf of respondent no. 7. Page 241 of the paper-book has been referred by the Executive Engineer as also Counsel for the State submitting that it is response of the respondent no. 7 but on perusal thereto, we do not find it 3 to be the response as Page 241 appears to be some unsigned, undated note and page 242 and 243 are some internal correspondences. Hence, the previous order of the Tribunal has not been complied with. Learned Counsel for State of UP submits that he is representing respondent no. 7. The Tribunal does not appreciate the practice of any Officer appearing at the instance of any other Officer and making the submission without Tribunal's direction though the concerned impleaded Officer is already represented though the Counsel. Learned Counsel for respondent no. 7 submits

that response on behalf of respondent no. 7 will be filed within one week.

7. The response of NMCG has been filed stating the following:-

> *"5. That the concerned activities along the Sonali river falls under the administrative control and maintained by the Irrigation department of the State of U.P. However, over a period of time, the direction of river flow has moved towards agricultural land belonging to the private individual person.*
>
> *6. That the State Government may take necessary steps for Interception & Diversion (I&D) of the above mentioned drains to the existing STP as the existing STP in Roorkee is hardly getting 20% of its design capacity flows at present.*
>
> *7. That as regards the floodplain zonation, the necessary steps may also be taken by the State Government."*

8. It will be open to the State Authorities to duly consider the response of the NMCG and take appropriate remedial action and also to file their proposed action/action taken report in pursuance to the response of the NMCG.

9. List this matter on 10.04.2024."

3– प्रश्नगत वाद में राज्य (प्रतिवादी संख्या–7, मुख्य सचिव, उ0प्र0 शासन) की ओर से एक्शन टेकन रिपोर्ट/रिस्पॉस मा0 एन0जी0टी0 में दाखिल किया जाना है। **प्रकरण में अगली सुनवाई दिनांक 10.04.2024 को नियत है।**

3– अतः इस संबंध में मुझे यह कहने का निदेश हुआ है कि प्रश्नगत प्रकरण में विचार विमर्श हेतु **सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन विभाग की अध्यक्षता में बापू भवन स्थित उनके कार्यालय कक्ष संख्या–609 में एक बैठक दिनांक 21.03.2024 को मध्यान्ह 12:00 बजे आहूत की गयी है।**

अतः अनुरोध है कि प्रश्नगत बैठक में अपने–अपने विभाग से संबंधित बिन्दुओं पर सूचना/अनुपालन आख्या सहित ससमय प्रतिभाग करने का कष्ट करें। ताकि प्रकरण में समेकित रूप से एक्शन टेकन रिपोर्ट समयान्तर्गत मा0 एन0जी0टी0 में दाखिल कराये जाने की कार्यवाही की जा सके।

भवदीय,

Digitally Signed by
देवेन्द्र सिंह चौहान
Date: 19-03-2024 18:03:07
Reason: Approved

(देवेन्द्र सिंह चौहान)
अनु सचिव।

<u>संख्या एवं दिनांक तदैव</u>

प्रतिलिपि – निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :–

1– निजी सचिव, सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, उ0प्र0 शासन।

2– पास कार्यालय, बापू भवन, उ0प्र0 सचिवालय को इस अनुरोध के साथ प्रेषित कि प्रश्नगत बैठक में प्रतिभाग करने वाले अधिकारीगण को पास निर्गत करने का कष्ट करें।

आज्ञा से,

(देवेन्द्र सिंह चौहान)
अनु सचिव।

उत्तर प्रदेश शासन

सिंचाई एवं जल संसाधन अनुभाग-4

संख्या–776/24-27-सिं०-4-14(रिट)(एन 0 जी0 टी0)/2023C.N-1749961

लखनऊ दिनांक: 28/03/2024

सचिव,

पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग-7,

उत्तर प्रदेश शासन।

कृपया अनु सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग-7,उ 0 प्र 0 शासन के पत्र संख्या–एन 0 जी0 टी0-98/81-7-2024 दिनांक 19 मार्च, 2024 का कृपया सन्दर्भ ग्रहण करने का कष्ट करें, जिसके माध्यम से मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ 0 ए 0 संख्या-632/2022 वी0 के0 त्यागी बनाम उत्तराखण्ड राज्य व अन्य के सम्बन्ध में पारित मा0 अधिकरण के आदेश दिनांक 29.01.2024 के सम्बन्ध में आवश्यक कार्यवाही किये जाने की अपेक्षा की गयी थी। उक्त के क्रम में मुख्य अभियन्ता (जल संसाधन), कार्यालय प्रमुख अभियन्ता, सिंचाई एवं जल संसाधन विभाग, उ 0 प्र 0 लखनऊ के पत्र संख्या-152/मु0 अ 0(ज 0 सं0)अनिमं-1/अनिख-3, दिनांक 28 मार्च, 2024 द्वारा सिंचाई विभाग से सम्बन्धित बिन्दुओं पर सूचना उपलब्ध करायी गयी है। उपलब्ध करायी गयी आख्या/अद्यतन रिपोर्ट संलग्न कर सूचनार्थ एवं आवश्यक अग्रिम कार्यवाही हेतु प्रेषित है।

संलग्नक: यथोक्त।

Digitally Signed by अमित प्रणव
Date: 28-03-2024 19:06:38
Reason: Approved

(अमित प्रणव)
संयुक्त सचिव

संख्या- 776 (I)/ 24-27-सिं0-4 तद्दिनांक

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित:-

1. प्रमुख अभियन्ता एवं विभागाध्यक्ष, सिंचाई एवं जल संसाधन विभाग, उ 0 प्र 0 लखनऊ।
2. मुख्य अभियन्ता (जल संसाधन), सिंचाई एवं जल संसाधन विभाग, उत्तर प्रदेश, लखनऊ।
3. मुख्य अभियन्ता (गंगा), सिंचाई एवं जल संसाधन विभाग, उत्तर प्रदेश, मेरठ।
4. मुख्य अभियन्ता (यमुना), सिंचाई एवं जल संसाधन विभाग, उत्तर प्रदेश, ओखला।

आज्ञा से,

2778/29/2024/ -4

मुख्य अभियन्ता(जल संसाधन),
कार्यालय प्रमुख अभियन्ता,
सिंचाई एवं जल संसाधन विभाग, उ0प्र0,
लखनऊ।

प्रेषित,

संयुक्त सचिव,
सिंचाई एवं जल संसाधन अनुभाग–4,
उ0 प्र0 शासन, लखनऊ ।

पत्रांक:15/मु0अ0(ज0सं0)अनिमं–1/अनिख–3, दिनांक 28 मार्च, 2024

विषयः–मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0 सं0–632/2022 वी0 के0 त्यागी बनाम उत्तराखण्ड राज्य व अन्य के सम्बन्ध में पारित मा0 अधिकरण के आदेश दिनांक 29.01.2024 के अनुपालन के सम्बन्ध में।

संदर्भः–उप सचिव, सिंचाई एवं जल संसाधन अनुभाग–4, उ0प्र0 शासन, लखनऊ के पत्र संख्या–720/24–27–सिं–4–14(रिट)(एन0जी0टी0)/2023, दिनांक 20.03.2024

महोदय,

कृपया उपरोक्त विषयक संदर्भित शासकीय पत्र के साथ संलग्न पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग–7 का पत्र संख्या–एन.जी.टी.–98/81–7–2023, दिनांक–19.03.2024 का अवलोकन करने का कष्ट करें, जिसके द्वारा प्रश्नगत वाद में राज्य (प्रतिवादी संख्या–7, मुख्य सचिव, उ0प्र0 शासन) की ओर से एक्शन टेकन रिपोर्ट/रिस्पॉस मा0 एन0जी0टी0 में दाखिल किये जाने के सम्बन्ध में सिंचाई विभाग से सम्बन्धित बिन्दुओं पर संकलित सूचना/अनुपालन आख्या उपलब्ध कराने हेतु निर्देशित किया गया है।

तत्क्रम में मुख्य अभियन्ता (गंगा), सिंचाई एवं जल संसाधन विभाग, उ0प्र0, मेरठ का पत्रॉक–2691/मु0 अ0गंगा/एन0जी0टी0 दिनॉक–26.03.2024 (छायाप्रति संलग्नकों सहित संलग्न) एवं मुख्य अभियन्ता (यमुना), सिंचाई एवं जल संसाधन विभाग, उ0प्र0, ओखला का पत्रॉक–नि–610/मु0अ0य0ओ0/एन0जी0टी0, दिनॉक–27.03.2024 (छायाप्रति संलग्नकों सहित संलग्न) द्वारा सिंचाई विभाग से सम्बन्धित बिन्दुओं पर सूचना/अनुपालन आख्या उपलब्ध कराई गयी है, जो निम्नवत् है।

मुख्य अभियन्ता (गंगा) द्वारा अवगत कराया गया है कि उनके नियंत्रणाधीन खण्डों उत्तरी खण्ड गंगा नहर, रूडकी के कार्य क्षेत्रान्तर्गत सोलानी नदी 1.500 किमी0 लम्बाई में एवं ड्रेनेज खण्ड प्रथम, मेरठ के कार्य क्षेत्रान्तर्गत 40.00 कि०मी० लम्बाई में प्रवाहित होती है।

मुख्य अभियन्ता (यमुना) द्वारा अवगत कराया गया है कि उनके नियंत्रणाधीन खण्ड सिंचाई निर्माण खण्ड, सहारनपुर के कार्य क्षेत्रान्तर्गत सोलानी नदी उद्गम स्थल से 21.00 किमी0 लम्बाई में प्रवाहित होती है।

उपरोक्त संगठनों द्वारा सोलानी नदी के फ्लड प्लेन जोन निर्धारण का एक्शन प्लान उपलब्ध कराया गया है, जो निम्नवत् हैः–

S. No	Details of Activity	Northern Division Ganga Canal, Roorkee		Drainage Division – I st , Meerut.		Irrigation Construction Division, Saharanpur.	
		Reach – 1.500 km (1 km in u/s and 0.5 km in d/s of Solani Aqueduct)		Reach – 40 km length from confluence point		Reach –21 km length from origin	
		Proposed Time Line	Remarks	Proposed Time Line	Remarks	Proposed Time Line	Remarks
1.	Removal of encroachments from the water way of river Solani in segment comes under the control of Uttar Pradesh Irrigation and Water Resources Department.	up to 11.04.2023	Completed / Recheckin g is being done.	No Encroachment		-	-
2.	Preliminary survey and Temporary demarcation of river land with coordination of Revenue Department/ Irrigation Department of Uttarakhand/Uttar Pradesh state Government.	up to 15.06.2024	-	up to 30.06.2024	-	up to 30.06.2024	-

3	Ascertain of Flood Plain Zone considering with the observed/ evaluated discharge at 1:25, 1:50 and 1:100 years frequency as deemed fit for this area; and establishment of boundary pillars.	up to 30.09.2024		up to 30.09.2024	-	up to 30.09.2024	-

मुख्य अभियन्ता (गंगा), सिंचाई एवं जल संसाधन विभाग, उ0प्र0, मेरठ एवं मुख्य अभियन्ता (यमुना), सिंचाई एवं जल संसाधन विभाग, उ0प्र0, ओखला द्वारा प्रेषित आख्या प्रमुख अभियन्ता एवं विभागाध्यक्ष, सिंचाई एवं जल संसाधन विभाग, उ0प्र0, लखनऊ की सहमति के उपरान्त अग्रेत्तर कार्यवाही हेतु प्रेषित किया जा रहा है।
संलग्नक–उपरोक्तानुसार।

मुख्य अभियन्ता
(जल संसाधन)

पत्रांक एवं दिनॉक– यथोक्त

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है:–

1–प्रमुख अभियन्ता एवं विभागाध्यक्ष, सिंचाई एवं जल संसाधन विभाग, उ0प्र0, लखनऊ।
2–अनु सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग–7, उत्तर प्रदेश शासन, लखनऊ।
3–मुख्य अभियन्ता (गंगा), सिंचाई एवं जल संसाधन विभाग, उ0प्र0, मेरठ।
4–मुख्य अभियन्ता (यमुना), सिंचाई एवं जल संसाधन विभाग, उ0प्र0, ओखला।

मुख्य अभियन्ता
(जल संसाधन)

2778829/2024/ -4

मा0 राष्ट्रीय हरित अधिकरण

कार्यालय मुख्य अभियन्ता(गंगा)
सिंचाई एवं जल संसाधन विभाग
उत्तर प्रदेश, मेरठ

पत्रांकः–2691 /मु.अ.गंगा/एन0जी0टी0 दिनांकः 26/03/24

विषयः–मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में याजित ओ0ए0 632/2022 श्री वी0 के0 त्यागी बनाम उत्तराखण्ड राज्य एवं अन्य के संबंध में पारित मा0 अधिकरण के आदेश दिनांक 29.01.2024 के अनुपालन के सम्बन्ध में।

सन्दर्भः– आपका पत्रांक 142/मु0अ0(ज0सं0)/अनिमं–1/अनिख–3 दिनांक 22.03.2024

मुख्य अभियन्ता (जल संसाधन) सिंचाई एवं जल संसाधन विभाग, उत्तर प्रदेश, लखनऊ।

उपरोक्त विषयक अपने सन्दर्भित पत्र का अवलोकन करने का कष्ट करें, जिसके द्वारा उत्तर प्रदेश शासन, पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग–7 के पत्र संख्या–एन0जी0टी0–98/81–7–2023, दिनांक 19.03.2024 के माध्यम से प्रश्नगत वाद में राज्य की ओर से एक्शन टेकन रिपोर्ट/रिस्पांस मा0 एन0जी0टी0 में दाखिल किये जाने के सम्बन्ध में दिनांक 21.03.2024 को सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन विभाग की अध्यक्षता में सम्पन्न बैठक में सोनाली नदी के फ्लड प्लेन जोन निर्धारण की टाईम लाइन निर्धारित करके सूचना/अनुपालन आख्या तत्काल उपलब्ध कराये जाने की वांछना की गयी है।

उपरोक्त के कम में अधीक्षण अभियन्ता गंगा नहर संचालन मण्डल मेरठ ने अपने पत्र संख्या–1040/गंनसमं, दिनांक 26.03.2024 द्वारा अवगत कराया है कि उनके नियंत्रणाधीन खण्डों उत्तरी खण्ड गंगा नहर रूडकी के कार्यक्षेत्रान्तर्गत सोलानी नदी 1.500 किमी0 लम्बाई में एवं ड्रेनेज खण्ड प्रथम मेरठ के कार्यक्षेत्रान्तर्गत सोलानी नदी 40.00 कि0मी0 लम्बाई में प्रवाहित होती है। खण्डों द्वारा मा0 राष्ट्रीय हरित अधिकरण के आदेश दिनांक 29.01.2024 की अनुपालना में एक्शन प्लान तैयार कर प्रेषित किया गया है।

विषयगत मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली के पारित आदेश के अनुपालन में सम्बन्धित खण्डों द्वारा प्रेषित एक्शन प्लान आपको संलग्न कर अग्रिम आवश्यक कार्यवाही हेतु प्रेषित है।

संलग्नकः– उपरोक्तानुसार।

26/3/2024
मुख्य अभियन्ता(गंगा)
सिंचाई एवं जल संसाधन विभाग
उ0प्र0, मेरठ
26/03/24

पत्रांकः–2691/मु.अ.गंगा/ तदिनांकः

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं अग्रिम कार्यवाही हेतु प्रेषित हैः–

1. विशेष सचिव, सिंचाई एवं जल संसाधन अनुभाग–4, उत्तर प्रदेश शासन, लखनऊ।
2. प्रमुख अभियन्ता एवं विभागाध्यक्ष, सिंचाई एवं जल संसाधन विभाग, उत्तर प्रदेश लखनऊ।
3. अधीक्षण अभियन्ता गंगा नहर संचालन मण्डल मेरठ को उनके पत्र संख्या–1040/दिनांक 26.3.2024 के कम में ।
4. अधिशासी अभियन्ता, उत्तरी खण्ड गंगा नहर रूडकी/ड्रैनेज खण्ड–प्रथम, मेरठ ।

मुख्य अभियन्ता(गंगा)
सिंचाई एवं जल संसाधन विभाग
उ0प्र0, मेरठ

170

ACTION PLAN

S. No.	Details of Activity	Northern Division Ganga Canal, Roorkee.		Drainage Division – I", Meerut.	
		Reach – 1.500 km (1 km in u/s and 0.5 km in d/s of Solani Aqueduct)		Reach – 40 km length from confluence point	
		Proposed Time Line	Remarks	Proposed Time Line	Remarks
1.	Removal of encroachments from the water way of river Solani in segment comes under the control of Uttar Pradesh Irrigation and Water Resources Department.	up to 11.04.2023	Completed/ Rechecking is being done.	No encroachments	
2.	Preliminary survey and temporary demarcation of river land with coordination of Revenue Department/ Irrigation Department of Uttarakhand/ Uttar Pradesh State Government.	up to 15.06.2024	-	up to 30.06.2024	-
3.	Ascertain of Flood Plain Zone considering with the observed/ evaluated discharge at 1:25, 1:50 and 1:100 years frequency as deemed fit for this area; and establishment of boundary pillars.	up to 30.09.2024	-	up to 30.09.2024	-

Note: - The remaining reach of Solani River in Haridwar district is under the control of Uttarakhand State, for which an action plan is being prepared by them.

26/3/2024

Chief Engineer(Ganga)
Irrigation & WR Department U.P
Meerut

2778829/2024/ 4

2378829/2024/ -4

कार्यालय मुख्य अभियन्ता(यमुना)
सिंचाई एवं जल संसाधन विभाग, उ0प्र0,
ओखला नई दिल्ली

पत्रांकः–नि–610/मु0अ0य0ओ0/NGT, दिनांकः 27.03.2024

विषयः– मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0–संख्या–632/2022 श्री वी0के0 त्यागी बनाम उत्तराखण्ड सरकार व अन्य के सम्बन्ध में पारित मा0 अधिकरण के आदेश दिनांकः 29.01.2024 के अनुपालन के सम्बन्ध में।

संदर्भः– आपका पत्रांकः 142/मुअ(ज0सं0)/अनिम–1/ अनिख–3, दिनांक 22.03.2024

मुख्य अभियन्ता (जल संसाधन), कार्यालय प्रमुख अभियन्ता, सिंचाई एवं जल संसाधन विभाग उ0प्र0, लखनऊ।

उपरोक्त विषयक सन्दर्भित पत्र जो मुख्य अभियन्ता(गंगा) को सम्बोधित एवं अधोहस्ताक्षरी तथा अन्य को पृष्ठांकित है, तत्संलग्नक उप सचिव सिंचाई एवं जल संसाधन अनुभाग–4 उ0प्र0, शासन, लखनऊ के पत्र संख्या–720/24–27–सिं–4–14(रिट)/एन0जी0टी0/2023, दिनांकः 20.03.2024 का अवलोकन करने का कष्ट करें, जिसके द्वारा मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली द्वारा पारित आदेश के अनुपालन में सिंचाई विभाग से सम्बन्धित बिन्दुओं पर संकलित सूचना/अनुपालन आख्या की वांछना की गयी है।

अतः उक्त के क्रम में इस संगठन के नियन्त्रणाधीन अधीक्षण अभियन्ता, सिंचाई कार्य मण्डल, सहारनपुर के पत्रांक–7459/सिं0का0म0स0/दिनांकः 27.03.2024 द्वारा प्राप्त सोलानी नदी के उदगम स्थल से 21.00 कि0मी0 लम्बाई के परिपेक्ष्य में मा0 राष्ट्रीय हरित अभिकरण के आदेश की अनुपालना हेतु एक्शन प्लान अग्रिम आवश्यक कार्यवाही हेतु प्रेषित है।

संलग्नकः– उपरोक्तानुसार।

मुख्य अभियन्ता(यमुना)
सिंचाई एवं जल संसाधन विभाग,
उ0प्र0, ओखला नई दिल्ली

पत्रांकः– /मु0अ0य0ओ0/तदिनांकः

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित हैः–

1– मुख्य अभियन्ता(गंगा) सिंचाई एवं जल संसाधन विभाग, उ0प्र0, मेरठ।
2– अधीक्षण अभियन्ता, सिंचाई कार्य मण्डल, सहारनपुर को उनके पत्रांक–7459/सिंकामस/दिनांकः 27.03.2024 के क्रम में।

मुख्य अभियन्ता(यमुना)
सिंचाई एवं जल संसाधन विभाग,
उ0प्र0, ओखला नई दिल्ली

ACTION PLAN

S.No.	Details of Activity	Irrigation Construction Division Saharanpur	
		Reach-21 km length from origin	
		ProposedTime Line	Remarks
1	Removal of encroachment from the water way of River Solani in segment comes under the control of Uttar Pradesh Irrigation and Water Resources Department	--	--
2	Preliminary survey and Temporary demarcation of River land with coordination of Revenue Department/ Irrigation Department of Uttarakhand/ Uttar Pradesh State Government.	upto 30.06.2024	-
3	Ascertain of Flood Plain Zone considering with the observed/ evaluated discharge at 1:25, 1:50 and 1:100 years frequency as deemed fit for this area; and establishment of boundary pillars.	upto 30.09.2024	-

Executive Engineer
Irrigation Construction Division,
Saharanpur

27/3/24

Superintending Engineer
Irrigation Works Circle
Saharanpur

27.3.24

Chief Engineer(Yamuna)
Irrigation & Water Resources
Depertment Uttar Pradesh,
Okhla, New Delhi

Email : romuzaffarnagar@uppcb.in

दूरभाष : 0131–2436493

क्षेत्रीय कार्यालय

उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, मुजफ्फरनगर

U.P. POLLUTION CONTROL BOARD, MUZAFFARNAGAR

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

संदर्भ सं० / Ref. No. 18/ओ०ए० नं० 632/वी०के०त्यागी/2024

दिनांक / Dated 03-4-2024

सेवा में,

मुख्य पर्यावरण अधिकारी (वृत्त–3)
उ०प्र० प्रदूषण नियंत्रण बोर्ड
लखनऊ।

विषय– मा० एन०जी०टी० में योजित ओ०ए० संख्या 632/2022 वी०के० त्यागी बनाम स्टेट ऑफ उत्तराखण्ड के सम्बन्ध में पारित आदेश दिनांक 29.01.2024 के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक अपने पत्रांक एच06705/सी–3/एनजीटी–357/2024 दिनांक 08.02.2024 का संदर्भ ग्रहण करने का कष्ट करें। मा० एन0जी0टी0 में योजित ओ0ए0 संख्या 632/2022 वी0के0 त्यागी बनाम स्टेट ऑफ उत्तराखण्ड में पारित आदेश दिनांक 29.01.2024 के अनुपालन में विभाग से सम्बन्धित बिन्दुओं पर आख्या तैयार कर पत्र के साथ संलग्न कर आपके अवलोकनार्थ एवं अग्रिम आवश्यक कार्यवाही हेतु प्रेषित है।

संलग्नक–उपरोक्तानुसार।

भवदीय,

(अंकित सिंह)
क्षेत्रीय अधिकारी

<u>प्रतिलिपि</u>–सदस्य सचिव महोदय, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ को सादर सूचनार्थ प्रेषित।

क्षेत्रीय अधिकारी

Report in compliance to Hon'ble National Green Tribunal order dated 29.01.2024 in the matter of O.A. No. 632/2022 V.K. Tyagi Vs State of Uttarakhand

In reference to the O.A. No. 632/2022 V.K. Tyagi Vs State of Uttarakhand, Hon'ble NGT on date 29.01.2024 issued the following directions :

"..... 6. Mr. Vikas Tyagi, Executive Engineer, Irrigation Department has appeared online by submitting that he is appearing for Respondent No. 7. Respondent no. 7 is the Chief Secretary of the State of Uttar Pradesh. On the previous date on 10.10.2023, the Counsel for Respondent Nos. 7 to 9 had sought time to file response. No response has been filed on behalf of respondent no. 7. Page 241 of the paper-book has been referred by the Executive Engineer as also Counsel for the State submitting that it is response of the respondent no. 7 but on perusal thereto, we do not find it to be the response as Page 241 appears to be some unsigned, undated note and page 242 and 243 are some internal correspondences. Hence, the previous order of the Tribunal has not been complied with. Learned Counsel for State of UP submits that he is representing respondent no. 7. The Tribunal does not appreciate the practice of any Officer appearing at the instance of any other Officer and making the submission without Tribunal's direction though the concerned impleaded Officer is already represented though the Counsel. Learned Counsel for respondent no. 7 submits that response on behalf of respondent no. 7 will be filed within one week.

7. The response of NMCG has been filed stating the following:-

> *"5. That the concerned activities along the Sonali river falls under the administrative control and maintained by the Irrigation department of the State of U.P. However, over a period of time, the direction of river flow has moved towards agricultural land belonging to the private individual person.*
>
> *6. That the State Government may take necessary steps for Interception & Diversion (I&D) of the above mentioned drains to the existing STP as the*

(A.E.E)

existing STP in Roorkee is hardly getting 20% of its design capacity flows at present.

7. That as regards the flood plain zonation, the necessary steps may also be taken by the State Government."

8. It will be open to the State Authorities to duly consider the response of the NMCG and take appropriate remedial action and also to file their proposed action/action taken report in pursuance to the response of the NMCG.

9. List this matter on 10.04.2024."

Background/Previous Inspections/Surveys regarding Water Pollution in Solani River

It is to be noted that O.A. No. 495/2023 Mohd. Amjad Vs CPCB with O.A. no. 530/2022 Anuj Kumar Vs State of Uttarakhand & Ors. presently under consideration before Hon'ble NGT which is in reference to the water pollution in river Solani and river Ban Ganga originating from Uttarakhand and passing through the District Muzaffarnagar. In compliance to the directions of Hon'ble NGT in the above said O.A., the joint committee comprising of CPCB, UPPCB, UKPCB, MOEF, NMCG and District Administration (Uttarakhannd & Uttar Pradesh) conducted site surveys from Roorkee (Uttarakhand) till downstream of Shukratal (Muzaffarnagar) of river Ban Ganga, river Solani and river Ganga passing through Shukratal. The joint survey was conducted on dated 14-15 September 2023 and Post-monsoon committee visit on 11-12 October, 2023.

River Solani and river Ban Ganga are 02 separate river channels originating from the ranges of Himalayas traversing through Roorkee area in Uttarakhand and then entering in district Muzaffarnagar. Both the rivers confluence in district Muzaffarnagar and travels as Boodhi Ganga at Shukratal.

The joint committee, during the survey, inspected several points/villages from where the river Ban Ganga and river Solani passes from Roorkee till d/s of Shukratal with the final objective to conduct pollution source mapping of both rivers. Several

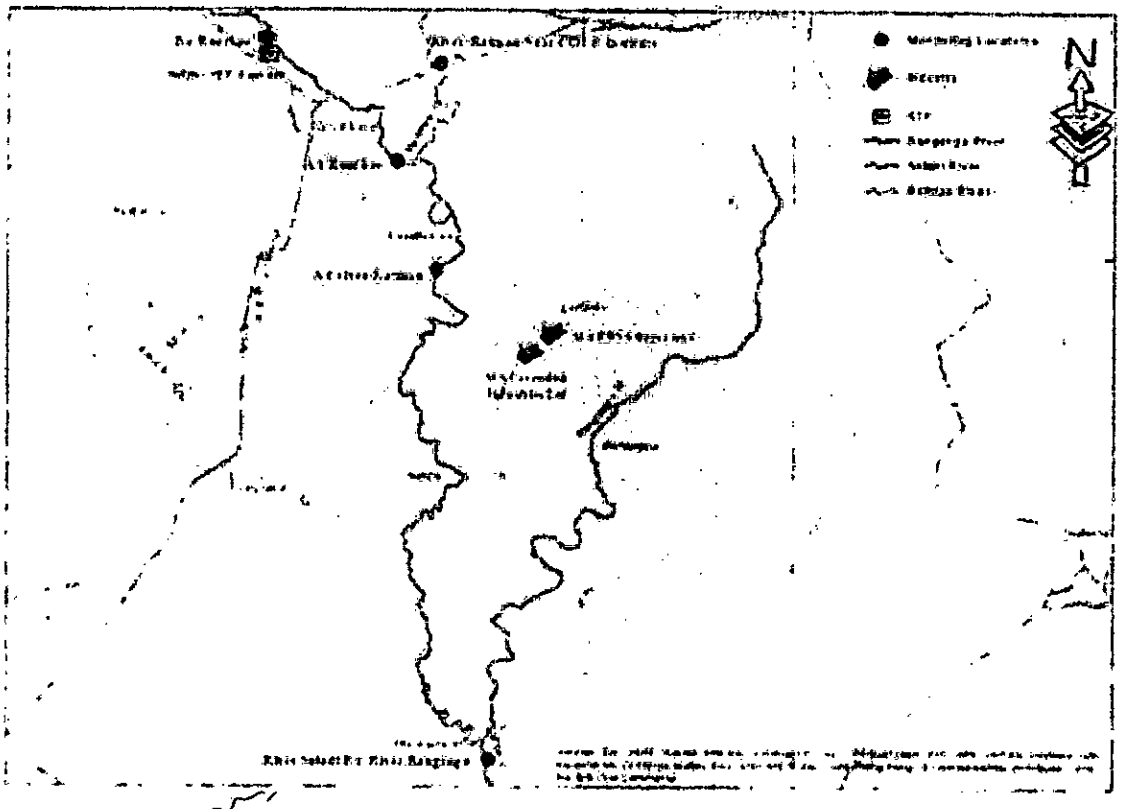
(A.E.E)

samples were collected from both the rivers traversing from the area of Uttarakhand and Uttar Pradesh. A joint report was prepared with all the facts and pollution source, mapping of rivers and the report was submitted to Hon'ble NGT by the joint committee. The joint committee report is annexed as **Annexure-1**.

Major facts identified by the Joint Committee while conducting survey of Solani River

River Solani

The Solani River originates from the Himalayan foothills, near Dehradun and runs along an approximate length of 145 km through Biharigarh, Bhagwanpur, Roorkee, Laksar city/towns before falling into River Banganga at upstream of Shukratal. River Solani is a rain feed river. For pollution source mapping, joint team carried out monitoring and sampling of River during October 11 to 12, 2023. The location map showing monitoring locations on river Solani and its tributary river Ratmau is shown in **Figure.**

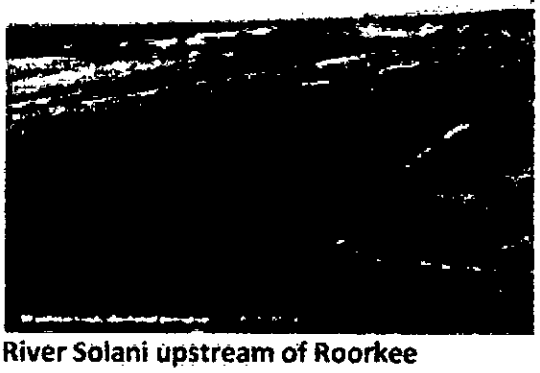


Location map showing monitoring locations on river Solani and its tributary river Ratmau

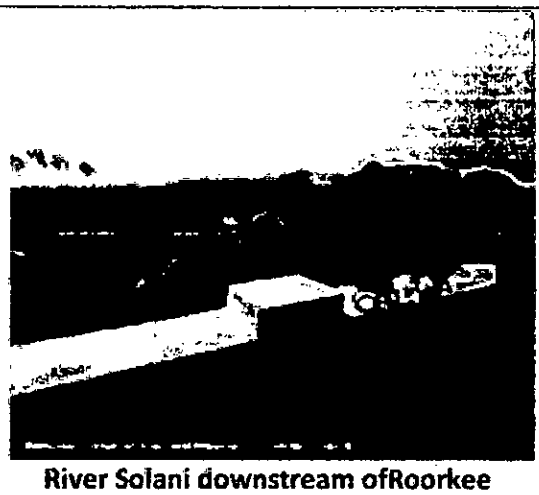
The objectives of the pollution source mapping were:

- Tracing and mapping the course of the river.
- Characterization of water quality of river at various locations.
- Identification, quantification and characterization of major tributaries /drains joining theriver.
- Impact on water quality of River Banganga b/c and a/c with River Solani.
- Assessment of sewage management in catchment area of Solani river.

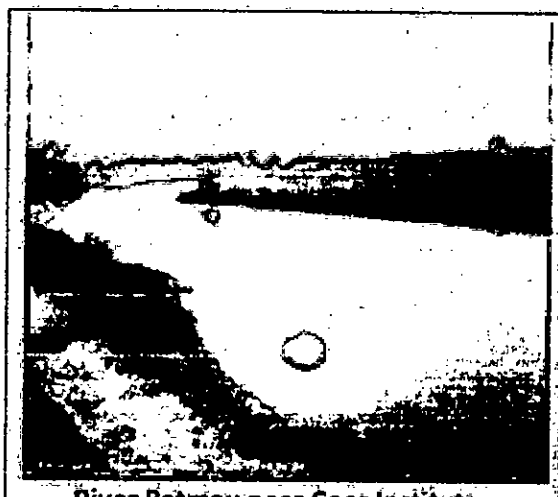
During the pollution mapping and exploratory survey, the course of Solani river was mappedfrom upstream of Roorkee till confluence into the River Banganga. The details of the sameis presented in **Figures.**



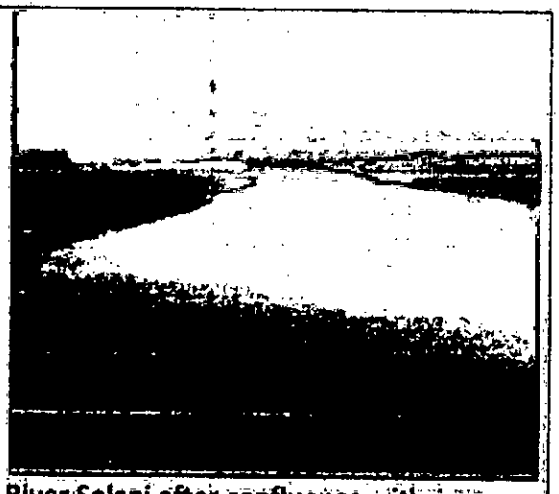
River Solani upstream of Roorkee



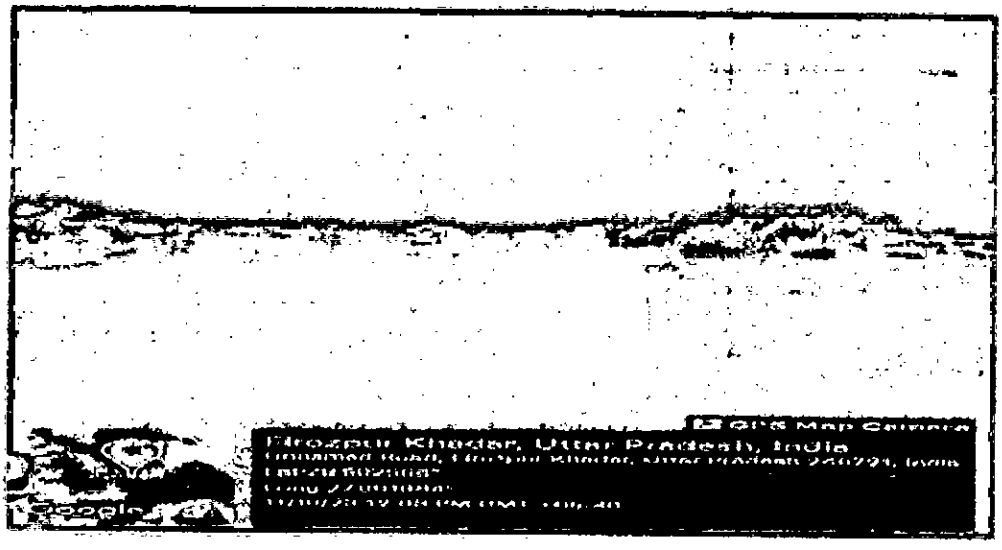
River Solani downstream ofRoorkee at bridge on National Highway



River Ratmau near Coer Institute, National Highway, Roorkee



River Solani after confluence withriver Ratmau at Roorkee-Laksar Road



River Solani before confluence with River Banganga

Four samples from River Solani and one sample from the tributary River Ratmau were collected to analyze the status of river water quality and to understand the characteristics of possible polluting sources at different locations along the course of the river.

During mapping joint teams observed that apart from rain water, the river receives discharge of untreated sewage from major towns (Bhagwanpur, Roorkee) & several villages along its stretch including discharge of treated sewage from 33 MLD STP in Roorkee city

The joint committee during conducting survey of river Solani divided the survey into 3 stretches which were :

- Stretch – I: Origin to u/s of Roorkee
- Stretch – II: u/s of Roorkee to u/s of Laksar
- Stretch – III: D/s of Laksar to River Solani before confluence with River Banganga

The detailed report of Solani river, pollution source mapping of the river and water quality of the river from the origin of the river traversing through Uttarakhand area till the joining of river with Ban Ganga before traversing through Shukratal is already produced in **Annexure-1**.

The joint committee has given the following conclusions regarding river Solani which is highlighted below :

i. River Solani originates from the Himalayan foothills, near Dehradun and runs along an approximate length of 145 km through Bihariqarh, Bhagwanpur, Roorkee, Laksar city/towns before falling into River Banganga at upstream of Shukratal in Muzaffarnagar.

ii. River Solani receive flow from rain along with discharge of untreated sewage from nearby villages namely Kishanpur, Hasanpur etc and treated sewage of 33 MLD STP Roorkee. Moderate pollution in river was observed from origin to upstream of Laksar town. The STP was found complying w.r.t discharge norms prescribed under Hon'ble NGT order dated 30.04.2019 in O.A. No. 1069/2018 except Total phosphorus (2.7 mg/L against norm of 1 mg/l) and Faecal coliform (14 x 10^4 MPN/ 100 ml against

normof <230 MPN/100 ml).

iii. The water quality of river Solani before confluence with river Banganga was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.

iv. Water quality of River Banganga after confluence of River Solani at Shukratal Ghat, Muzaffarnagar was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.

From the above conclusions and surveys conducted earlier by the joint committee, following are the observations regarding water pollution in river Solani till confluence in river Ban Ganga with respect to Muzaffarnagar area.

a) During the survey, the joint committee has noted that the river Solani runs along length of 145 Kms. through Biharigarh, Bhagwanpur, Roorkee, Laksar, City /towns before falling into river Ban Ganga at U/s of Shukratal in Muzaffarnagar. All major cities/towns/ villages discharging their untreated effluent into river Solani falls only under the jurisdiction/area of Uttarakhand (Biharigarh, Bhagwanpur, Roorkee, Laksar area).

b) Committee has observed that the river Solani receives discharge of untreated sewage from nearby villages namely Kishanpur, Hasanpur etc. (which falls in Uttarakhand area) and also treated sewage of 33 MLD STP Roorkee.

c) The water quality of river Solani before confluence of river Ban Ganga is also meeting primary water quality criteria for bathing.

d) The committee during survey of the river, did not find any discharge of sewage from any drain going into the river Solani in Muzaffarnagar area.

(Imraan Ali)
A.E.E.

(Ankit Singh)
Regional Officer

Annexure - 6

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

Principal Bench, New Delhi

Original Application No.495/2023

With

Original Application No. 530/2023

Mohd. Amjad & Anr. Applicant(s)

Vs.

State of U.P. & Ors. Respondent(s)

With

Anuj Kumar Applicant

Vs.

State of Uttarakhand & Ors. Respondent(s)

	Control of Pollution) Act, 1974 and under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981	
9.	**Annexure-VII:** Copy of the Hon'ble NGT Order dated 14.08.2023 in OA No. 495/2023	
10	**Annexure-VIII:** Copy of the Hon'ble NGT Order dated 23.08.2023 in OA No. 530/2023.	

(Reena Satavan)
Scientist E
Central Pollution Control Board
Delhi-110032

Date: 21.11.2023
Place: Delhi

Report of Joint Committee in compliance to Hon'ble NGT orders dated 14/08/2023 in OA 495/2023 and 23/08/2023 in OA 530/2023 regarding pollution in river Banganga at Shukratal, Muzaffarnagar (U.P.)

CENTRAL POLLUTION CONTROL BOARD
Ministry of Environment Forest & Climate Change
Parivesh Bhawan, East Arjun Nagar, Delhi- 110032
(November, 2023)

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1. Background

In response to the water pollution issue at Shukratal Ganga Ghat in Muzaffarnagar, Uttar Pradesh, the Hon'ble National Green Tribunal (NGT), vide its order dated 14/08/2023, in OA No. 495/2023 (Mohd. Amzad & Anr. Vs State of U.P. & Ors.), directed the formation of a Joint Committee to verify the factual position. The NGT stated, *"In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position. Accordingly, we constitute a Joint Committee comprising of Central Pollution Control Board (CPCB), Regional Office, Ministry of Environment, Forest and Climate Change (MoEF&CC), National Mission for Clean Ganga (NMCG), Uttarakhand Environment Protection and Pollution Control Board (UEPPCB), Uttar Pradesh Pollution Control Board (UPPCB) and District Magistrates (DMs) of Haridwar and Muzaffarnagar and direct the same to meet within one week, undertake visits to the site, look into the grievances of the applicant, associate the applicant and representatives of the concerned project proponents, verify the factual position which shall include (i) details of industries located in Laksar Industrial area and Muzaffarnagar Industrial area which are discharging effluents in the drain connecting to the River Banganga; (ii) details of industries which are functioning without consent/EC; (iii) functioning of STP/ETP and other waste water treatment mechanism and (iv) mechanism for utilization of waste water for agriculture and other land use purposes rather than discharging in the drain and take appropriate remedial action by following due course of law and giving opportunity of being heard to the concerned project proponents. The CPCB will be the nodal agency for coordination and compliance."*

The Hon'ble NGT vide order dated 23/08/2023, in OA No. 530/2023 (Anuj Kumar Vs State of U.P. & Ors.), directed that, "*Since the Committee has already been constituted, therefore, we direct the said Committee to look into and consider the grievance of the present application also and submit the report in respect thereof along with the report in terms of the earlier directions*."

Both the matters are listed for further consideration on 22/11/2023.

2. Actions taken by Committee:

I. Meeting of the committee on 28/08/2023 through VC

II. Site visit on 14-15, September, 2023

a) Interaction with complainant Md. Amjad in OA 495/2023 and Mr. Anuj Kumar in OA 530/2023

b) Interaction with project proponent of M/s RBNS Sugar & Distillery and Cavendish India Ltd.

c) Industrial inspection of M/s RBNS Sugar & Distillery, Laksar and M/s Cavendish India ltd, Laksar

III. Post -monsoon committee visit on 11-12, October, 2023

a) Mapping and monitoring of River Banganga

b) Mapping and monitoring of River Solani

c) Mapping and monitoring of Laksar

d) Mapping and monitoring of Hadwa drain

2.1. Meeting of committee on 28/08/2023:

To discuss the actions required to comply with the Hon'ble NGT's order dated 14/08/2023, in OA No. 495/2023 (Mohd. Amzad & Anr. Vs State of U.P. & Ors.), a meeting of the committee was convened on 28/08/2023. This meeting was attended by officials from CPCB, MoEF&CC, NMCG, UPPCB, UKPCB, and district administrations of Haridwar and Muzaffarnagar. Following extensive discussions, the committee reached the following conclusions:

1. State Pollution Control Boards (SPCBs) and concerned District Administrations will collaborate with project proponents (PPs) to compile an inventory of industries situated in the Laksar industrial area, gather data on wastewater generated by these industries, and provide information on Sewage Treatment Plants (STPs). Additionally, they will involve District Agriculture Officers to explore the utilization of wastewater for agricultural purposes. All details must be submitted to the Committee by 10/09/2023.
2. SPCBs will coordinate with PPs to obtain written submissions, if any.
3. It was reported by the representatives from the Regional Offices of UPPCB, Muzaffarnagar and UKPCB, Roorkee that no industries were discharging into River Banganga. Therefore, it was decided that the SPCBs demarcate the catchment area of River Banganga, West Kali, and River Solani and provide written confirmation if no industries are discharging into these rivers.

4. Details of industries discharging into Idrispur drain must be submitted by SPCBs by 10/09/2023.
5. Another meeting is scheduled for September 14-15, 2023, at Shukratal, Muzaffarnagar, to discuss the next steps. During these dates, the teams will also conduct visits to industries.
6. UKPCB shall coordinate with relevant PPs, and UPPCB will coordinate with the Applicant for their meeting & discussion with the committee on September 14,15, 2023 at Shukartal.
7. The Committee agreed to conduct post-monsoon monitoring of drains.
8. Information regarding the FIR filed in March 2023 and July 2023, as well as progress on these cases, will be provided to the Committee by the District Administration of Muzaffarnagar.
9. NMCG's representative requested additional time to provide their comments.

2.2. Site visit by Committee on Sep 14, 2023

A committee meeting, was held at Shukratal Ganga Ghat, Muzaffarnagar, on 14/09/2023. It was attended by officials from CPCB, MoEF&CC Regional Offices in Dehradun and Lucknow, NMCG, UKPCB Regional Office in Roorkee, UPPCB Regional Office in Muzaffarnagar, Uttar Pradesh Irrigation Department and the District Administrations of Roorkee & Muzaffarnagar (**Figure-2).** List of participants is attached as ***Annexure-I.***

2.2.1. Brief description of sites and locations:

M/s RBNS Pvt. Ltd. (Sugar and Distillery) is located in the catchment area of Laksar drain and confluence of Laksar drain into River Banganga near Idrishpur village, Uttarakhand. Laksar is a small town, near Haridwar city and Nagar Palika in Haridwar district of the Indian state of Uttarakhand. The average elevation of Laksar town is approximately 227 meters (745 feet) above sea level. It is located between the towns of Khanpur and Sultanpur, and in close proximity to the towns of Pathri, Jhabrera, and Roorkee, all of which are situated in the Haridwar district of Uttarakhand.

Another industry, known as M/s Cavendish Industries Ltd., is also situated within the catchment area of the Hadwa drain, which is a subsidiary drain of the Laksar drain. The River Solani, a tributary of the River Banganga, confluences with the River Banganga near Shukratal in Muzaffarnagar, Uttar Pradesh.

A joint committee conducted a pollution source mapping study for the Rivers Banganga and Solani, as well as the drains namely Laksar and Hadwa. The committee also monitored 33 MLD Sewage Treatment Plant (STP) in Saliyar, which is located within the catchment area of the Solani River. A map illustrating the monitoring locations on rivers & drains along with industries & STP is provided in Figure-1.

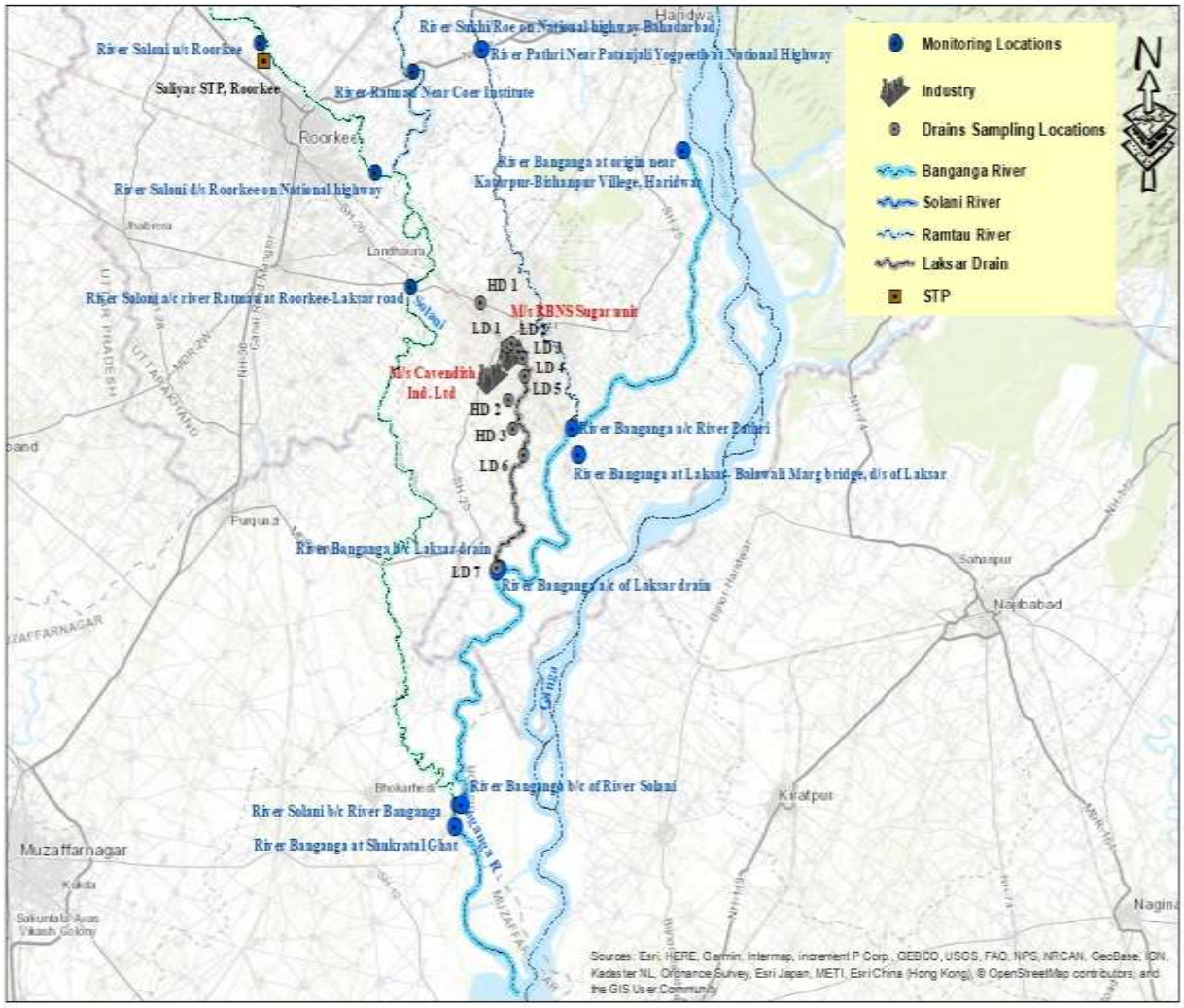


Figure 1: Location map showing monitoring locations on rivers (Banganga, Solani, Ratmau & Sukhi) and drains (Laksar & Hadwa)

2.2.2. Details of Committee visit:

2.2.2.1. Visit to Shukratal area:

The Committee discussed the next steps in the matter and conducted a site visit to the confluence point of River Solani with River Banganga via motorboat, approximately 1.3 kilometres upstream of Shukratal Ganga Ghat (**Figures- 2 to 6**). The water in River Banganga at Shukratal appeared clear, and fish species were observed at the Ganga Ghat.

Due to recent rainfall, there was adequate flow in the river. Considering the weather conditions, the committee decided to carry out monitoring of rivers and drains during the post-monsoon season, tentatively scheduled during 1st-2nd week of October 2023, to collect representative samples and assess the true characteristics of rivers and drains. A groundwater sample was collected from a hand pump in Shukratal (**Figure-7**). The laboratory analysis results indicated that Total Hardness (205 mg/L) and Iron (0.39 mg/L) exceeded the acceptable limit notified by the Bureau of Indian Standards (BIS) IS 10500:2012 (**Table**-1):

Table 1: Laboratory analysis results of groundwater collected near Shukratal Ghat, Muzaffarnagar (U.P.)

Parameters	Monitoring location	
	Hand pump near Shukratal Ghat (29.486343, 77.989746)	**BIS IS 10500:2012 (Acceptable limit)**
pH	7.99	**6.5-8.5**
Conductivity (µmho/cm)	378	**-**
TDS	238	**500**
COD	BDL	**-**
Total Hardness	**205**	**200**
Chloride	15	**250**
Phosphate	0.05	**-**
Fluoride	0.33	**1.0**
Total alkalinity as $CaCO_3$	192	**200**
Sulphate	07	**200**
Nitrate	0.04	**45**
Colour (Hazen)	BDL	**05**
Cd	BDL	**0.003**
Co	BDL	**-**
Cr	BDL	**0.05**
Cu	BDL	**0.05**
Fe	**0.39**	**0.3**
Mn	0.02	**0.1**
Ni	BDL	**0.02**
Pb	BDL	**0.01**
Sb	BDL	**-**
Se	BDL	**0.01**
V	BDL	**-**
Zn	0.55	**05**

Figure 2: Meeting of committee at Shukratal Ganga Ghat, Muzaffarnagar

Figure 3: Visit of committee members to confluence point of River Solani with River Banganga via motor boat

Figure 4: Confluence point of River Solani with River Banganga

Figure 5: River Banganga after confluence of River Solani

Figure 6: River Banganga at Shukratal, Muzaffarnagar

Figure 7: Collection of groundwater in Shukratal, Muzaffarnagar

Also, UPPCB vide letter dated 3.11.23 submitted that *"in district Muzaffarnagar from the location at Shukratal where both river Solani and Banganga meets till the location at Haiderpur wetland where these rivers joins the main stem of Ganga River, there are no industries which discharge their effluent directly or indirectly in any of the three rivers. The nearest industry located in district Muzaffarnagar is M/s The Ganga Kisan Sahkari Chini Mills Ltd. Morna which is at about aerial distance of 8 Km. (Approx.) from Shukratal Ghat and uses its treated effluent in irrigation and recycling. Also, there is no identified drain in district Muzaffarnagar discharging effluent into river Ganga at Shukratal Ghat or Solani and Banganga river. Hence, industrial water pollution sources having a tendency to pollute Ganga at Shukratal Ghat is not present in the area of district Muzaffarnagar."*

2.2.2.2. Interaction with complainant in OA No 495/2023

During this meeting, the committee interacted with the complainant, Mohd. Amjad, in OA No. 495/2023, at Shukratal Ghat who submitted there were no additional issues beyond those submitted to the NGT. He provided copy of his Aadhar card as Id proof.

2.2.2.3. Visit to Laksar area on 14-15, Sept, 2023:

UKPCB vide letter dated 13.9.23 has submitted the list of 13 industries in catchment area of Laksar drain to which consent to operate was issued under Water (Prevention and Control of Pollution) Act, 1974 (***Annexure-II***). It was submitted by the UKPCB to the committee that, apart from M/s R.B.N.S. Pvt. Ltd., no other unit is discharging untreated/partially treated effluent into any drain/water body in the catchment area of Laksar drain. It was observed by the committee that, in catchment area of Hadwa drain, one major unit namely M/s Cavendish Industries Ltd. (formerly Birla Tyres), a unit of J K Tyres, located in Village Khedi Mubarakpur, Uttarakhand was observed. Considering the potential of M/s Cavendish Industries Ltd. to pollute the water bodies/drains in the catchment, the committee decided to visit the industry. Committee also visited the surroundings of other units namely M/s JMV Ispat, M/s Shree Cement Ltd., M/s Yogi Industries, M/s Green Biofeeds Pvt Ltd, M/s B S Rolling Mills, M/s Narmada Agro Fertilizer & Chemicals, M/s Ruchi Soya Industries Ltd, M/s Alfa Ingot Pvt Ltd, M/s APT Packaging Pvt Ltd, M/s Chaudhary Enterprises Pvt Ltd., M/s Keshav Dev Industries and M/s Shiv India Pharmaceuticals and observed that these industries don't have potential to discharge in Laksar and Hadwada drain. The details about the other units in terms of product manufactured, consented water requirement & discharge quantity and mode of disposal of treated waste water is attached as ***Annexure-III.***

In Laksar area the committee visited Laksar drain at upstream and downstream of M/s Rai Bahadur Narayan Singh Pvt. Ltd. (**Figure- 8 & 9**). It was observed that at upstream, the drain carried storm water due to rain, while downstream, the wastewater appeared light reddish-brown in colour.

Figure 8: Laksar drain upstream M/s Rai Bahadur Narayan Singh Pvt. Ltd.

Figure 9: Laksar drain downstream M/s Rai Bahadur Narayan Singh Pvt. Ltd.

2.2.2.4. Interaction with complainant in OA No. 530/2023

On 15/09/2023, the committee interacted with the complainant, Shri Anuj Kumar, in reference to Hon'ble NGT order dated 23/08/2023 in O.A. No. 530/2023 regarding non-compliance and violation of the directions issued by the Pollution Control Board to M/s Rai Bahadur Narayan Singh Sugar Mills Limited. The committee discussed the issues raised by the complainant and other villagers. Villagers provided written statements ***(Annexure-IV)*** regarding the impact of industrial pollution on human health and agriculture.

2.2.2.5. Inspection of M/s Rai Bahadur Narayan Singh Sugar Mill Pvt. Ltd. (Sugar & Distillery), Shekhpuri, Laksar, Uttarakhand:

On 14/09/2023, the committee inspected M/s Rai Bahadur Narayan Singh Sugar Mill Pvt. Ltd. and M/s Rai Bahadur Narayan Singh Distillery Pvt. Ltd., located in Shekhpuri, Laksar, Uttarakhand. Committee also interacted with the industry representative Sh. S.P.Singh, (Unit Head) and he informed that both Sugar & Distillery plants are non-operational and unit is not discharging any effluent into the Laksar drain. The major observations made by the committee during inspection of the industry - M/s Rai Bahadur Narayan Singh Pvt. Ltd. are as follows:

- On the day of inspection, both sugar and distillery unit were found non-operational.

- It was informed by the unit representative that the Distillery unit has stopped its production from 24.06.2023 due to monsoon, and will resume its operations after rainy season and the sugar unit has stopped in manufacturing operations from 21 May, 2023 due to completion of crushing season and will resume its operations after 15 Nov, 2023.

2.2.2.5.1. Inspection Report of M/s RBNS Sugar unit:

- Unit was established in year 1935 and engaged in production of plantation white sugar with consented crushing capacity of 10000 TCD using sugarcane as a raw material.
- As per final manufacturing report R.T. 8 (C) for the season 2022-23, average daily crushing rate is observed as 8497.2 TCD during 195 operational days (From date of start on 07.11.2022 to date of finish on 21.05.2023).
- Unit has valid Consent to Operate under section 21/22 of Air (Prevention & Control of Pollution) Act, 1981 (as amended) and under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (as amended) up to 31.03.2024. The unit is having valid Authorization issued under the provisions of Hazardous and disposal of hazardous wastes up to 31/03/2024.
- Unit has an Effluent Treatment Plant (ETP) of capacity 1000 KLD for treatment of mill house & boiling house effluent. ETP based on ASP technology followed by tertiary filtration system, was found non-operational. However, joint team observed that biological system was under stabilization stage as aeration system (surface aerator) was in operation.
- Joint team observed improper hydraulic design of ETP sub-units as pumping was observed between aeration tank and secondary clarifier (settling tank) rather than gravity flow as standard practice for effective settling of MLSS in secondary clarifier.
- The joint team has observed that Lakshar drain flow besides the ETP unit and there is no boundary wall near the ETP area for demarcation. As there is no boundary wall between ETP & Lakshar drain, possibility of discharge of untreated effluent in to drain can’t be ruled out.
- Unit is having two lagoons, one in ETP area having capacity 1200 m^3 and another in distillery area of capacity 3500m^3 for storage of treated effluent for further recycling & irrigation purposes. Pumping arrangement was provided to transfer treated water from ETP to lagoon in distillery area.

- It was observed that unit is having multiple discharge options from ETP outlet. Treated effluent is stored in 1200m^3 lagoon for use in process & 3500m^3 for use in irrigation. One outlet drain was observed from ETP outlet towards Laksar drain.
- Unit has 15 hectare of own land area for irrigation.
- Housekeeping near the ETP was very poor as the shrubs found grown all over the ETP area.
- As per consent provided by UKPCB, unit has to install the sewage treatment plant (STP) in their premises for treatment of generated sewage. However, till date no STP is installed by the unit thus violating the consent condition.

Recommendations:

i. As the unit is having a colony of approx 100 houses from which approximately 40KLD of sewage is generated hence, the unit shall install STP of adequate capacity for treatment of domestic sewage.
ii. Unit shall construct boundary wall behind ETP to demarcate it from adjacent Laksar drain.
iii. Unit to carry out adequacy and performance assessment of ETP.
iv. Unit shall make provision for gravitional flow from aeration tank to secondary clarifier for effective performance of clarifier.
v. Unit shall submit irrigation management plan to UKPCB.
vi. Unit to ensure metering at all treated water consumption and discharge points and accordingly ensure proper record keeping.

2.2.2.5.2. Inspection report of M/S Rai Bahadur Narayan Singh Pvt. Ltd. Distillery unit:

General Details of molasses based distillery plant

Consents & Authorization

The unit has obtained Consolidated Consent & Authorization (CCA) issued by Uttarakhand Pollution Control Board (UKPCB) dated 06.10.2023 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 having validity upto 31.03.2023 for production of 60 KLPD of Ethanol/ENA/RS + 60 KLPD of Ethanol by using 372 m3/day of molasses. ***(Annexure –A1).*** Unit has applied for the renewal of CCA dated 12.092022 on 13.03.2023.

The salient conditions of the Consolidated Consent to Operate are as follow:

a. The unit shall carry out production of Ethanol/ENA/RS + 60 KLPD of Ethanol @ 120 KLPD using 372 m^3/day of C – Heavy molasses or B – Heavy molasses.

b. Unit shall comply with the conditions of NOC issued by Ground Water Department Govt. for abstraction of ground water.
c. Unit shall maintain Zero Liquid Discharge, and no effluent is allowed to discharge outside the premises.
d. The final storage capacity of lagoon for storage of concentrated spent wash after MEE to be utilized in bio-composting shall be strictly restricted to thirty days equivalent of Concentrated spent wash.
e. The unit having uncovered bio-compost area shall stop its bio-compost activities in monsoon period. The Unit shall make extra land arrangement for storage of press mud and ready bio-compost.
f. The unit shall use bio-composting only up to December 2023, thereafter no fresh concentrated spent wash shall be disposed through bio-composting yard and spent wash shall be totally disposed through spray dryer.
g. Flow meter to be installed in all water abstraction points and usage of fresh water to be minimized.
h. Industry shall maintain Online Continuous Effluent and emission Monitoring System (OCEMS) on ETP and stack & connect it with SPCB and CPCB server, before start of production as per the direction of CPCB.
i. 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.

Compliance status of conditions stipulated in consent to Operate

Production Capacity:

- On the day of visit, the distillery unit of capacity (120 KLD) were found non-operational.
- It was informed by the unit representative that Distillery unit has stopped its production from 24.06.2023 due to monsoon, and will resume its operations after rainy season, however during committee's post monsoon visit on 11.10.2023 the unit was again found non-operational.
- The unit representative has informed that the old distillation plant of capacity 60 KLD was commissioned in 2014 and the new distillation plant of capacity 60 KLD was commissioned in 2022.

Groundwater abstraction:

- The Uttarakhand Ground Water Department (UKGWD) granted No Objection Certificate (NOC) to the unit for groundwater abstraction from 01 no. of borewell, having validity upto 17.08.2026 for two borewells and upto 18.08.2026 for 03rd Borewell. As per the conditions of NOC, the unit can abstract groundwater at a maximum rate of 500 KL/day. During visit the team noticed that the borewell flow meter readings were 0.0 m^3/hr

Verification of Zero Liquid Discharge as stipulated in Consolidated Consent to Operate issued by UKPCB on 06.10.2023

- For management of spent wash, the unit is currently following below mentioned scheme:

  Raw Spent Wash (old plant)→ Bio-methanation→Standalone MEE →lagoon →Bio-composting

- Raw Spent Wash (new plant) →Integrated MEE → Bio-methanation→ Standalone MEE→Dryer

Table 2: Design capacity of various ZLD units:

S. No.	Particulars	Nos.	Size /capacity / feed rate
1.	IMEE (for new plant)	01	25 m^3/hr
2.	Bio-digesters	04	1000 m^3 (02 no.) (in use) 7500 m^3 & 8000 m^3 (for future use)
3.	Evaporator (6 stage) (for old plant)	01	25 m^3/hr (02 forced circulations and 04 falling film)
4.	Evaporator (6 stage) for new plant	01	25 m^3/hr
5.	Lagoon for storage of concentrated spent wash/bio-methanated spent wash	03	Total = 5222 m^3
6.	Lagoon found filled	01	2800 m^3 (found filled with boiler ash)
7.	Lagoon for storage of sugar water	01	3500m^3

- The unit has installed mass flow meters with totalizer at, inlet and outlet of IMEE, Inlet and outlet of MEE. All mass flow meters are connected to CPCB server. Since the unit

was found non-operational, raw spent wash was not available, therefore performance evaluation of spent wash management system could not be assessed.

- For management of raw spent wash, the unit has 03 digesters of capacity 10000 m3 (2 nos.) and 7500 m3 six stage Multiple Effect Evaporator (MEE) of capacity 600 KLD (2 nos.) and CPU of capacity 1050 m3 which were found non-operational during visit.
- For treatment of MEE condensate, and other low strength effluent, the unit has installed common Condensate Polishing Unit (CPU) of capacity 1050 KLD (for sugar and distillery unit).
- The CPU comprising of equalization tank, UASB, aeration tank, clarifier and lamella. The UASB reactor was found vacant and not in operation during the visit, the unit has informed that treated water from CPU is being utilized in cooling tower and in molasses dilution.

Lagoons:

- For storage of concentrated spent wash, unit has 03 lagoons of capacity 1925m3, 1925m3 and 1372 m3 (total capacity 5222m3. The joint team observed that these 03 lagoons were found filled with approx. 80-85 % of spent wash (Approx. 4000m3-4500m3).
- The team also observed that the unit has two more lagoons of capacity 3500m3 and 2800 m3. Out of which one lagoon of capacity 2800m^3 was found filled with mud/ boiler ash and the another lagoon of capacity 3500 m^3 was found filled with rain water, which is informed by the unit's representative that the lagoon of capacity 3500m^3 is used for storing treated effluent from sugar mills.
- It was observed that Laksar drain carrying sewage from Laksar town flows from Laksar city is passing through the premises of the unit via open channel. The drain flows adjacent to the lagoons.
- The joint team collected samples from three lagoons which is according to the unit used for storing concentrated spent wash. Analysis results are mentioned in Table-3 below:

Table 3: Analysis results of spent wash samples collected from unit

Sr. No.	Sample Location	pH	COD (mg/l)	BOD (mg/l)	TS (mg/l)	(% Total Solids)
1.	Lagoon-1	6.4	93922	39429	82090	8.2
2.	Lagoon-2	5.1	182376	51500	176740	17
3.	Lagoon-3	6.2	82416	36000	75640	7.5

- Analysis result of sample collected from lagoon-1, lagoon-2 and lagoon-3 shows pH- 6.4, 5.1 & 6.2, COD – 93922 mg/l, 182376 mg/l and 82416 mg/l, BOD – 39429 mg/l, 51500, and 36000 mg/l and Total Solid % of spent wash is 8.2%, 17% and 7.5% respectively.
- Analysis results of the samples collected from the lagoons clearly indicate that the unit is storing bio-methanated spent wash (BMSW) in lagoons-1 & lagoon -3, raw spent wash (RSW) in lagoon -2. which is in violation of CPCB direction dated 07.12.2015.
- CPCB direction adted 7.12.2015 clearly stated that in case of bio-composting, the unit could strictly restrict its lagoon capacity to thirty days' storage equivalent of concentrated spent. However, even during monsoon season lagoons were found filled with BMSW/RSW and as these lagoons are located adjacent to Laksar drain hence the possibility of overflow/discharge of spent wash in the Laksar drain can't be ruled out. Since the unit was non-operational thus, the industrial impact on drain couldn't be verified.
- The team has also collected sample from the storm water drain (near cooling tower) outlet towards Laksar drain. Analysis results of the samples collected from the outlet of storm water drain near shows pH- 7.1, COD- 220 mg/l BOD-44 mg/l TSS-117 mg/l, TDS 1540, Cl- 106 mg/l, colour 21, sulphate-34 mg/l and Phosphate 0.2mg/l.
- It was observed that Laksar drain carrying sewage from Laksar town flows from Laksar city is passing through the premises of the unit via open channel. The drain flows adjacent to the lagoons.
- The team has also collected sample from the outlet of storm water drain near CPU area. Analysis results of the samples collected from the outlet of storm water drain near shows pH- 7.1, COD- 220 mg/l BOD-44 mg/l TSS-117 mg/l, TDS 1540, Cl- 106 mg/l, colour 21, sulphate-34 mg/l and Phosphate 0.2mg/l which indicates discharge of cleaning effluent into Laksar drain.

Dryer

The unit has installed two spray dryers having capacity of 45 TPH and 45 TPH for both the distillation plant (60 KLD each). The details of dryer are as follows;

Table 4: Details of Dryers

S. No.	Capacity	Fuel & Stack Height	Air Pollution Control Device (APCD)
1.	Spray dryer (45 TPD)	Bagasse fired 40mtr	Wet scrubber

2.	Spray dryer (45 TPF)	Bio-gas 40mtr	Wet scrubber

Bio-composting

- As per the consent, the unit is allowed to bio-composting only up to December 2023, thereafter no fresh concentrated spent wash shall be disposed through bio-composting yard and spent wash shall be totally disposed through spray dryer.
- The unit representative has informed that, from January 2024, the unit consume all its spent wash through dryer and the practice of bio-composting will be stopped thereafter.
- The unit is having total 14 acres of active area which was visited by the joint team on 14.09.23 & 11.10.23. Out of 14 acres, 4.56 acres of land is covered and the remaining 9.66 acres of land is open/uncovered where four cycles of bio-compost per annum can be carried out. As per the calculation (considering spent wash generation rate 6 kl/kl of production), the unit is requiring 7.14 of bio-compost area, which is found adequate.
- Following were observed by the team during the visit to bio-compost yard:
    i. No Bio-compositing activity was going on at the time of visit however, ready bio-compost was found stored in the covered shed. The covered shed was damaged and improper.
    ii. Bio-compost yard, leachate collection drain and pits were not observed around the periphery of bio-compost yard for leachate management. Leachate was found filled in the bio-compost yard.
    iii. The unit has not constructed any boundary wall near the compost yard, however the team re-visited the unit on 11.10.2023 and it was found that the unit has constructed boundary wall near compost yard.
    iv. A tank of capacity 300 kl was observed in the bio-compost yard which is used for storing concentrated spent wash for bio-composting purpose.

Violations observed by the committee in M/s RBNS Sugar & Distillery units:

i. Lakshar drain flow besides the ETP unit and there is no boundary wall near the ETP area for demarcation. As there is no boundary wall between ETP & Lakshar drain, possibility of discharge of untreated effluent in to drain can't be ruled out.
ii. Unit is not having an comprehensive irrigation management plan.
iii. Unit is not having any sewage treatment plant as stipulated in the consent.

iv. In the distillery plant, as per the analysis results of the samples collected from all the lagoons the total solids were found below 30% which is in violation of CPCB direction dated 07.12.2015.

v. Unit was not complying with CPCB bio-compositing SOP.

Recommendations:

1. UKPCB shall restrict the production capacity of the unit such that the entire quantity of spent wash i.e about 4500m3 stored in three lagoons of capacity (1925m3, 1925m3 and 1372 m3) be consumed through dryer in environmentally sound manner within two monts time and thereafter, shall dismantle all the 03 lagoons.
2. The unit shall dispose all the stored ready bio-compost and press mud in bio-compost yard by adapting appropriate scientific method under the supervision of UKPCB within two months.
3. The unit shall prepare adequacy and performance assessment report of ZLD scheme for molasses based distillery as unit has expanded its production capacity from 60 KLPD to 120 KLPD and has installed spray dryers as ZLD system.
4. The unit shall make provision under supervision of UKPCB for flow of Laksar drain through the closed conduit pipe line starting from 500 meters upstream (u/s) to 500 meter downstream (d/s) of the unit to rule out any possibility of discharge of treated/untreated effluent into drain.
5. It shall be the responsibility of the unit to maintain the quality of Laksar drain at downstream of the unit in sync with the quality at upstream of the unit. Also, unit shall be responsible for the maintenance of the closed conduit pipeline.
6. UKPCB shall carry out regular monitoring of u/s & d/s location of the Laksar drain on random basis.
7. The Unit shall comply with ZLD norms as per CPCB direction dated 07.12.2015 issued under Section 18(1) (b) of Water (Prevention & Control of Pollution) Act, 1974.
8. The unit shall comply with the consent conditions issued by UKPCB and shall ensure that no fresh concentrated spent wash shall be disposed through bio-composting and entire spent wash shall be totally disposed through spray dryer.

2.2.2.6. Groundwater monitoring in Laksar:

Three samples in and around the unit were collected by the committee. Details of the samples along with analysis results is tabulated below.

A groundwater sample near the industry (coordinates - 29.748295, 78.030729) was collected, which appeared yellowish in colour (**Figure-10**).

Figure 10: Groundwater sample collected near Industry - M/s Rai Bahadur Narayan Singh Pvt. Ltd.

Table 5: Laboratory analysis results of groundwater samples collected in and around M/s R.B.N.S. Pvt. Ltd., Laksar (Uttarakhand)

Parameters	Monitoring location			
	Borewell within M/s R.B.N.S. Sugar unit (29.747809, 78.029911)	**Hand pump outside M/s R.B.N.S. distillery (near bio-compost yard) (29.748295, 78.030729)**	**Hand pump near Laksar Roadways bus stand (29.755945, 78.032244)**	**BIS IS 10500:2012 (Acceptable limit)**
pH	7.76	7.78	7.6	6.5-8.5
Conductivity (µmho/cm)	959	1186	921	-
TDS	**532**	**730**	**530**	500
COD	17	**73**	BDL	-
Total Hardness	332	448	239	200
Chloride	28	65	38	250
Phosphate	BDL	BDL	BDL	-
Fluoride	0.25	0.29	BDL	1.0
Total alkalinity as $CaCO_3$	**300**	**342**	**257**	200
Sulphate	59	67	59	200
Nitrate	0.10	0.45	BDL	45
Colour (Hazen)	**07**	**43**	BDL	05
As	-	-	0.04	-
Cd	BDL	BDL	BDL	0.003

Parameters	Monitoring location			
	Borewell within M/s R.B.N.S. Sugar unit (29.747809, 78.029911)	**Hand pump outside M/s R.B.N.S. distillery (near bio-compost yard) (29.748295, 78.030729)**	**Hand pump near Laksar Roadways bus stand (29.755945, 78.032244)**	**BIS IS 10500:2012 (Acceptable limit)**
Co	BDL	BDL	-	-
Cr	BDL	0.01	BDL	0.05
Cu	BDL	0.01	BDL	0.05
Fe	**3.28**	**34.53**	**4.5**	0.3
Mn	**0.47**	**1.01**	**0.24**	0.1
Ni	BDL	BDL	BDL	0.02
Pb	BDL	0.01	BDL	0.01
Sb	BDL	BDL	-	-
Se	BDL	BDL	-	0.01
V	BDL	BDL	-	-
Zn	0.07	0.46	0.16	05

- The laboratory analysis results indicated that TDS, Total alkalinity, Iron and Manganese exceeded the acceptable limit notified by the Bureau of Indian Standards (BIS) IS 10500:2012 in all three samples.
- Colour exceeded the acceptable limit in two samples viz. within M/s R.B.N.S. Sugar unit (7 Hazen) and M/s R.B.N.S. distillery (near bio-compost yard) (43 Hazen).
- Sample collected from the handpump near bio-compost yard shows COD-73mg/l and color-43mg/l which indicates that water is not fit for drinking. However, during post-monsoon visit on 11.10.23 it was observed that the particular handpump was dismantled by local authorities.

2.2.2.7. Survey of surroundings of M/s R.B.N.S. Pvt. Ltd., Laksar (Uttarakhand)

The committee visited agricultural fields near the bio-compost yard of M/s Rai Bahadur Narayan Singh Pvt. Ltd. (Sugar & Distillery) and found that fields belonging to farmers from nearby villages were inundated with water from the compost yard or rain. A sample of the collected wastewater on agricultural fields was collected (**Figure-11**). Sub-divisional Magistrate of Muzaffarnagar district informed the committee that the government has also provided monetary compensation to farmers whose agricultural fields have been inundated during monsoon-induced flood.

Figure 11: Agricultural fields of farmers near bio-compost yard of M/s Rai Bahadur Narayan Singh Pvt. Ltd. (Distillery Unit)

Analysis results of the sample collected from the fields near bio-compost yard shows pH-7.5, COD- 168 mg/l BOD-25 mg/l TSS-98 mg/l, TDS 1272, Cl- 80 mg/l and Phosphate 0.1mg/l. From Analysis results it is quite evident that though the low lying area was filled with rain water but the impact of seepage of spent wash from bio-compost yard can't be ruled out.

2.2.2.8. Inspection report of M/s Cavendish Industries Ltd. (formerly Birla Tyres), a unit of J K Tyres, Laksar:

Key observations made during this inspection are as follows:

- Unit was found operational on the day of visit i.e., 15/09/2023.
- The salient findings & observations of the committee are mentioned below:
  1. Unit is engaged in manufacturing of tubes and tyres. It was also observed that three production units were present within same complex of M/s Cavendish Industries Ltd.
  2. Unit has obtained separate Consent to Operate for all three production units as mentioned below:

Table 6: Consent to Operate M/s Cavendish Industries Ltd.

Unit no.	Consent validity date	Validity	Capacity/Product
Unit-II	30.09.2024	Valid	Tubes- 1500 MT/month & Tyre-7500 MT/month
Unit-III	30.09.2024	Valid	Radial Tyre- 6750 MT/month

Unit-IV	31.03.2023	Invalid	Automobile Tyre- 2790 MT/month

3. It was observed that unit has 07 no. of Borewells within the industrial complex for meeting process water and domestic requirements.
4. Unit has obtained No Objection Certificate (NOC) from Central Ground Water Authority (CGWA) for groundwater abstraction from 08 no. of Borewells and details are mentioned below:

Table 7: No Objection Certificate (NOC) from Central Ground Water Authority (CGWA)

Unit no.	**Permitted no. of borewells**	**Permitted groundwater abstraction limit**	**Validity date**	**Valid/Invalid**
Unit-II	05	1253 KLD	30.02.2024	Valid
Unit-III	03	622 KLD	17.01.2024	Valid

5. As per the logbook/data provided by unit, avg. groundwater withdrawal from 07 nos. of Borewells (duration 01.08.2023 – 15.09.2023) was calculated as 1394 KLD against the total permitted capacity of 1875 KLD (as mentioned in NOC issued by CGWA).
6. Unit has installed flow meters on all 07 Borewells and maintained logbooks for the same.
7. Unit has installed two ETPs, based on ASP technology, and both ETPs were found operational.
8. ETP-1 of 1800 KLD capacity has been provided for treatment of effluent generated from Unit-II & IV whereas ETP-2 of 1200 KLD capacity has been provided for treatment of effluent generated from Unit-III.
9. Unit has installed two STPs of 160 KLD capacity each for treatment of sewage generated and both STPs were found operational. Combined outlet of STP-1&2 was being fed into ETP-2 for further treatment.
10. Outlet of ETP-1 was being used in gardening, dust suppression and fire hydrant i.e. 345.65 KLD.
11. Outlet of ETP-2 (which includes combined outlet of STP-1&2) is fed into Softener and soft water is used as make-up in 05 nos. of Cooling Tower @ 539.95 KLD
12. Unit has installed flow meters at Inlet and Outlet of STP & ETP.

13. Sample were collected from inlet and Outlet of ETP-1 and laboratory analysis results of inlet sample show pH- 7.5; BOD – 05 mg/l; COD – 43 mg/l; TSS – 21 mg/l ; TDS – 724 mg/l and Colour – BDL.
14. Analysis results of outlet sample show pH- 7.5 (against norm of 5.5 – 9.0); BOD – 03 mg/l (against norm of 30 mg/l); COD – 24 mg/l (against norm of 250 mg/l); TSS – 05 mg/l (against norm of 100 mg/l); TDS – 684 mg/l and Colour – BDL which indicates that unit is complying w.r.t. discharge norms as mentioned in Consent issued by UKPCB.
15. On the day of visit i.e. 15.09.2023, joint team observed that a stormwater drain from the unit meets Hadwada drain. During the visit, backflow of wastewater from Hadwada drain into the stormwater drain from the industry was observed. Diluted wastewater was observed in Hadwada drain due to rain.
16. However, during visit carried out on 12.10.2023, joint team collected a sample from stormwater drain coming from the unit. Analysis results of sample collected show pH-7.0; BOD – 16 mg/l; COD – 72 mg/l; TSS – 08 mg/l; TDS – 664 mg/l, Sulphate – 64 mg/l and Colour – BDL.
17. Unit has made agreement with TSDF (i.e. M/s Bharat Oil & Waste Management Ltd.) for disposal of hazardous waste.
18. As per data provided unit and calculations performed by joint team it has been observed that outlet from ETP-2 (i.e. 539.95 KLD) is much higher than the inlet quantity (i.e. 373.63 KLD).

Recommendations:

1. Unit shall get a water audit done by a reputed expert government technical institute and submit the report to UKPCB.
2. Unit shall obtain valid Consent to operate for Unit-IV at the earliest.

2.3. Post-monsoon drain and river monitoring

As decided during the meeting of the committee on 15/09/2023, the post-monsoon river & drain monitoring was scheduled during Oct 11^{th} – 12^{th}, 2023:

Committee's visit during Oct 11-12, 2023

The objectives of the visit were:

- Pollution source mapping of Banganga River.

- Pollution source mapping of Solani River.
- Pollution source mapping of Laksar drain and Hadwa drain.

2.3.1. Pollution source mapping of rivers and drains

Pollution source mapping of rivers (Banganga & Solani) and drains (Laksar & Hadwa) was carried out. A map illustrating the monitoring locations on rivers and drains is provided in **Figure-12.**

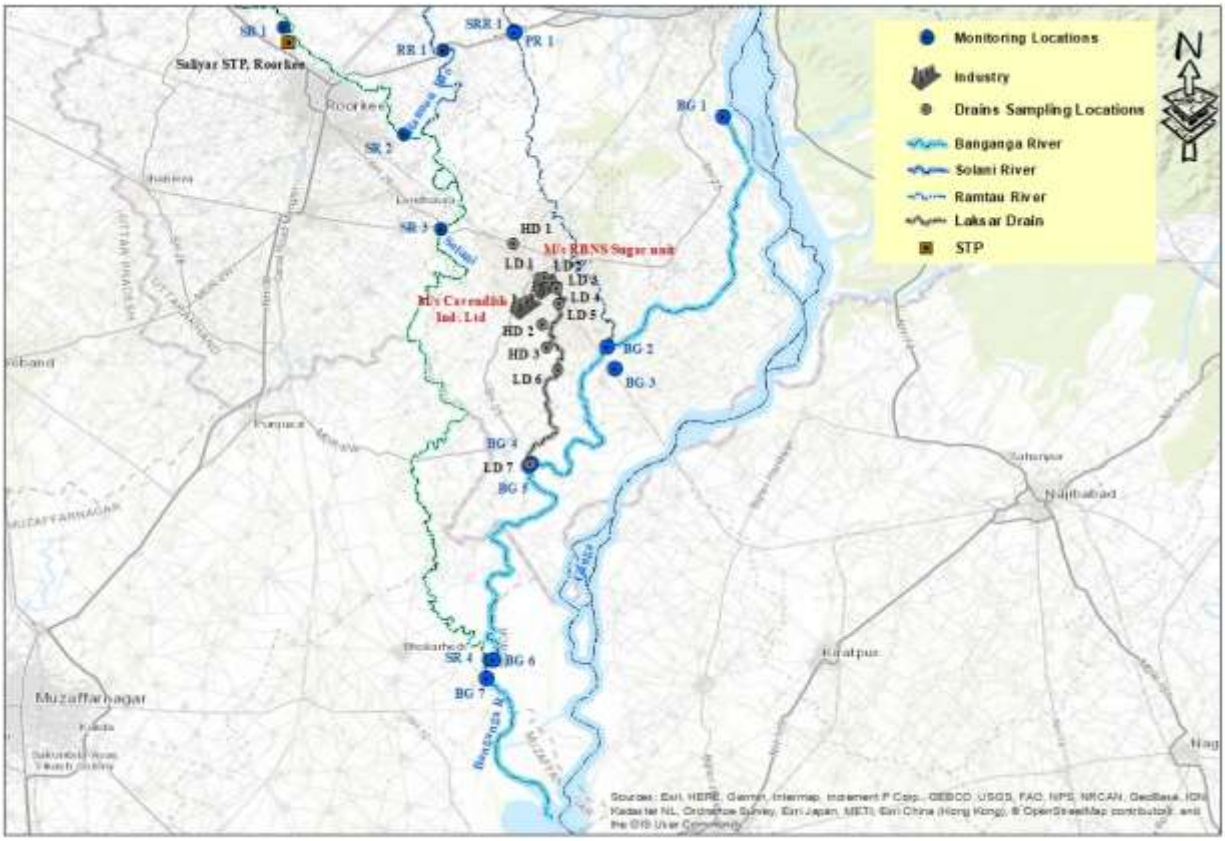


Figure 12: Location map showing monitoring locations on rivers (Banganga, Solani, Ratmau & Sukhi) and drains (Laksar & Hadwa)

2.3.1.1. River Banganga

River Banganga is presumed to be originated from a diversion/stream of River Ganga near Katarpur Alipur village in Bahadrabad Tehsil in Haridwar District, Uttarakhand and travel around 70 km before confluencing with River Ganga near village Shukratal in Muzaffarnagar district of Uttar Pradesh. However, during monitoring, the joint team did not observe any fresh water stream emerging in to River Banganga from River Ganga. River Banganga gained flow after receiving untreated sewage from nearby villages such as Mahtauli, Tanda, Mubarakpur, Chamrawal, Nehandpur Suthari and Muzaffarpur Gujra Jadeed. For pollution source mapping, the joint team carried out monitoring and sampling of River during October

11-12, 2023. The location map showing monitoring locations on river Banganga, its tributaries river Pathri, Sukhi & Solani and Laksar & Hadwa drains is shown in **Figure-13.**

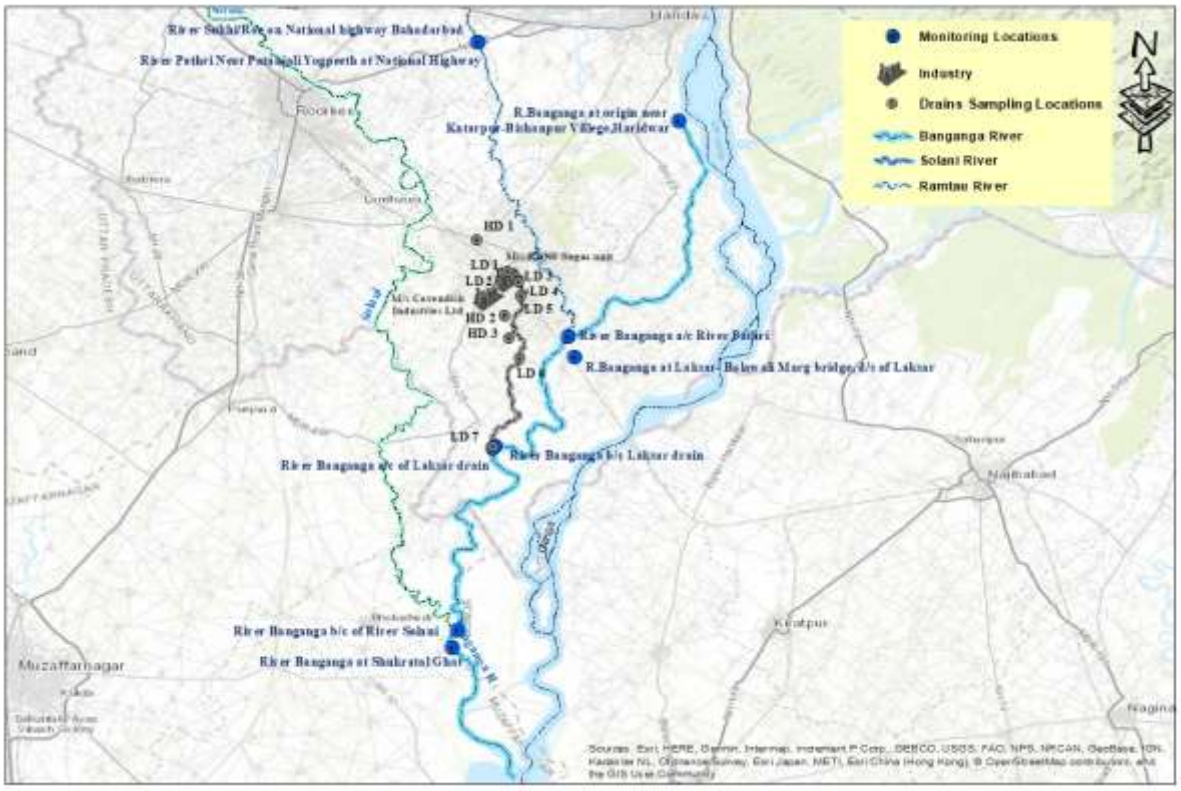


Figure 13: Location map showing monitoring locations on river Banganga, its tributaries river Pathri, Sukhi & Solani and Laksar & Hadwa drains

The objectives of the pollution mapping were:

- Tracing and mapping the course of the river
- Characterization of water quality of river at various locations
- Identification, quantification and characterization of major tributaries /drains joining the river.
- Impact on water quality of River Banganga b/c and a/c with River Solani
- Impact on water quality of River Banganga b/c and a/c with Laksar drain

During the pollution mapping and exploratory survey, the course of Banganga river was mapped from origin near Mahtauli village in Haridwar to the confluence in River Ganga at village Shukratal in Muzaffarnagar district. The details of the same is presented in **Figure-14 to 20.**

Figure 14: River Banganga at origin near Katarpur-Bishanpur Village, Haridwar

Figure 15: River Banganga after confluence of River Pathri

Figure 16: River Banganga at Laksar-Balawali Marg bridge, d/s of Laksar

Figure 17: River Pathri near Patanjali Yogpeeth at national Highway

Figure 18: Sukhi or Roe River at Bridge on National Highway Bahadarabad

Figure 19: River Banganga before confluence with River Solani

Figure 20: River Banganga after confluence with River at Shukratal Ghat, Muzaffarnagar

Five river samples were collected to analyse the status of water quality (**Table …**) and to understand the characteristics of possible polluting sources at different locations along the course of the river.

During mapping joint teams observed that river Banganga presently receive discharge from runoff rain water, untreated sewage from towns/villages in the catchment area, domestic & industrial discharge through Laksar drain, domestic discharge through Sultanpur drain and tributaries namely Pathri river & Solani river.

River Banganga is divided into three stretches for study that have been classified on the basis of comparable values of flow and water quality. The three stretches are:

- Stretch – I: Origin to d/s of Sultanpur
- Stretch – II: d/s of Sultanpur to u/s of Shukratal
- Stretch – III: Shukratal to the confluence point in River Ganga

Stretch – I: Origin to d/s of Sultanpur

In this stretch, intermittent flow observed in the river. No source of fresh water draining into River Banganga was observed during this stretch including at origin. River receive discharge from runoff rain water, untreated sewage from Sultanpur drain and villages in the catchment area such as Mahtauli, Tanda, Mubarakpur, Chamrawal, Nehandpur Suthari and Muzaffarpur Gujra Jadeed. No water sample was collected.

Stretch – II: d/s of Sultanpur to u/s of Shukratal

In this stretch, River receive fresh water from Pathri River which is one of the major tributaries of River Banganga. Water of River Banganga was observed clean which indicated that there is no visible pollution. One sample from River Banganga was collected near Netwala Saidabad village. For river water quality assessment. Analysis results of river sample shows pH-8.2, DO-4.46 mg/l, BOD-2.21 mg/l, COD-10 mg/l, TSS-19 mg/l, TDS-372 mg/l and FC-1300 MPN/100 mL indicating that quality of river water is found clean in this stretch. River water quality was meeting primary water quality criteria for bathing w.r.t. pH (8.2), BOD (2.21 mg/L) and FC (1300 MPN/100 mL).

Stretch – III: Shukratal to the confluence point in River Ganga

In this stretch, River receive discharge from Laksar drain and River Saloni. Water samples of River Banganga were collected before and after confluence of Laksar drain (near Idrishpur village) and River Solani (near Shukratal, Muzaffarnagar). In this stretch, River Banganga was meeting the primary water quality w.r.t. pH (8.2), DO (5.8-7.1 mg/L), BOD (BDL-2.29 mg/L) and FC (78-490 MPN/100 mL).

The water sample from the Banganga River after the confluence with the Solani River was collected at Shukratal Ghat, Muzaffarnagar, which is situated approximately 1.3 kilometers downstream from the confluence point of Solani River and Banganga River. The dissolved oxygen levels in the Banganga River before and after the confluence of the Solani River were found to be 7.12 mg/L and 6.39 mg/L, respectively.

The laboratory analysis results are shown in **Table-8** given below:

Table 8: Laboratory analysis results of water samples collected from River Banganga

Stretch	Monitoring location	Physical observations	Quality	Remarks
I: Origin to d/s of Sultanpur	-	• Intermittent flow observed in the river. • No source of fresh water draining into River Banganga.	Not applicable	-
II: d/s of Sultanpur to u/s of Shukratal	River Banganga a/c River Pathri	-	pH-8.2, DO-4.46 mg/l, BOD-2.21 mg/l, COD-10 mg/l, TSS-19 mg/l, TDS-372 mg/l and FC-1300 MPN/100 ml	Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH, BOD and FC.
III: Shukratal to the confluence point in River Ganga	River Banganga b/c Laksar Drain	Clear water in river was observed.	pH-8.2, DO-6.2 mg/l, BOD-1.85 mg/l, COD-10 mg/l, TSS-9 mg/l, TDS-344 mg/l and FC-78 MPN/100 ml	Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.
	River Banganga a/c Laksar drain	Clear water in river was observed.	pH-8.2, DO-5.8 mg/l, BOD-BDL, COD-BDL, TSS-26 mg/l, TDS-304 mg/l and FC-490 MPN/100 ml	• No impact of Laksar drain on river Banganga was observed. • Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.
	River Banganga b/c River Solani	Clear water in river was observed.	pH-8.2, DO-7.1 mg/l, BOD-1.19 mg/l, COD-8 mg/l, TSS-24 mg/l, TDS-334 mg/l and FC-130 MPN/100 ml	Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.
	River Banganga a/c River Solani at Shukratal Ghat, Muzaffarnagar (U.P.)	• Clear water in river was observed. • Fish species were observed in River Banganga at Shukratal Ghat, Muzaffarnagar (U.P.)	pH 8.2, DO-6.4 mg/l, BOD-2.29 mg/l, COD-9 mg/l, TSS-44 mg/l, TDS-276 mg/l and FC-230 MPN/100 ml	• Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.

2.3.1.2. River Solani

The Solani River originates from the Himalayan foothills, near Dehradun and runs along an approximate length of 145 km through Biharigarh, Bhagwanpur, Roorkee, Laksar city/towns before falling into River Banganga at upstream of Shukratal. River Solani is a rain feed river. For pollution source mapping, joint team carried out monitoring and sampling of River during October 11 to 12, 2023. The location map showing monitoring locations on river Solani and its tributary river Ratmau is shown in **Figure-21.**

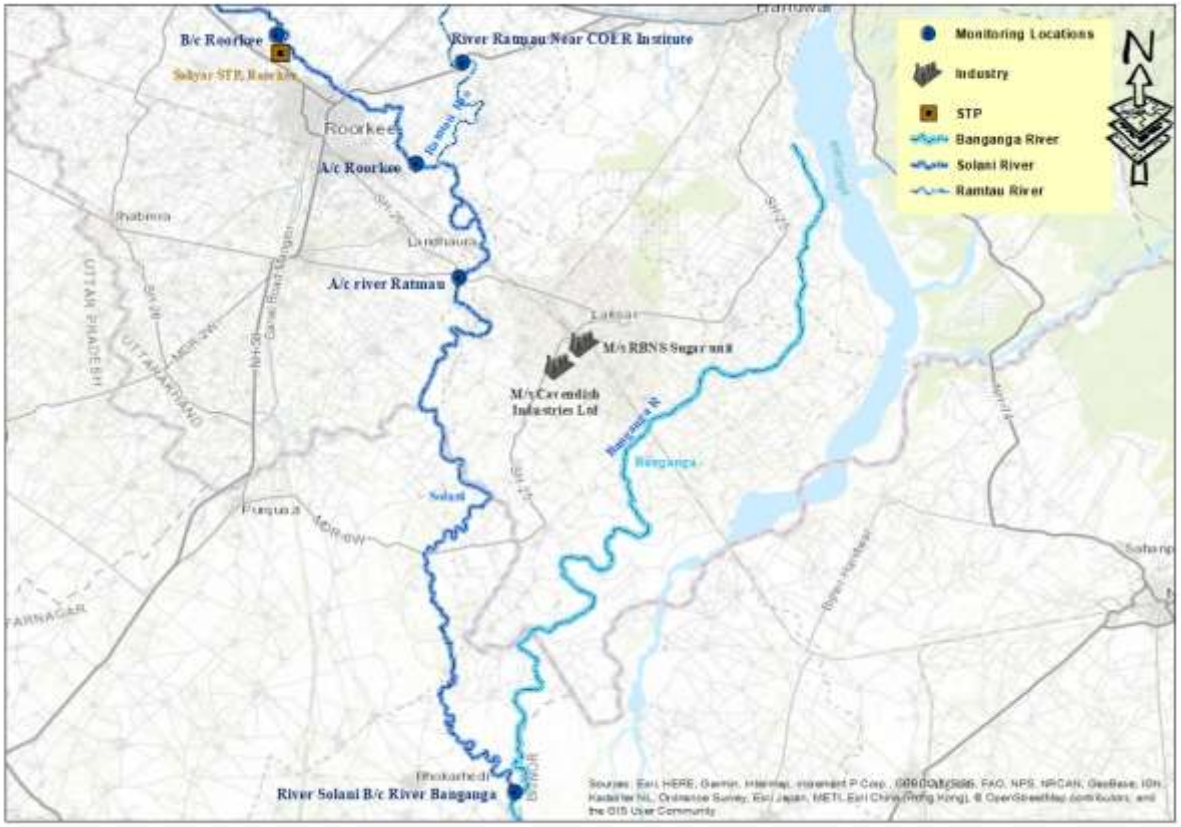


Figure 21: Location map showing monitoring locations on river Solani and its tributary river Ratmau

The objectives of the pollution source mapping were:

- Tracing and mapping the course of the river.
- Characterization of water quality of river at various locations.
- Identification, quantification and characterization of major tributaries /drains joining the river.
- Impact on water quality of River Banganga b/c and a/c with River Solani.
- Assessment of sewage management in catchment area of Solani river.

During the pollution mapping and exploratory survey, the course of Solani river was mapped from upstream of Roorkee till confluence into the River Banganga. The details of the same is presented in **Figure-22 to 26.**

Figure 22: River Solani upstream of Roorkee

Figure 23: River Solani downstream of Roorkee at bridge on National Highway

Figure 24: River Ratmau near Coer Institute, National Highway, Roorkee

Figure 25: River Solani after confluence with river Ratmau at Roorkee-Laksar Road

Figure 26: River Solani before confluence with River Banganga

Four samples from River Solani and one sample from the tributary River Ratmau were collected to analyze the status of river water quality (***Annexure-V***) and to understand the characteristics of possible polluting sources at different locations along the course of the river.

During mapping joint teams observed that apart from rain water, the river receives discharge of untreated sewage from major towns (Bhagwanpur, Roorkee) & several villages along its stretch including discharge of treated sewage from 33 MLD STP in Roorkee city.

River Solani is divided into three stretches for study that have been classified on the basis of comparable values of flow and water quality. The three stretches are:

- Stretch – I: Origin to u/s of Roorkee
- Stretch – II: u/s of Roorkee to u/s of Laksar
- Stretch – III: D/s of Laksar to River Solani before confluence with River Banganga

Stretch – I: Origin to u/s of Roorkee

In this stretch, river receive flow from rain along with discharge of untreated sewage from nearby villages namely Kishanpur, Hasanpur, on its travel length. River water observed clean indicated that there is no visible pollution. One sample was collected for river water quality assessment. Analysis results of river sample shows pH-8.5, DO-6.2 mg/l, BOD-2.51 mg/l, COD-14 mg/l, TSS-41 mg/l and TDS-290 mg/l indicating that quality of river water is found clean in this stretch. River water quality was meeting primary water quality criteria for bathing w.r.t. pH (8.5), DO (6.2 mg/l) and BOD (2.51 mg/l).

Stretch – II: u/s of Roorkee to u/s of Laksar

In this stretch, river receive major flow from discharge of 9 domestic drains (near Sultanpur) from Roorkee city, discharge of treated sewage from 33 MLD STP Roorkee along with one tributary namely Ratmau river which also originate from foothills of Shivalik range of Himalayas near Dehradun. Three river samples including one from Ratmau river were collected to analyze the status of river water quality in this stretch. Analysis results of Ratmau river water sample shows pH-8.1, DO-6 mg/l, BOD-1.17 mg/l, COD-9 mg/l, TSS-70 mg/l and TDS-204 mg/l. Values of Bio-chemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) in Solani river water samples are found in the range from BDL-7 mg/L and 7-29 mg/L, respectively indicating moderate organic load of polluting sources. Value of dissolve oxygen found in the range of 6-6.2 mg/l. However, the overall water quality observed in this stretch has characteristics of moderate pollution which may be attributed to the discharge of treated sewage from STP & untreated sewage of Roorkee via drains. Water quality of river Solani after confluence of river Ratmau was meeting primary water quality criteria for bathing w.r.t. pH (8.1), DO (6.2 mg/l) and BOD (BDL).

Monitoring of 33 MLD Saliyar STP-Roorkee:

Joint team also carried out inspection and monitoring of 33 MLD STP Roorkee for verification of compliance. Detailed inspection report is attached as ***Annexure-VI***. Major observations are as follows:

a. STP found operational during visit on 11.10.2023.
b. STP operating agency has not obtained CCA from UKPCB.
c. STP receive sewage via two no. of SPS namely Ganesh Nagar (12.5 MLD) and Mahigram (32 MLD). Presently STP receive only 8 MLD of sewage against design capacity of 33 MLD.
d. Ultrasonic type flow meter found installed at inlet & outlet of STP.
e. STP is operating on SBR technology with 03 nos. of SBR basins. One no. of SBR basin found non-operational during visit
f. Centrifuge (03 nos.) has been installed for the dewatering of raw sludge.
g. Chlorination through Cl_2 gas chlorinator dosing @ 3 – 6 kg/hr is being carried out for disinfection of treated sewage.
h. Sensor for online monitoring of BOD, COD and TSS found installed at inlet & outlet of STP but not connected with CPCB server.

i. Analysis results of samples collected from the SBR basin the during aeration phase show MLSS – 2391 mg/l & MLVSS – 994 mg/l.
j. Grab samples were collected from the inlet, outlet and SBR basin during the visit. Analysis results of samples collected from STP outlet indicate that STP is complying for w.r.t discharge norms prescribed under Hon'ble NGT order dated 30.04.2019 in O.A. No. 1069/2018 except **total phosphorus-2.7 mg/l (against norm of 1 mg/l) and fecal coliform-14×10^4 MPN/100 ml (against norm of <230 MPN/100 ml).**
k. Treated sewage is directly discharged into river Saloni via pipeline.

STP operating agency shall be directed to comply the following:

a. Augmentation of sewage network in STP catchment area to ensure optimum utilization of design capacity of STP.
b. Install OCEMS and provide its connectivity with CPCB/SPCB server.
c. Ensure consistent compliance with the discharge norms prescribed under Hon'ble NGT order dated 30.04.2019 in O.A. No. 1069/2018.
d. Optimize disinfection system as per feed flow condition.
e. STP shall obtain valid CCA from UKPCB.

Stretch – III: D/s of Laksar to River Solani before confluence with River Banganga

In this stretch, river receive flow from small domestic drains from nearby villages. One sample before confluence with River Banganga was collected for river water quality assessment. Analysis results of river sample shows pH-8.1, DO-6.1 mg/l, BOD-BDL, COD-BDL, TSS-87 mg/l, TDS-258 mg/l and FC-230 MPN/100 ml indicating that quality of river water is clean in this stretch. River was meeting primary water quality for bathing w.r.t. pH (8.1), DO (6.1 mg/L), BOD (BDL) & FC (230 MPN/100 ml).

After confluence of Laksar drain in Banganga River, the River Banganga traverses a distance of approximately 23.3 Kms before meeting the Solani River. Water sample was collected from River Solani before confluence with Banganga River. The dissolved oxygen level in the Solani River was observed to be 6.12 mg/L. To assess the impact of the Solani River on the Banganga River, water samples were collected from the Banganga River before and after the confluence with the Solani River.

The laboratory analysis results are shown in **Table-9** given below:

Table 9: Laboratory analysis results of water samples collected from River Solani

Stretch	Monitoring location	Physical observations	Quality	Remarks
I: Origin to u/s of Roorkee	River Solani u/s STP Saliyar	-	pH-8.5, DO-6.2 mg/l, BOD-2.51 mg/l, COD-14 mg/l, TSS-41 mg/l and TDS-290 mg/l	Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH, DO and BOD.
II: u/s of Roorkee to u/s of Laksar	River Solani d/s Roorkee bridge	-	pH-8.1, DO-6 mg/l, BOD-7 mg/l, COD-29 mg/l, TSS-28 mg/l and TDS-354 mg/l	Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH and DO.
	River Sonali a/c River Ratmau	-	pH-8.1, DO-6.2 mg/l, BOD-BDL, COD-7 mg/l, TSS-74 mg/l and TDS-258 mg/l	Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH, DO and BOD.
III: D/s of Laksar to River Solani before confluence with River Banganga	Solani b/c to Banganga	River water was slightly turbid.	pH-8.1, DO-6.1 mg/l, BOD-BDL, COD-BDL, TSS-87 mg/l, TDS-258 mg/l and FC-230 MPN/100 ml	Water quality of river was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.

2.3.2. Pollution source mapping of Laksar drain

Pollution source mapping of Laksar drain was carried out from its origin in Laksar town (Uttar Pradesh) to confluence with River Banganga near Idrishpur village in Uttar Pradesh during Oct 11th – 12th, 2023 by the committee. From origin to confluence with River Ganga, Laksar drain was monitored and wastewater samples from the drain were collected at five locations. To assess the impact of Laksar drain on River Banganga, water samples of River Banganga were also collected before and after the confluence of the Laksar drain.

The water samples collected from drains and Rivers were analyzed for physico-chemical properties. The laboratory analysis results are collectively attached as *Annexure-V.* The monitoring locations on Laksar drain and River Banganga are given in **Table-10**:

Table 10: Monitoring locations on Laksar drain and River Banganga

S. no.	Monitoring locations on drain	Date of monitoring	Flow (MLD)	Geographical coordinates		Sample collected
				Latitude	Longitude	
1.	Laksar drain near railway track (0.4 Kms from origin)	12/10/2023	Could not be	29.749017	78.024849	Yes

S. no.	Monitoring locations on drain	Date of monitoring	Flow (MLD)	Geographical coordinates		Sample collected
				Latitude	Longitude	
			measured			
2.	Laksar drain upstream of M/s R.B.N.S. Private Limited, Shekhpuri, Laksar (Uttarakhand) (0.34 Kms*)	11/10/2023	3.6	29.750117	78.027595	Yes
3.	Laksar drain near Nasrullapur village (downstream of M/s R.B.N.S. Private Limited, Shekhpuri, Laksar (Uttarakhand)) (1.46 Kms*)	11/10/2023	Could not be measured	29.742559	78.03486	Yes
4.	Laksar drain near Akhoda Kalan village (1.68 Kms*)	11/10/2023	Could not be measured	29.732718	78.036621	Yes
5.	Hadwa drain before confluence with Laksar drain	12/10/2023	25.8	29.704305	78.02871	No
6.	Laksar drain after confluence with Hadwa drain (6.78 Kms*)	12/10/2023	143.5	29.690158	78.035797	Yes
7.	Laksar drain before confluence with River Banganga (9.71 Kms*)	11/10/2023	372	29.629473	78.01801	Yes

* Distance from previous monitoring location

The Laksar drain originates from Laksar town in Uttarakhand and carries storm water along with the untreated sewage of Laksar town. From origin to confluence with River Banganga, Laksar drain carry untreated sewage of several villages in the catchment. The drain traverses a distance of approximately 20.37 kilometers before confluence with River Banganga near Idrishpur village in Uttarakhand. The monitoring team interacted with the residents of the villages in the catchment of the drain. The villagers informed that polluted water in Laksar drain is observed when the unit is in operation.

Based on the pollution source mapping of Laksar drain, the total length of Laksar drain is divided into three stretches for study which are as follows:

- Stretch-I: Origin to upstream of Unit
- Stretch-II: Downstream of Unit to before confluence with Hadwa drain
- Stretch-III: After confluence with Hadwa drain to before confluence with river Banganga

The wastewater characteristics of Laksar drain as well as the observations made during monitoring are given in **Table-11**:

Table 11: Wastewater characteristics of Laksar drain

Stretch	Monitoring location	Physical observations	Quality	Remarks
I: Origin to upstream of Unit	Laksar drain near railway track	Solid waste dumping in drain was observed.	BOD-12 mg/L, COD-68 mg/L, TSS-20 mg/L & TDS-380 mg/L	Wastewater characteristics indicated that Laksar drain carry sewage only.
	Laksar drain u/s M/s R.B.N.S. Pvt. Ltd.	Flow-3.6 MLD	BOD-14 mg/L, COD-76 mg/L, TSS-27 mg/L & TDS-392 mg/L	
II: Downstream of Unit to before confluence with Hadwa drain	Laksar drain d/s M/s R.B.N.S. Pvt. Ltd.	-	BOD-11 mg/L, COD-66 mg/L, TSS-18 mg/L & TDS-396 mg/L	No impact of industrial discharge on Laksar drain was observed.
	Laksar drain near Akhoda Kalan village	-	BOD-15 mg/L, COD-76 mg/L, TSS-17 mg/L & TDS-488 mg/L	
III: After confluence with Hadwa drain to before confluence with river Banganga	Laksar drain a/c with Hadwa drain	• Flow significantly increased. • Fishing activities observed.	BOD-7 mg/L, COD-46 mg/L, TSS-21 mg/L & TDS-356 mg/L	Water quality of Laksar drain improved a/c with Hadwa drain.
	Laksar drain b/c with River Banganga	• Clear water. • Fish species observed.	BOD-7 mg/L, COD-40 mg/L, TSS-18 mg/L & TDS-360 mg/L	

Stretch-I: Origin to upstream of Unit

After approximately 0.4 kilometers from the origin, wastewater sampling was done from the Laksar drain near the railway track adjacent to the unit (**Figure-27**). Flow in the drain could not be measured due to high width and depth. Wastewater characteristics (BOD-12 mg/L and COD-68 mg/L) indicated that the drain carry sewage only.

Figure 27: Laksar drain near railway track (upstream of unit)

Further, at approximately 0.34 kilometers downstream, wastewater sampling was done from the Laksar drain at upstream of unit. Flow in the drain near lagoons was measured as 3.6 MLD. Municipal solid waste was dumped along the drain (**Figure-29**). Wastewater characteristics (BOD-14 mg/L and COD-76 mg/L) indicated that the drain carry sewage only.

Figure 28: Laksar drain upstream of unit

Figure 29: Solid waste dumped along Laksar drain

Stretch-II: Downstream of Unit to before confluence with Hadwa drain

The Laksar drain passes through the industry premises via an open channel. The industry has installed five lagoons, of which three were used for storing spent wash, one was used for storing treated effluent while one was not in use. The drain flow adjacent to these lagoons, and damage to the lagoon walls at various locations indicated the possibility of episodic

discharge of untreated wastewater into Laksar drain (**Figure-30**). Further, the Laksar drain passes adjacent to the ETP of Sugar plant with no defined boundary between the unit's ETP and Laksar drain which further indicates the possibility of discharge of untreated/partially treated effluent into the Laksar drain.

Further, at approximately 1.46 kilometers downstream, wastewater sampling was done from the Laksar drain near Nasrullapur village (downstream of M/s R.B.N.S. Private Limited, Shekhpuri, Laksar (Uttarakhand)). Flow in the drain could not be measured due to high width and depth. Wastewater characteristics (BOD-11 mg/L and COD-66 mg/L) did not indicate any impact of industrial discharge from the unit, i.e., M/s R.B.N.S. Pvt. Ltd., into Laksar drain.

Figure 30: Laksar drain near lagoons of the unit

Figure 31: Laksar drain near Nasrullapur village (downstream of unit)

Further, at approximately 1.68 kilometers downstream, wastewater sampling was done from the Laksar drain near Akhoda Kalan village. Flow in the drain could not be measured due to high width and depth. Wastewater characteristics (BOD-15 mg/L and COD-76 mg/L) did not indicate any impact of any industrial discharge from the unit, i.e., M/s R.B.N.S. Pvt. Ltd., into Laksar drain.

Stretch-III: After confluence with Hadwa drain to before confluence with river Banganga

After approximately 6.2 kilometers downstream, another drain namely Hadwa drain, which carries untreated sewage from villages in its catchment area, meets the Laksar drain near Mirzapur Sadat village. The drain flows adjacent to M/s Cavendish Industries Ltd., village

Khedi Mubarakpur, Uttarakhand. The flow of the Hadwa drain was measured near Bijopura village and was found to be 25.8 MLD (**Figure-32**).

Subsequently, approximately 6.78 kilometers downstream, the Laksar drain was monitored after its confluence with the Hadwa drain. After confluence, significant increase in the flow of Laksar drain was observed. Flow in drain was measured as 143.5 MLD (**Figure-33)**. Clear water and fish population in the drain was observed and fishing activity by local people in the drain has been observed. Wastewater characteristics (BOD-7 mg/L and COD-46 mg/L) showed improvement in water quality of Laksar drain after confluence of Hadwa drain.

Figure 32: Hadwa drain before confluence with Laksar drain

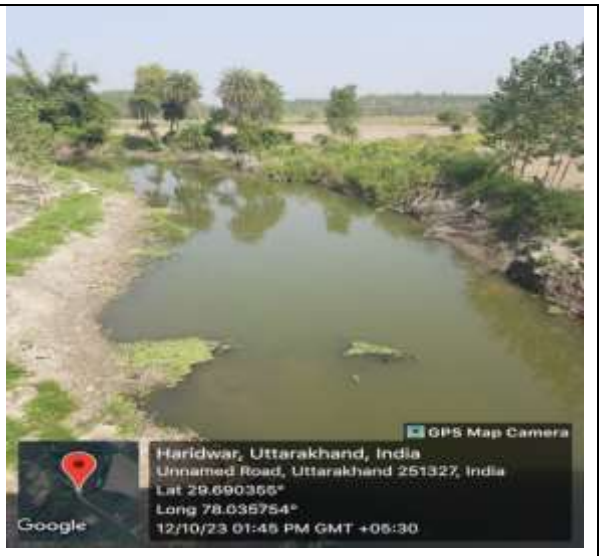


Figure 33: Laksar drain after confluence with Hadwa drain

Further, at approximately 9.71 kilometers downstream, wastewater sampling from the Laksar drain was done before confluence with River Banganga near Idrishpur village in Uttarakhand (**Figure-34**). At this location, clear water was observed in the drain, and various fish species were seen. The flow in the Laksar drain before its confluence with the Banganga River was measured as 372 MLD. Such high flow in Laksar drain may be attributed to the intrusion of freshwater from streams emanating from natural water bodies such as ponds, wetlands, etc. and discharge of untreated sewage from villages in the catchment area of the Laksar drain such as Bahdarpur, Dayalpuri, Tughlakpur, Khanpur, Tanda Jalalpur, Podowali, Lalchandwala, Kanewali Raisingh. Wastewater analysis results showed BOD-7 mg/L and COD-40 mg/L in Laksar drain b/c with river Banganga.

To evaluate the impact of Laksar drain on the Banganga River, water samples were collected from River Banganga before and after confluence of Laksar drain (**Figure-35)**. The dissolved

oxygen levels in the Banganga River were found to be 6.18 mg/L and 5.84 mg/L before and after the confluence of the Laksar drain, respectively.

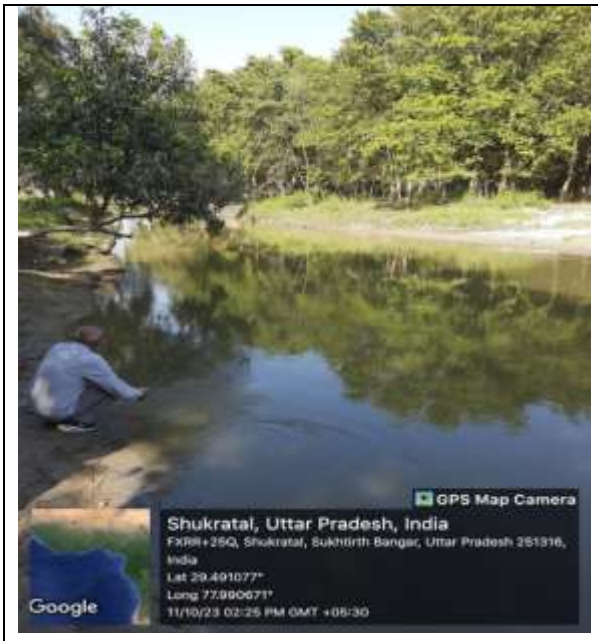


Figure 34: Laksar drain before confluence with River Banganga near Idrishpur village (Uttarakhand)

Figure 35: Confluence point of Laksar drain with River Banganga

2.3.3. Pollution source mapping of Hadwa drain

Hadwa drain is a subsidiary drain of Laksar drain which originates Laksar town and carry untreated sewage of villages in Laksar area. Hadwa drain meets Laksar drain near Mirzapur Sadat village. Hadwa drain was monitored at two locations. Wastewater sampling of Hadwa drain was done at Roorkee-Laksar Road, which is upstream of Laksar town (**Figure-36**). Flow was measured as 2 MLD. Wastewater characteristics (BOD-11 mg/L and COD-60 mg/L) indicated that Hadwa drain carry sewage only. Further downstream, wastewater sampling was done from Hadwa drain before confluence with Laksar drain which is also the downstream of M/s Cavendish Industries Ltd. Village Khedi Mubarakpur, Uttarakhand (**Figure-37**). Flow was measured as 25.8 MLD, BOD-8 mg/L and COD-46 mg/L. Increased flow in Hadwa drain was observed due to discharge of untreated sewage from nearby villages in the catchment such as Majri, Kheri Mubarakpur and Maheshwara. The wastewater characteristics of Hadwa drain are shown in **Table**-12:

Table 12: Wastewater characteristics of Hadwa drain

Monitoring location	Physical observation	Quality	Remarks
Hadwa Drain u/s Laksar	Flow-2 MLD	BOD-11 mg/L, COD-60 mg/L, TSS-25 mg/L, TDS-388 mg/L, Sulphate-17 mg/L	Drain carry sewage of villages ion the catchment.
Hadwa drain b/c of Laksar drain	Flow-15 MLD	BOD-8 mg/L, COD-46 mg/L, TSS-28 mg/L, TDS-384 mg/L, Sulphate-13 mg/L	No impact of industrial discharge on drain was observed.

Figure 36: Hadwa drain at Roorkee- Laksar road, u/s of Laksar

Figure 37: Hadwa drain b/c with Laksar drain

3. Conclusions

1. Joint committee comprising of officials from CPCB, MoEF&CC, NMCG, UPPCB, UKPCB, and district administrations of Haridwar and Muzaffarnagar convened meeting and site visits in compliance to Hon'ble NGT orders dated 14.8.23 & 23.8.23 in OA No 495/2023 & 530/2023.

2. Details of the site visit undertaken by committee are mentioned in Para 2.2.

3. In compliance to Hon'ble NGT orders mentioned above the committee interacted with both applicants and same are mentioned in Para 2.2.2.2 & 2.2.2.5.

4. The committee verified the factual status w.r.t. industries located in Laksar & Muzaffarnagar areas and same are mentioned in Para 2.2 & 2.3.

5. Also, committee carrried out mapping and monitoring of River Banganga, its tributary (River Solani) and Laksar drain & its first order drain (Hadwada drain). The conclusion on water quality of rivers are mentioned in below point 6 onwards.

6. ***River Banganga:***

i. River Banganga originates near Mahtauli village in Roorkee district, Uttarakhand after receiving untreated sewage from villages such as Mahtauli, Tanda, Mubarakpur, Chamrawal, Nehandpur Suthari and Muzaffarpur Gujra Jadeed and confluences with river Ganga near Haiderpur wetland near Bijnor Ganga Barrage in Uttar Pradesh.

ii. River Banganga lacks freshwater source from its origin till downstream of Sultanpur town in Uttarakhand. River Banganga receive freshwater from Pathri river and, after confluence of Pathri river, water quality of river Banganga was meeting primary water quality criteria for bathing w.r.t. pH, BOD and FC.

iii. Near Idrishpur village in Roorkee district, Uttarakhand, Laksar drain confluences with river Banganga. No industrial pollution in Laksar drain was observed however during visit, the industries in the catchment of Laksar drain i.e., M/s R.B.N.S. Pvt. Ltd. (Sugar & Distillery) were found non-operational.

iv. Fishes were observed in Laksar drain after confluence of Hadwa drain till its confluence with river Banganga. Water quality of river Banganga improved after confluence of Laksar drain and was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.

v. At approximately 1.3 Kms upstream of Shukratal Ghat in Muzaffarnagar district, river Solani meets with Banganga and water quality of river Banganga was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.

7. River Solani:

i. River Solani originates from the Himalayan foothills, near Dehradun and runs along an approximate length of 145 km through Biharigarh, Bhagwanpur, Roorkee, Laksar city/towns before falling into River Banganga at upstream of Shukratal in Muzaffarnagar.

ii. River Solani receive flow from rain along with discharge of untreated sewage from nearby villages namely Kishanpur, Hasanpur etc and treated sewage of 33 MLD STP

Roorkee. Moderate pollution in river was observed from origin to upstream of Laksar town. The STP was found complying w.r.t discharge norms prescribed under Hon'ble NGT order dated 30.04.2019 in O.A. No. 1069/2018 except Total phosphorus (2.7 mg/L against norm of 1 mg/l) and Faecal coliform (14 x 10^4 MPN/ 100 ml against norm of <230 MPN/100 ml).

iii. The water quality of river Solani before confluence with river Banganga was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.

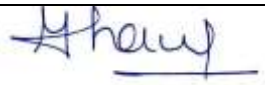
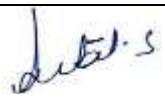
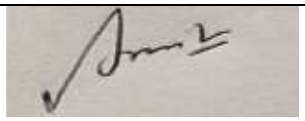
iv. Water quality of River Banganga after confluence of River Solani at Shukratal Ghat, Muzaffarnagar was meeting primary water quality criteria for bathing w.r.t. pH, DO, BOD and FC.

8. Due to non-operation of M/s RBNS Sugar & Distillery the industrial impact on Laksar drain couldn't be assesed. Analysis results of the samples collected from Laksar drain doesn't indicates any industrial pollution impact and after confluence with Hadwada drain fishes were observed in it till its confluence to Banganga river. However, industrial units namely M/s RBNS Sugar & Distillery units have potential to pollute Laksar drain. Similarly, M/s Cavendish India ltd. has potential to pollute the Hadwa drain which ultimately meets Laksar drain.

9. The recommendations of the committee w.r.t. Sugar unit, Distillery unit, M/s Cavendish India Ltd and STP as mentioned in respective sections may be implemented under supervision of UKPCB.

10. In view of colour in the groundwater sample collected from the handpump near the bio-compost yard of the distillery complex, it is recommended that UKPCB shall carry out detailed assessment of groundwater quality including ground water sampling & analysis in and around the unit to ascertain the groundwater contamination, if any, and need for remediation. Depending on such study, detailed remedial action plan be also prepared and executed by UKPCB in time bound manner.

Signature of inspecting officials:

S. No.	Name of Officers	Signature
1.	Sh. G.S.Chauhan, SDM Laksar	
2.	Sh. Ankit Singh, RO Muzaffarnagar, UPPCB	
3.	Ms. Reena Satavan, Sc- 'E', CPCB Delhi	
4.	Dr. A. K. Gupta, Sc- 'E', MoEF&CC Lucknow	
5.	Dr. K. Mondal, Sc- 'D', MoEF&CC Dehradun	
6.	Sh. S. P. Singh, RO Roorkee, UKPCB	
7.	Sh. Narendra Bahadur Singh, ADM Muzaffarnagar	Concurrence received by e-mail.
8.	Dr. Ishaq Ahmed, Sc- 'C', NMCG	
9.	Dr. Pankaj Kumar, Sc- 'D', CPCB Delhi	

10.	Sh. Vipin Kumar, RA-III, CPCB Delhi	
11.	Ms. Anshul Kumari, RA-III, CPCB Delhi	
12.	Dr. Vivek Rana, RA-I, CPCB Delhi	
13.	Sh. Ankit Shukla, SRF, CPCB Delhi	
14.	Sh. Muktesh Chaudhari, SRF, CPCB Delhi	

Annexure-I

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Committee meeting in OA No 495/2023 & 530/2023 (14.9.23)

S.No	Name of the official & mobile number	Organisation & Designation	Signature
1	S.P. Singh 9412084974	UKPCB, Roorkee Regional office	
2.	Imraan Ali Vipin Kumar	A.E.E. UPPCB M2N CPCB, Delhi	Vipin Kumar
3			
4	Dr A.K. Gupta, Sc-E R.O. MoEF&CC Lucknow 8004923480	Regional office MoEF&CC, Lucknow	
5.	G.S. Chauhan SCOM (Laksar) Haridwar	SCOM(L) 7351700710	14.09.2023
6.	Mr. ANKIT SHUKLA	SPF, CPCB, Delhi	
7	Satendra Kumar	DAO Muzaffarnagar	14/09/2023
8)	Dr. Shahida Parveen	JRF UKPCB, ROR	
9)	Reena Sataran	Sc E, CPCB - Delhi	
10.	Dr. Kanchanlata Mandal.	Sc-D, MoEFCC	
11)	Dr. Pankaj Kumar	Sc'D' CPCB	
12)	Anshul kumari	CPCB, Delhi	
13)	Dr. Vivek Rana	CPCB, Delhi	
14)	NARENDRA BAHADUR SINGH	ADM (E) M2N	
15.	ANKIT SINGH	RO. UPPCB M2N	14/09/23

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Annexure II

क्षेत्रीय कार्यालय
उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड
सिंचाई परिकल्प भवन परिसर, रूड़की -247667 हरिद्वार

पत्रांक-यूकेपीसीबी/आर0ओ0आर0/सा0-147(53)/2023/ 753 दिनांकः 13.09.2023

पंजीकृत डाक द्वारा

सेवा में,

Dr. A.K. Vidyarthi,
Director and Divisional Head WQM-II
Central Pollution Control Board, East Arjun Nagar
New Delhi.

विषयः- मा0 राष्ट्रीय हरित अधिकरण में योजित O.A. No. 495/2023 Mohd. Amjad & Anr. Versus State of U.P. & Ors के सम्बन्ध में पारित आदेश दिनांक 14.08.2023 के अनुपालन के सम्बन्ध में।

महोदय,

कृपया उपरोक्त विषयक मा0 राष्ट्रीय हरित अधिकरण में योजित O.A. No. 495/2023 Mohd. Amjad & Anr. Versus State of U.P. & Ors के सम्बन्ध में पारित आदेश दिनांक 14.08.2023 के अनुपालन में आपको अवगत कराना है, कि जिला- हरिद्वार के तहसील- लक्सर में स्थापित मै0 आर0बी0एन0एस0 शुगर मिल लि0, से जनित शुद्धिकृत उत्प्रवाह को लक्सर ड्रेन के अन्तर्गत निस्तारित किये जाने की अनुमति है। इसके अतिरिक्त तहसील- लक्सर में स्थापित अन्य किसी भी उद्योग द्वारा प्रत्यक्ष व अप्रत्यक्ष रूप से उत्प्रवाह निस्तारित नही किया जाता है। **(सूची संलग्न)।**

संलग्नकः- यथोपरि।

भवदीय,

13/09/2023

(एस0 पी0 सिंह)
क्षेत्रीय अधिकारी

S. No.	Name of Industry	Industry Type	Whether EC has been granted (EC No. & date	Whether CTE/CTO has been granted (CTO No. & date	Contact details of the point person with Mobile No. & e-mail
1	M/s JMV Ispat, khasra No-23-village-gangnoli, Tehsil-Laksar,	Steel and steel products using various furnaces like blast furnace /open hearth furnace/induction furnace/arc furnace/submerged arc furnace /basic oxygen furnace /hot rolling reheated furnace	NA	31.03.2022 Now Application under process	8392905163 hs.maan@dsrolling.in
2	R.B.N.S. SUGAR Mills Ltd., Laksar Haridwar.	Distillery (molasses / grain / yeast based)	IA-J-11011/618/2010-IAII(I) 27.08.2021	31.03.2023 Now Application under process	9927019571 vikasom407@gmail.com
3	SHREE CEMENT ltd, vill akbarpur urd, tehsil lakshar-vill akbarpur urd, tehsil lakshar, laksar	Cement	SCL/ENV/HARIDWAR/2009 20.02.2009	31.03.2026	8755050039 envrgu@shreecement.com
4	Yogi Industries, khasra no-472-village - akbarpur oud, near shree cement, laksar,lkr-akbarpur	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black	NA	31.03.2024	9759839410 yogi.industries252@gmail.com
5	GREEN BIO FEEDS PVT LTD, Vill Podowali-Laksar,LKR-Podowali , Lakshar	Pharmaceutical formulation and for R & D purpose (For sustained release/ extended release of drugs only and not for commercial purpose)	NA	31.03.2024	9312286169 greenbiofeed@gmail.com
6	M\S D.S ROLLING MILLS (P) LTD, khashra no 192,195,197,190,189,188-vill-Dayalpur,LKR-LaKSAR	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H & TBM) rules, 2008 - Items namely - Used Oil – As per specifications prescribed from time to time.	EC22A008UK196830 Issue Date: 28.04.2022	31.03.2025	8392905163 hs.maan@dsrolling.in
7	Narmada Agro fertilizers and	Fertilizer (granulation /	NA	31.03.2027	9758063883 avnishgupta1979@gmail.com

	chemicals, plot no-243, Vill- Akbarpur Urd, Laksar, Haridwar	formulation / blending only)			
8	ALFA INGOT private limited, khasra no.-264 m, village gangnauli, laksar, haridwar	Steel and steel products using various furnaces like blast furnace /open hearth furnace/induction furnace/arc furnace/submerged arc furnace /basic oxygen furnace /hot rolling reheated furnace	NA	31.12.2022 Now Application under process	9917200010 yasirarafat2024@gmail.com
9	APT Packaging ltd, Khasra No.- 529- Village- Akbarpur Urd, Laksar,Haridwar,LKR-Akbarpur Urd	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Paint and ink Sludge/residues	NA	30.09.2024	9837747895 hrharidwar@aptpackaaging.in
10	Chaudhary Enterprises Company, Kh No- 61 & 64, Vill- Tugalpur (Govardhanpur), Tehsil- Laksar, Distt- Haridwar.	Tyre Pyrolysis Plant	NA	31.03.2023 Now Application under process	9416060541 dilbaguchana@yahoo.com
11	Shiv India pharmaceuticals, MIE 12-15 Pipli Laksar Road-Laksar, ROK-laksar road pipli	Ayurvedic and homeopathic medicines (without boiler)	NA	30.09.2024	9897770065 shivindiapharmaceuticals@gmail.com
12	Cavendish indiustries ltd (formely birla tyres), unit of j.k. tyres-village-khedimubarakpur,lkr-khedi mubarakpur	Tyres and tubes vulcanization/ hot retreating	NA	30.09.2024	7351002439 patni2k1@gmail.com
13	TIDC INDIA -A UNIT OF TUBE INVESTMENTS OF INDIA LIMITED, Khasra No. 230 and 231, Village-Gangnauli, Tehsil-Laksar, District-Haridwar,	Automobile Manufacturing (integrated facilities)	NA	31.03.2027	8171000703 singhk@tii.murugappa.com

Details about Industries in Laksar tehsil: 700

S. No.	Name of Unit	Description of Manufacturing Process/Products	Consented Water requirement	Consent Discharge Quantity	Mode of Disposal of treated waste water
1	M/s JMV Ispat, khasra No-23-village-gangnoli, Tehsil-Laksar,	Steel and steel products using various furnaces like blast furnace /open hearth furnace/induction furnace/arc furnace/submerged arc furnace /basic oxygen furnace /hot rolling reheated furnace	Domestic- 1.0	Domestic-1.0	In House Septic Tank/Soakpit
3	SHREE CEMENT ltd, vill akbarpur urd, tehsil lakshar-vill akbarpur urd, tehsil lakshar, laksar	Cement	Domestic- 30	Domestic-20.0	In House STP Treated water of STP used in gardening/Green Belt
4	Yogi Industries, khasra no-472-village - akbarpur oud, near shree cement, laksar,lkr-akbarpur	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black	Industrial- 2.0 Domestic- 1.0	Trade Effluent-1.0 Domestic-0.8	In House ETP Treated water of ETP used in gardening/Green Belt
5	GREEN BIO FEEDS PVT LTD, Vill Podowali-Laksar,LKR-Podowali , Lakshar	Pharmaceutical formulation and for R & D purpose (For sustained release/ extended release of drugs only and not for commercial purpose)	Domestic-1.0	Domestic - 0.8	In House Septic Tank/Soakpit
6	M\S D.S ROLLING MILLS (P) LTD, khashra no 192,195,197,190,189,188-vill-Dayalpur,LKR-LaKSAR	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H & TBM) rules, 2008 - Items namely - Used Oil – As per specifications prescribed from time to time.	Domestic- 10.0	Domestic-6.0	In House STP Treated water of STP used in gardening/Green Belt
7	M/s Narmada Agro fertilizers and chemicals, plot no-243, Vill- Akbarpur Urd, Laksar, Haridwar	Fertilizer (granulation / formulation / blending only)	Domestic- 5.0	_	In House Septic Tank/Soakpit
8	ALFA INGOT private limited, khasra no.-264 m, village gangnauli, laksar, haridwar	Steel and steel products using various furnaces like blast furnace /open hearth	Domestic- 2.0	Domestic - 1.5	In House Septic Tank/Soakpit

		furnace/induction furnace/arc furnace/submerged arc furnace /basic oxygen furnace /hot rolling reheated furnace			
9	APT Packaging ltd, Khasra No.- 529- Village- Akbarpur Urd, Laksar,Haridwar,LKR-Akbarpur Urd	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW(M, H& TBM) rules, 2008 - Items namely - Paint and ink Sludge/residues	Domestic- 2.0	Domestic-1.0	In House Septic Tank/Soakpit
11	Chaudhary Enterprises Company, Kh No- 61 & 64, Vill-Tugalpur (Govardhanpur), Tehsil- Laksar, Distt-Haridwar.	Tyre Pyrolysis Plant	Industrial- 3.0 Domestic- 2.0	Trade Effluent-2.0 Domestic-1.0	In House ETP Treated water of ETP used in gardening/Green Belt
12	Shiv India pharmaceuticals, MIE 12-15 Pipli Laksar Road-Laksar, ROK-laksar road pipli	Ayurvedic and homeopathic medicines (without boiler)	Industrial- 1.0 Domestic- 2.0	Trade Effluent-0.5 Domestic - 1.6	In House ETP Treated water of ETP used in gardening/Green Belt
13	TIDC INDIA -A UNIT OF TUBE INVESTMENTS OF INDIA LIMITED, Khasra No. 230 and 231, Village-Gangnauli, Tehsil-Laksar, District-Haridwar,	Automobile Manufacturing (integrated facilities)	Domestic- 25.0 Industrial- 20.0	Trade Effluent-12.0 Domestic-16.0	In House ETP & STP Treated water of ETP & STP used in gardening/Green Belt

Annexure IV

मैं राजन कुमार S/o अशोक कुमार निवासी केदला यह बताना चाहता हु हमारे पास डिस्टलरी लगी हुई है जिसमे आसपास पानी काफी दूषित है एवं उद्योग से बदबु भी आती है जिससे पानी खेतो में जा रहा है जिससे फसले खराब हो रही है।

राजन कुमार
15-9-2023
No-9045949606

मैं विवेक कुमार S/o बरेश कुमार निवासी केदला यह बताना चाहता हु हमारे पास डिस्टलरी लगी है जिससे पानी काफी खराब हो चुका है एवं उद्योग से बदबु आती है जिससे पानी खेत में जा रहा है जिससे ~~xxxx~~ खबरे बहुत खराब हो रही है और यह काफी ~~a~~वर्षो से हो रहा है।

विवेक
15/9/23
7505838939

8791286310 Ankur Kumar

1. मैं जगदीश कोहली पुत्र ओम प्रकाश कोहली निवासी केहड़ा रोड निकट RBNS Sugar mill यह बताना चाहता हूँ कि आज के समय में हमें कोई समस्या नहीं है।

Jagdish Kohli
15-9-2023
9219738764

2. निर्दोष कुमार S/o रिछपालसिंह निवासी ग्राम केहड़ा यह बताना चाहता हूं कि इसका इथनोल प्लांट से डिस्टलरी लगी हुई है। जिससे आसपास का पानी दूषित हो गया है एवं उद्योग से बदबू भी आती है। इसके कम्पोस्ट यार्ड से पानी जमीन में जा रहा है। जिससे फसले खराब हो रही है।

निर्दोष
15/09/23
मो० 9690727522

Annexure-V: Laboratory analysis results of river and drain

Lab Analysis Results of River Banganga

S. No.	Location	DO	pH	Color	BOD	COD	TSS	TDS	SO_4^{--}	Cl^-	Conductivity	NH_3-N	As	Cd	Cr	Cu	Fe	Pb	Mn	Ni	Zn	TC	FC
1.	River Banganga a/c River Pathri	4.46	8.2	BDL	2.21	10	19	372	44	21	547	-	-	-	-	-	-	-	-	-	-	4900	1300
2.	Banganga b/c Laksar Drain	6.2	8.2	BDL	1.85	10	9	344	28	20	525	BDL	0.01	BDL	BDL	BDL	2.46	BDL	0.28	BDL	0.01	2800	78
3.	Banganga a/c Laksar drain	5.8	8.2	BDL	BDL	BDL	26	304	20	20	548	BDL	0.01	BDL	BDL	BDL	2.08	BDL	0.3	BDL	0.02	2400	490
4.	Banganga b/c Sonali	7.1	8.2	BDL	1.19	8	24	334	22	16	522	BDL	0.02	BDL	BDL	BDL	1.1	BDL	0.13	BDL	BDL	1300	130
5.	Banganga a/c Sonali	6.4	8.2	BDL	2.29	9	44	276	17	17	475	BDL	0.02	BDL	BDL	BDL	2.32	BDL	0.14	BDL	0.01	1100	230

Lab Analysis Results of River Solani

S. No.	Location	DO	pH	Color	BOD	COD	TSS	TDS	SO_4^{--}	Cl^-	Conductivity	NH_3-N	As	Cd	Cr	Cu	Fe	Pb	Mn	Ni	Zn	TC	FC
1.	River Solani u/s STP Saliyar	6.2	8.5	BDL	2.51	14	41	290	13	20	441	-	-	-	-	-	-	-	-	-	-	-	-
2.	River Solani d/s Roorkee bridge	6.0	8.1	7	7	29	28	354	19	34	625	-	-	-	-	-	-	-	-	-	-	-	-
3.	River Sonali a/c River Ratmau	6.2	8.1	BDL	BDL	7	74	302	25	23	440	-	-	-	-	-	-	-	-	-	-	-	-
4.	Solani b/c to Banganga	6.1	8.1	BDL	BDL	BDL	87	258	14	17	430	BDL	0.01	BDL	BDL	BDL	5.07	BDL	0.27	BDL	0.02	1300	230

Lab Analysis Results of River Ratmau

S. No.	Location	DO	pH	Color	BOD	COD	TSS	TDS	SO_4^{--}	Cl^-	Conductivity
1.	River Ratmau on bridge	6.0	8.1	BDL	1.17	9	70	204	35	20	320

Lab Analysis Results of Laksar Drain

S. No.	Location	pH	Color	BOD	COD	TSS	TDS	SO_4^{--}	Cl^-	Conductivity	NH_3-N	As	Cd	Cr	Cu	Fe	Pb	Mn	Ni	Zn
1.	Laksar drain near railway track	7.2	BDL< 05	12	68	20	380	16	36	690	6	BDL	BDL	0.028	BDL	0.686	BDL	0.238	BDL	BDL
2.	Laksar drain u/s M/s R.B.N.S. Pvt. Ltd.	7.1	BDL< 05	14	76	27	392	24	38	697	2	BDL	BDL	0.004	BDL	2.147	BDL	0.098	BDL	0.03
3.	Laksar drain d/s M/s R.B.N.S. Pvt. Ltd.	7.1	BDL< 05	11	66	18	396	31	34	705	2	BDL	BDL	0.004	BDL	0.847	BDL	0.143	BDL	BDL
4.	Laksar drain near Akhoda Kalan village	7.3	BDL< 05	15	76	17	488	61	81	960	7	BDL	BDL	0.06	BDL	0.75	BDL	0.354	BDL	BDL
5.	Laksar drain a/c with Hadwada drain	7.2	BDL< 05	7	46	21	356	20	26	710	2	BDL	BDL	0.026	BDL	0.896	BDL	0.499	BDL	BDL
6.	Laksar drain b/c with River Banganga	7.4	BDL< 05	7	40	18	360	22	63	704	2	BDL	BDL	BDL	BDL	1.117	BDL	0.274	BDL	BDL

Lab Analysis Results of Hadwa Drain

S. No.	Location	pH	Color	BOD	COD	TSS	TDS	SO_4^{--}	Cl^-	Conductivity	TC	FC
1.	Hadwa Drain u/s Laksar	7.1	BDL<05	11	60	25	388	17	42	748	-	-
2.	Hadwa drain b/c of Laksar drain	7.3	BDL<05	8	46	28	384	13	26	720	7000	3300

Annexure-VI: STP Inspection report

Central Pollution Control Board
Format for monitoring of Sewage Treatment Plants (STPs/CETPs)

1.	**Name/Location of STP/CETP (full address)**		:	STP Saliyar, Roorkee
2.	**Coordinates (In decimal units e.g. 12.34567°)**	**Latitude**	:	29.418459
		Longitude		77.700320
3.	**Designed capacity of STP and Treatment Technology**		:	33 MLD, Sequential Batch Reactor (SBR)
4.	**a. Date of monitoring and starting time**		:	11.10.2023
	b. Type of sampling (Grab or Composite)		:	Grab
	c. If composite mentioned total hours and interval (eg. 12 hr composite at 2 hr interval)		:	NA
5.	Agency/organisation responsible for O&M (Name of agency & contact person, Mob., E-mail)		:	Uttarakhand Jal Sansthan Mr. Manoj (AEE), 9761212691
6.	Whether Operation through Sub contractor, if any, details thereof with contact information (Name of agency, contact person with designation, Mob., E-mail)		:	KEC international Ltd. Mr. Sushil Kumar Mishra, 9012801708 mishrasa@kecrpg.com
7.	Year of commissioning (Operational since)		:	2020
8.	a. Operational/Non-functional/Non-operational (be specific in functionality status) b. Reason, if non-functional/non-operational and time since non-functional/non-operational		: :	Operational
9.	STP designed parameter (flow, BOD, COD, TSS etc.& mentioned values of designed parameter)		:	BOD≤10, TSS≤10, Faecal coliform ≤500 MPN,
10.	Utilized Capacity as reported by operator **or** verified from log book (MLD)		:	7.89 MLD as per logbook of September, 2023
11.	Actual treatment (Inflow during visit) (m^3/hr x hrs.)		:	NA
12.	If operating under designed capacity, give reason		:	Improper sewage network connectivity
13.	Flow meter/v-notch at Inlet of STP & reading		:	Ultrasonic flow meter without totalizer
14.	Flow meter/v-notch at Outlet of STP & reading		:	Ultrasonic flow meter without totalizer
15.	Fresh water supply source (in STP premises) if any, details (source, water consumption status, logbook, meter)		:	01 Borewell, without flowmeter
16.	**Raw sewage characteristics** pH COD BOD TSS TDS (also FDS for CETPs) Total Nitrogen Total Phosphorus Sulphate Nitrate,		:	Mentioned at Sr. No. 61

	Phosphate, Ammonical Nitrogen Chloride Faecal Coliform Total Coliform Heavy metal (For Kanpur STPs)		
17.	Details of transfer sump	:	Not available
18.	Pre-treatment if any, details (screen, Equalization Tank)	:	Yes, Screen provided 2 mechanical & 1 manual
19.	Primary-treatment if any, details (Oil and Grease trap, grit, pre-settling tank)	:	02 No. grit chamber
20.	Primary Settling Tank (i) Primary Settling Tank Volume m^3 (ii) Settling Surface area m^3 (iii) Weir length m (iv) Retention Period (v) PST outlet pH, TSS, BOD, COD (mg/L) (vi) Underflow solids concentration mg/l or % (vii) Actual primary Sludge production rate (flow rate m^3/hr x hr/day) Availability of Mechanical Scrapper	:	NA
21.	No. of Biological Treatment stages	:	Single Stage
22.	**Treatment processes used in STP for sewage treatment along with order of the stage:** ASP – Activated sludge process; TF – Trickling filter; AL – Aerated lagoon; BT- Bio-tower; UASB – Up flow anaerobic sludge blanket; OP-Oxidation pond/WSP-waste stabilization ponds/ Aerated lagoon with or without lining; EA - Extended Aeration; BD –Biodigester; SBR – Sequential Batch Reactor; MBR – Membrane Bio Reactor; MBBR/FAB – Moving Bed Bio Reactor/Fluidized Aerobic Bed; SBT- Soil Biotechnology; Electrocoagulation or Any Other Treatment Technology used (describe)		
	SBR – Sequential Batch Reactor		
23.	Process parameters of Anaerobic Process for example **A. UASB& Others** (i) No. of reactors (ii) Capacity of each reactor (iii) Average flow (iv) HRT (v) UASB outlet BOD, COD, TSS (mg/l)	:	NA
24.	Process parameters of Aerobic Process for example **B. Activated Sludge Process** (i) Waste sludge generation (flow rate m^3/hr multiplied by hr/day) (ii) Waste sludge solids (TSS) concentration mg/l (iii) ASP outlet pH, TSS, COD, BOD **Aeration Tank** (i) Aeration Tank volume m^3 (ii) Retention period	:	NA

	(iii) Mixed Liquor MLSS, MLVSS&DO mg/l (iv) Aeration Capacity KW or HP (v) Related aeration capacity Kg/KW hr **Secondary Settling Tank** (i) Secondary Settling tank volume m^3 (ii) Settling Surface area m^2 (iii) Retention period (iv) Weir length m (v) Return flow rates m^3/hr or m^3/day (vi) Return flow solids (TSS) concentration		3 SBR basin having size 37 m x 37 m x 5.5 m (7530 m^3) each were provided, one found non-operational during visit NA
25.	Tertiary Treatment (Physico- Chemical) **(i) Coagulation and flocculation** **(ii) Dual Media Filter** **(iii) Adsorption** **(iv) Membrane Treatment** **(v) Any Other**	:	Not available
Disinfection System			
26.	Disinfection Technology Installed	:	Yes
	Name of Technology used	:	Gas Chlorination
	Operational status (if Non-operational, Reasons)	:	Operational
	If chlorination based disinfection system a. Name of chemical/ form of chlorine b. Methodology (Mechanical/manual) c. Dosing Rate d. Type of chlorinator e. Chemical consumption record f. Dimension of the Chlorine contact tank g. Chlorine Contact Time/Retention time h. **Value of Residual Chlorine in treated sewage (ppm)** i. Methodology used for assessment of Residual chlorine : titrimetric method/ colorimetry (using ortho-toluidine or any other indicator)	:	 a. Chlorination b. Mechanical (02 Nos.) c. 05-08 kg/hr d. Gas chlorinator e. Provided f. 12 m x 26 m x 4 m (1248 m3) g. 30 min. at design decanting flow h. 0.3 ppm i. Colorimetry
	If Ozonation a. Pressure at which ozonation is performed b. Dosing rate (concentration of ozone dozed) c. Dosing tank Detail d. Contact time e. Flow rate of sewage	:	NA
	If UV Treatment a. UV Dose (mJ/cm^2) b. Dosing tank Detail c. Flow rate of sewage	:	NA
27.	**Treated sewage characteristics** Oil & Grease pH	:	Mentioned at Sr. No. 61

	BOD COD TSS TDS (also FDS for CETP) Total Nitrogen Total Phosphorous Nitrate (as N) Ammonical Nitrogen (as N) Phosphate (as P) Chloride Faecal Coliform Total Coliform **Residual Chlorine (if doing chlorination)** (Heavy metal for STPs) as per order & Other parameters (DO & MLSS/MLVSS for Aeration tank)		
28.	Sludge Thickener (i) Volume m^3 (ii) Thickening Surface m^3 (iii) Underflow solids concentration (mg/l) (iv) Actual thickened sludge production rate (Flow rate, m/hr multiplied by hr/day)	:	1 no. having size 19.3 m dia. X 3.5 m SWD
29.	Sludge Digester (i) Digester Volume m^3 (ii) Thickening sludge BOD & COD mg/l (iii) Actual digester sludge production rate(flow rate m^3/hr multiplied by hr/day)	:	NA
30.	Biogas produced, if any and its composition	:	NA
31.	Operational status of gas utilization	:	NA
32.	Power generation, if any	:	NA
33.	STP connected to sewerage network (Yes/ NO)		NA
34.	Mode of receiving raw sewage through (open drain/ sewerage network/ both)	:	NA
35.	Details of pumping stations (SPS/IPS/MPS) & area covered by each pumping station		02 Nos. of SPS, Mahigran (32.2 MLD) & Ganeshpur (12.5 MLD) provided
36.	Log book of pumping station (pump operation, breakdown, operational hours, etc.)		Not available
37.	Route of sewage reaching the STP (Area covered, SPS, MPS etc)		SPS (02 Nos.)
38.	Disposal of treated sewage (river/lake/irrigation/land/pisciculture/aquaculture/and other) Any plan for reuse of treated sewage	:	Solani River
	In case Land disposal (land & agreement details)/	:	NA
	Recycling and reuse of treated sewage	:	NA

	If reuse by Industry/organization (name of unit and contract)		
	Route of treated sewage to reach river	:	Via pipeline
39.	By Pass arrangement at STP/CETP, if any	:	No
40.	By pass observed at time of inspection (Yes/No) If yes pictures and description	:	No
41.	Method of sludge disposal description, avg. quantity of sludge generated per day and status (Satisfactory/unsatisfactory)	:	Dumping within STP premises
42.	Operation and maintenance of Sewage Treatment Plant (Satisfactory/unsatisfactory)	:	Satisfactory
43.	If unsatisfactory, details of major flaws observed	:	NA
44.	Power requirement	:	875 KVA
45.	Status of power availability for uninterrupted and continuous running of STP. Provide details of standby arrangement , if any	:	UKPCL & DG set of 1010 KVA (01 No.)
46.	Annual expenditure on O & M & STP	:	15 Lakhs/Months excluding electricity
47.	Consent Status from State Pollution Control Board/Pollution Control Committee (Water & Air)	:	Yes, Available
48.	Sewage generated (in MLD) in the area covered under STP	:	No information available
49.	Details of proposed or ongoing augmentation or upgradation of capacity or any new STP under construction	:	NA
50.	Augmentation of STPs for achieving stricter norms	:	None
51.	Volume of industrial waste being mixed in sewage, if any.	:	No information available
52.	Status of maintenance of log Books (inlet & outlet flow, pump operations, electricity, maintenance/breakdown maintenance)	:	Yes maintained
53.	Influent and Effluent quality monitoring schedule in own lab (parameter wise)	:	Yes, BOD, COD, TSS, pH, DO on daily basis
54.	Status of Skilled/trained Manpower (operation & laboratory)	:	40 Nos. (Skilled-28, Unskilled- 12) including SPS operators
55.	Status of Environmental Laboratory facility	:	Yes
56.	Status of Online Monitoring System (OCEMS) (Installed/not installed and connected to CPCB/SPCB server or not) Compliance to be verified of direction dated 10.08.2020	:	Sensor for online monitoring of BOD, COD and TSS found installed at inlet & outlet of STP but not connected with CPCB server
57.	Flow diagram of treatment (also to be attached)	:	Not available
58.	**Observations:** a. STP found operational during visit on 11.10.2023. b. STP operating agency has obtained CCA from UKPCB valid up to 31.03.2025. c. STP receive sewage via two no. of SPS namely Ganesh Nagar (12.5 MLD) and Mahigram (32 MLD). Presently STP receive only 8 MLD of sewage against design capacity of 33 MLD.		

d. Mechanical coarse screen and fine screen have been installed for the removal of floating trash.
e. Grit chambers (along with grit separators) have been installed for the removal of grit from raw sewage.
f. Ultrasonic type flow meter found installed at inlet & outlet of STP.
g. STP is operating on SBR technology with 03 nos. of SBR basins. One no. of SBR basin found non-operational during visit
h. Centrifuge (03 nos.) has been installed for the dewatering of raw sludge.
i. Complete STP operates in automation through SCADA software and flows at inlet & outlet are measured in this software.
j. Chlorination through Cl_2 gas chlorinator dosing @ 3 – 6 kg/hr is being carried out for disinfection of treated sewage.
k. Dried sludge found dumped inside premises of STP and is taken by nearby farmers for use in agricultural purposes.
l. Sensor for online monitoring of BOD, COD and TSS found installed at inlet & outlet of STP but not connected with CPCB server.
m. Onsite environmental laboratory is available inside the STP premises.
n. Analysis results of samples collected from the SBR basin the during aeration phase show MLSS – 2391 mg/l & MLVSS – 994 mg/l.
o. Grab samples were collected from the inlet, outlet and SBR basin during the visit. Analysis results of samples collected from STP outlet indicate that STP is complying for w.r.t discharge norms prescribed under Hon'ble NGT order dated 30.04.2019 in O.A. No. 1069/2018 except **Total phosphorus as 2.7** against norms of 1 mg/l and **Faecal coliform 14 x 10^4 (MPN/ 100 ml)** against norms of <230 MPN/100 ml.
p. Treated sewage is directly discharged into river Saloni via pipeline.

59. **Table: Analysis results of Inlet & Outlet samples**

S. No.	Parameter	STP Inlet	STP Outlet	Norms as per NGT order 30.04.2019	Complying Status as per NGT	Norms as per as per MoEF&CC notification dated 13.10.2017	Compliance status as per MoEF&CC dated 13.10.2017
1.	pH	7.2	6.9	5.5-9.0	Complying	**6.5-9.0**	Complying
2.	COD (mg/l)	232	69	50	Complying	-	
3.	BOD (mg/l)	73	14	10	Complying	20	Complying
4.	TSS (mg/l)	169	14	20	Complying	<50	Complying
5.	Cl- (mg/l)	63	53	-		-	
6.	NO_3-N (mg/l)	3	12.9	-		-	
7.	T. Kjeldahl Nitrogen - **TKN** (mg/l)	-	8	-		-	
8.	Phosphorus – Total (mg/l)	3.7	2.7	1mg/l (for discharge to ponds/lakes)	**Non-complying**	-	
9.	NH_3-N (mg/l)	-	7	-		-	
10.	Oil & Grease (mg/l)	-	BLD	-	Complying	-	

	11.	TC (MPN/ 100 ml)		54 x 10^4	-		-	
	12.	FC (MPN/ 100 ml)		14 x 10^4	< 230	**Non-Complying**	<1000	**Non-Complying**
	13.	**Aeration Tank-: MLSS** –2391 mg/l; **MLVSS** -994 mg/l						
60.	**Recommendations:** STP operating agency shall be directed to: a. augmentation of sewage network to ensure optimum utilization of design capacity of STP. b. install OCEMS and provide its connectivity with CPCB/SPCB server. c. ensure consistent compliance with the discharge norms prescribed under Hon'ble NGT order dated 30.04.2019 in O.A. No. 1069/2018. d. optimize disinfection system as per feed flow condition.							
61.	Pictures							

Fig 1: STP inlet screen

Fig 2: Inlet flow meter

Fig 3: SBR basin

Fig 4: Chlorine contact tank

Fig 5: Centrifuge

Fig 6: Gas chlorinator

Fig 7: Thickener

Fig 8: OCEMS

HEAD OFFICE
Uttarakhand Pollution Control Board
"Gauradevi Paryavaran Bhawan"
46B, IT Park, Sahastradhara Road, Dehradun
E-mail : msukpcb@yahoo.com, Phone No.-0135-2607092

Letter No.: UKPCB/HO/Con-U-2/2023/920 Date: 06 .10.2023

REGD. POST

To,

M/S Rai Bahadur Narayan Singh Sugar Mills Ltd.,
(Distillery Unit)
Laksar, Distt. Haridwar
(Uttarakhand)

Subject: **Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & Authorization) Renewal 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 under "Rule -6(2)"of the "Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016"notified under "Environment (Protection) Act, 1986"as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively).**

CAF ID: 9158	**Application No.** 2775076
CCA (Renewal)	**Date:-** 13.03.2023

Consolidated Consent and Authorization (CCA):

CCA is hereby granted to **M/S Rai Bahadur Narayan Singh Sugar Mills Ltd. (Distillery Unit)** located at Laksar, Distt. Haridwar (Uttarakhand) subject to the provisions of the **Water (Prevention and Control of Pollution) Act, 1974;** the **Air (Prevention and Control of Pollution) Act, 1981** and the **Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016** and the orders that may be made further and subject to following terms and conditions:

1. This CCA is granted for the period up to 31.03.2024, under Section-25 of the Water (Prevention & Control of Pollution) Act, 1974, as amended.
2. This CCA is granted for the period up to 31.03.2024, under Section-21 of the Air (Prevention & Control of Pollution) Act, 1981, as amended.
3. This CCA is granted for the period of 31.03.2024, under the Hazardous and Other Waste (Management & transboundary Movement) Rules, 2016 as amended.

4. **Production Capacity:**

S. No.	Declared by the industry		Permitted by Board	
	Raw Material/ Feedstock	Finished Product (KLD)	Raw Material/ Feedstock (M^3/Day)	Finished Product (KLD)
I.	C-Heavy/ B-Heavy Molasses- 372 M^3/Day	Ethanol/ENA/RS-60 KLD & Ethanol-60 KLD	C-Heavy/ B-Heavy Molasses- 372 M^3/Day	Ethanol/ENA/RS-60 KLD & Ethanol-60 KLD

5. Production Process Infrastructure:

	Declared by the unit				Permitted by the Board
S.no.	**Number of fermenters**	**Capacity of fermenters (M^3**	**Type of fermentation technology adopted**	**Type of Distillation**	
1.	07	6.5	Feed Batch	Molasses based	As declared by Unit.

Molasses storage infrastructures:

Declared by the unit			Permitted by SPCB
Capacity	**No. of tanks**	**No. of lined pits***	
6000 Qtl. & 85000 Qtl.	02 Nos.	NA	6000 Qtl. & 85000 Qtl. (02 Nos.)

*The unit shall not store molasses in *Kaccha*/ unlined pits.

6. Water Conservation:

A. Fresh water Consumption

i. The unit shall obtain permission / NOC from State or Central Ground Water Authority for Groundwater abstraction and shall comply with the conditions mentioned in the NOC.

ii. Industry shall install separate sealed, calibrated Electro Magnetic Flow meters with flow totalizer at all water abstraction sources, utilization lines- process, domestic and boiler.

iii. The industry shall maintain duly signed logbook of fresh water consumption and utilization.

iv. The specific water consumption shall not exceed values mentioned below as per consented product type.

Category	Specific Water Consumption not to exceed
B-heavy / C-Heavy	8-10KL/KL of product
Cane syrup/ sugar cane juice	6-8KL/KL of product

	Declared by the Industry	Permitted by NOC issued by CGWA	CGWA conditions
No. of bore wells	01	01	To be complied.
Daily quantity of water to be abstracted (KLD)	200 KLD	500 KLD	

B. Effluent generation, treatment and disposal:

i. The quantity of maximum specific effluent generation shall be as specified below:

Category	Specific spent wash generation, not to exceed
B-heavy / C-Heavy	6-8KL/KL of product
Cane syrup/ sugar cane juice	4-6KL/KL of product

ii. The quantity of maximum daily effluent generation & discharge should not be more than the following:

S.No.	Kind of Effluent	Maximum daily generation	Maximum daily discharge, (KLD)	Treatment Facility and Discharge point

1	Domestic			Septic Tank & Soak Pits.
2	Industrial (Spent wash)	720 M^3/Day	Zero Liquid Discharge (ZLD) (Through MEE & Spray Dryers).	

iii. 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 the storm water drain.

iv. The domestic effluent should be treated in sewage treatment plant (STP) and it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules, 1986 as amended.

v. The unit shall identify recipient drains/ rivulets and their u/s & d/s locations in consultation with SPCB for monthly monitoring by industry to ensure ZLD from distilleries within 30 days. The monitoring report shall be submitted to CPCB on monthly basis.

S.No.	Name of recipient drain/rivulets	Latitude	Longitude	Name of the recipient river
1.	u/s of Laksar drain	$28^0 44' 59''$N	$78^0 01' 40''$E	Banganga
2.	d/s of Laksar drain	$29^0 44' 36''$N	$78^0 01' 53''$E	Banganga

vi. The industry shall maintain Zero Liquid Discharge (ZLD). ZLD refers to installation of facilities and system which will enable industrial effluent (all streams) for absolute recycling of or re-use in to industrial processes and converting solute (dissolved organic and in-organic compounds / salts) into residue in solid form by adopting method such as concentration/ evaporation/drying. ZLD will be recognized and certified based on two broad parameters that is, water consumption versus waste water reused or recycled (permeate) and correspondingly solids recovered (percent total dissolved / suspended solids in effluents).

C. Effluent Management Infrastructure:

Bio-digester

S.no.	No. of digesters	Designed Capacity (m3)	Sludge generation from digester	Method of disposal/ utilization of sludge
1.	03	10000 x 02 nos. 7500 x 01 nos.	--	MEE & Spray Dryers

Multi Effect Evaporator (MEE)

S.No.	Nos. of MEE	Design Capacity (m3)	Type of technology of MEE (stages)	Mass flow meter installed at inlet and outlet of MEE
1.	02 Nos.	5028 Sq. Meter	Multi-Effect Evaporation	Yes.

Condensate Polishing Unit (CPU):
****For treatment of MEE condensate and other low-strength effluent**

S.No.	Design Capacity (m3)	Type of technology of CPU	Sources of effluent coming into CPU with Quantity	Quantity of treated effluent from CPU and its utilization	Quantity of CPU sludge & its disposal mechanism
1.	1050	USAB	Condensate of MEE	485 KLD Reused in	Sludge Drying Bed.

				cooling and processes.	To be used as manu re.
Reverse Osmosis (RO) system					
S.No.	**Design Capacity (m3)**	**No. of stages**	**Quantity of RO permeate (m3) & purpose of utilization**	**Quantity of RO reject (m3) & disposal mechanism**	
1.	The Unit shall establish RO system of appropriate capacity by March, 2024.				

i. All process and non-process effluents such as Spent lees, Process condensates, Boiler RO reject, CT blowdown, Softener/DM plant backwash, Pump gland cooling water etc. should be treated through CPU and recycled back in the process.
ii. The unit shall install mass flowmeters with totalizers at inlet and outlet of Multi Effect Evaporator (MEE) (concentrate) and shall connect the same with CPCB and Uttarakhand Pollution Control Board's servers.
iii. The unit shall install electromagnetic flowmeters with totalizer at CPU inlet & outlet and at water recirculation points like make up water for cooling towers & in process. The unit shall have separate energy meter for ETP/CPU and maintain the duly signed logbook of the same.
iv. The unit shall maintain duly signed logbooks of spent wash generation, MEE feed, MEE condensate, MEE concentrate, CPU inlet & outlet, cooling tower make up water and treated effluent reused in process.
v. The unit shall ensure proper marking/and colour coding of all the pipelines carrying industrial effluent accordingly.

Distilleries opting for Bio-composting;

i. The final storage capacity of lagoon for storage of concentrated spent wash after M.E.E to be utilized in bio-composting shall be strictly restricted to thirty days equivalent of concentrated spent wash (40% by volume of spent wash generated and solid concentration shall be maintained 30%). The lagoon shall be impermeable and properly lined.

ii. **Details of lagoons**

Declared by unit				**Permitted By Board**
S.no.	**No of Lagoons**	**Dimensions of lagoon**	**Capacity of lagoon (m3)**	
1.	03 nos.	22 x 25 x 3.5 Meter 14 x 28 x 3.5 Meter	1925 x 02 nos. 1372 x 01 nos.	As declared by Unit.

iii. For concentrated spent wash having total solids 27 - 30 %, the filler material (press mud) to spent wash ratio prescribed is 1: 1.6 for 60 days' cycle.
iv. Impervious compost yard area based on material balance (plus ready compost storage area) should be made available. The unit shall strictly implement the Standard Operating Procedure (SOP) for Bio-composting operation for Molasses based distilleries. (Link: https://cpcb.nic.in/ngrba/Biocomposting_SOP_for_distillery-Final_10.08.2018.pdf).
v. The unit having uncovered bio-compost area, shall stop its bio-compost activities in monsoon period (July –September). The unit shall make extra land arrangements for storage for press mud and ready bio-compost.

vi. Unit must install and maintain online connectivity of PTZ web cameras at the bio-compost yard and lagoons with server of CPCB and Uttarakhand Pollution Control Board's servers.

vii. Details of Bio-composting area requirement; as permitted by the Board:

S.No.	Total area for bio-composting	Active area for bio-composting (excluding the land arrangements for storage for press mud and ready bio-compost)	Covered area (Acres)	Uncovered area (Acres)	Number of Piezometric wells available around the compost
1.	14.02 Acres	14.02	4.28	9.74	01

viii. Obtaining valid registration/certification for the production and quality of bio-enriched Organic manure (bio compost) as per Gazette Notification S.O. 2776 (E) dated 10.10.2015 under the Fertilizer (Control) Fourth Amendment Order, 2015 issued by Ministry of Agriculture and Farmers Welfare (Dept. Of Agriculture, Cooperation and Farmers Welfare) from the Ministry of Agriculture/ concerned agency – within a time period of four months.

ix. The finished bio-compost shall be packed in sealed poly bags super scribed with quality and composition of bio compost along with the name of the manufacturer industry.

x. The unit shall maintain a record of procurement/ availability of press mud, sell of compost and compost quality on monthly basis.

xi. The unit shall not be sale ready bio-compost in open tractors/trolleys.

xii. **The Unit shall use bio-composting year only up to December, 2023. Thereafter, no fresh concentrated spent wash shall be disposed through Bio-Composting yard and spend wash shall be totally disposed through spray dryers.**

Distilleries opting for Incineration;

i. Minimum Solid % in feed for slop fired incinerator shall be 55-60% in case of C-Heavy and B-Heavy molasses as feedstocks and 50-55% in case of sugar syrup/sugarcane juice as feedstock.

ii. Maximum storage of raw spent wash utilized in MEE followed by incineration shall strictly be restricted to seven days (07) equivalent of concentrated spent wash generated. Excess storage facilities beyond this shall be levelled and dismantled.

iii. The unit shall collect ash generated from Incineration boiler through screw/belt conveyor from common silo and should be disposed of as fertilizer or for any other use.

iv. 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 regime during rainy season by flowing along with storm water. Direct exposure of workers to fly ash & dust shall be avoided.

v. The unit shall sell potash rich ash to industries for potash recovery plant, Fertilizer Company or sell the ash to the farmers after meeting FCO conditions.

vi. Unit shall dispose the spent wash through MEE followed by use of concentrated spent wash (as stated in point i) fuel in the Incineration boiler of appropriateTPH.

S.no.	Type of Boiler	Capacity of Boiler (TPH)	Type of subsidiary fuel used	Quantity of subsidiary fuel consumed (MT/day)	Quantity of ash generated (MT/day)	Method of Ash Disposal
--NA--						

Distilleries opting for dryer;

i. Minimum Solid % in feed for dryer shall be 40-45%.

ii. Maximum storage of Bio-methanated spent wash utilized in dryer shall strictly be restricted to seven days (07) equivalent of concentrated Bio-methanated spent wash generated. Excess storage facilities beyond this shall be levelled and dismantled.

iii. The unit shall collect powder produced from dryer in common silo and should be disposed of as fertilizer.

iv. Unit shall dispose the spent wash through Bio-methanation followed by Bio-methanated spent wash MEE followed by use of concentrated bio-methanated.

D. Domestic sewage

i. The domestic effluent should be treated separately in sewage treatment plant/ soak pit so that it should be in conformity with the following norms.

Trade effluent and domestic sewage shall be treated separately and also to be monitored for compliance w.r.t. notified norms separately. However, Single outlet can be provided after mixing for outside disposal.

ii. Industry shall install the flow meter at STP inlet and outlet and maintain the daily logbook.

iii. Industry shall explore the possibility to recycle the treated used water shall be utilised in gardening, irrigation, industrial utility and toilet flushing to minimise the fresh water consumption up to 20 % per year.

7. Air pollution mitigation:

i. The industry shall use following fuel and install air pollution control devices (APCD) of adequate capacity to comply with the following;

S. No.	Equipment	Fuel used	Stack height (m)	Air Pollution Control Device (APCD)	Stack Emission standards
I.	Spray Dryer (45 TPD)	***Bagasse-168 TPD***	***40***	Wet Scrubber	PM-150 mg/N M^3
II.	Spray Dryer (45 TPD)	***Biogas-1500 M^3/day***			

ii. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only. Porthole, platform and stairs shall be provided as per prescribed guidelines for stack emission monitoring.

iii. The APCS will be maintained and operated in such a manner that emissions always conform to the standard laid down under the E.P Act 1986 as amended. The ash generated from the Boiler shall be disposed of properly in such a manner that not affect the environment adversely.

iv. The unit shall install Online Stack Emission Monitoring System (OEMS) for PM and ensure with its connectivity (24x7) to CPCB server and Uttarakhand Pollution Control Board's dashboard.

v. The unit shall submit manual stack emission monitoring report and ambient air quality report on quarterly basis during operation of the plant.

vi. Water shall be sprinkled on the roads and premises for suppression of road dust.

vii. The solid waste namely boiler ash shall be disposed of properly and ensure that there is no fugitive emission from their transportation, storage and handling.

viii. The industry shall provide ports in the chimney/stack and facilities such as ladder, platform etc. as per requirement for monitoring the air emissions and the same shall be open for inspection and use at all time) by the Board's staff, the chimney/stack attached

to various sources of emission shall be designated by number such as S-1, S-2 etc. and these shall be painted/ displayed to facilitate identification.

8. Noise Pollution Mitigation:

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

Standards for Noise level in db.(A) L_{eq}			
Industrial Area		**Commercial Area**	
Day	Night	Day	Night
75	70	65	55

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

ii. The industry shall take adequate measures to control of noise from its own source so as to comply with the standards as may be applicable.

iii. The industry shall provide acoustics enclosure on DG sets as per Environment (Protection) Rules, 1986.

9. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016: -

Hazardous Waste Management:

i. Number of authorization and date of issue: As above.

ii. Reference of application (No. and date) : As above.

iii. The **Factory Manager** of **M/S Rai Bahadur Narayan Singh Sugar Mills Ltd.** is hereby granted an authorization for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at Laksar, District Haridwar (Uttarakhand).

Details of Authorization

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity (ton/annum)
--NA--			

iv. The authorization shall be valid for a period of .....NA.....

v. The authorization is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A. General conditions of authorization:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control 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 authorization.

5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization 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 authorized 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 authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
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 authorization 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 Change 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.

General Conditions

1. Environmental management system:
   i. Industry shall setup the environmental management cell including unit head, purchase/store manager, process operation head, ETP in charge to effectively monitoring of environmental compliance
   ii. Industry shall setup the environmental laboratory for testing of minimum wastewater quality parameters like pH, TSS, BOD, COD, MLSS and DO to effectively monitoring of ETP control parameters and ETP discharge norms.
2. The applicant shall get analyses the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF&CC and shall report to the SPCB.
3. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
4. Treated waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
5. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions with 30 days of receipt of this CCA. If, at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the **Board**, legal action shall be initiated against the applicant.
6. The applicant shall maintain good housekeeping. All valves/pipes/sewer/drains etc. must be leak-proof.
7. The industry shall provide uninterrupted entry to this STP's/ETP's inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control measures.
8. The industry shall provide "Inspection Book" at the time of inspection to the Board's officials. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall

be reported to the Board's offices and other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect

9. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.
10. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point.
11. The **Board** reserves the right to revoke/add/modify any stipulated conditions issued along with CCA, as may be necessary.
12. Any unauthorized change in personnel, equipment as working condition as mentioned in the application by the person authorized shall constitute a breach of his authorization.
13. It is the duty of the authorized person to take prior permission of the **Board** to close down the facility.
14. The authorization is valid for temporary storage of Hazardous Waste within premises only.
15. It is duty of the authorized person to take prior permission of this Board to close and clean up the facility for treatment, storage and disposal of hazardous waste.
16. Industry shall submit the latest copy of Audit Balance sheet/C.A. Certificate (Fixed Assets + Current Assets-Current Liabilities) so that the Consent fee payable by the industry may be verified.
17. Generated hazardous waste shall be stored temporarily in the factory premises and disposed of through authorized TSDF after obtaining the authorization from the Board
18. Unit shall develop green belt as per the protocol of Central Pollution Control Board.
19. The industry shall comply with the provisions of Environment (Protection) Amendment, Rules 2018 notified by MoEF&CC by Notification no 49 Dt. 25.01.2018, Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended, Plastic Waste Management Rule 2016, E-Waste (Management and Transboundary Movement) Rules 2016 (whichever is applicable).
20. If closure order is issued by CPCB or SPCB against the unit then CCA will remain suspended during the closure period. After ensuring the compliance and after revocation of the closure order, the CCA will automatically be effective from the date of issuance of the closure revocation/modification order with additional conditions mentioned in the closure revocation/modification order.

(S.K. Pattnaik)
Member Secretary

Copy to:

Regional Officer, Uttarakhand Pollution Control Board, Regional Office, Roorkee (Haridwar) for information and compliance.

Member Secretary

Annexure-VII

Item No. 02 Court No. 2

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 495/2023

Mohd. Amjad & Anr. Applicant(s)

Versus

State of U.P. & Ors. Respondent(s)

Date of hearing: 14.08.2023

CORAM: HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Appellant: Mr. Rahul Khurana & Mr. Hasil Jain, Advocates

Application has been filed under Sections 14 and 15 of the National Green Tribunal Act, 2010

ORDER

1. The grievance in the present application is regarding severe water pollution at the Shukratal Ganga Ghat in Muzaffar Nagar, Uttar Pradesh.

2. The applicants have submitted that Shukratal Ganga Ghat in Muzaffar Nagar, Uttar Pradesh is a religious place where the local people, devotees, saints and sadhus come for taking holy dip. Respondent No. 7 - M/s R.B.N.S. Sugar Mill Pvt. Ltd., Shekhpuri, Laksar, Uttarakhand and Respondent No. 8 - M/s R.B.N.S. Distillery Pvt. Ltd., Shekhpuri, Laksar, Uttarakhand are located at upstream of Banganga River at Laksar Industrial area in District Haridwar, Uttarakhand. Respondents No. 7 and 8 are discharging highly polluting industrial effluents in drain which merges in Banganga river. Respondents No. 7 and 8 are flouting environmental norms under the Water (Prevention and Control of

Pollution) Act, 1974 and the Environment (Protection) Act, 1986. Respondents No. 7 and 8 are in the habit of releasing of toxic spent wash stored in their lagoon whenever they find opportunity. The process of illegal discharge has been going on for the last many years. The waste water is released in bulk quantity at Idrishpur drain which damages the entire ecosystem river of Banganga till the Shukratal ghat downstream. The Shukratal ghat is a stagnated water area where the river water stagnates and the effect of pollution in water is clearly visible. Due to pollution caused, the dissolved oxygen of water at Shukratal ghat has reduced significantly and has resulted in death of fish in the area. The spent wash changes colour of water to brown and also results in foul odour in the area. FIR No. 76 dated 16.03.2023 and FIR No. 198 dated 08.07.2023 were registered under Sections 277 of IPC and 51 of Wildlife Protection Act, 1972 at Police Station Bhopa, District Muzaffarnagar.

3. *Prima facie*, the averments made in the application raise questions relating to environment arising out of the implementation of the enactments specified in Schedule I to the National Green Tribunal Act, 2010.

4. In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position. Accordingly, we constitute a Joint Committee comprising of Central Pollution Control Board (CPCB), Regional Office, Ministry of Environment, Forest and Climate Change (MoEF&CC), National Mission for Clean Ganga (NMCG), Uttarakhand Environment Protection and Pollution Control Board (UEPPCB), Uttar Pradesh Pollution Control Board (UPPCB) and District Magistrates (DMs) of Haridwar and Muzaffarnagar and direct the same to meet within one week, undertake visits to the site, look into the grievances of the applicant, associate the applicant and

representatives of the concerned project proponents, verify the factual position which shall include (i) details of industries located in Laksar Industrial area and Muzaffarnagar Industrial area which are discharging effluents in the drain connecting to the River Banganga; (ii) details of industries which are functioning without consent/EC; (iii) functioning of STP/ETP and other waste water treatment mechanism and (iv) mechanism for utilization of waste water for agriculture and other land use purposes rather than discharging in the drain and take appropriate remedial action by following due course of law and giving opportunity of being heard to the concerned project proponents. The CPCB will be the nodal agency for coordination and compliance.

5. Factual and Action taken Report may be submitted within three months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.

6. List for further consideration on 22.11.2023.

7. A copy of this order, along with a copy of the application and documents attached with the same, be forwarded to the CPCB, MoEF&CC, NMCG, UEPPCB, UPPCB and DMs of Haridwar and Muzaffarnagar by e-mail for requisite compliance.

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

August 14, 2023
Original Application No. 495/2023
DV

Item No. 04 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

(BY VIDEO CONFERENCING)

Original Application No. 530/2023

Anuj Kumar Applicant

Versus

State of Uttarakhand & Ors. Respondent(s)

Date of hearing: 23.08.2023

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

Applicant: Mr. Prakash Pandey, Advocate

ORDER

1. In this Original Application, applicant has made several allegations against respondent no. 7, M/s Rai Bahadur Narayan Singh Sugar Mills Limited in respect of non-compliance and violation of the directions issued by the Pollution Control Board. The prayer in the OA is to issue a direction to the said respondent to install incineration boiler to protect ground water from pollution and also to construct concrete nallah from industry premises to Hadwada drain. There is a further prayer to issue a direction to the said respondent to develop green area in 10 acres and to compensate for the loss caused to the environment by assessing the damage.

2. We have been informed that another Original Application being *O.A. No. 495/2023, Mohd. Amjad & Anr. vs. State of U.P. & Ors.* alleging various violations in respect of the same respondent no. 7 is already

pending and this Tribunal by order dated 14.08.2023, considering the allegations, with a view to verify the factual position, has constituted a joint Committee comprising of Central Pollution Control Board (CPCB), Regional Office, Ministry of Environment, Forest and Climate Change (MoEF&CC), National Mission for Clean Ganga (NMCG), Uttarakhand Environment Protection and Pollution Control Board (UEPPCB), Uttar Pradesh Pollution Control Board (UPPCB) and District Magistrates (DMs) of Haridwar and Muzaffarnagar. This Tribunal has directed the Committee to meet within one week and undertake visits to the site and look into the grievance raised therein and verify the factual position.

3. Since the Committee has already been constituted, therefore, we direct the said Committee to look into and consider the grievance of the present application also and submit the report in respect thereof along with the report in terms of the earlier directions.

4. List this matter along with O.A. No. 495/2023 for further consideration on 22.11.2023.

Prakash Shrivastava, CP

Sheo Kumar Singh, JM

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

August 23, 2023
Original Application No. 530/2023
SN