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उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड  
UTTAR PRADESH POLLUTION CONTROL BOARD

पत्रांक संख्या- H.01451 / सी-5 / 143 / OA no - 424 / 23

दिनांक 03-10-23

To,

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

**Sub: Regarding Factual and Action Taken Report in OA no. 424/2023 Sunil Kumar Ramhet V/s State of Uttar Pradesh passed by Hon'ble NGT, New Delhi on dated 01.08.2023.**

Sir,

In compliance to the order dated 01.08.2023 passed by this Hon'ble National Green Tribunal in OA no. 424/2023 Sunil Kumar Ramhet V/s State of Uttar Pradesh the Factual Action Taken Report is hereby attached with a request to put up before Hon'ble National Green Tribunal for kind perusal and consideration.

**Enclosure: As above.**

Your's Sincerely,

(Dr. Ram Karan)

**Chief Environmental Officer,  
Circle-5**

**Copy to:**

1. Member Secretary, UPPCB, Lucknow.
2. District Magistrate, Sitapur.
3. Shri Arvind Kumar, Advocate for UPPCB.
4. Law Officer-I, UPPCB, Lucknow.
5. Regional Officer, UPPCB, Lucknow.

**Chief Environmental Officer,  
Circle-5**

**Action Taken Report on behalf of UPPCB in compliance to the order dated 01.08.2023 passed by Hon'ble NGT, Principal Bench, New Delhi in O. A. No. 424 of 2023 in reference Sunil Kumar Ramhet V/s State of Uttar Pradesh & others: -**

Hon'ble NGT, Principal Bench, New Delhi vide its order dated 01.08.2023 in O. A. No. 424 of 2023 in reference Sunil Kumar Ramhet V/s State of Uttar Pradesh & others has passed the following directions:

*"...2. 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. In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position and take appropriate remedial action. Accordingly, we constitute a Joint Committee comprising of State PCB and District Magistrate, Sitapur and direct the same to meet within one week, undertake visit to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponent, verify the factual position and take appropriate remedial action by following due course of law and giving opportunity of being heard to the project proponent. The Committee is also directed to report about compliance by the industry in question with EC and CTE/CTO conditions, consented mode of disposal and utilization of treated effluents, assess damage to recipient environment (water, air, agricultural land etc.) and suggest restoration measures. The Committee shall also provide factual status on compliance with emission norms and management of ash. The State PCB will be the nodal agency for coordination and compliance.*

*3. Factual and Action taken Report may be submitted within one month by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.*

*4. List for further consideration on 05.10.2023. ...."*

The with most respectfully in pursuance to the order dated 01.08.2023 the Action Taken Report is as under:

1. The Joint Committee has inspected the M/s J B Daruka Paper Mills, A-1, Industrial Area, Advania Grant, Shahjahanpur Road, Sitapur, U. P. on dated 21.08.2023. Join Committee inspection report is annexed as **Annexure no. 1.**



...2

(2)

2. In compliance of above in Hon'ble NGT order direction has been issued against the industry M/s J B Daruka Paper Mills, A-1, Industrial Area, Advania Grant, Shahjahanpur Road, Sitapur, U. P. under section 31A of Air (Prevention and Control of Pollution) Act, 1981 on dated 03.10.2023, regarding for the control of fugitive emission and handling of bagasse/rice husk and compliance for CTO conditions (Letter enclosed as **Annexure no. 2**).

Therefore, the Action Taken Report of the UPPCB is being filed for the kind perusal and consideration of this Hon'ble Tribunal, Lucknow.

Lucknow :

Your's Sincerely,

Date :



**(Dr. Ram Karan)**

Chief Environmental Officer (Circle-5)  
Uttar Pradesh Pollution Control Board,  
Lucknow

**JOINT INSPECTION REPORT OFM/s J B Daruka Paper Mills, A-1, Industrial Area, Advania Grant, Shahjahanpur Road, Sitapur, U. P.**

**IN THE MATTER OF  
Sunil Kumar Ramhet V/s State of Uttar Pradesh (O. A. No. 424 of 2023)**

**A. Background:**

**Hon'ble NGT, Principal Bench, New Delhi has passed order on dated 01.08.2023 for joint inspection of M/s J B Daruka Paper Mills, A-1, Industrial Area, Advania Grant, Shahjahanpur Road, Sitapur, U. P. in the matter of Sunil Kumar Ramhet V/s State of Uttar Pradesh (O. A. No. 424 of 2023). The relevant portion of the order is as below: -**

*"...2. 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. In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual position and take appropriate remedial action. Accordingly, we constitute a Joint Committee comprising of State PCB and District Magistrate, Sitapur and direct the same to meet within one week, undertake visit to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponent, verify the factual position and take appropriate remedial action by following due course of law and giving opportunity of being heard to the project proponent. The Committee is also directed to report about compliance by the industry in question with EC and CTE/CTO conditions, consented mode of disposal and utilization of treated effluents, assess damage to recipient environment (water, air, agricultural land etc.) and suggest restoration measures. The Committee shall also provide factual status on compliance with emission norms and management of ash. The State PCB will be the nodal agency for coordination and compliance.*

*3. Factual and Action taken Report may be submitted within one month by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Supported PDF and not in the form of Image PDF.*

*4. List for further consideration on 05.10.2023. ...."*



Copy of reference NGT order is annexed as **Annexure-1**.

Subsequently, inspection of M/s J B Daruka Paper Mills, A-1, Industrial Area, Advania Grant, Shahjahanpur Road, Sitapur, U. P. was carried out by a joint team comprising officials from District Administration Sitapur and UPPCB, Regional Office, Lucknow on 21.08.2023 . The salient details, observation and recommendation based on the inspection is summarized as below:

**B. Salient Details:**

1.	Name & Address of Industry	M/s J B Daruka Paper Mills, A-1, Industrial Area, Advania Grant, Shahjahanpur Road, Sitapur, U. P.
2.	Establishment of the year	1995
3.	Date of Inspection/Inspections	21-08-2023
4.	Nature of Industry	Paper
5.	Category of Industry	Red (Medium)
6.	Operational Status	Operational
7.	Product and Capacity (MT/day )	Kraft Paper-50 MTD
8.	By Product	Soda Ash
9.	Status of Water Consent	Grant up to 31.12.2024
10.	Status of Air Consent	Grant up to 31.12.2024
11.	Source of Water	Tube well-04 Capacity- 30 HP each
12.	Whether water meter installed on Tube well	Yes, electromagnetic flow meter installed by the industry on the all tube well.



13.	Whether unit has taken permission from UPGWD for ground water extraction	Yes, validity up to 01/08/2027
14.	Utilization of Water Consumption	Industrial- 1240 KLD Domestic -03 KLD
15.	Details of ETP installed/Capacity of ETP	<ul style="list-style-type: none"> <li>• Equalization Tank, Sedimentation Cell, Primary Clarifier, Aeration Tank-1, Aeration Tank-2, Secondary Clarifier, Tertiary Clarifier, Media Filter, Belt Press, Sludge Drying Beds.</li> <li>• ETP Capacity- 1350 KLD</li> <li>• Unit has installed Chemical Recovery Plant for treatment of Black Liquor. At the time of inspection CRP unit was found operational.</li> </ul>
16.	Effluent Quantity (KL/day)	Industrial-1000KLD Domestic- 02 KLD
17.	Quality of Treated Effluent	Treated effluent sample collected from the outlet of the ETP. As per analysis report, the parameters are found complying the discharge norms.
18.	Point of Discharge and Final Discharge	Gadiya drain to Piriyai River through Sarain River meeting in Gomti River.
19.	STP Status for domestic effluent	For domestic effluent treatment Septic Tank & Soak Pit has been installed by the industry.
20.	Quantity of Hazardous Waste	Used Oil-1.80 KL/Annum.
21.	Status of Hazardous Waste	Yes (up to 01/08/2024)



	Authorization	
22.	Source of Air Pollution	Boiler-10 TPH, 08 TPH (Standby)
23.	Details of Fuel Used	Rice Husk/Bagass-100 TPD
24.	Details of APCS & Stack Height	For Boiler 10 TPH – Multi Cyclone dust collector and Stack height 30, For Boiler 08 TPH - Multi Cyclone dust collector and Stack height 30 Mtr.
25.	Details of DG Set (Whether installed acoustic enclosure)	04 DG sets (Capacity-750KVA ,500 KVA, 500 KVA & 82.5 KVA) Stack height all above DG sets as per norms.

### C. Observations:

- 1- The unit has installed Online Continuous Effluent Monitoring System (OCEMS) for monitoring of effluent quality. This system is linked to server of UPPCB and CPCB.
- 2- Stack monitoring was carried out by Central Laboratory, UPPCB, Lucknow on dated 22.08.2023. As per stack monitoring report the value of particulate matters is found 233 mg/Nm<sup>3</sup> which is complying as per the prescribed emission norms 600 mg/Nm<sup>3</sup>. Copy of stack monitoring report dated 22-08-2023 is attached herewith and marked as **Annexure-2.**
- 3- Unit has submitted Ground water impact assessment report prepared by Eathvision Envirotech Pvt. Ltd. 13/353 J, Vinamra Khand, Gomtinagar, Lucknow. Copy of Ground water impact assessment report is attached herewith and marked as **Annexure-3.**
- 4- During Inspection it was also observed that the unit has further strengthened the Rice Husk/Bagasse handling yard and it covered with vertical Tin sheets.
- 5- The wind breaking wall near the bagasse /rice husk area was found broken and permanent water sprinkling arrangement has not been found to suppress the dust/ash particles. Unit has not installed OCEMS on the Boiler stack for continuous monitoring of emission.
- 6- During inspection water sample were collected from the Gadiya Drain and Piryai River and sample deposited for analysis to central laboratory, UPPCB, Lucknow. As per analysis report the parameters are tabulated in **Table No.01.**



**Table No-01**

Sampling locations	Parameters				
	pH	DO mg/Lit	TSS mg/Lit	BOD mg/Lit	COD mg/Lit
Gadiya Drain	7.16	Not detected	78.0	20.0	104.0
Piryai River U/S	7.60	4.29	52.0	5.6	28.4
Piryai River D/S	7.32	2.16	64.0	9.2	52.8

Copy of the analysis report is annexed as **Annexure-4**

- 7- The committee also interacted with the complainant of Shri Sunil Kumar and Shri Ramhet and they have informed vide letter dated 14-04-2023 that at present there is no problem with the industry with respect to water and air pollution. Copy of complainant letter dated 14-04-2023 is attached herewith and marked as **Annexure-5**.
- 8- The committee has found during inspection that unit has following the Charter for water Recycling & Pollution Prevention in Pulp & Paper Industries made by CPCB.
- 9- At the time of inspection treated effluent of industry was discharging in the drain. The treated effluent of ETP was collected during the inspection and As per analysis report the parameters are tabulated in **Table No.02**.

**Table No-02**

Sampling locations	Parameters			
	pH	TSS mg/lit.	BOD mg/lit.	COD mg/lit.
ETP Inlet	6.50	328.0	480.0	2404.0
ETP outlet	7.55	44.0	22.0	198.0
Standard	7.0-8.5	50	30	250



● As per the results presented above, the treated effluent complying with the norms.

10- The industry has installed Chemical Recovery Plant having treatment of black liquor capacity-140 Agro pulp Ton/day.

11- During the inspection unit was found complying with the conditions of CTE/CTO. The unit is established in the year 1995, hence unit has not obtained the Environmental Clearance.

12- The Groundwater samples were also collected from the surrounding area of industry and as per the analysis report, the parameters are are tabulated in **Table No.03**.

**Table No-03**

Parameters	Unit	Indian Marka Hand pump opp. Ram rahis S/o Mathura house	India Marka hand pump near Nafees S/o Kallu House	Shallow hand pump in the house of islam S/O habib	Shallow hand pump in the premises of Indira nagar masjid	Standards Source: IS 10500:2012(2 <sup>nd</sup> Rev.) Required Acceptable Limit
pH	--	7.26	7.12	7.21	7.24	6.5-8.5
TDS	mg/l	484	448	490	412	500
BOD	mg/l	BDL	BDL	BDL	BDL	—
COD	mg/l	BDL	BDL	BDL	BDL	—
Total Hardness	mg/l	159.2	177.2	165.2	148.4	200
Calcium	mg/l	55.12	61.28	56.72	53.76	75
Magnesium	mg/l	5.14	5.76	5.62	3.36	30



Alkalinity	mg/l	164.8	187.4	190.8	172.4	200
Cadmium	mg/l	ND	ND	ND	ND	0.003
Total Chromium	mg/l	ND	ND	ND	ND	0.05
Nickel	mg/l	ND	ND	ND	ND	0.02
Zinc	mg/l	ND	0.1097	ND	ND	5
Arsenic	mg/l	0.0015	0.002	0.004	0.0059	0.01

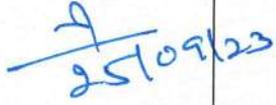
- a. It is evident from above analysis results that ground water parameters are within norms as per IS 10500:2012.
- 13- The Joint team interacted with the residents of nearby village Indira nagar Tehsil & District Sitapur about complaint regarding discharging industrial effluents which have contaminated drinking water. The Project Proponent has stacked big heaps of bagasse and rice husk which spreads over to the residences of the villagers. Smoke emissions generated by burning of bagasse and rice husk are also causing air pollution. The air and water pollution caused by the Project Proponent is also adversely affecting agricultural crops and fertility of soil, but during inspection no adverse impact was virtually observed on crop.
- 14- For impact on agriculture crops from discharge of treated effluent and stack emission from the industry, vide UPPCB letter dated 01/09/2023, information has been sought from District Agriculture officer, Sitapur and vide letter dated 11/09/23, he has informed that during inspection no impact was found on the crops due to the stack emission and discharge of treated effluent from the industry. The copy of the District Agriculture officer, Sitapur letter dated 11-09-2023 dated 14-04-2023 is attached herewith and marked as **Annexure-6**.
- 15- During inspection the industry representative has informed that 2.5 Ton/day fly Ash is generated from the industry which is transported by Trolley and disposed for filling of lowland area. The committee has instructed to the representative for disposal of ash in scientific manner.



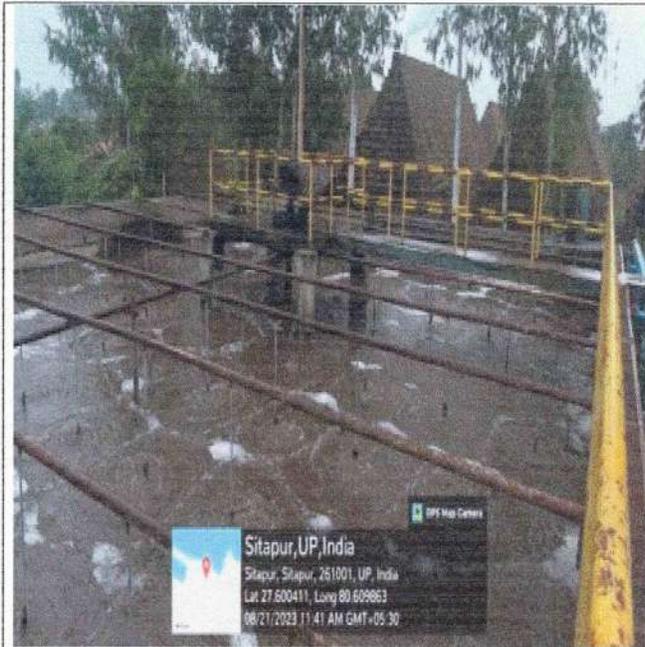
**D. Recommendations:**

- 1- The Unit should ensure the operation of Air Pollution Control System (APCS) in such manner that the air emission confirms with the standard prescribed under EP Act 1986 as amended. It is also recommended the unit should installed OCEMS in stack to ensure regular monitoring of emission coming from the stack.
  - 2- Fly ash shall be stored in closed shed as per CPCB guidelines, so that it should not adversely affect the air quality of nearby peripheral. Unit should also regularly monitor the Ambient Air Quality.
  - 3- Unit should perform the water audit.
- The Above report is here by submitted before the Hon'ble NGT court for kind perusal.

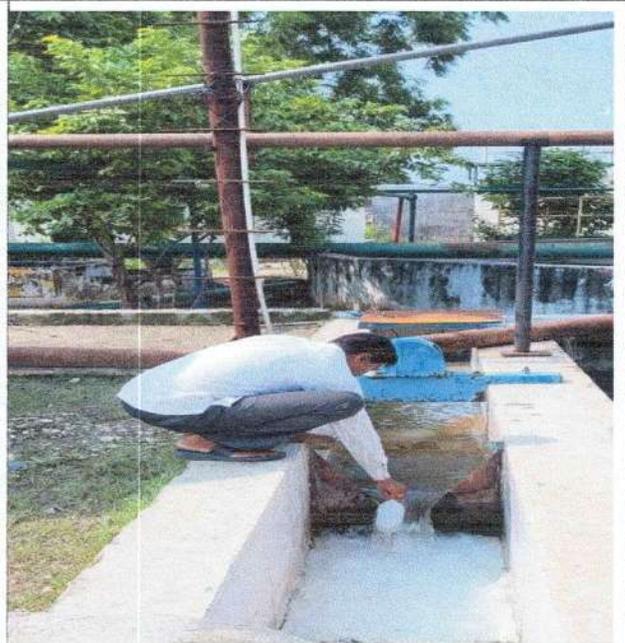
**Inspection Team:**

Sr. No.	Name of Inspecting Officers	Designation	Signature
1	Ram Bharat Tiwari	Additional District Magistrate(F&R),Sitapur	 25/09/23
2	PankajShukla	Assistant Scientific officer, Regional Office, U.P. Pollution Control Board, Lucknow.	 25/09/23

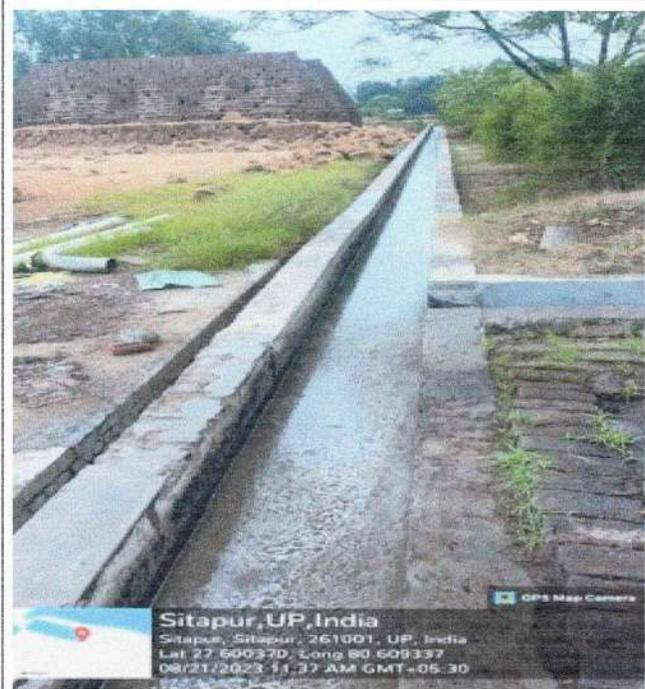
**Photo Gallery of the M/s J B Daruka Paper Mills, A-1, Industrial Area, Advania Grant, Shahjahanpur Road, Sitapur, U. P. in the matter of Sunil Kumar Ramhet V/s State of Uttar Pradesh (O. A. No. 424 of 2023)**



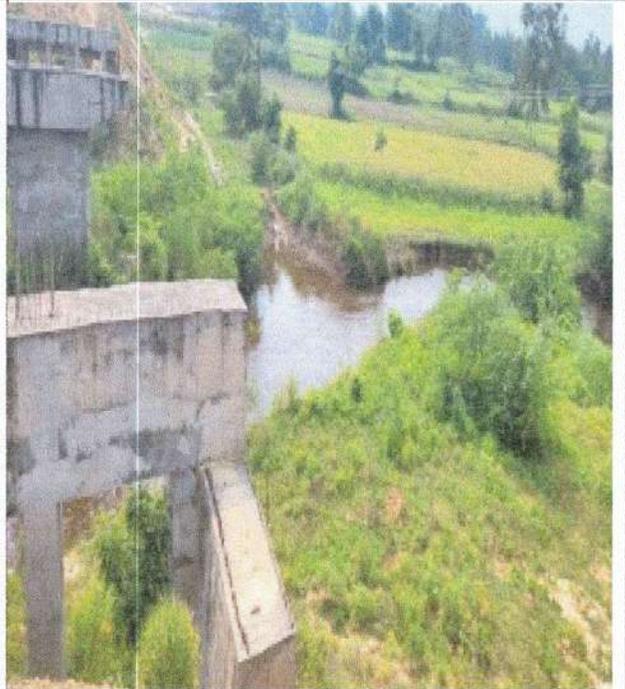
**Photograph-1 ( Aeration tank of ETP)**



**Photograph-2(outlet of ETP)**



**Photograph-3 (Industry Drain)**

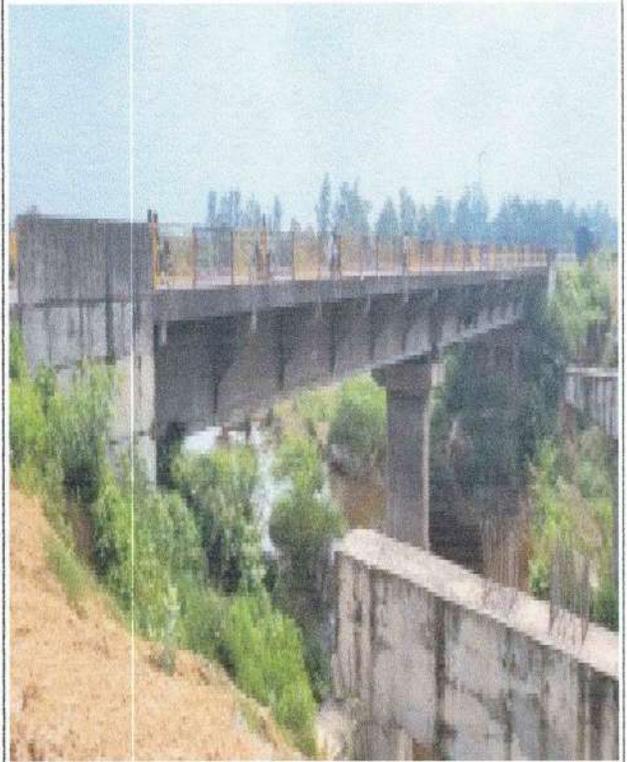


**Photograph-4 (Crop near piryai river)**

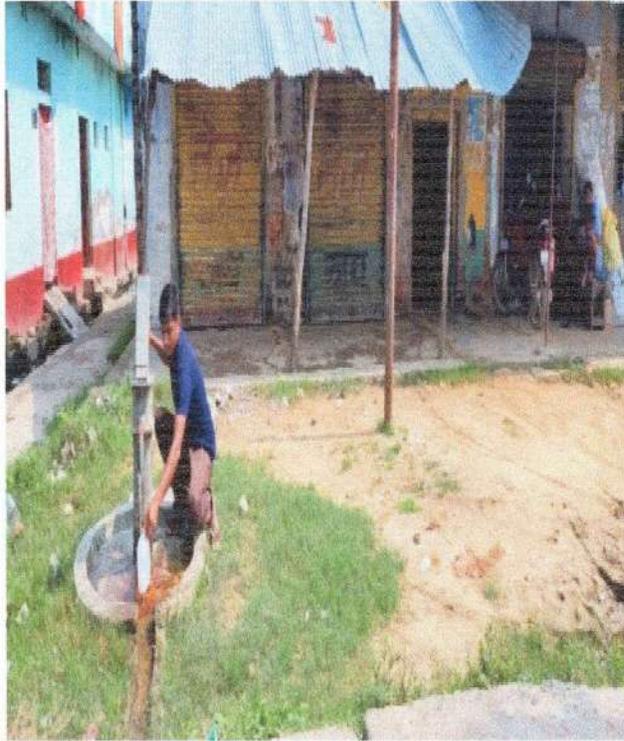
A handwritten signature in blue ink, appearing to read 'Sunil Kumar'.



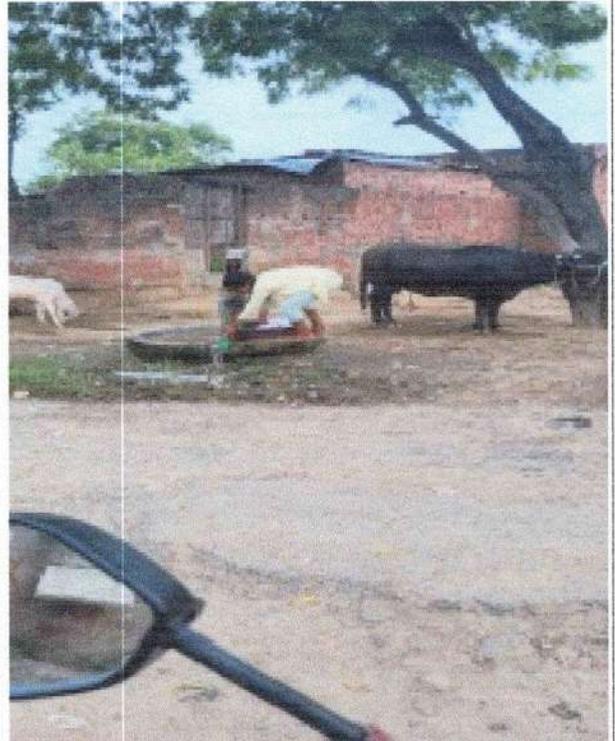
**Photograph-05 (Sampling from Up Stream Piryai River near shahjanapur road Bridge)**



**Photograph-06 (sampling from down stream of Piryai river near hardoi road Bridge)**



**Photograph-7 (ground water from Hand pump India marka-2 in Village Indira nagar)**

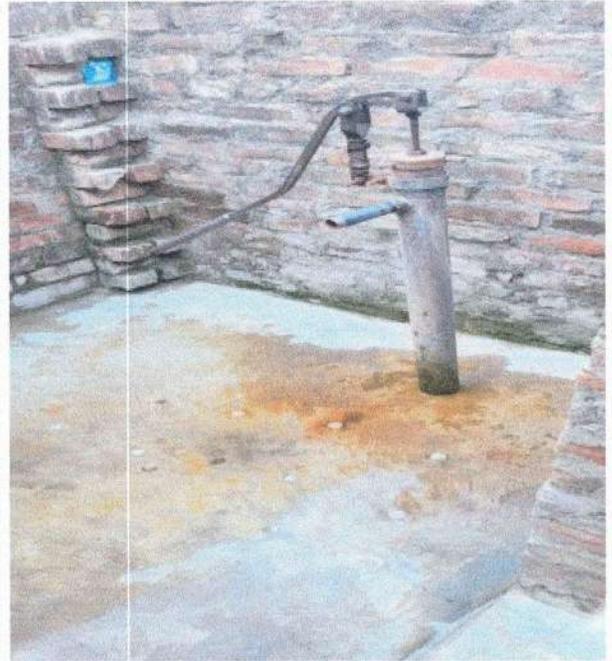


**Photograph-8 (ground water from Hand pump India marka-2 in Village Indira nagar)**

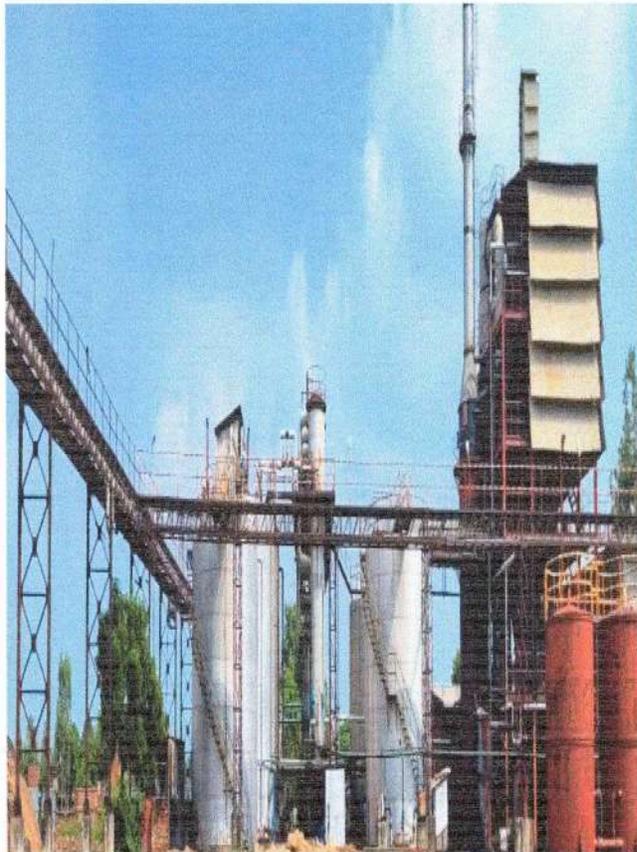
*Sankaj*



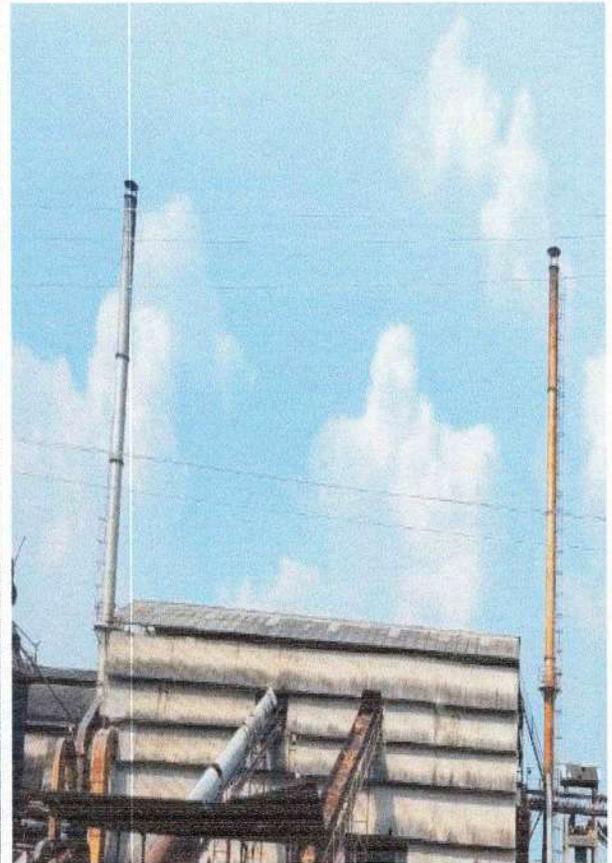
**Photograph-09 ( Water Sampling of ground water from shallow hand pump in Village Indira nagar)**



**Photograph-10 ( Water Sampling of ground water from shallow hand pump in Village Indira Nagar)**

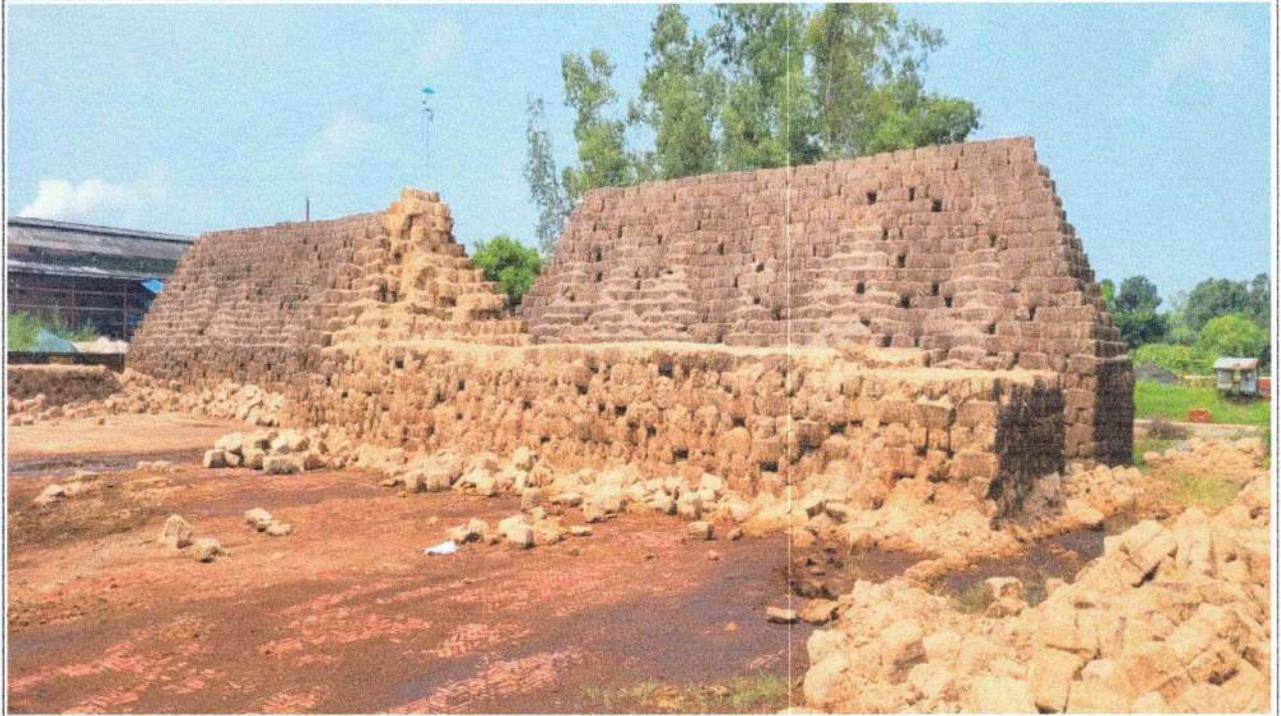


**Photograph-11 (CRP)**



**Photograph-12 (Stack of Boiler)**

A handwritten signature in blue ink, appearing to read 'Sunil Kumar'.



**Photograph-13 (Baggas Storage Yard)**

*Sankar*



उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड  
UTTAR PRADESH POLLUTION CONTROL BOARD

15

पत्रांक संख्या- H01449 / सी-5/L/जवा- 37 / 2023

दिनांक 3-10-23

पंजीकृत

सेवा में,

मैसर्स जे0बी0 दारूका पेपर मिल्स,  
ए-1, औद्योगिक क्षेत्र, एडवनिया ग्रान्ट, शाहजहाँपुर रोड,  
सीतापुर।

विषय: मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0 संख्या-424/2023 सुनील कुमार रामहेत बनाम स्टेट ऑफ यू0पी0 व अन्य में पारित आदेश दिनांक 01.08.2023 के अनुपालन में उद्योग का समिति द्वारा किए गये निरीक्षण दिनांक 21.08.2023 में पाये गये तथ्यों के दृष्टिगत वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 के अन्तर्गत निर्देश।

महोदय,

उपरोक्त विषयक का संदर्भ ग्रहण करने का कष्ट करें। मा0 राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ0ए0 संख्या-424/2023 सुनील कुमार रामहेत बनाम स्टेट ऑफ यू0पी0 व अन्य में पारित आदेश दिनांक 01.08.2023 के अनुपालन में बोर्ड के पत्र दिनांक 17.08.2023 द्वारा जिला प्रशासन, सीतापुर एवं क्षेत्रीय कार्यालय, लखनऊ की गठित समिति के सदस्यों द्वारा उद्योग मैसर्स जे0बी0 दारूका पेपर मिल्स, ए-1, औद्योगिक क्षेत्र, एडवनिया ग्रान्ट, शाहजहाँपुर रोड, सीतापुर का निरीक्षण दिनांक 21.08.2023 को किया गया। निरीक्षण के समय इकाई में भण्डारित बैगास एवं राइस हस्क के कणों के उत्सर्जन के नियंत्रण हेतु स्थापित ब्रेकिंगवाल जगह-जगह टूटी पायी गयी तथा ब्वायलर से जनित फलाई ऐश पर पर्याप्त जल छिड़काव की व्यवस्था नहीं पायी गयी, जिससे महीन कणों के उत्सर्जन से आस-पास के क्षेत्र में कुप्रभाव पड़ना सम्भावित है। इकाई के ब्वायलर की चिमनी से जनित गैसीय उत्सर्जन के सतत् मापन हेतु Online Continuos Emission Moinitoring System (OCEMS) स्थापित नहीं है।

उक्त के दृष्टिगत क्षेत्रीय अधिकारी, लखनऊ के पत्र संख्या-1513/सहमति-156डी/2023 दिनांक 27.09.2023 द्वारा उद्योग को वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 के अन्तर्गत उपरोक्त के अनुपालन हेतु निर्देश दिये जाने की संस्तुति की गयी है।

अतः उपरोक्त के दृष्टिगत सक्षम अधिकारी के अनुमोदनोपरान्त मैसर्स जे0बी0 दारूका पेपर मिल्स, ए-1, औद्योगिक क्षेत्र, एडवनिया ग्रान्ट, शाहजहाँपुर रोड, सीतापुर को वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 के अन्तर्गत निर्देशित किया जाता है कि -

1. इकाई में भण्डारित बैगास एवं राइस हस्क के कणों के उत्सर्जन के नियंत्रण हेतु स्थापित ब्रेकिंगवाल की मरम्मत कराकर चारों तरफ से कवर्ड किया जाये, जिससे धूल कणों के उत्सर्जन की समस्या उत्पन्न न हो।
2. ब्वायलर से जनित फलाई ऐश पर पर्याप्त जल छिड़काव की व्यवस्था हेतु आटोमेटिक वाटर स्प्रीकलर की व्यवस्था सुनिश्चित की जाये तथा ब्वायलर से जनित फलाई ऐश का निस्तारण तकनीकी रूप से केन्द्रीय प्रदूषण नियंत्रण बोर्ड की गाइडलाइन के अनुरूप निस्तारित किया जाये।
3. इकाई में स्थापित ब्वायलर की चिमनी से जनित उत्सर्जन के सतत् मापन हेतु Online Continuos Emission Moinitoring System (OCEMS) स्थापित किया जाना सुनिश्चित किया जाये।
4. उद्योग को बोर्ड के पत्र दिनांक 23.03.2023 द्वारा जारी सहमति (सी.टी.ओ.) की विशिष्ट शर्त संख्या-2, 8, 11, 12, 13 एवं 15 का अनुपालन सुनिश्चित करे।

...2

उपरोक्त निर्देशों का अनुपालन सुनिश्चित करते हुए अनुपालन आख्या 15 दिन में बोर्ड मुख्यालय प्रेषित करना सुनिश्चित करें अन्यथा उद्योग के विरुद्ध वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 (यथासंशोधित) के प्राविधानों के अन्तर्गत नियमानुसार कार्यवाही प्रारम्भ की जा सकती है, जिसका सम्पूर्ण उत्तरदायित्व उद्योग एवं उद्योग संचालक का होगा।

सक्षम अधिकारी द्वारा अनुमोदनोपरान्त पत्र निर्गमन हेतु अधिकृत  
भवदीय,

  
मुख्य पर्यावरण अधिकारी, वृत्त-5

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

1. जिलाधिकारी, सीतापुर।
2. क्षेत्रीय अधिकारी, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ को इस निर्देश के साथ प्रेषित कि उद्योग को जारी उक्त निर्देश की प्रति अपने स्तर से भी उद्योग को प्राप्त कराकर 15 दिन के अन्दर स्पष्ट संस्तुति सहित निरीक्षण आख्या बोर्ड मुख्यालय में प्रेषित करना सुनिश्चित करें।

  
मुख्य पर्यावरण अधिकारी, वृत्त-5



Item No. 03

Court No. 2

BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI

Original Application No. 424/2023

Sunil Kumar Ramhet

Applicant

Versus

State of U.P.

Respondent

Date of hearing: 01.08.2023

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

Application is registered based on a letter petition received by Post

ORDER

1. The grievance in this present application is that J.V. Daruka Papers Limited situated on Shahjahanpur road in the area of Village Pandit Adwania Grunt, Police Station Rankot, Block/Tehsil and District Sitapur is discharging industrial effluents which have contaminated drinking water. The Project Proponent has stacked big heaps of bagasse and rice husk which spreads over to the residences of the villagers. Smoke emissions generated by burning of bagasse and rice husk are also causing air pollution. The air and water pollution caused by the Project Proponent is also adversely affecting agricultural crops and fertility of soil.

2. *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. In view of the averments made in the application, we consider it appropriate that a Joint Committee be constituted to verify the factual

position and take appropriate remedial action. Accordingly, we constitute a Joint Committee comprising of State PCB and District Magistrate, Sitapur and direct the same to meet within one week, undertake visit to the site, look into the grievances of the applicant, associate the applicant and representative of the concerned project proponent, verify the factual position and take appropriate remedial action by following due course of law and giving opportunity of being heard to the project proponent. The Committee is also directed to report about compliance by the industry in question with EC and CTE/CTO conditions, consented mode of disposal and utilization of treated effluents, assess damage to recipient environment (water, air, agricultural land etc.) and suggest restoration measures. The Committee shall also provide factual status on compliance with emission norms and management of ash. The State PCB will be the nodal agency for coordination and compliance.

3. Factual and Action taken Report may be submitted within one month 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.

4. List for further consideration on 05.10.2023.

5. A copy of this order, along with a copy of the application and documents attached with the same, be forwarded to the Member Secretary, State PCB and District Magistrate, Sitapur by e-mail for requisite compliance.

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

August 01, 2023  
Original Application No. 424/2023  
SN



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

**Stack Emission Test Report**

Ref No.22587367/CENTRAL/2023

Date: 25/08/2023

- 1- Name & Address of Industry: JB DARUKA PAPERS LIMITED, Industrial Area, Shahjahanpur Road, Sitapur
- 2- Sample Collected By: Samrendra Singh, SA & Manoj Verma, MA
- 3- Date of Monitoring: 22/08/2023
- 4- Source of Sampling: Stack
- 5- Stack attached to: Boiler
- 6- Stack Height: 30 m
- 7- Total No. of Boiler: 02 Nos
- 8- Capacity of Boiler: 10 TPH & 08 TPH
- 9- Fuel used: Rice Husk
- 10- Quantity of Fuel used: 2.5 TPH & 2 TPH
- 11- Flue Gas Velocity: 7.3 m/s
- 12- Air Pollution Control Device: Multi-cyclone Dust Collector & Wet Scrubber
- 13- Other remarks (if any): NA
- 14- Further details of sample location nad Test methods followed are appened overleaf:

Sr no.	Parameter	Unit	Result	Standards
1	Particulate Matter	mg/Nm <sup>3</sup>	233	600

Analysed by-  
[Samrendra Singh SA]

Authorised Signatory-  
ANANT Digitally signed by ANANT PRASAD  
PRASAD Date: 2023.08.25 18:28:37 +05'30'  
Dr Anant Prasad (ASO)

RAM Digitally signed by RAM GOPAL  
GOPAL Date: 2023.08.25 18:29:22 +05'30'  
Chief Environmental Officer  
Central Laboratory

GROUND WATER  
IMPACT ASSESSMENT REPORT

Annexure-3

OF

**JB** | JB DARUKA PAPERS LIMITED

at

A-1, Industrial Area, Advenia Grant,  
Shahjahanpur Road, Ailiya,  
Sitapur - 261001, Uttar Pradesh

PREPARED BY

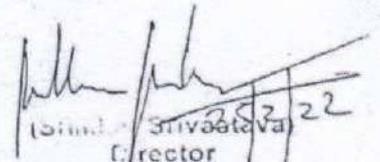


Earthvision Envirotech Pvt Ltd

13/353 J, Vinamra Khand, Gomti Nagar, Lucknow - 226010

EMAIL ID: [eiaconsultant1@gmail.com](mailto:eiaconsultant1@gmail.com)

March 2022

  
Sandeep Srivastava  
Director

Earthvision Enviro-tech Pvt.ltd.  
Lucknow(U.P.)

Accredited By CGWA, valid Up To 30.9.2026



## EARTHVISION ENVIRO-TECH (P) LTD.

Admin Office: 1/353K, VINAMRA KHAND, GOMTINAGAR-226010,  
MOB: +91 7897700666, 9935801000, 7080007474  
Email-earthvision02@gmail.com

### DECLARATION

This Report has been prepared by Earthvision Envirotech Pvt Ltd 13/353 J, Vinamra Khand, Gomti Nagar, Lucknow - 226010 with all reasonable skills, care, and diligence within the terms of contract with the client and as per CGWA format.

Declaration by Earthvision Envirotech Pvt Ltd Contributing to M/s J B Daruka Papers Limited, A-1, Industrial Area, Advenia Grant, Shahjahanpur Road, Ailiya, Sitapur - 261001

We hereby certify that we were part of Ground water Impact Assessment Team to develop the report.



Name: .....  
(Shikhar Srivastava)  
Director  
Date: ..Earthvision Enviro-tech Pvt.ltd.  
Place: Lucknow Lucknow(U.P.)  
Accredited By CGWA.valid Up To 30.9.2026

(Shikhar Srivastava)  
Director  
Earthvision Enviro-tech Pvt.ltd.  
Lucknow(U.P.)  
Accredited By CGWA.valid Up To 30.9.2026



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MOB: +91 7897700666, 9935801000, 7080007474  
Email-earthvision02@gmail.com

### Disclaimer & Notice to the Readers

- Earthvision Envirotech Pvt Ltd 13/353 J, Vinamra Khand, Gomti Nagar, Lucknow - 226010 has prepared this assessment report solely for the purpose of providing select information on a confidential basis to the Management of M/s J B Daruka Papers Limited, A-1, Industrial Area, Advenia Grant, Shahjahanpur Road, Ailiya, Sitapur - 261001
- This report is confidential and for the use of management only. Any distribution beyond the management of M/s J B Daruka Papers Limited shall be with the due consent.
- While performing the groundwater assessment work, Earthvision Envirotech Pvt Ltd assume the genuineness of all signatures and the authenticity of all documents provided to us as a base for the hydrological study. We have not independently verified the correctness or authenticity of the same.
- Performance of our work was based on information and explanation given to us by the management of M/s J B Daruka Papers Limited. Neither Earthvision Envirotech Pvt Ltd nor any of its directors or employees or experts undertake responsibility in whatsoever to any person in respect of errors in this report, arising from omission or incorrect information provided by M/s J B Daruka Papers Limited.
- Our views are not binding on any person, entity, authority, or court and hence, no assurance is given that a position contrary to the opinion expressed herein will not be asserted by any person, entity, authority and by an appellate authority or a court of law.

By reading our report the reader of the report shall deemed to have accepted the terms mentioned herein above.



(Shikhar Srivastava)  
Director

Earthvision Enviro-tech Pvt.ltd.  
Lucknow(U.P.)

Accredited By CGWA.valid Up To 30.9.2026



### EARTHVISION ENVIRO-TECH (P) LTD.

Admin Office: 1/353K, VINAMRA KHAND, GOMTINAGAR-226010,  
MOB: +91 7897700666, 9935801000, 7080007474  
Email-earthvision02@gmail.com

#### Disclosure of Consultant Engaged

Earthvision Envirotech Pvt Ltd 13/353 J, Vinamra Khand, Gomti Nagar, Lucknow - 226010 is CGWA Accredited Ground water consultant organization and accreditation validity up to 30.09.2026. Our prime objective is to deliver more value by providing state of the art solutions for complex problems in hassle-free manner to the clients.

The validity of certificate is up to 30.09.2026, so we can cater all the need of industry related to CGWA/GWD NOC and reports. We provide complete solution and technical services related to requirements after preparation of Impact Assessment report.

#### DECLARATION BY EXPERTS CONTRIBUTING PROJECT REPORT

I, hereby certify that I was a part of the team in the following capacity that developed the Impact Assessment Report for Ground Water Clearance of project for M/s J B Daruka Papers Limited, A-1, Industrial Area, Advenia Grant, Shahjahanpur Road, Ailiya, Sitapur – 261001, Uttar Pradesh.

**Earthvision Envirotech Pvt Ltd**  
13/353 J, Vinamra Khand, Gomti Nagar, Lucknow - 226010  
Accredited Ground water Institution from CGWA  
(Accreditation validity up to 30.09.2026)  
Contact Information: eiaconsultant1@gmail.com

S. No	Name	Designation
1	Dr. R. A.Yadav	Project coordinator
2	Dr. Pooja goyal	G.I.S. Expert

Name: .....  
Designation: ..... (Shikhar Srivastava) Director  
Place: Lucknow Earthvision Enviro-tech Pvt.ltd.  
Date: ..... Lucknow(U.P.)  
Accredited By CGWA.valid Up To 30.9.2026

(Shikhar Srivastava)  
Director  
Earthvision Enviro-tech Pvt.ltd.  
Lucknow(U.P.)  
Accredited By CGWA.valid Up To 30.9.2026

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**Chapter 1: Introduction (Objective, Scope and Methodology)**

**1.0 Salient features of the Proposal**

S. No	Particulars	Details
1	Application No.	-----
2	Accredited by	Earthvision Envirotech Pvt Ltd 13/353 J, Vinamra Khand, Gomti Nagar, Lucknow - 226010
3	Date of Accreditation	01.10.2021
4	Validity upto	30.09.2026
5	Work Order Date (Attach copy of the Work Order with masking details of charges)	-----
6	New/ Existing Project	Existing Project
7	CTE issued date	
8	Alluvium/ Non-alluvium	Alluvium
9	Block Name & Category (GWRA, 2020)	Ailiya
10	Ground water requirement	1250 m <sup>3</sup> /day
11	Ground water Modelling Required (Yes/No)	No
12	In case the report is prepared jointly by accredited Institute and Individual consultant, name/details of chapters prepared by the Individual consultant	Report prepared by an Accredited Institute
13	Signature of the Consultant(s)	

**1.1 The Changing Ground Water Resources**

The groundwater is one of the most precious natural resources that has played a significant role in the maintenance of economic development of the region. Water is the most essential resource for the existence of life on the earth, second to air. In Indian context, the country faces grave water related challenges in terms of water quality and quantity that impede continued economic growth, as well as social and economic development. In central government's Twelfth Five-Year Plan, it was estimated that the total demand for water by 2031 is likely to be 50 per cent higher than 2013 level. Almost 20 percent of this gap is estimated to be bridged by augmenting available supply through additional water harvesting, surface and sub- surface storage, and groundwater retention. The expert opinion that majority (say around 80%) of the deficit water demand must be bridged through greater water use efficiency including multiple water reuse and wastewater treatment.

(Shikhar Srivastava)  
 Director  
 Earthvision Enviro-tech Pvt.ltd.  
 Lucknow(U.P.)  
 Accredited By CGWA.valid Up To 30.9.2026

### 1.2 Objective of the study

The objective of the present scientific investigation is to assess the impact on ground water regime in and around site and highlight risks.

Based on assessment, proposed management strategies are prepared to overcome adverse environmental issues.

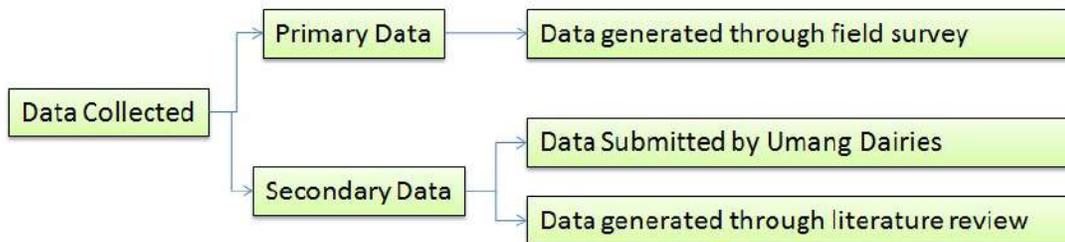
### 1.3 Scope of work

The scope of work of the present study includes following points:

1. Defining study area.
  - a. Land use land cover study
  - b. Topography and drainage study
2. Assessment of ground water situation in and around project area
  - a. Ground water level trends analysis for 10 years
  - b. Water quality assessment of surface water bodies as well as ground water
3. Details of tube well-constructed and proposed piezometers
  - a. Study of aquifer parameters, discharge of tube wells and litho-logical data
4. Comprehensive Assessment of impact on ground water sources
  - a. Impact on environmental values
  - b. Impact on socio economic aspects
5. Proposed Water Management Strategies for industry
  - a. Water balance chart based on sound analysis
  - b. Water conservation measures for water use balance

### 1.4 Data Used

Data collected for the proposed report has been classified as primary data and secondary data which is shown in below flowchart.



#### 1.4.1 Primary Data

##### 1.4.1.1 Physical Environment Data

- GPS data collection site location tube well location, important features
- Geo-tagged water sample collection along with photographs from surrounding 5 kms area (from the periphery of M/s J B Daruka Papers Limited and analysis in NABL lab as per QCI guidelines.
- Well inventory data of nearby pumping wells.

##### 1.4.1.2 Ecological Data

- The suitability of environmental data with respect to flora – fauna was obtained from the field observation.

- Interaction with local people and stakeholder's consultation was made for the description of existing environmental conditions, assessment of alternatives and impacts on the environment.

#### 1.4.1.3 Social Environment Data

Socioeconomic survey was conducted, and impact assessment form was prepared after interaction with village sarpanch.

#### 1.4.2 Secondary Data

1.4.2.1 Data Submitted by **M/s J B Daruka Papers Limited** located at A-1, Industrial Area, Advenia Grant, Shahjahanpur Road, Ailiya, Sitapur – 261001, Uttar Pradesh to the Earthvision Envirotech Pvt Ltd during number of personal interactions after December-2021.

- Basic details of industry
- ETP Design
- Water quality report

#### 1.4.2.2 Data Generated through literature review and analysis.

- Water level, water table (water depth) and reduced water level and other piezometer data collection for the nearby wells surrounding the project site within a radius of 5-km from the project site.
- Flow direction/ flow pattern/ flow gradient and groundwater movement
- Geological, morphological, topographical, hydrological and geo-hydrological investigation data including soil cover and land use.
- Meteorological data rainfall, humidity, air temperature, solar radiation, and soil moisture
- Nature of aquifer, disposition, behaviour, depth/ thickness
- Village/town wise population, households, Occupation, and literacy status based on Census data for project area as well as buffer zone area. Settlement map/Occupational map/Health Status/ Literacy rate and other data available as per records in village panchayat is prepared.

The secondary data sources involved in the study are:

- Ground water Zones from Central Ground Water Board (CGWB), Ministry of Jal Shakti, Government of India
- Soil data from National Bureau of Soil Survey and Land Use (NBSS) Ministry of Agriculture and Farmers Welfare, Government of India
- Piezometric GW Levels, Meteorology data from State Water Data Centre, Government of Uttar Pradesh
- Technical reports of the area by various organizations including Panchayat and Minor Irrigation Department, Agriculture Department.

### 1.5 Methodology

The methodology adopted to achieve the desired objectives are explained in appended flow charts as module 1 (Figure 1.1), module 2 (Figure 1.2) and module 3 (Figure 1.3).

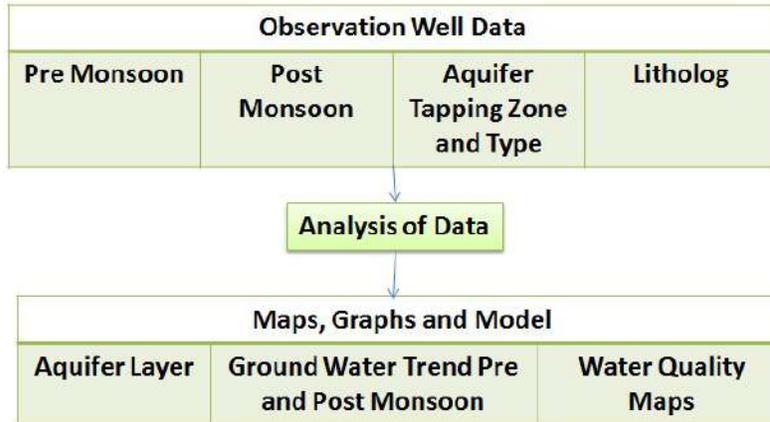


Figure 1.1 Methodology (Module 1)

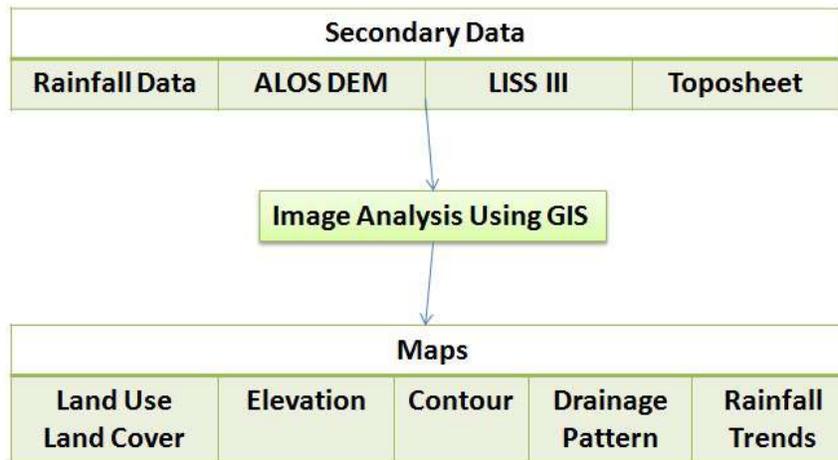


Figure 1.2: Methodology (Module 2)

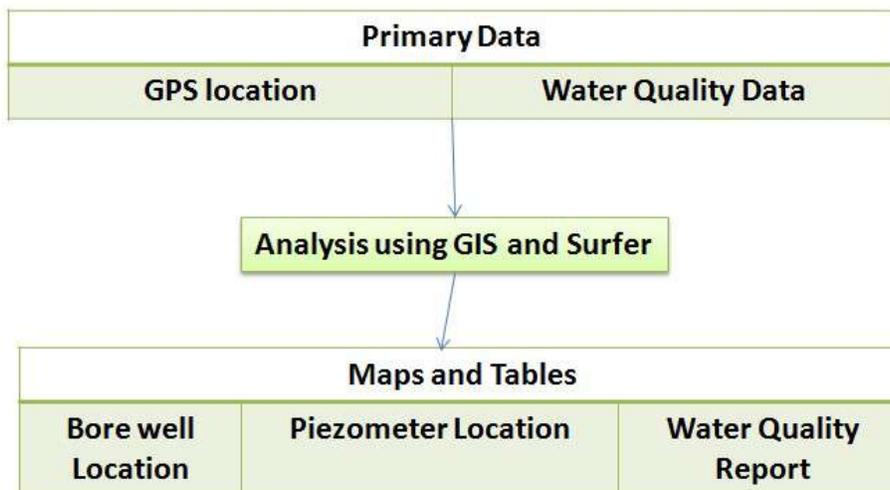


Figure 1.3: Methodology (Module 3)

## 2.0 Introduction about JB Daruka Papers Limited

**JB Daruka Papers Limited** is a pioneer of Agro-based Absorbent Kraft Paper in India. This high-quality paper is the company’s flagship product. The company ensures excellent quality of Absorbent Kraft Paper, which is used in decorative laminates, majorly for exports around the world.

Over 2 decades, JB Daruka Papers Limited has expanded its portfolio across multiple variants of paper and products.

JB Daruka Papers Limited is committed to creating an environment-friendly culture and an entire ecology that promotes sustainability. The company has a strict policy of “No Cutting Trees” and uses locally sourced agro residue (bagasse) and, recycles waste to make Absorbent Kraft Paper and other specialty papers. The company also generates employment for the rural area and local community.

JB Daruka Papers Limited has a fully equipped, in-house Quality Control Lab, to ensure the highest quality of its Absorbent Kraft Papers and other products. The raw material, pulp, chemicals and the final products are tested at every stage and meet the company’s high-quality standards.

Our family has an industrial background right from the Independence days when the great grandfather migrated to Sitapur and started supply of food grains to the military. His siblings, continuing the legacy, expanded and diversified the business into trading and manufacturing of multiple products. Business interests of the family included the trading of food grains and cement, manufacturing and processing of khandsari sugar, polished rice, flour, pulses and dairy products before venturing into specialty paper manufacturing.

Fresh water is required for industrial purpose. Total fresh water requirement for existing project is 1250.00 m<sup>3</sup> /Day. Fresh water has been drawn from underground through bore wells.

**Table 2.1: Summary of the project**

S. No	Particulars	Details
1	Name of the Factory	M/s J B Daruka Papers Limited
2	Location	A-1, Industrial Area, Advenia Grant, Shahjahanpur Road, Ailiya, Sitapur - 261001
3	Water requirement	1250.0 m <sup>3</sup> /day
4	<b>Area details</b>	
a	Green belt area	79381.44 m <sup>2</sup>
b	Open area	40000.00 m <sup>2</sup>
c	Road/Paved area	30000.00 m <sup>2</sup>
d	Rooftop area of building/sheds	10510.00 m <sup>2</sup>

**2.0.1 Intended use of the ground water withdrawal:**

Fresh water is required for industrial purpose. Total fresh water requirement for existing project is 1250.00 m<sup>3</sup> /Day. Fresh water has been drawn from underground through bore wells.

**General Location of project:**

M/s JB Daruka Papers Limited is a pioneer of Agro-based Absorbent Kraft Paper in India. Project site situated at A-1, Industrial Area, Advenia Grant, Shahjahanpur Road, Ailiya, Sitapur - 261001.

For Impact Assessment Study 5.0 km radial study area is covered and the same is shown on SOI Topo sheets 63A/10 in the map below;

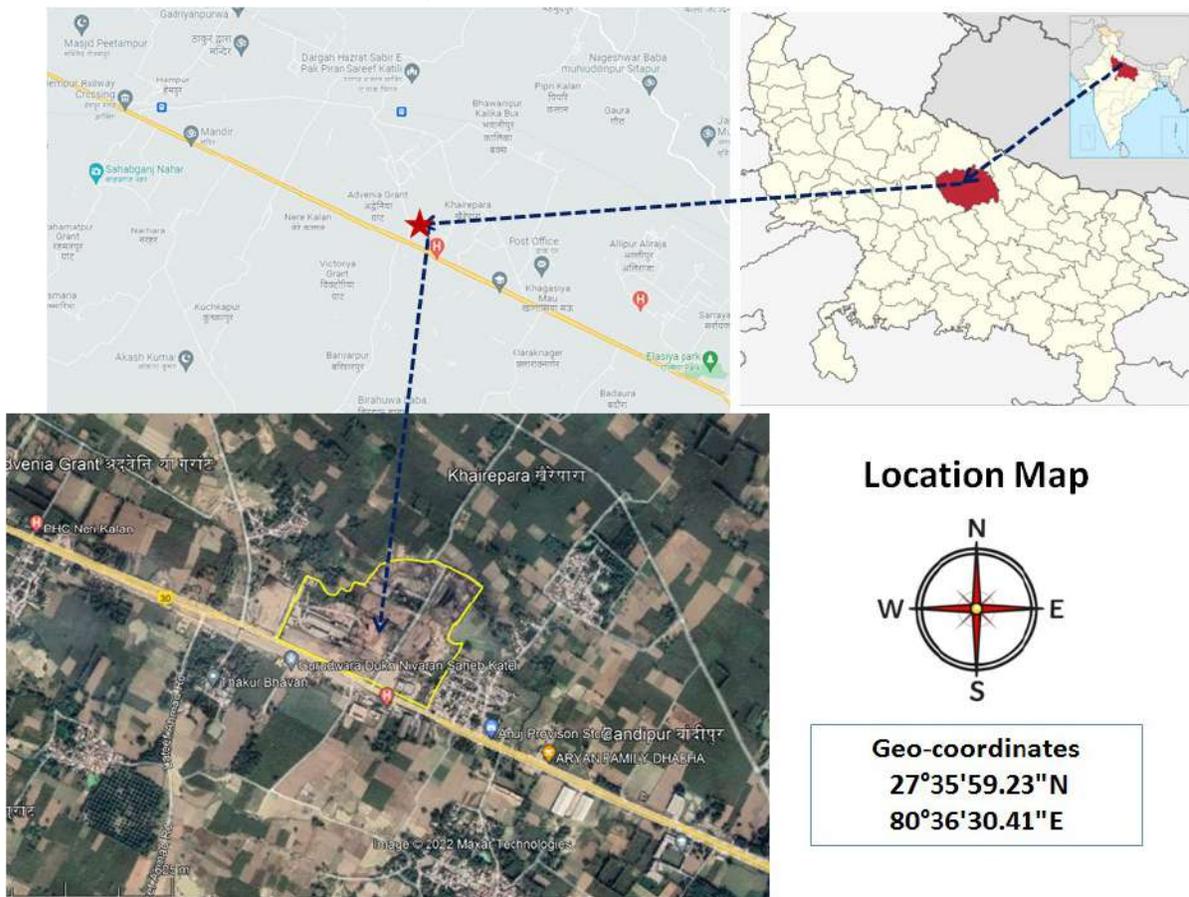


Figure 2.1: Location map

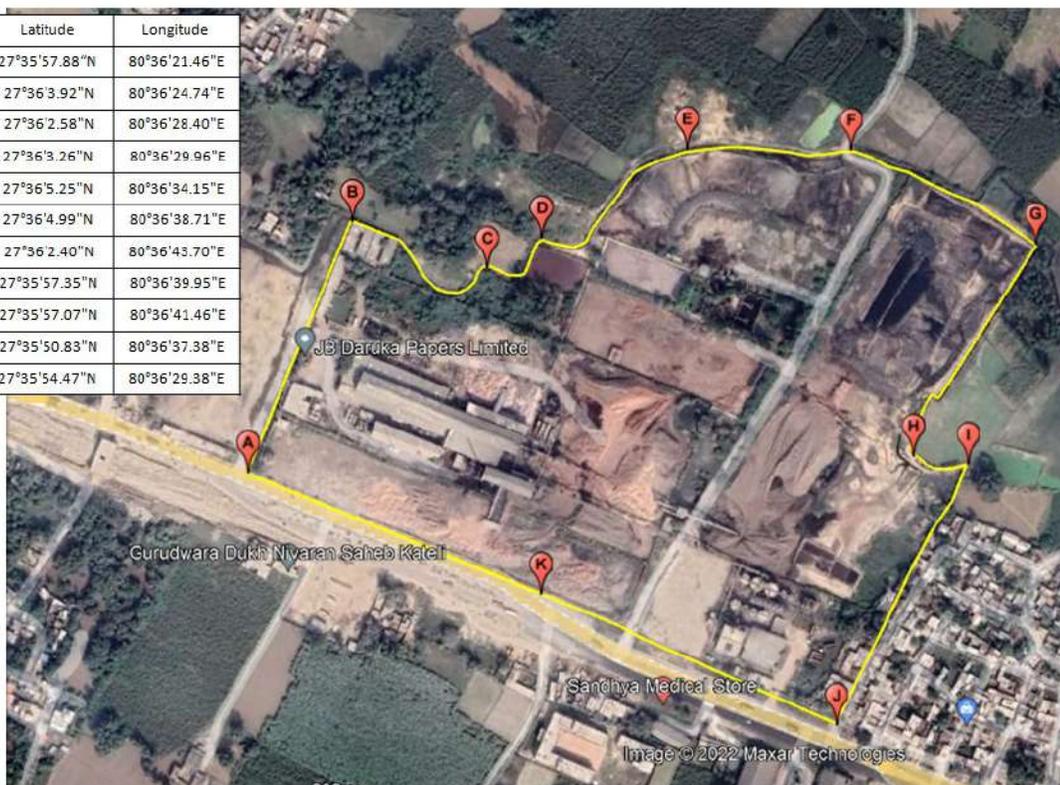
### 2.0.2 Site Coordinates:

Site coordinates of the project boundary are given below;

**Table 2.2: Geo - Coordinates of the factory**

**Project Surrounding with Geo-coordinates**

Pillar	Latitude	Longitude
A	27°35'57.88"N	80°36'21.46"E
B	27°36'3.92"N	80°36'24.74"E
C	27°36'2.58"N	80°36'28.40"E
D	27°36'3.26"N	80°36'29.96"E
E	27°36'5.25"N	80°36'34.15"E
F	27°36'4.99"N	80°36'38.71"E
G	27°36'2.40"N	80°36'43.70"E
H	27°35'57.35"N	80°36'39.95"E
I	27°35'57.07"N	80°36'41.46"E
K	27°35'50.83"N	80°36'37.38"E
L	27°35'54.47"N	80°36'29.38"E



### 2.0.3 Important features around the site

The important features in the vicinity of the proposed project, including the nature of industries in the surrounding area, availability of mode of conveyance, geophysical parameters are shown in Table 2.3.

**Table 2.2: Environmental Sensitivity**

S.No.	Particulars	Details
1.	Location Geo Co-ordinates Toposheet	<ul style="list-style-type: none"> <li>A-1, Industrial Area, Advenia Grant, Shahjahanpur Road, Ailiya, Sitapur – 261001</li> <li>Latitude: 27°35'57.88"N,</li> <li>Longitude 80°36'21.46"E</li> </ul>
2.	Land use	Non-agricultural land use (Industrial purpose)
3.	Highway	<ul style="list-style-type: none"> <li>NH30 – Adjacent to project site (S)</li> <li>MDR76C – 4.90 Km (E)</li> <li>SH21 (Sitapur – Hardoi Road) – 5.26 Km (SE)</li> </ul>
4.	River/Cana/Ponds/Water	Sarayan river – 6.5 Km (SE)

	Body	
5.	Railway Station	<ul style="list-style-type: none"> <li>Hempur railway station – 4.0 Km (NW)</li> <li>Katili Railway Station – 1.75 Km (N)</li> </ul>
6.	Airport	Lucknow Airport - 96.0 km (S)
7.	Defense area	None
8.	Residential Colony	<ul style="list-style-type: none"> <li>Bandipur village – 1.15 Km (SE)</li> <li>Khairepara Village – 0.70 Km (N)</li> <li>Nere Kalan – 2.0 km (W)</li> <li>Claraknagar – 1.60km (SE)</li> <li>Hempur – 4.0 Km (NW)</li> </ul>
9.	National Park/WLS/PF	No
10.	Sensitive man-made land use	<p><b>Hospitals:</b></p> <ul style="list-style-type: none"> <li>PHC Nere Kalan – 0.8 Km (NW)</li> <li>Modern Post Mortem House Sitapur– 2.80 Km (SE)</li> <li>PHC Indrauli – 5.50 Km (SW)</li> </ul> <p><b>Schools &amp; Colleges:</b></p> <ul style="list-style-type: none"> <li>Primary School Bhavanipur Block Aliya– 1.80 km (N)</li> </ul> <p><b>Place of workshop</b></p> <ul style="list-style-type: none"> <li>Dargah Hazrat Sabir E Pak Piran Sareef Katili– 2.0 Km (N)</li> <li>Shri Sidheshwer Mahadev Mandir Khairepara– 0.70 Km (N)</li> </ul>

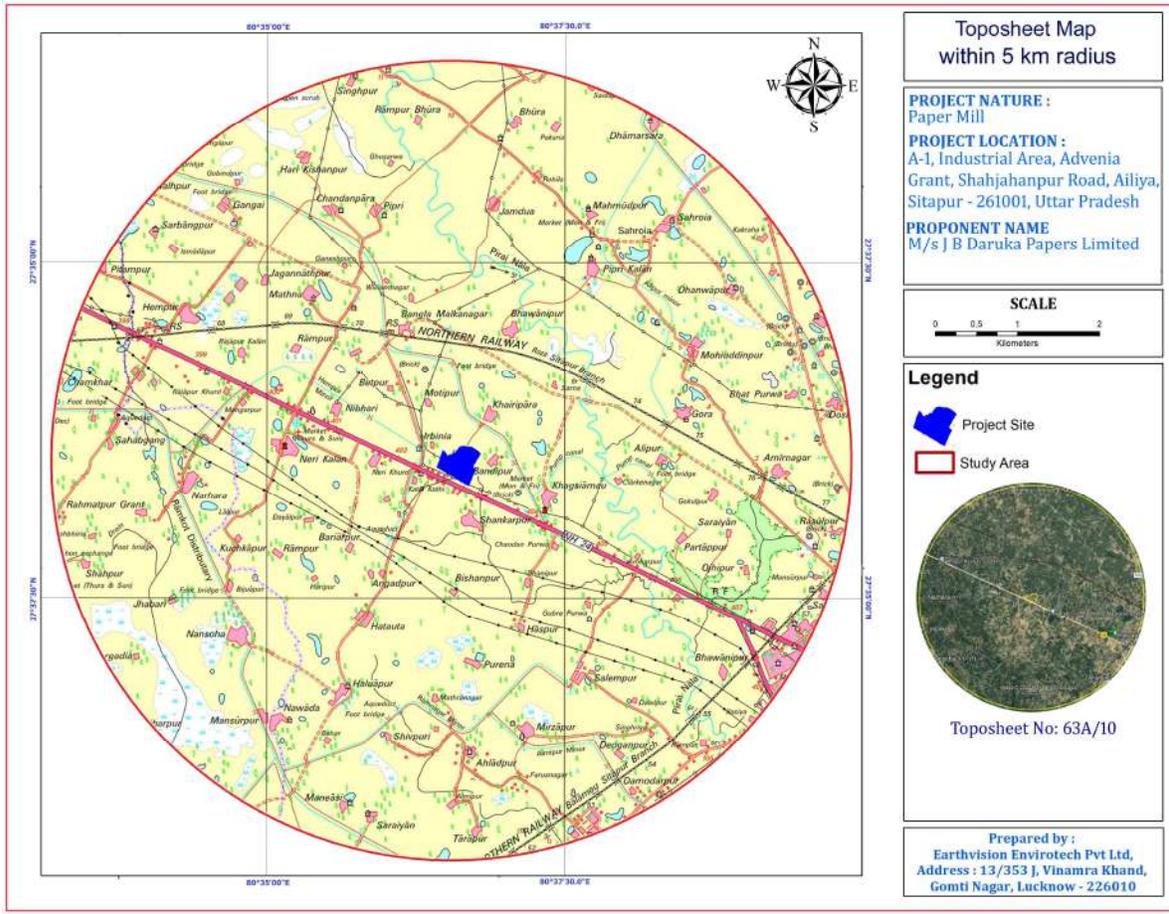


Figure 2.2: Topo-sheet map within 5 km radius

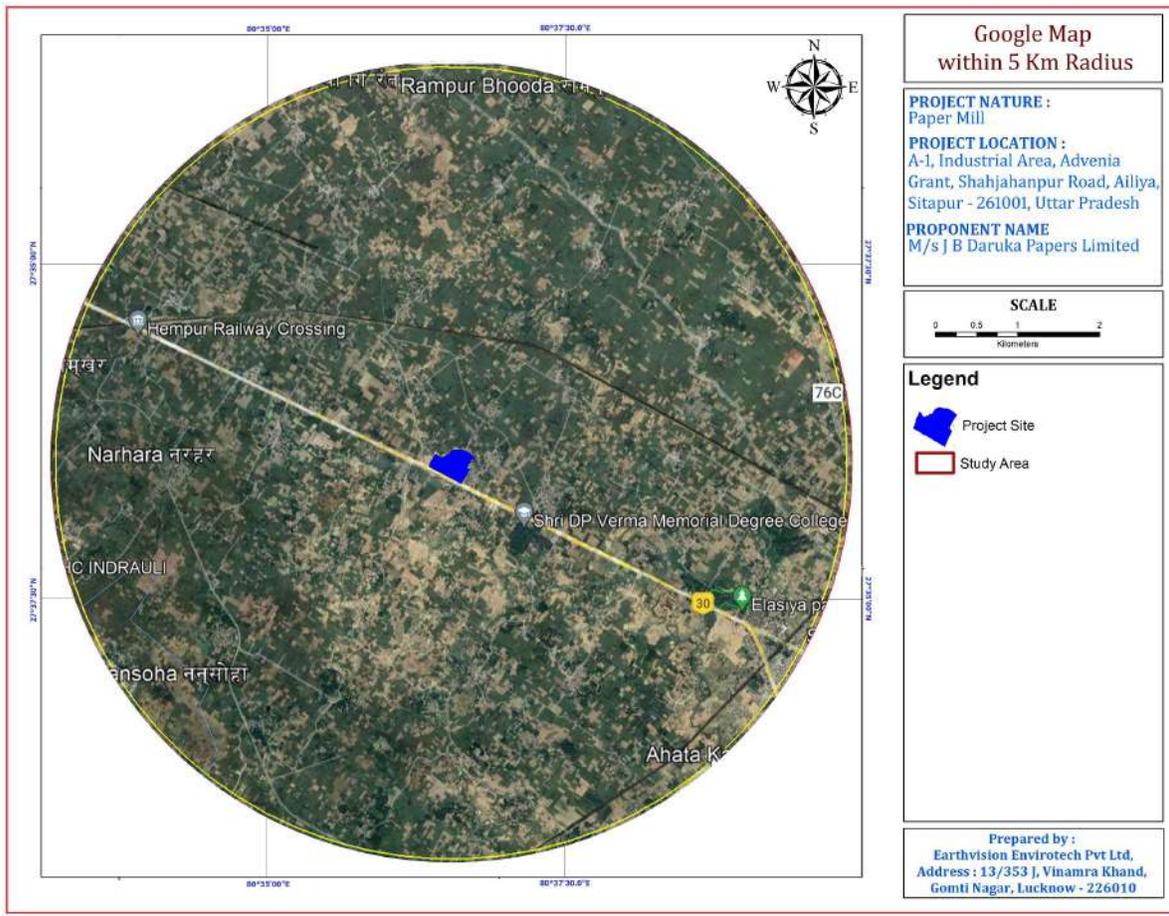


Figure 2.3: Google map within 5 Km radius of project site

### 2.0.4 Manufacturing Process:

Absorbent Kraft Paper is one of the examples of products that can support the efforts of many businesses to go green and support the nature that sustains us. As the environmental issues are growing in the world and people are getting green, the popularity of eco-friendly products has been going over the roof.

Unlike normal papers, Kraft Papers are made with the process called Kraft where wood is chemically converted into wood pulp. It involves the process of removing lignin from the wood leaving cellulose chemically, which is good for making paper. Once the pulp, which only consists of cellulose, is made, they can now be converted into any kind of paper products.

The company uses only agro-residue and recycles waste to make all its variants of paper. It is one of the few Absorbent Kraft Papers manufacturers in India to do so. It strictly follows the “No Cutting Trees” policy and hence conserving forests and promoting green recycled products. It uses the chemical pulping process to make wood-free paper. The company also uses agro-waste to generate fuel for heating purposes at different points of production.

Sugarcane bagasse is the by-product of sugar mills and is an ideal raw material for papermaking after demyelination. Sugarcane bagasse can be easily cooked, bleached and fewer chemicals are needed for its process. Silicon content is higher than in wood but lower than other grass fibre materials. Thus bagasse pulping is simpler than other grass fibre material while using the appropriate technology.

### **Bagasse pulp processing**

Bagasse pulp process includes **materials preparation, pulp cooking, pulp washing, pulp screening and pulp bleaching.**

#### **Material preparation**

Traditional bagasse preparation can be divided into three steps. Firstly, do the first half-dry depithing in the sugar factory. Secondly, after depithing, package the materials to the paper mill and stock through dry method. Thirdly, use the vertical or horizontal depithing machine deal the bagasse with the dry method of depithing, and the certified bagasse fiber for paper making is prepared.

In the modern sugarcane bagasse stocking, it usually uses wet storage to replace the dry storage. Wet storage can keep the bagasse wet, the water content is 70-80%, and both control bagasse fermentation and keep high stock per unit area. After wet storage and pulp washing, the bagasse has features of good fiber quality and quick penetration of cooking liquor, which decide the quality of bagasse paper. The wet storage advantages as follow:

- Avoids the color and whiteness of bagasse pulp getting bad.
- Improve the quality of bagasse pulp.
- Reduce the chemicals consumption and storage loss.
- Avoid the bagasse blowing and fire disaster.

#### **Bagasse pulp cooking**

Due to the sugarcane bagasse is easy to cook and install, high flexibility, low investment, small-scale pulp mill generally adopt rotary spherical digester. For modern pulp production, bagasse pulp cooking adopts alkaline continuous cooking and cold blow. The cooking equipment uses continuous tubular digester and blow tank. The continuous tubular digester has following advantages:

- Less cooking time, alkali charge, steam consumption required; High pulp yield (under same K value, the yield of this cooking process is 5% higher than others), even quality and high strength of bagasse pulp; Avoid the peak load of steam in the batch cooking process, and good for heat recovery.
- Overall process design is compact, and easy to handle.
- The whole system is reliable and safe, less maintenance and labor cost required; apply for large-scale pulp mills.
- Cold blow reduces the fiber damage, increase the strength of pulp. Because the bagasse has light volume-weight, big compressibility, high liquor absorbing ability, the continuous cooking digester is more suitable.

### **Bagasse pulp washing**

Washing equipment for bagasse usually uses vacuum drum washer. With the advantages of low cost, easy operation and high extraction of black liquor, many paper and pulp mills adopt vacuum drum washer. There is another type of washer named horizontal belt washer, it has lower alkaline recovery rate and bigger pollution load compared with vacuum drum washer.

### **Bagasse pulp screening**

Traditional bagasse pulp screening adopts open type low concentration screening system. The screening system is consisting of CX screener and low concentration grit separator. Screening level is 0.8-1.0%. Water consumption per ton reach up to 100m<sup>3</sup>, the quantity of wastewater effluent reach 75m<sup>3</sup>, which increases the production cost of bagasse pulp making.

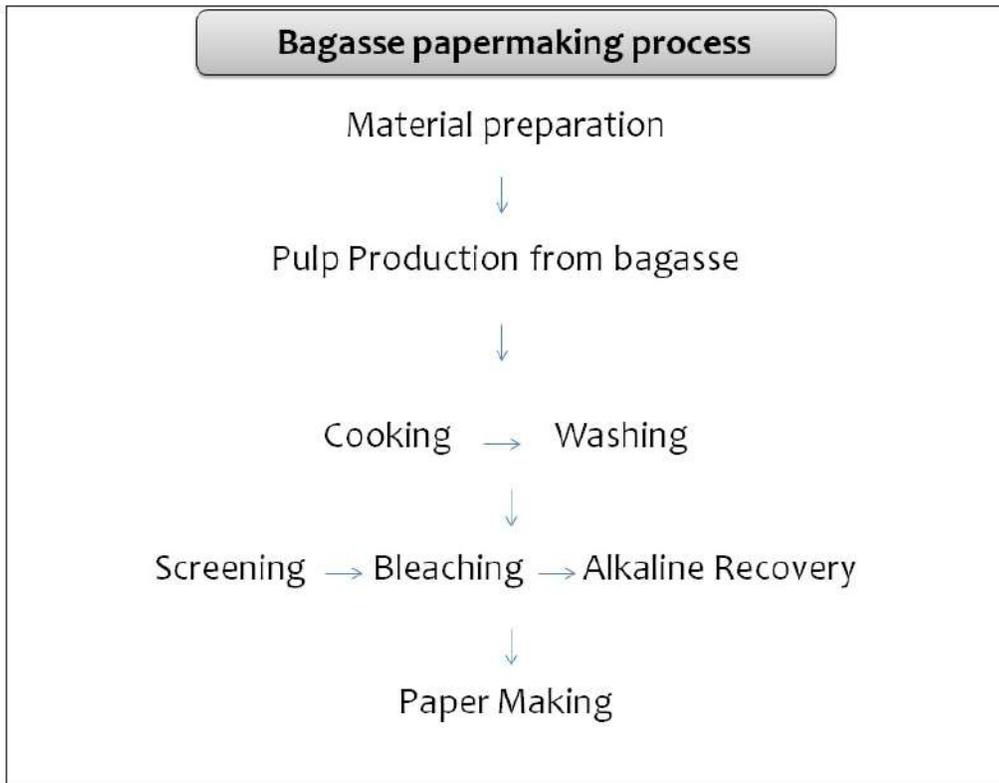
The traditional screening system has big water consumption, bad quality of pulp, big waste water production. For changing the bad situation, the Medium concentration closed screening.

### **Bagasse pulp bleaching**

Bagasse pulp is easier to bleach, normal CEH bleaching can bleach the bagasse pulp into 80% ISO, so it is widely applied to the traditional bagasse pulp production line. In recent years, chlorine bleach produces the waste liquor contain the Dioxin, which is bad for environmental protection. Less chlorine bleaching or chlorine-free bleaching will be the main current in the future. Recently, the H<sub>2</sub>O<sub>2</sub> is produced in the pulp bleaching process, to reduce the chlorine consumption, replace CEH bleaching with CEHP bleaching. The H<sub>2</sub>O<sub>2</sub> bleaching pulp has high whiteness and stability. H<sub>2</sub>O<sub>2</sub> has high bleachability and produce fewer pollutants and less damage for bagasse fiber.

### **Advantages of bagasse pulp production**

- Turn waste into wealth. In the past, the sugarcane bagasse is generally used as fuel to burn. If the bagasse is used to make paper pulp, the value will increase 3-5 times compared with being fuel.
- As the materials for pulping, per ton sugarcane bagasse can replace 0.5-0.8m<sup>3</sup> other fiber materials. For dealing with the pressure of wood shortage, make full use of bagasse to making paper.



## 2.0.5 DESCRIPTION OF THE PROCESS

### RAW MATERIAL

Bagasse is the by-product of the sugar industry and is also one kind of papermaking fiber material. As the foundation of paper and pulp industry, fiber materials include wood fiber and straw fiber. Except for the sugarcane bagasse, there are some other materials like wheat straw, reed, bamboo, and kenaf, etc. Among all kinds of fiber materials, bagasse is low-cost and inexhaustible to make paper pulp. The bleached bagasse pulp can be mixed to certain quantity of macrofiber and used to manufacture various high-grade cultural paper and living paper, such as bodystock paper, copy paper, two-side offset paper, sanitary tissue, napkin and etc. With the proper manufacturing process, the bagasse pulp also can be applied to make coated art base paper or newspaper.

### The truth of sugarcane bagasse



	<p>made paper that's made from chemical pulp produced in the kraft process.</p>	<p>shopping bags</p> <ul style="list-style-type: none"> <li>• Envelopes</li> <li>• Gumming tape</li> </ul>	<p>requirement.</p> <ul style="list-style-type: none"> <li>• Available in brown colour</li> </ul>
<p><b>Soda Ash (Black)</b></p> 	<p>Known also as Sodium Carbonate, Black Soda Ash is retrieved from the chemical recovery plant by recycling the black liquor from the pulping process</p>	<ul style="list-style-type: none"> <li>• Manufacturing of glass</li> <li>• Making of soaps &amp; detergents</li> <li>• Production of chemicals like Sodium silicate, Sodium bicarbonate &amp; percarbonate, Sodium chromate &amp; dichromate, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Purity: 94% +</li> </ul>
<p><b>Core Board / Cone Board Paper</b></p> 	<p>JB Daruka Papers Limited manufactures high strength specialty coreboard used mostly for Packaging in Textile and Yarn industry. The ply bond coreboard is made from recycled waste and bagasse and supports superior horizontal &amp; vertical strength requirements. It is used in the production of high-quality cylindrical products and paper core tubes</p>	<ul style="list-style-type: none"> <li>• Packaging in Textile &amp; Yarn Industry (Textile bobbins)</li> <li>• High quality core pipes</li> <li>• Industrial tubes for paper making, steel, plastic films and slitted coils</li> <li>• High grade P.O.Y. &amp; D.T.Y. paper core tube</li> <li>• All kinds of Cone, Cores, Tubes, Angular boards etc.</li> </ul>	<ul style="list-style-type: none"> <li>• GSM – 220 – 350</li> <li>• Ply bond range – 300 – 700</li> </ul>
<p><b>Sugarcane Bagasse Pulp / Board</b></p> 	<p>Sugarcane Bagasse Pulp is made from sugarcane residue (bagasse). JB Daruka papers Limited is one of the few paper pulp/ board suppliers in the country.</p>	<ul style="list-style-type: none"> <li>• Papermaking</li> <li>• Moulded products</li> <li>• Packaging mould</li> <li>• Bagasse Tableware</li> </ul>	<ul style="list-style-type: none"> <li>• Beating &amp; freeness (oSR) as per buyer requirement</li> <li>• Colour – Off White / Pale Yellow</li> </ul>

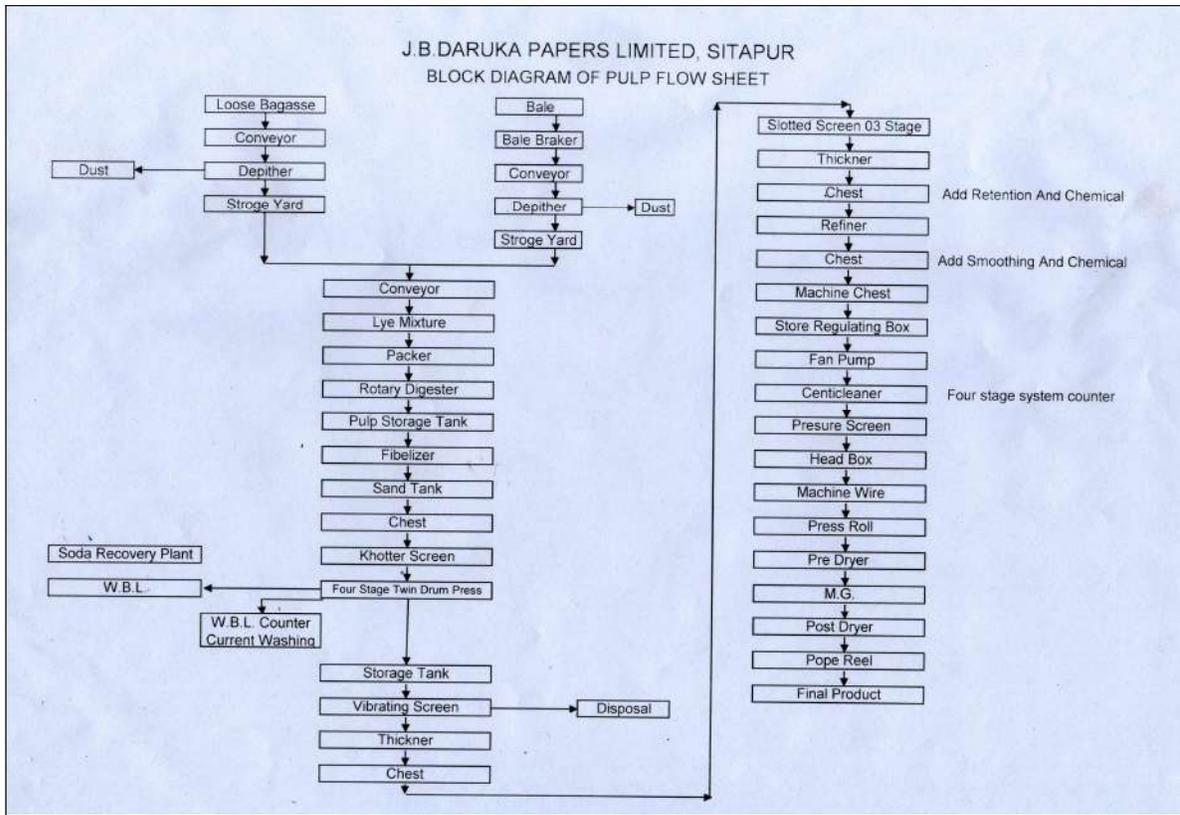


Figure 2.4: Manufacturing Process

**2.1 Land Use Land Cover of the surrounding area, Percentage of LULC categories Land Use Based on Satellite Imagery**

Remote sensing satellite imageries were collected and interpreted for the study area within radius of 5.0 km of project site for analyzing the land use pattern of the study area based on the satellite data, land use / land cover map have been prepared.

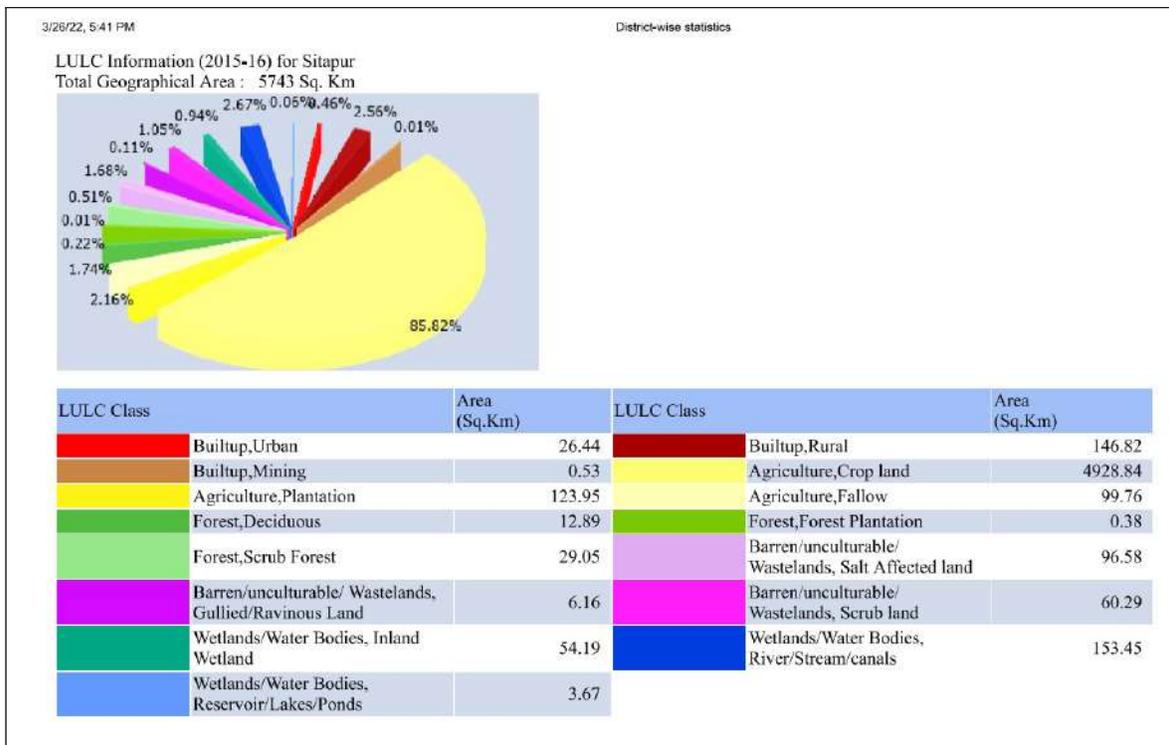


Figure 2.5: Land use land cover of Sitapur District.

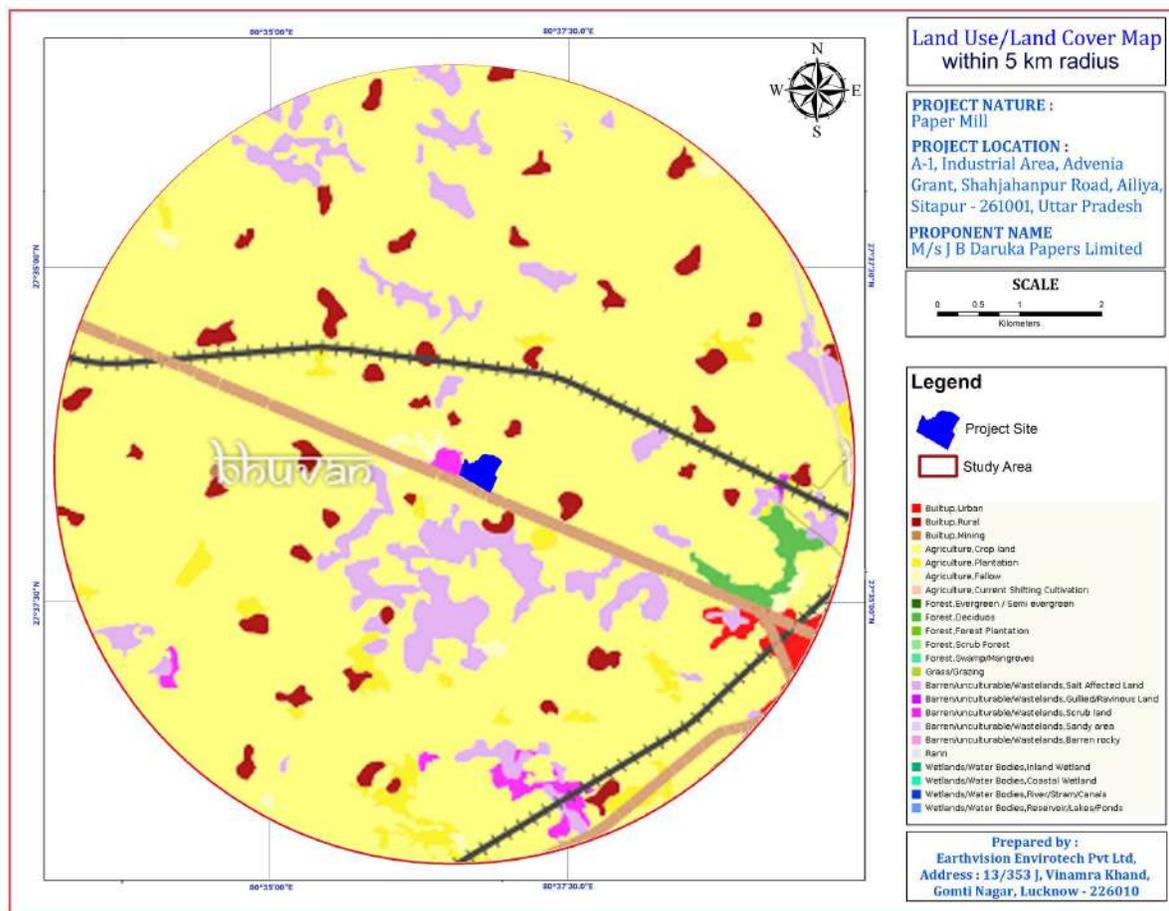
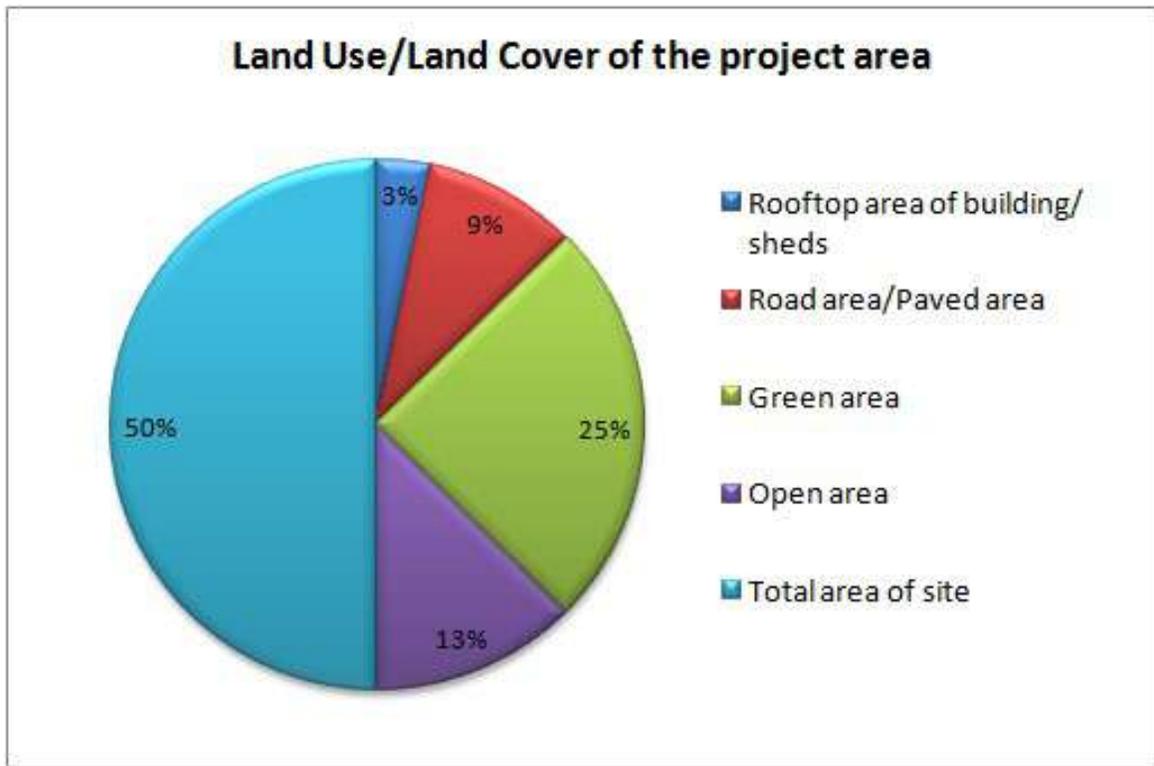


Figure 2.6: Land use land cover

**2.1.1 Land Use Land Cover of Study Area**

**Table 2.4: Land Use detail**

Particulars	Area (m2)	Percentage (%)
Rooftop area of building/sheds	10510.00	07
Road area/Paved area	30000.00	19
Green area	79381.44	50
Open area	40000.00	25
Total area of site	159891.44	100



**Figure 2.7: Percentage Land use / Land cover**

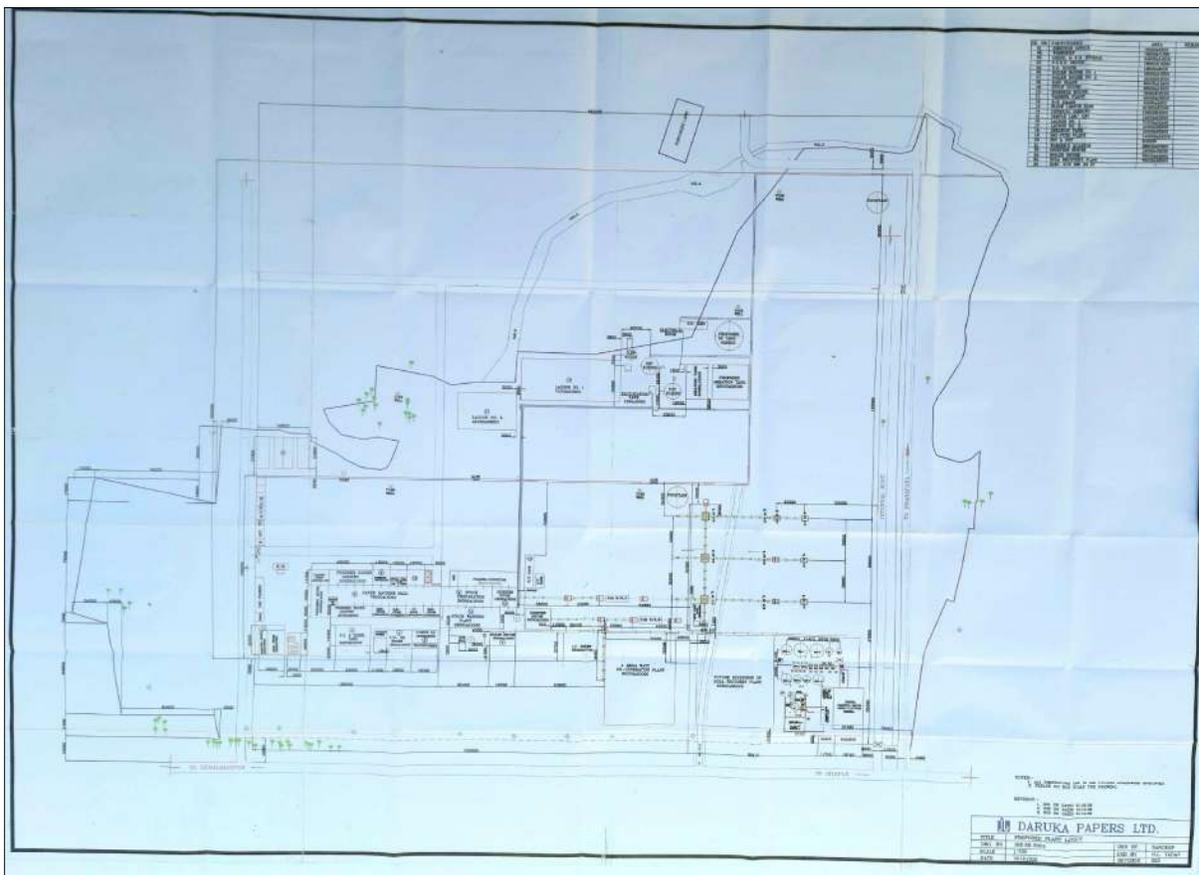


Figure 2.8: Site Layout Plan of factory

### 2.1.2 Land Use /Land Cover Classification System

The present land use / land cover maps were prepared based on the classification system of National standards.

#### Data Requirement

IRS-P6 Geo-Coded FCC of LISS-III was acquired for 2014 - 2015 and was used for the mapping and interpretation. Besides, other collateral data as available in the form of maps, charts, census records, other reports and especially topographical survey of India maps are used. In addition to this, ground truth survey was also conducted to verify and confirm the ground features.

### 2.1.3 Methodology

The methodology adopted for preparation of land use/ land cover thematic map is monoscopic visual interpretation of geo coded scenes of IRS-P6 satellite LISS-III and field observations are taken. The various steps involved in the study are preparatory field work, field survey and post field work.

### 2.1.4 LULC Classes

The present land use / land cover maps were prepared based on the classification system of National standards. The details attached to each class, salient features and visual characteristics of each class are listed in Table 2.5 below;

**Table 2.3: LU/LC Classification**

Sl.	Description-1	Description-2	NRC LULC Classes
1	Built-up	Urban, Rural, Mining	Residential (compact or sparse), commercial, industrial, active, or close mines, rural areas
2	Agriculture	Crop and Fallow land, Plantation	Agricultural land, plantation (compact or pattern), shifting cultivation, seasonal crops
3	Forest	Evergreen (dense), Deciduous (open), Scrub, Swamp	Open, dense, desert, swamp, mangroves, abandoned cultivation
4	Barren Land	Land without Scrub, Land with Scrub, Wastelands	Scrub, Salt affected, Gullied or Ravines, Sandy, Rocky, Desert or Rann, Coastal Beaches
5	Water Bodies	Ocean, River, Canal, Glacier, Dam	Sea, Perennial or non-perennial river, stream, drain, canal, or distributor line, seasonal or non-seasonal lake or pond, reservoir or tanks, snow
6	Wetland	Inland Natural	Ox-bow Lake, cut-off meander, waterlogged, saltpans, lagoon, mudflats, creeks
7	Vegetation Cover	Open, Dense	Scrub, Open, Dense

The Land Use/ Land Cover map of the study area and around 5-km radius is shown in Figure 2.8. The final output would be the land-use/land cover map and numerals were given different colour code for each category as shown in Figure 2.8.

#### **Pre- Field Interpretation of satellite data**

The False Color Composite (FCC) of IRS-P6 satellite data are used for pre-field interpretation work. Taking the help of topo sheets, geology, geo- morphology and by using the image element the feature are identified and delineated the Boundaries roughly. Each feature is identified on image by their image elements like tone, texture, colour, shape, size, pattern and association. A tentative legend in term of Land cover and land use, physiography and erosion was formulated. The sample areas for field check are selected covering all the physiography, land use / land cover feature cum image characteristics.

#### **Software's Used**

- ERDAS Imagine for image processing /rectification/geo coding;
- Arc View for Image /Land use presentation.

#### **Ground Truth Collection**

Both topo sheets and imagery were taken for field verification and a transverse plan using existing road network was made to cover as many representative sample areas as possible to observe the broad land use features and to adjust the sample areas according to field

conditions. Detailed field observations and investigations were carried out and noted the land use features on the imagery.

### Post Field Work

The base maps of the study area were prepared, with the help of Survey of India Topo sheets. Preliminary interpreted land use and the land cover features boundaries from IRS-P6 False Colour Composite were modified in light of field information and the final thematic details were transferred onto the base maps. The final interpreted and classified thematic map was cartographic. The cartographic map was colored with standard colour coding and detailed description of feature with standard symbols. All the classes noted and marked by the standard legend on the map.

### Final Output

The final output would be the land-use/land cover map and numerals were given different colour code for each category as shown in map. Area estimation of all features of Land use/Land cover categories was noted. The land use pattern is Shows that majorly agricultural land use cover 75.0 % of total study area mean major part of rain water is directly recharge through the farm land by natural percolation. Hence rain water recharge rate by natural mean is found good in the study area.

## 2.2 DEM/Topography

Sitapur is located at 27.57°N 80.68°E. It test has an average elevation of 138 meters (452 feet). It is located in the Gangetic Plain, with elevations ranging from 150 m above sea level in the north-west to 100 m in the south-east. It is intersected by numerous streams and ravines and contains many shallow ponds and natural reservoirs, which overflow during the rainy seasons, but become dry, in some places, in the hot season. Except in the eastern portion, which lies in the doabs between the Kewani and the Chauka, and the Ghaghra and the Chauka rivers, the soil is semi arid. Even this moist tract is interspersed with patches of land covered with saline efflorescence called reh.”

Sitapur district lies in Upper Gangetic Mid-Plains of Uttar Pradesh and is bound on four sides by Lakhimpur Kheri, Bahraich, Barabanki and Hardoi districts. The district has 19 blocks and over 2,000 villages. The total area of the district is 5743 sq km supporting a population of 36.20 lakh with a density of 630.27 persons per sq km. Sitapur district is one of the districts of Uttar Pradesh state of India, with Sitapur town as the district headquarters.

The City is situated on the river bank of 'Sarayan', at Lucknow-Delhi National Highway No-24, 89 Km. from state capital Lucknow, and on meter gauge Railway line from Lucknow to Bareilly via Lakhimpur and Pilibhit. Sitapur is also connected on broad gauge train network connecting Gorakhpur and Delhi via Gonda, Burhwal bypassing Lucknow and Hardoi. Whole district is divided into six tehsils - Sitapur, Biswan, Mishrikh, Laharpur, Mahmoodabad and Sidhauri. (Source: DSR, Sitapur).

### 2.2.1 Topography within proposed plant site:

The project site is almost flat the elevation of the project area ranges between 139 to 142 msl. However the project site is sloping slightly towards southwest direction.

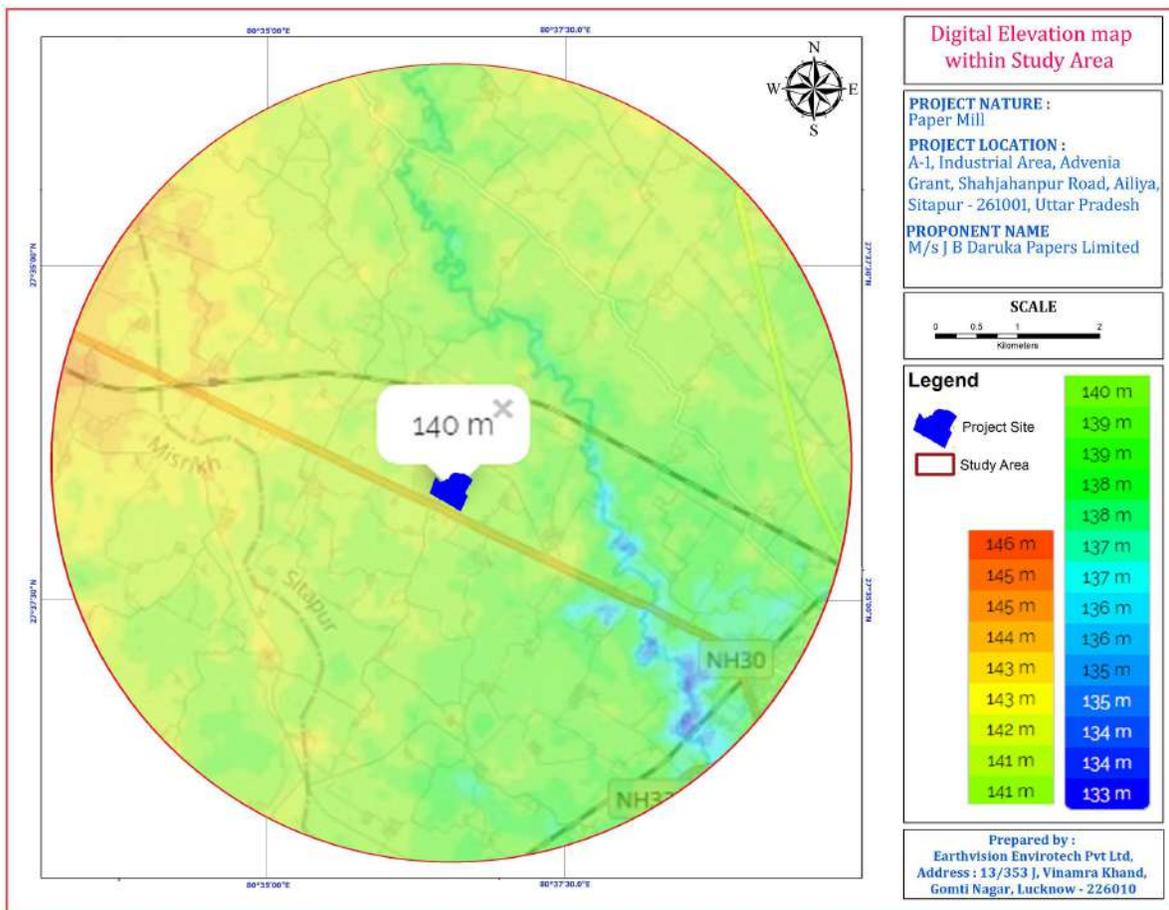


Figure 2.9: DEM map

The project area exhibits a gentle slope toward South East part where the elevation ranges between 133-135 m amsl.

### 2.2.2 Digital Elevation Model (DEM)

A Digital Elevation Model (DEM) is a digital representation of ground surface topography of terrain. It is also widely known as Digital Terrain Model (DTM). The DEM often comprises much of the raw dataset, which may have been acquired through techniques such as photogrammetric, LiDAR, IfSAR and land surveying. A DTM on the other hand is, generally, a filtered version of DEM. A DEM can be represented as a raster (a grid of squares) or as a triangular irregular network. The DTM provides a bare earth model, devoid of landscapes features. A DEM may be useful for landscape modelling, city modelling and visualization application.

Digital Elevation Model consists of raster grid of regularly spaced elevation values produced by USGS. A much higher quality DEM from the Shuttle Radar Topography Mission (SRTM) is

also freely available for most of the globe and represents elevation at a 3 arc-second resolution (around 30 m). The quality of a DEM is a measure of how accurate elevation is at each pixel (absolute accuracy) and how accurately is the morphology presented (relative accuracy). Several factors play an important role for quality of DEM-derived products:

- Terrain roughness
- Sampling density (elevation data collection method)
- Grid resolution or pixel size
- Interpolation algorithm
- Vertical resolution
- Terrain analysis algorithms

The topography data of the study area is based on SRTM Digital Elevation Model data which is available at the USGS website. The vector polygon boundary file of the study area was used to clip the SRTM DEM to yield elevation data within the boundaries of the study area as shown in Figure-2.9. The DEM shows that altitude varies from 133.0 to 146.0 m above mean sea level (m amsl).

Digital elevation map (DEM) of the 5 km area around project site is shown in Figure 2.9.

## 2.3 Geomorphology and Drainage (5 Km)

### 2.3.1 Geomorphology

Being a part of Indo Gangetic alluvial plain the area is almost a flat terrain with master slope towards southeast. Geomorphologically the area can be divided into younger alluvial plain and older alluvial plain. The younger alluvial plain forms flat to gently sloping, low lying, undulating surface of large areal extent formed by river deposition and consisting of fluvial land forms such as oxbow lakes, paleo-channels etc. The younger refers to later cycle of deposition and constitute unconsolidated coarse to fine sand, silt and clay. The effect of high soil moisture is observed in the vicinity of canal.

The older alluvial plain is similar to younger alluvial plain but formed at earlier stage of depositional regimes, comprising older unconsolidated alluvium.

The paleo-channels are buried channels filled in with sand silt and clay of varying lithology, where as oxbow lakes are crescent shaped cut off meander with water and composed of unconsolidated alluvial materials.

#### **Natural divisions**

The area is characterised by ravines. These are small, narrow, deep depressions dissected and irregular surface usually produced by surface run off. These occur along Gomti river & its tributaries. The ravines comprises unconsolidated alluvial material of varying lithology mainly with fine sediments and developed in older alluvium.

The chief varieties of soil are bhur or sand, dumat or loam and matiyar or clay. Bhur is formed along the high banks of rivers and streams, matiyar is found in depressions in the upland while dumat occurs in rest of the district.

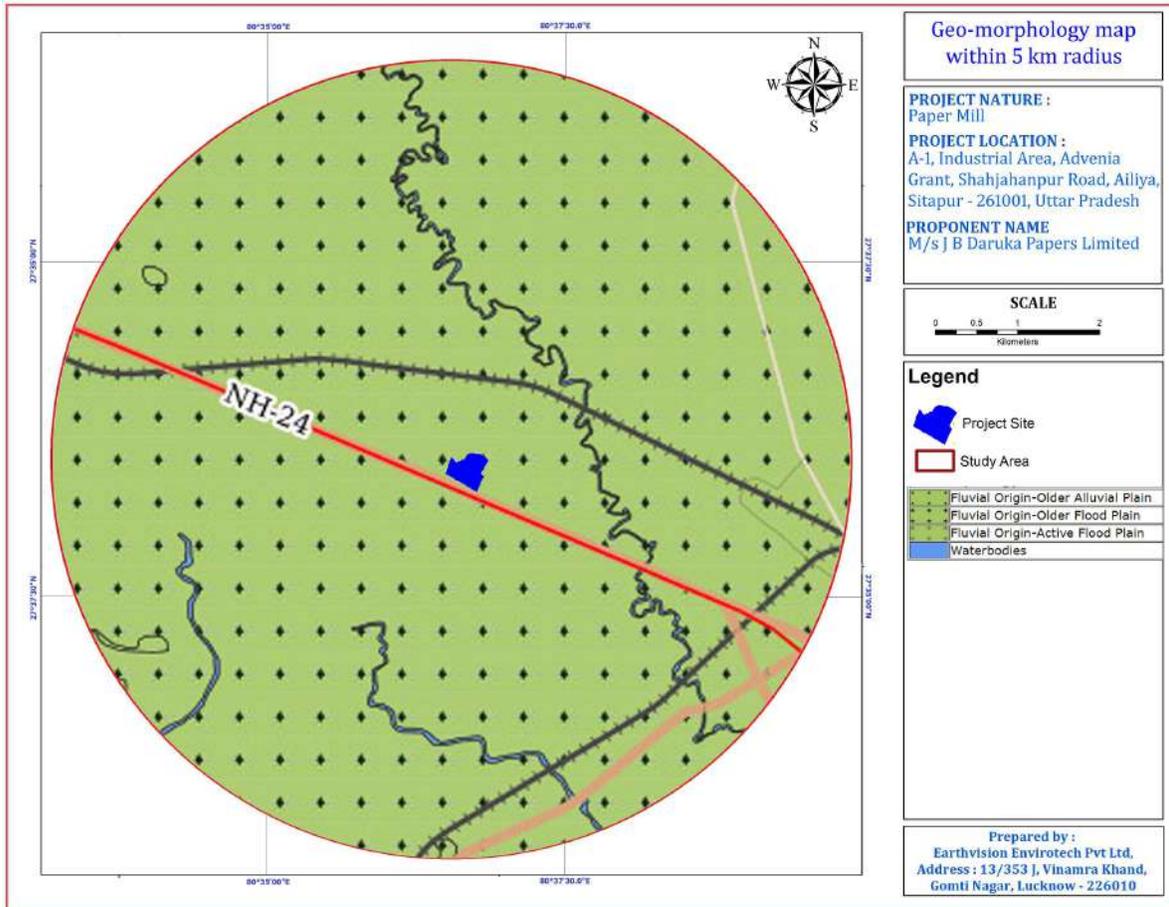


Figure 2.10: Geo-morphology of the study area

### 2.3.2 Soil

#### SOILS OF SITAPUR DISTRICT (U.P.)

##### Alluvial plain (0-1% slope)

1. Deep, loamy soils and slightly eroded.
2. Deep, loamy soils and slightly eroded associated with silty soils.
3. Deep, fine soils moderately saline and sodic associated with loamy soils, slightly eroded.
4. Deep, fine soils and slightly eroded associated with loamy soils slightly saline and moderately sodic.
5. Deep, fine soils and slightly eroded associated with loamy soils.
6. Deep, silty soils associated with loamy soils slightly eroded.
7. Deep, silty soils with moderate salinity/sodicity associated with loamy soils slightly eroded.
8. Deep, loamy soils and slightly eroded associated with silty soils slightly saline/sodic and moderately sodic.

9. Deep, silty soils and slightly eroded associated with fine soils.

**Old Alluvial plain with river left out channels/Oxbows/point bars (1-3% slope)**

10. Deep, loamy soils and slightly eroded associated with stratified loamy soils slightly eroded

**Recent Alluvial Plain (1-3% slope)**

11. Deep, loamy soils with moderate water logging and slight salinity associated with fine soils, slightly water logging.
12. Deep, silty soils and slight flooding associated with loamy soils and slight flooding
13. Deep, loamy soils slightly eroded associated with sandy soils with slight flooding
14. Deep, silty soils, moderately saline and sodic associated with loam soils and slightly eroded

**Active Flood Plain (1-3% slope)**

15. Deep, sandy soils with moderate flooding associated with stratified loamy soils and slight flooding.
16. Deep, stratified loamy soils, with moderate flooding associated with sandy soils with moderate flooding.
17. Deep, stratified loamy soils, with severe flooding associated with loamy soils with moderate flooding.

**Very gently sloping uplands with hummocks (1-3% slope)**

Deep, fine soils, slightly eroded associated with fine smectitic soils and slightly eroded.

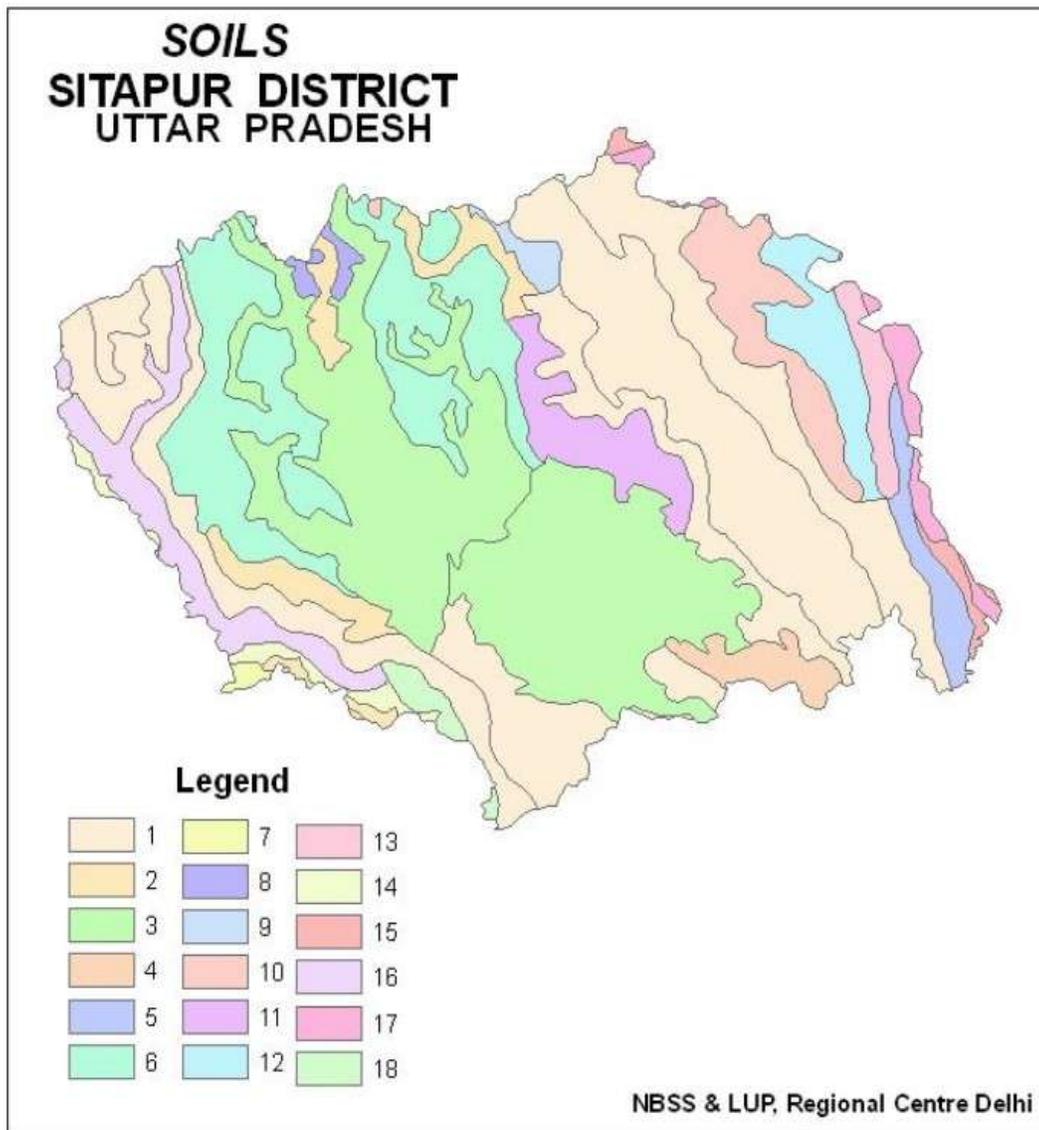


Figure 2.11: Soil Map of Uttar Pradesh

### 2.3.3 Drainage:

The monotony of featureless plain of upper Ganga valley is preserved throughout the district. At places this monotony is broken by Small River like Kathana, Sarayan and Gomati. Sandy stretches are found along the rivers and locally known as 'bhurs'. The region in general is a part of well integrated system of the river Ganga. Gomti is the most important tributary flows in the eastern part of the district and engulfs above mentioned small rivers.

### Rivers

Ghaghara forms the eastern boundary of the district. There are five rivers flowing through the district of Sitapur: Gomti, Kathana, Pirai, Sarayan, Ghaghra and Sharda. Kathna or kathna is a small river that joins the left bank of the Gomti River near Dadhnamau village in Sitapur District, Uttar Pradesh, Sarayan is small tributary of Gomti river which flows through Lakhimpur and Sitapur district of Uttar Pradesh.

District	Number of Drains	Total length of drains (K.M.)
Sitapur	124	1036.94

Source: Irrigation Department, Uttar Pradesh, Lucknow (District-wise details/summary of drains)

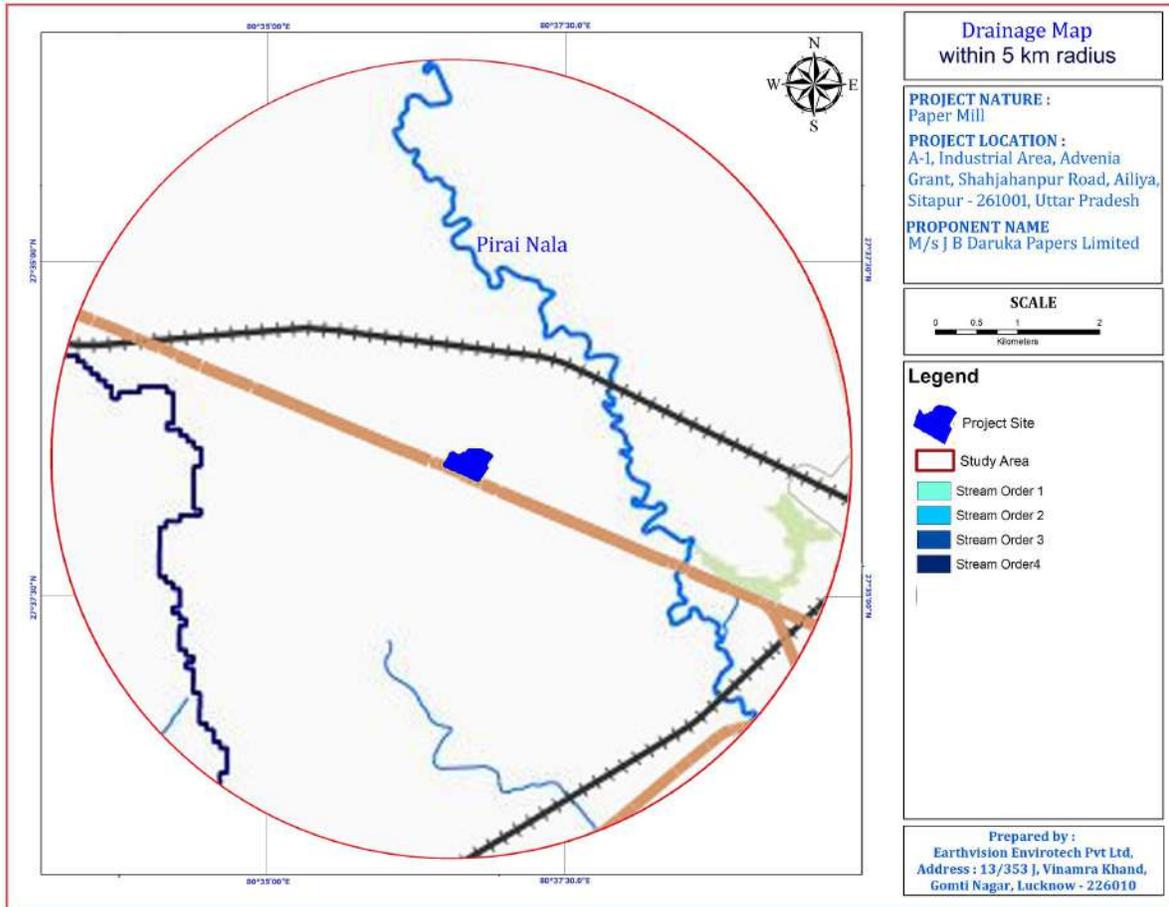


Figure 2.12: Drainage map and water bodies map within study area

Sarayan originates in Haidarabad paragona near the town of Gola Gokaranath. After a course of about 49 miles from its origin, it enters Sitapur district near the village of Naurangpur. It traverses from North to South in Sitapur flowing in a very irregular winding course. After running a few miles, it is joined by a small stream Jamwari near the village of Tehar, soon after which it takes a southerly course and reaches Sitapur where it passes through the middle of the city. Finally, it joins Gomati near the village of Hindaura in Sidhaulti tehseel[1].

In the upper portion of its course, it the stream flows in a shallow bed, but further South the channel of this stream grows deeper and banks are high and sandy, and are intersected by ravines.

The Sarayan is fed by several tributaries.

**West bank tributaries****Jamwari**

After flowing through the Kheri district, Jamwari forms, for a short distance, the boundary for that district and the pargana of Hargaon of Sitapur district where it joins the Sarayan river near the village of Tahar/Tehar/Tihar.

**Pirai**

Pirai rises in Kasta in Kheri district and after crossing the north-eastern border of pargana Maholi has a very winding course and flow through the pargana of Sitapur to join the Sarayan on its right, a short distance below Sitapur city.

**Behta**

Further south on the same bank, another tributary of Sarayan is Behta. It rises in Mishrikh pargana. After separating Koraua from Machhrehta it turn eastward through the latter pargana to join the Sarayan river near a small village of Rasulpur.

**East bank tributaries****Gond**

Gond is the most important and the largest tributary joining the Sarayan on its east bank. Gond river has its origins in swampy areas near Hargaon

**Ground Water Resources:**

The estimation of ground water resources is a basic pre requisite for sustainable development without causing adverse effect on the ground water regime. Quantification of ground water resource is often critical and no single comprehensive technique is yet defined which is capable for estimating accurate ground water resource. The present methodology is known as GEC 1997 methodology. Ground water department government of U.P. in consultation with Central Ground Water Board (NR) Lucknow has worked out the ground water resources of Sitapur district.

The project area falls in Advenia Grant, Shahjahanpur Road, block - Ailiya, Sitapur, Uttar Pradesh. Dynamic ground water resource of Block Ailiya is given below in table;

Table 2.4: Dynamic Ground Water Resources of Sitapur District (assessment block- Ailiya)

Assessment Units - Blocks/ District	Net Annual Ground Water Availability (ham)	Existing Gross Ground Water Draft for All Uses (ham)	Net Ground Water Availability for future Irrigation Development	Stage of Ground Water Development (%)	Category of block
Ailiya	9720.48	9216.29	162.85	94.81	Safe

In addition to above additional potential recharge in water logged and shallow water table areas has also been calculated and given in Table;

Table2.5: Additional potential recharge in Sitapur District

Assessment Units - Blocks/ District	Potential recharge in water logged and shallow water table areas	Potential recharge in flood prone areas	Total annual additional potential ground water recharge
Ailiya	1881.60	0.00	1881.60

**Irrigation:**

Table 2.6. Irrigation from different sources

S. No	Source	Area Irrigated (In Hectare)
01	Dugwells	12963
02	Tubewells Govt.	3861
03	Tubewells Private	322503
04	Ponds	489
05	Canals	25823
06	Other Sources	1285

**2.4 Details of wetlands [Highlight protected wetlands / Ramsar sites / NLCP lakes/ other important wetlands in terms of dependencies of local communities if any]**

Wetlands are among the world’s most productive environments (Voogt, K. D. 2000) and provide a wide variety of benefits. They are important repositories of aquatic biodiversity and play a critical role for the rural poor as they impinge on their health, livelihood and economic prospects (Sharma, D. 2013). It provides biological productivity, habitat for many species, fodder, fuel, food & livelihood for people, flood control, water purification, recreational and aesthetic values and recharging ground water sources. The value of ecological services per unit area resulting from wetlands is much higher than that of other ecosystems.

Frequently encountered definition of wetland is a land where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands are the transitional zones that occupy intermediate position between land and open water. They are one of the most productive ecosystems and rank with the tropical rain forests (Cross and Vohs 1998). Their productivity lies in the nature of biodiversity they harbor and the frequency of transfer of energy from one to another organism. However, the productivity, rather existence of wetlands is under threat due to several anthropogenic activities like, excess withdrawal of water resources for irrigation, non-judicial use of fertilizer, insecticides and pesticides,

drainage of polluting agents, conversion of the site for various other land uses, etc (Rahmani et al. 2011).

Some of the wetlands of UP, very important from ecological point of view, have legal protection under Wildlife (Protection) Act, 1972. Present review is based primarily on the works in such wetlands scattered in different ecological zones of the state and relevant literature on the subject.

(Source: Resource Production and Consumption System: Focus on Wetland biodiversity of Uttar Pradesh)

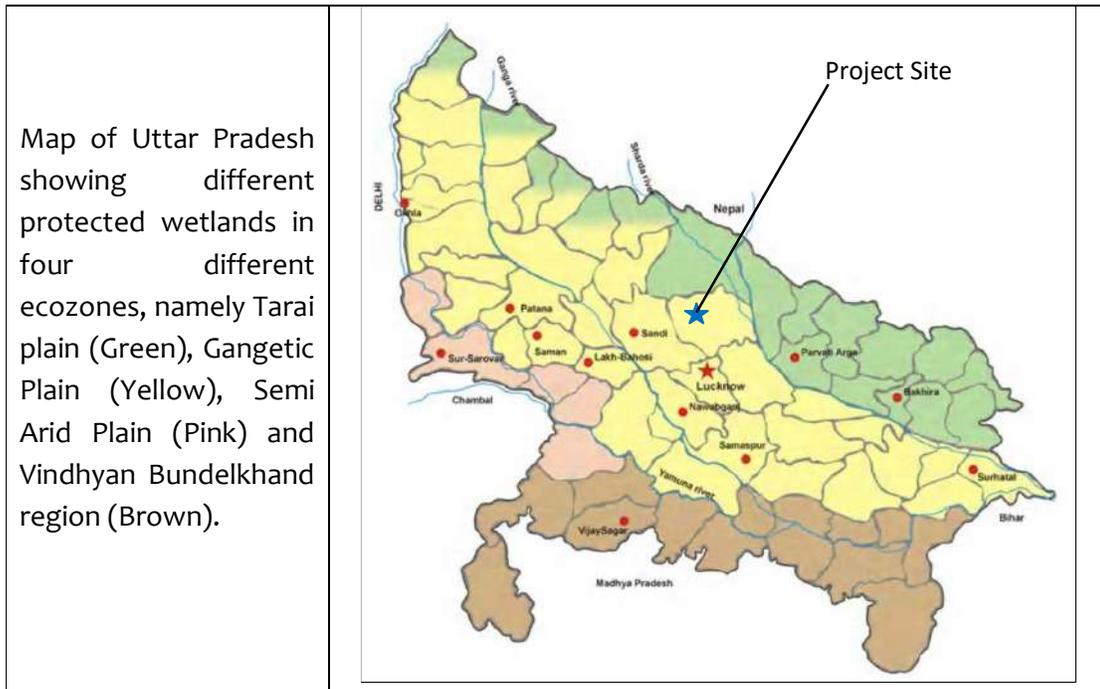


Figure 2.13: Wetland map of Uttar Pradesh

Table-2.7: Wetland area in district Sitapur

District	District geographical area	Wetland area (Hectare)	% of total wetland area	% of district geographical area
Sitapur	5743	23174	1.87	4.04

There is no wetland available with the study area of 05 Km.

## Chapter 3: Hydrogeology

### 3.1 Geological Setup

Geologically the district forms part of the vast Indo-Gangetic alluvial tract, of which the origin is attributed to a sag in the earth's crust, formed, in the upper Eocene times, between the northwardly drifting Gondwanaland and the rising Himalayan belt, and gradually filled in by sediments so as to constitute a level plane with a very gentle seaward slope.

The alluvium formation of the district, comprising sand, silt & clay with occasional gravel, is of the early quaternary to sub-recent age. The older alluvium called bhangar, forms slightly elevated terraces usually above the flood levels. It is rather dark in colour generally rich in concretions and nodules of impure calcium carbonate, locally known as kankar. The newer alluvium, called khandar, forming the lowlands between the Ganga and Bhangar, is light coloured, poor in calcareous content and composed of lenticular beds of sand, gravel and clays. The economic minerals found in the district are kankar, reh and sand;

**Table 3.1: Geological Succession (stratigraphic sequence in the area)**

System	Series	Formation	Lithology
Quaternary	Upper Holocene	Diara Formation	Alteration of fine grey silt and clay
upper Pleistocene	Unclassified Holocene	Kosi Formation	Grey silt and clay alteration with fine to medium sand
		Purnea Formation	Pale yellow to grey silt and silty clay, fine sand, grey medium to coarse sand with thin partings of sand and fine silt

#### 3.1.1 Regional Geology:-

District Sitapur is located within Zone-3 (Moderate Zone) of seismic zone of India in the Tari region of U.P. which is characterized by unique geological feature, since it makes the shift where the Southern Gondwana land collided with Northern Eurasian land lifting the sediments of the then existing Tethys sea and forming the Himalayas. As the result Southern and Northern part of Nepal shows widely differing formations. One find the Archean Crystalline formation covered deep beneath the Alluvium of Tarai, the main sedimentary deposits that were squeezed to form the high mountain and also the Siwalik formations.

The region is flanked by the great Indo-Gangetic alluvial plains. It is occupied by litho assemblages of various geological formations ranging in age from the Archaean to Quaternary period. The major part of the area up stream, Greater and Lesser Himalaya is composed essentially of variegated granite and granite gneisses with enclaves of meta-sediments and meta-basics and Siwalik sand stone. The gneissic granitic suite of rocks are

overlain by ENE-WSW trending volcano-sedimentary sequence of the Bijawar Group and intra-cratonic, platformal, ortho quartzite carbonate sequence of the Vindhyan Supergroup in the southern and eastern parts. The lacustrine Lameta Group of rocks and the overlying flood basalt of the Deccan Trap Province cover the Bijawar-Vindhyan rocks at various levels. Soil and alluvium of the Quaternary-Recent period is mostly confined along the banks of the major rivers.

### 3.1.2 Local Geology

On the basis of geology, soils, topography, climate and natural vegetation the district is sub divided into the three sub-micro regions: such as Ghaghra-Chauka Khadar, Sitapur plain and Gomti Basin. Brief description of these sub-micro regions is given below;

#### **Ghaghra –Chauka Khadar:**

The Khaddar tract formed of Alluvium and Dungravels of recent age runs parallel to Ghaghra river from north to south direction covering the major portion of Biswan, Laharpur, and Mahmudabad tahsils. The western limit of the region is marked by natural levee. The fact reveals that entire region is a left course of Chauka river which was pirated by Dahawar river in its upper part hence Chauka river becomes insignificant. The slope of the region is from north to south. Ghagra flows on the eastern boundary of the region where as Dahawar forms northern limit. A very narrow belt of eroded surface is observed along Ghaghra, Kakrehia and some streams in northern part. Ox-bow lakes, river meanders, natural ponds sand bars, dead arms of the river are the main physiographical characteristics. The area of the region is 1,766.6 sq. kms.

#### **Sitapur Plain:**

The plain is situated in the central part of the district covering parts of all six tahsils of the district with a little variation in relative relief. It is also formed of Alluvium and Dun-gravels of Recent age. A continuous belt of eroded surface may be seen along the Surayana, Gond and Puras streams in their lower courses. This region covers an area of 2,828.55 sq. km.

#### **Gomti Basin:**

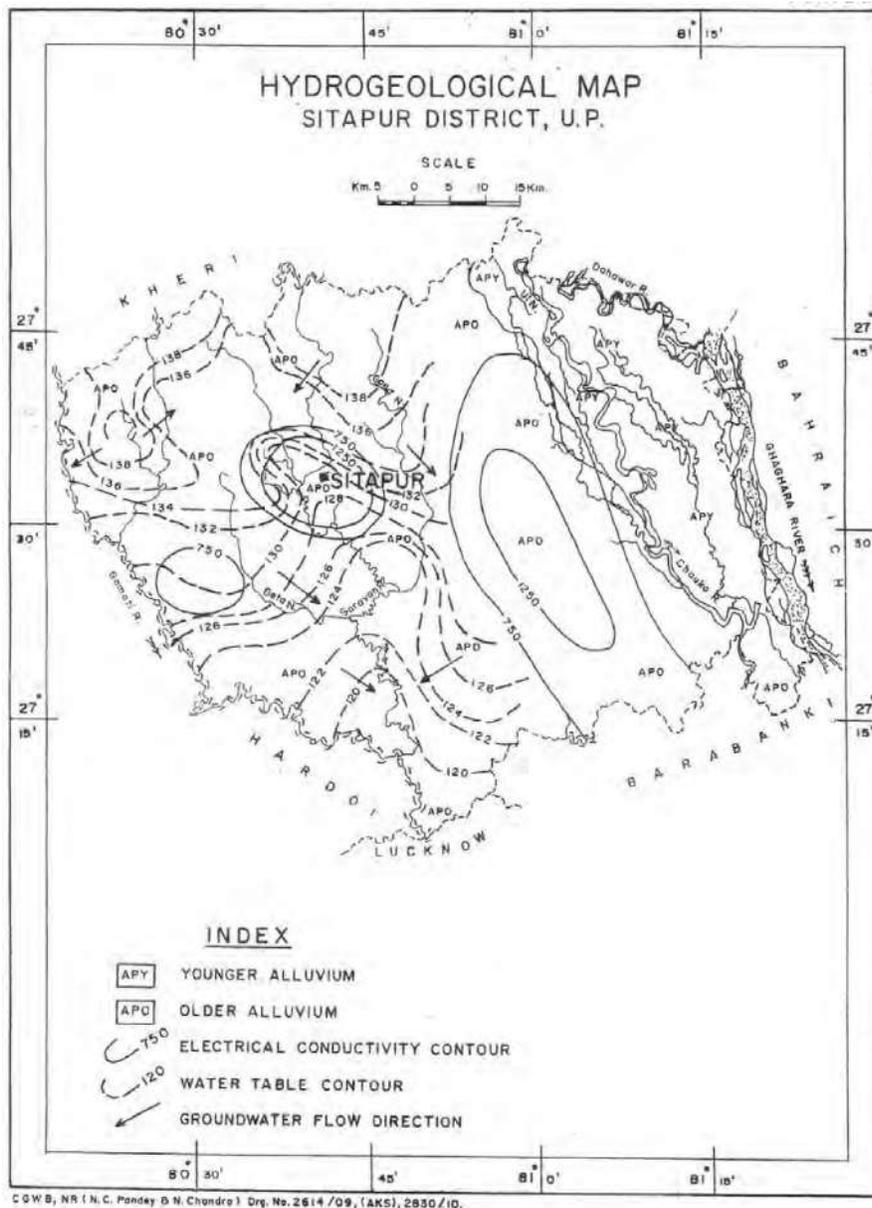
This region spreads over parts of Misrikh and Sidhauri tahsils along Gomti river in a crescent shape in the western part of the district. Geologically, it is also formed of Alluvium and Dun-gravels of Recent age. It is separated from Sitapur plain by the watershed line of Gomti River. The general slope of the area is from north to south. There are rugged surface along Kathna and Gomti rivers. A number of sand patches are noticed in the North-Western area nearby Gomti river. The region is spread over an area of 1,167.23 sq. km.

### 3.2 Hydro-geological Setup

The ground water occurrence and availability generally depends upon the water bearing properties of water bearing formation.

**3.2.1 Ground water situation in and around the project area**

The water bearing formation in the district is alluvium. The alluvium comprises sand, silt, clay & its admixture. Kankar is occasionally associated with clay. The interstices pore space between different grains is occupied by ground water. The interstices act as ground water conduct. Typically they are characterized by their size, shape irregularity and their distribution. The ground water occur under water table condition in shallow aquifer whereas the ground water in deeper aquifer occurs under semi-confined to confined condition. The shallow aquifer which is being tapped by dugwells occurs upto the depth of above 40 mbgl. The aquifer material is fine to medium sand. The kankar assorted with clay also occur occasionally.



**Figure 3.1: Hydro-geological map of Sitapur District**

**3.2.1 Aquifer characteristics**

The water bearing formation in the district is alluvium. The alluvium comprises sand, silt, clay & its admixture. Kankar is occasionally associated with clay. The interstices pore space between different grains is occupied by ground water. The interstices act as ground water conduct. Typically they are characterized by their size, shape irregularity and their distribution. The ground water occur under water table condition in shallow aquifer whereas the ground water in deeper aquifer occurs under semi-confined to confined condition. The shallow aquifer which is being tapped by dugwells occurs upto the depth of above 40 mbgl. The aquifer material is fine to medium sand. The kankar assorted with clay also occur occasionally

In major part of the area the depth to water level ranges between 2.00 to 4.00 mbgl (Plate-IV). The shallow aquifer gets fully recharged during monsoon period

Pre & post monsoon water level fluctuation in shallow aquifer depends upon the quantity of water recharged and discharged during pre-post monsoon period. The quantum of fluctuation is a direct function of above components. The low fluctuation in parts of Sitapur district gives a crude estimate that in Sitapur district the shallow aquifer is highly permeable in eastern part.

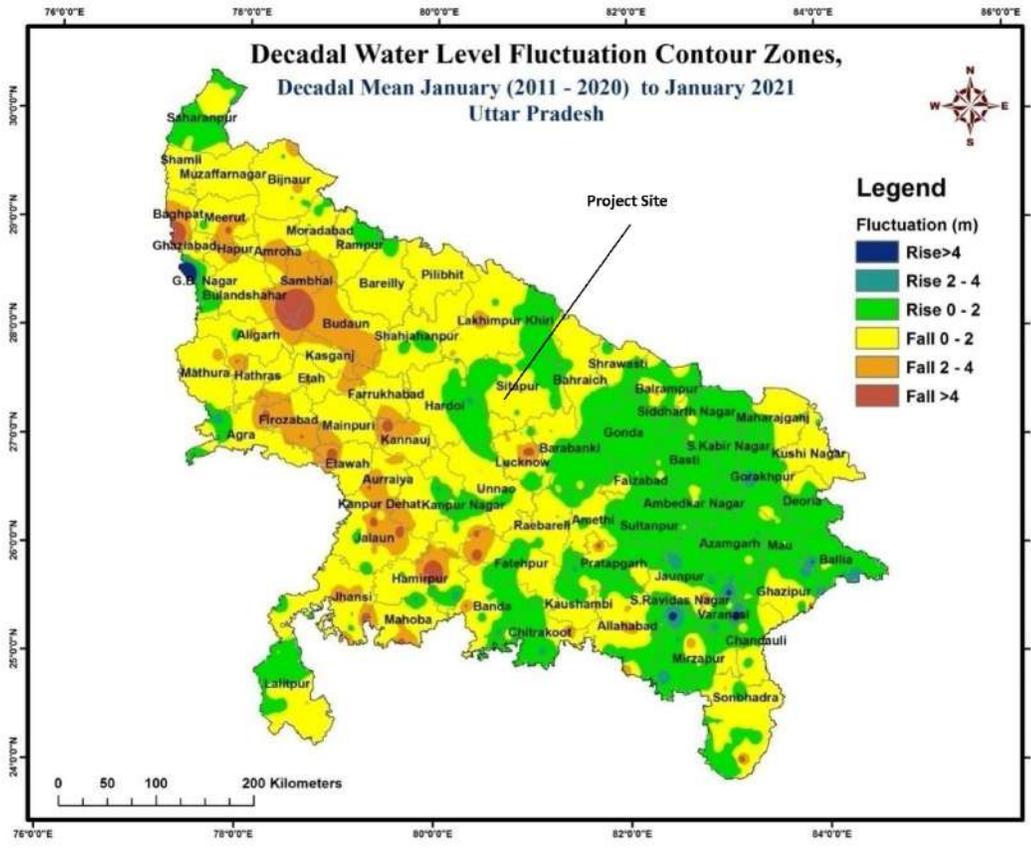


Figure 3.2: Decadal water level fluctuation (Mean January 2011 - 2020) to January 2021

A fall of 0 to 2 m is observed in 295 no. wells (about 39.38%) in major parts of the State, mainly in Western, South Western and Central region of the district including **Sitapur**.

### 3.2.2 Ground water flow and aquifer interaction with surface water bodies

Groundwater-flow systems are characterized by the boundary conditions imposed by their physiographic framework and by the distribution of recharge. The physiographic framework incorporates the topographic and geological conditions of a region, while recharge distribution is controlled by climate.

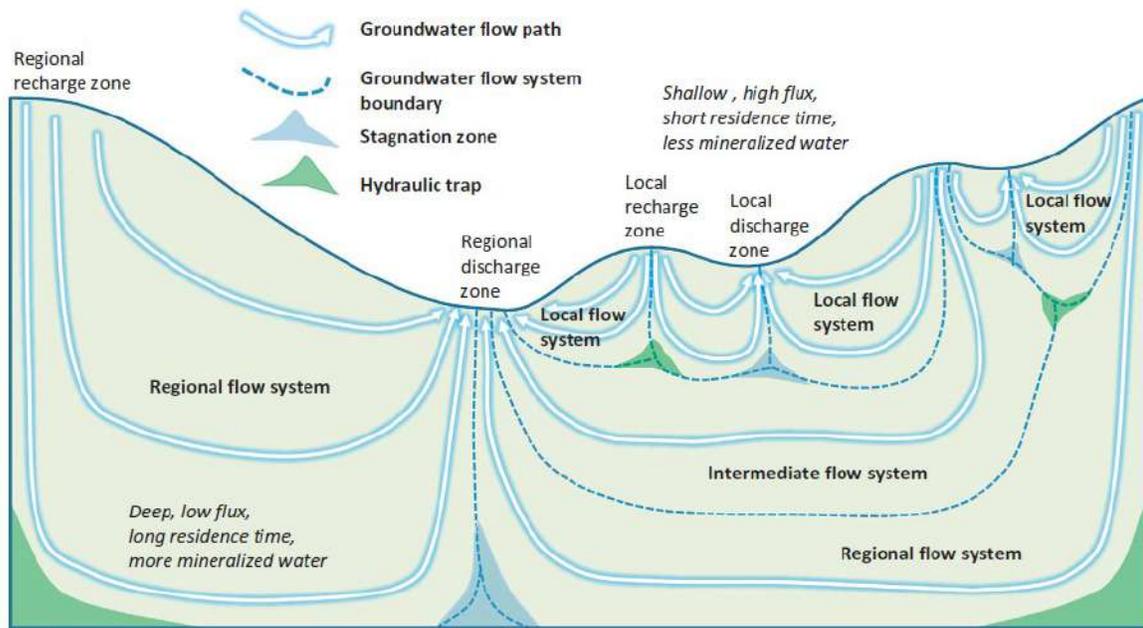
Regional-flow systems are recharged at regional water divides and discharge into regional (higher order) streams, while local-flow systems are recharged at local water divides and discharge into local (lower order) streams. Flow systems do not develop under extensive flat areas due to low hydraulic gradients. Increasing local topographic slopes increases the depth and intensity of local-flow systems, whereas increasing regional slopes increases the depth and intensity of regional-flow systems with a concomitant degeneration of local-flow systems. The hydrological response to recharge, and the water flux through the flow system diminish with increasing flow system scale, while the depth of penetration and residence time of groundwater increase with increasing flow system scale.

Thus regional-flow systems tend to be deep, steady, slow (low flux), and more mineralized, while local-flow systems are shallow, unsteady (high variability), fast (greater flux), and less mineralized.

The interaction of groundwater and surface water on regional to local scales is dependent on the;

1. Position of the surface water body with respect to the groundwater flow systems.
2. Anisotropy and hydraulic conductivity contrasts of the groundwater system.

Groundwater-surface water connectivity refers to the direction and magnitude of flow between water resources located above and below ground. Factors such as topography, geology and climate can change the direction and magnitude of these flows.



**Figure 3.3: Groundwater flow systems**

Surface water (including rivers, lakes, reservoirs, wetlands, estuaries, etc.) interacts with groundwater almost everywhere on Earth. This interaction takes place through the loss of surface water to groundwater, seepage of groundwater to surface water body, or a combination of both. The development or contamination of surface water or groundwater resources typically has an effect on each. Therefore a basic understanding of the interactions between surface water and groundwater is crucial for better management and sound policy making related to water-resource problems

Knowledge of groundwater-surface water interactions is essential to address the following water-resource issues:

1. Conjunctive use of groundwater and surface water resources.
2. Water rights issues, especially accounting for the groundwater flows to and from surface water bodies, which can be difficult and controversial.
3. Assessment and minimization of losses and delays of water released from surface-water reservoirs.
4. Assessment and control of contamination of surface water caused by groundwater and vice versa.
5. Integration of groundwater flows in watershed planning and management.





Figure 3.4: Groundwater quality monitoring location 5 km radius

**Table: 3.3 Ground water sampling location**

Sr No.	Village/location Name	Distance and Direction from project site	Owner Name	Latitude	Longitude
1	Khairepara	0.17 Km (E)	Private hand pump	27°35'51.11"N	80°36'43.90"E
2	Alipur Aliraja	2.55 Km (E)	Private borewell	27°36'2.28"N	80°38'19.93"E
3	Bhavanipur	1.84 Km (N)	Private borewell	27°37'0.23"N	80°37'1.95"E
4	Mathana	2.76 Km (NW)	Private borewell	27°37'14.33"N	80°35'21.72"E
5	Narhara	3.40 km (W)	Private borewell	27°35'48.60"N	80°34'19.20"E
6	Haluwapur	3.72 km (S)	Private Borewell	27°33'59.00"N	80°36'0.98"E
7	Mallahpur	8.55 km (SE)	Private Borewell	27°38'34.03"N	80°33'44.62"E
8	Sahaspur	6.66Km (E)	Private Borewell	27°34'41.72"N	80°40'24.04"E

Water quality of bore well has been tested by NABL accredited laboratory. It is found that all the parameter is within the prescribed limit. Test report has been attached with impact assessment report.

**Table 3.4: Ground water quality result at 8 locations**

Parameter	GWQ - 1	GWQ - 2	GWQ - 3	GWQ - 4	GWQ - 5	GWQ - 6	GWQ - 7	GWQ - 8	Acceptable limit	Permissible limit in the absence of Alternate Source
pH	7.43	7.53	7.29	7.27	6.98	7.62	7.32	7.29	6.5-8.5	
Colour	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5	15
Odour	Agreeable	Agreeable								
Taste	Agreeable	Agreeable								
Turbidity	0.8	<0.5	1.3	<0.5	<0.5	<0.5	0.8	1.3	1	5
Total Hardness (CaCO <sub>3</sub> )	228	312	248	368	288	332	196	236	200	600
Calcium (Ca)	64.00	80.00	64.00	78.40	68.80	76.80	54.40	64.00	75	200
Magnesium (Mg)	16.52	27.22	21.38	41.80	28.19	34.02	14.58	18.47	30	100

Chloride (Cl)	82.19	117.41	76.32	219.17	119.37	152.63	64.58	82.19	250	1000
Iron (as Fe)	<0.05	<0.05	0.070	0.055	<0.05	<0.05	<0.05	0.085	0.3	No relaxation
Fluoride (F)	0.77	0.86	0.71	1.07	0.63	0.69	0.45	0.71	1	1.5
Alkalinity (CaCO <sub>3</sub> )	208	236	196	272	232	248	164	188	200	600
Total Dissolved Solid	470	606	452	891	640	742	430	514	500	2000
Sulphate (as SO <sub>4</sub> )	7.03	6.70	3.59	8.94	5.92	6.17	4.51	5.61	200	400
Nitrate (as NO <sub>3</sub> )	29.21	48.34	30.45	108.89	94.01	108.36	60.55	70.11	45	No relaxation

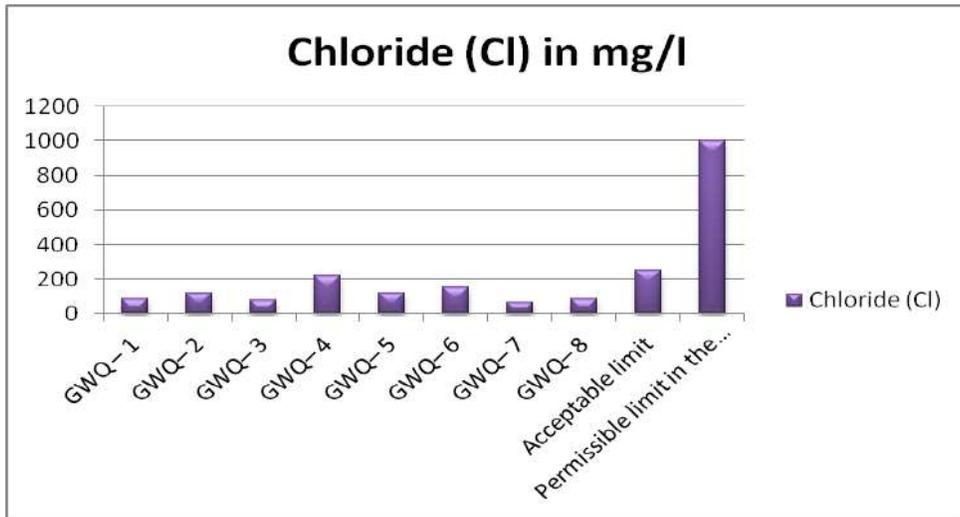


Figure 3.5: Graph of Chloride

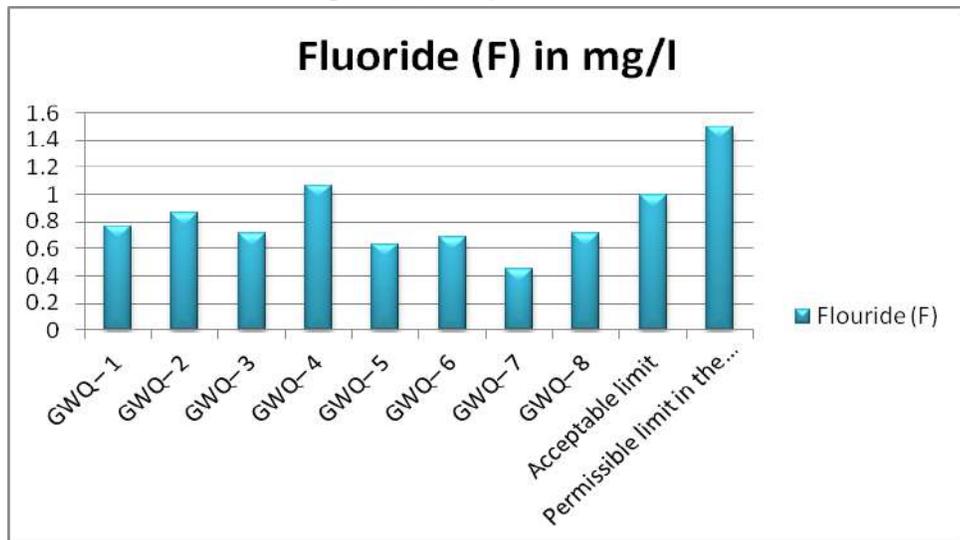


Figure 3.6: Graph of fluoride

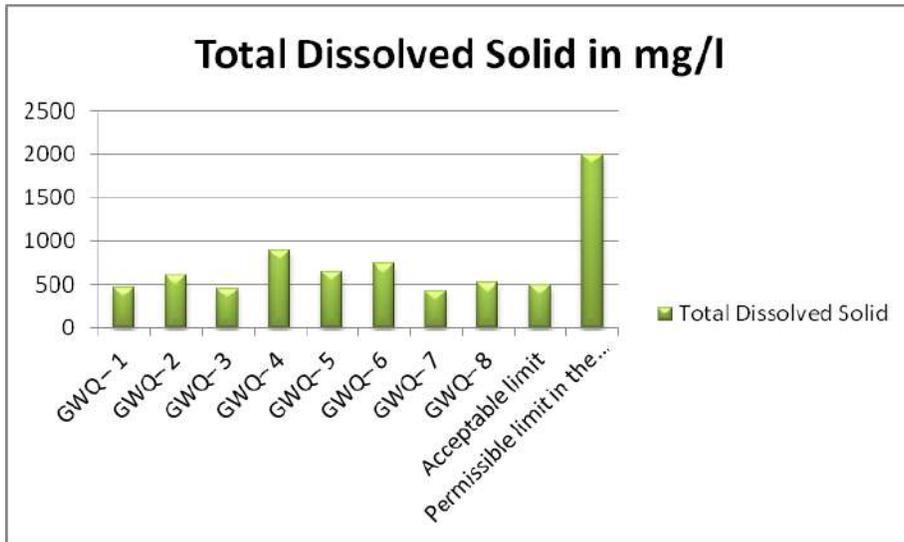


Figure 3.7: Graph of Total dissolved solid

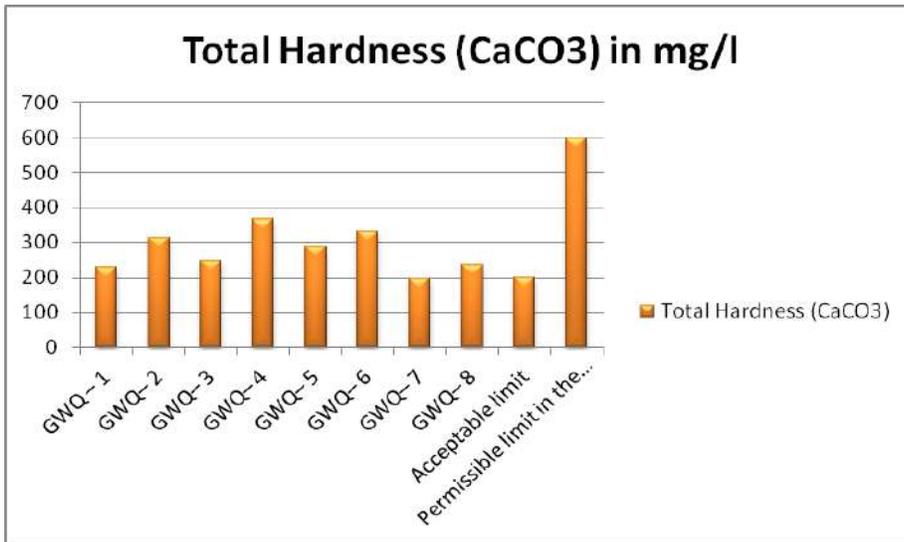


Figure 3.8: graph of total hardness in mg/l

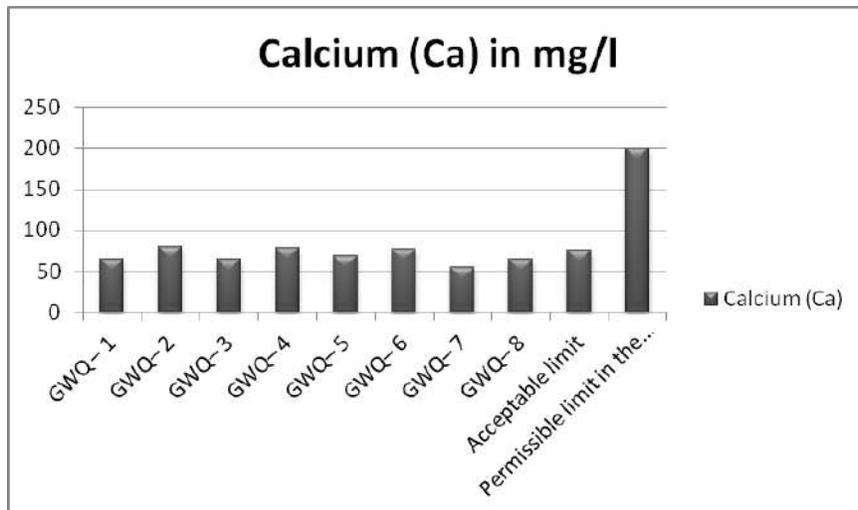


Figure 3.9: graph of Calcium (Ca)in mg/l

**3.2.5 Water quality of nearby water bodies**

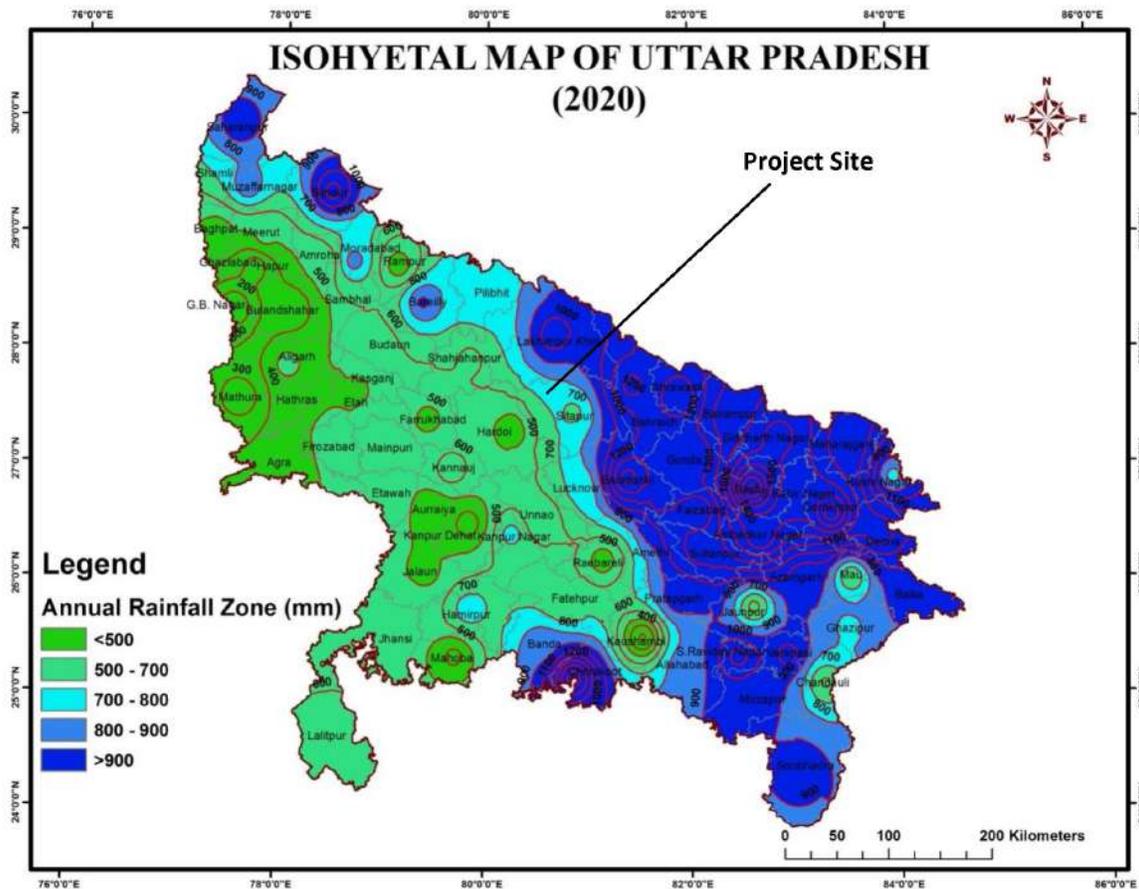
No any water bodies present within the 5 km radius of project area.

**3.2.6 Rainfall:**

The climate is sub-humid and it is characterized by a hot dry summer and a bracing cold season. The average normal rainfall is 988.6 mm. About 87% of rainfall takes place from June to September. During monsoon surplus water is available for deep percolation to ground water

**Table 3.5: Rainfall Month wise of 5 years in mm of Sitapur District**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
	R/F	R/F	R/F	R/F	R/F	R/F						
2016	2.0	3.0	4.3	0.0	40.1	49.4	223.9	229.9	106.9	2.5	0	0
2017	15.0	0.0	6.5	6.3	28.5	69.0	263.3	153.5	99.2	0	0	0
2018	2.7	7.4	0.0	29.2	3.0	28.1	292.7	290.5	112.2	0	0	0
2019	13.5	49.7	5.2	5.2	0.0	39.3	302.2	140.7	92.2	0.1	0.8	22
2020	18.7	11.4	33.7	6.0	25.1	98.4	207.1	241.9	29.6	0	10.5	0



**Figure 3.10: Isohyetal map of Uttar Pradesh**

**Chapter 4: DETAILS OF PROPOSED/EXISTING TUBEWELLS/ BOREWELLS**

**4.0 Groundwater Abstraction Structure- Existing**

In the plant premises there is 04 existing bore well and details are given below; NOC for ground water abstraction has been issued vide NOC No. CGWA/NOC/IND/REN/1/2019/5584 Dated 28/02/2019.

**Table 4.1: Bore well and details**

S. No	Type of Structure Name / Year of Construction	Depth (Meter) /Diameter (mm)	Discharge (m3/Hour)	Mode of Lift Name	Horse Power Of Pump
1	Bore well/1995	120.00 /150	100.00	Centrifugal Pump	30.00
2	Bore well/1995	120.00 / 150	100.00	Centrifugal Pump	30.00
3	Bore well/1995	120.00 / 150	100.00	Centrifugal Pump	30.00
4	Bore well/1995	120.00 / 150	100.00	Centrifugal Pump	30.00

Location of 4 bore well in the plant premises is shown on layout map (Figure 4.1).

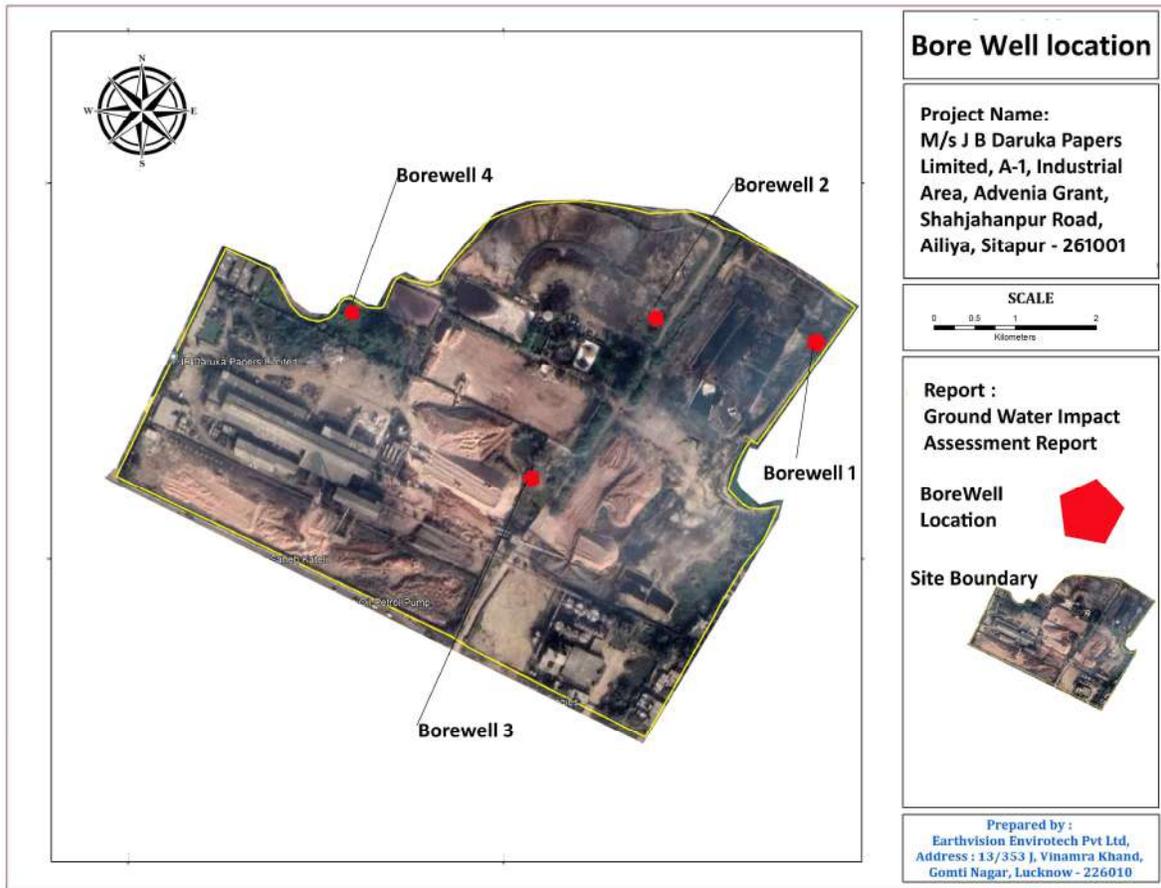


Figure 4.1: Location of Bore well

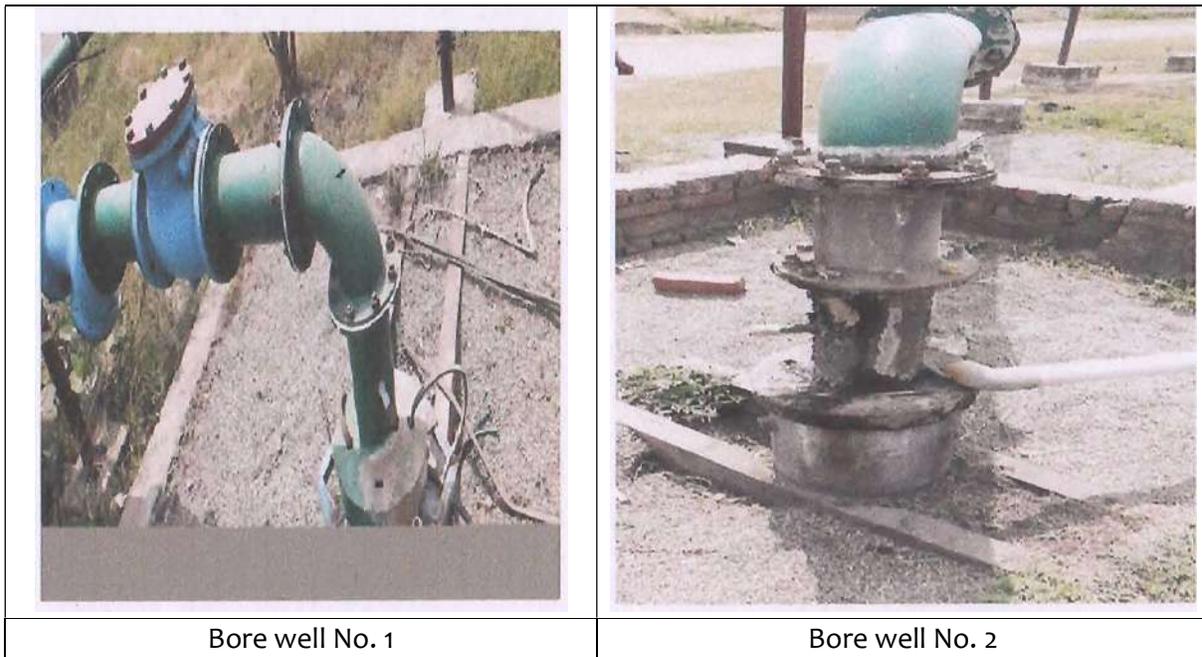
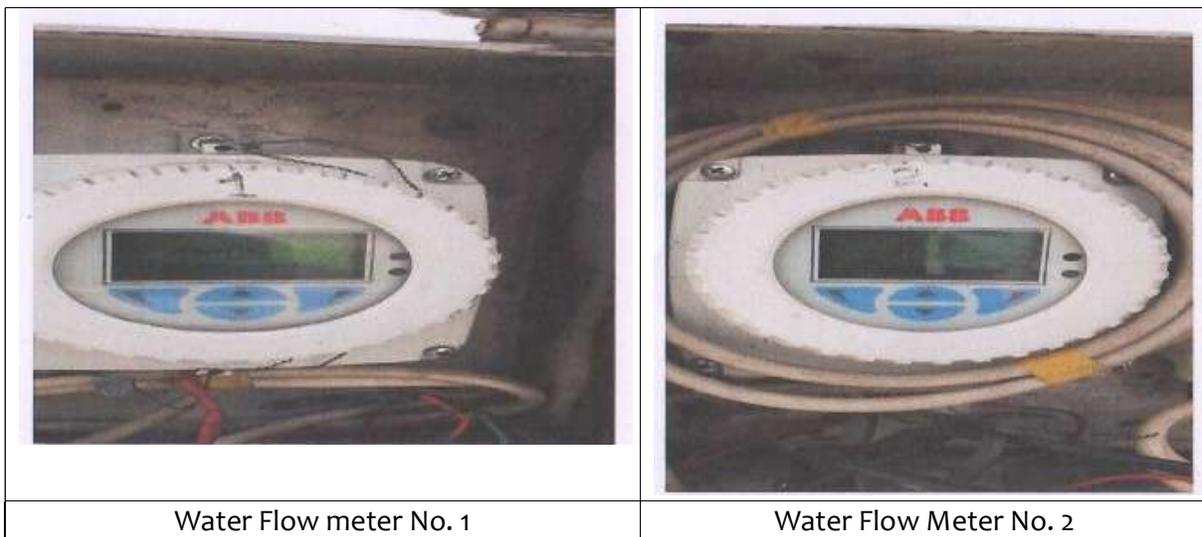


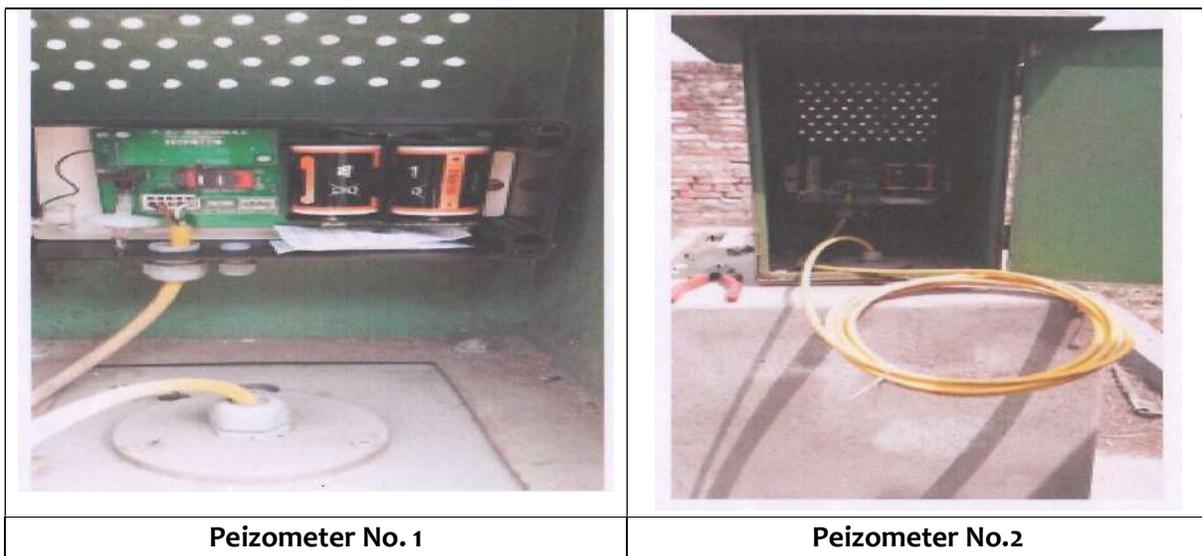
Figure 4.2: Photographs of Borewell



**Figure 4.3: Photographs of Water Flow meter**

**4.1 Details of Piezometer**

Piezometer installed by the M/s J B Daruka Papers Limited and the data is given below. The firm at its own cost installs piezometer with at suitable location and executes ground water regime monitoring programmed in and around the project area on regular basis in consultation with the Central Ground Water Board, Northern Region, Lucknow. As directed in the NOC, ground water level monitoring station i.e. Piezometer was established in the project area and the monthly water level monitoring of the piezometer has been taken to get the real impact of the ground water abstraction. Details are given the table as under.



**Figure 4.4: Photographs of Piezometer**

**Table 4.2: Monthly Water Level observed from Piezometer**

Drishti-2018 : Encardio-rite Electronics Pvt. Ltd.

SiteName : JB Daruka Papers

Dates Between: From 2022-01-01 15:37:51 To 2022-02-05 15:37:52

DateTime	DATALOGG	BATTERY V	WATER LEV	TEMPERAT	BAROMETF	INSTANT R	DAILY RAIN (mm)
01-01-2022 18:00	null	7.19	-6.46	26.3	1005.1	0	0
02-01-2022 06:00	null	7.18	-6.32	26.3	1002.6	0	0
02-01-2022 18:00	null	7.19	-6.43	26.3	1004.1	0	0
03-01-2022 06:00	null	7.19	-6.37	26.3	1001.3	0	0
03-01-2022 18:00	null	7.19	-6.43	26.3	1001.4	0	0
04-01-2022 06:00	null	7.18	-6.32	26.3	999.5	0	0
04-01-2022 18:00	null	7.19	-6.43	26.3	1001.3	0	0
05-01-2022 06:00	null	7.19	-6.33	26.3	999.7	0	0
05-01-2022 18:00	null	7.19	-6.38	26.3	1000.8	0	0
06-01-2022 06:00	null	7.2	-6.29	26.3	998.7	0	0
06-01-2022 18:00	null	7.2	-6.39	26.3	1000.2	0	0
07-01-2022 06:00	null	7.2	-6.27	26.3	1000.2	0	0
07-01-2022 18:00	null	7.2	-6.4	26.3	1002.3	0	0
08-01-2022 06:00	null	7.2	-6.19	26.3	999.6	0	0
08-01-2022 18:00	null	7.21	-6.15	26.3	1000.8	0	0
09-01-2022 06:00	null	7.2	-6.12	26.3	997.6	0	0
09-01-2022 18:00	null	7.21	-6.25	26.3	998.2	0	0
10-01-2022 06:00	null	7.21	-6.27	26.3	998	0	0
10-01-2022 18:00	null	7.21	-6.33	26.3	999.9	0	0
11-01-2022 06:00	null	7.21	-6.22	26.3	999	0	0
11-01-2022 18:00	null	7.19	-6.34	26.3	1000.5	0	0
12-01-2022 06:00	null	7.19	-6.22	26.3	997.9	0	0
12-01-2022 18:00	null	7.19	-6.32	26.3	1000.4	0	0
13-01-2022 06:00	null	7.19	-6.31	26.3	999.5	0	0
13-01-2022 18:00	null	7.19	-6.32	26.3	1001.3	0	0
14-01-2022 06:00	null	7.19	-6.25	26.3	999.2	0	0
15-01-2022 06:00	null	7.19	-6.34	26.3	1000.6	0	0
15-01-2022 18:00	null	7.18	-6.39	26.3	1003.8	0	0
16-01-2022 06:00	null	7.18	-6.38	26.3	1001	0	0
16-01-2022 18:00	null	7.19	-6.42	26.3	1004.5	0	0
17-01-2022 06:00	null	7.18	-6.4	26.3	1003.5	0	0
17-01-2022 18:00	null	7.18	-6.46	26.3	1005	0	0
18-01-2022 06:00	null	7.18	-6.36	26.3	1002.7	0	0
18-01-2022 18:00	null	7.17	-6.25	26.3	1001.5	0	0
19-01-2022 06:00	null	7.18	-6.16	26.3	1000.1	0	0
19-01-2022 18:00	null	7.19	-6.14	26.3	1000.3	0	0
20-01-2022 06:00	null	7.18	-6.07	26.3	995.8	0	0
20-01-2022 18:00	null	7.19	-6.08	26.3	996.5	0	0
21-01-2022 06:00	null	7.18	-6.09	26.3	993.3	0	0
21-01-2022 18:00	null	7.19	-6.09	26.3	997.1	0	0
22-01-2022 06:00	null	7.18	-6.06	26.3	993.8	0	0
22-01-2022 18:00	null	7.18	-6.04	26.3	994	0	0
23-01-2022 06:00	null	7.19	-6	26.3	991.7	0	0
23-01-2022 18:00	null	7.19	-6.04	26.3	993.4	0	0
24-01-2022 06:00	null	7.19	-6	26.3	994	0	0
24-01-2022 18:00	null	7.2	-6.01	26.3	997.4	0	0

25-01-2022 06:00 null	7.2	-5.97	26.3	996.3	0	0
25-01-2022 18:00 null	7.19	-6.01	26.3	998	0	0
26-01-2022 06:00 null	7.19	-6	26.3	996.9	0	0
26-01-2022 18:00 null	7.18	-6.1	26.3	999	0	0
27-01-2022 06:00 null	7.2	-6.18	26.3	997.8	0	0
27-01-2022 18:00 null	7.19	-6.31	26.3	999.7	0	0
28-01-2022 06:00 null	7.18	-6.19	26.3	997.7	0	0
28-01-2022 18:00 null	7.19	-6.34	26.3	999.9	0	0
29-01-2022 06:00 null	7.19	-6.21	26.3	998.9	0	0
29-01-2022 18:00 null	7.18	-6.29	26.3	1001.1	0	0
30-01-2022 06:00 null	7.18	-6.17	26.3	996.4	0	0
30-01-2022 18:00 null	7.19	-6.16	26.3	994.8	0	0
31-01-2022 06:00 null	7.19	-6.15	26.3	994.5	0	0
31-01-2022 18:00 null	7.19	-6.28	26.3	996.7	0	0
01-02-2022 06:00 null	7.2	-6.22	26.3	994.3	0	0
01-02-2022 18:00 null	7.18	-6.32	26.3	994.9	0	0
02-02-2022 06:00 null	7.19	-6.23	26.3	991.8	0	0
02-02-2022 18:00 null	7.19	-6.37	26.3	996.1	0	0
03-02-2022 06:00 null	7.19	-6.33	26.3	995.4	0	0
03-02-2022 18:00 null	7.19	-6.4	26.3	991.6	0	0
04-02-2022 06:00 null	7.2	-6.24	26.3	989.3	0	0
04-02-2022 18:00 null	7.2	-6.33	26.3	993.6	0	0
05-02-2022 06:00 null	7.19	-6.3	26.3	993.8	0	0

## Chapter 5.0 PROPOSED DEWATERING PLAN IN CASE OF INFRASTRUCTURE DEWATERING PROJECTS

Not applicable

### 5.1 PLANS FOR DEWATERING

There is no any dewatering proposal here.

### 5.2 USAGE OF PUMPED WATER

There is no any dewatering proposal here, So there is no any system of usage of pumped water.

## Chapter 6: Impact Assessment

### 6.1 Impact on the Ground Water Regime

Ground water is a valuable resource to support agricultural, industrial and domestic activities in many parts of the world. Overexploitation of groundwater can lead to scarcity in freshwater resources and adversely impact the ecosystem and social development. Moreover, countries like India. India, the largest agricultural user of groundwater in the world, has seen a revolutionary shift from large-scale surface water management to widespread groundwater abstraction in the last 47 years.

Water availability per person is dependent on population of the country and for India, per capita water availability in the country is reducing due to increase in population. The average annual per capita water availability in the years 2001 and 2011 was assessed as 1816 cubic meters and 1545 cubic meters respectively which may further reduce to 1486 cubic meters and 1367 cubic meters in the years 2021 and 2031 respectively.

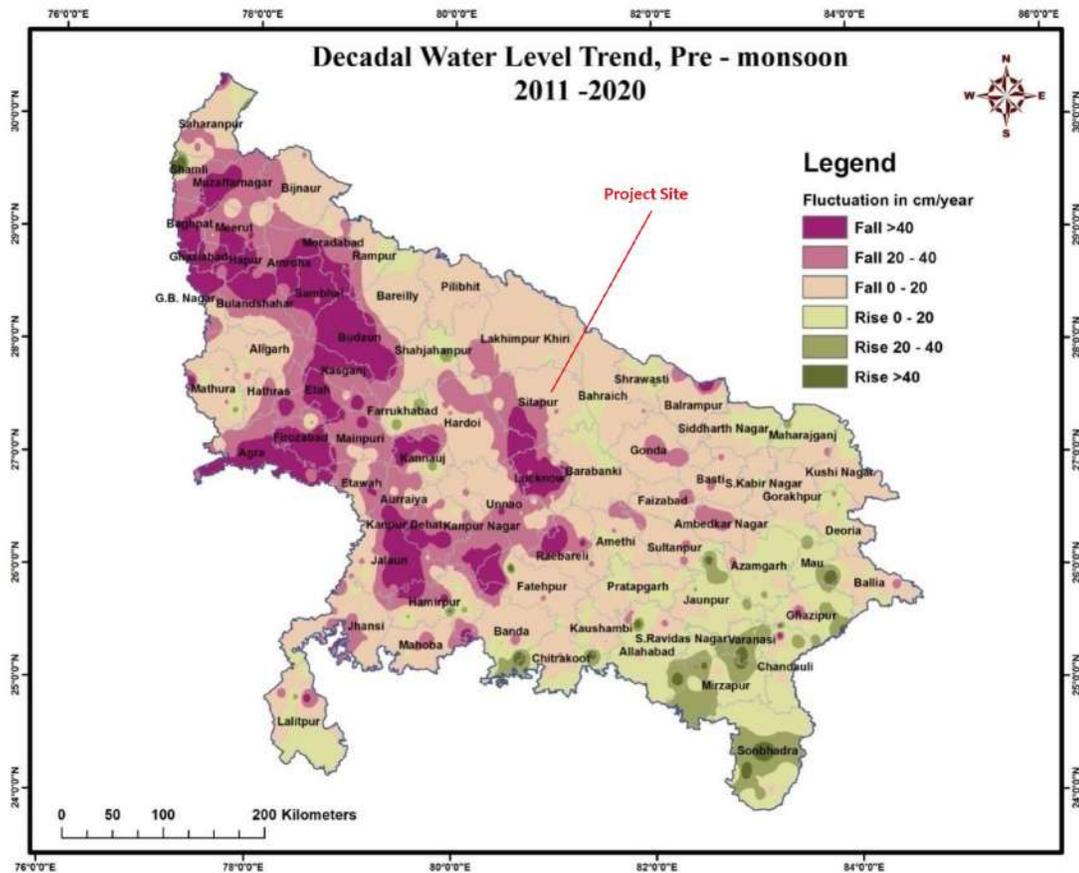


Figure 6.1. Decadal water level trend, pre-monsoon 2011-2020

The seasonal, annual and decadal fluctuation gives an idea of the behavior of the water level but is subjected to many anomalous factors which give a short term picture. To have a true

picture where highs and lows are balanced out, the long term trend for ten years 2011 to 2020 has been worked out and analysed on the basis of DWL data of Ground Water Monitoring Wells.

The declining trend is observed in 71.06 % of the monitoring wells (506) covering over 10 year’s period. Decline of 0 – 20 cm/yr is commonly observed in 37.35% wells followed by 20 – 40 cm/yr in 18.40% wells and >40 cm/yr in 15.31%. The low decline is spread all over the state but dominant in eastern and central parts and along Terai belt of the state. Higher decline occurs in most of the districts of western and southern regions. There is a rising trend observed in 206 wells (28.93%), out of which 20.78 % and 4.77% of analysed wells shows rising trend in the range of 0-20cm/year and 20-40cm/year respectively and very few wells of 3.37% shows rising trend of more than 40cm/year. Decadal water level trend, pre-monsoon 2011-2020 Sitapur district came under 0 – 20 cm/yr decline category.

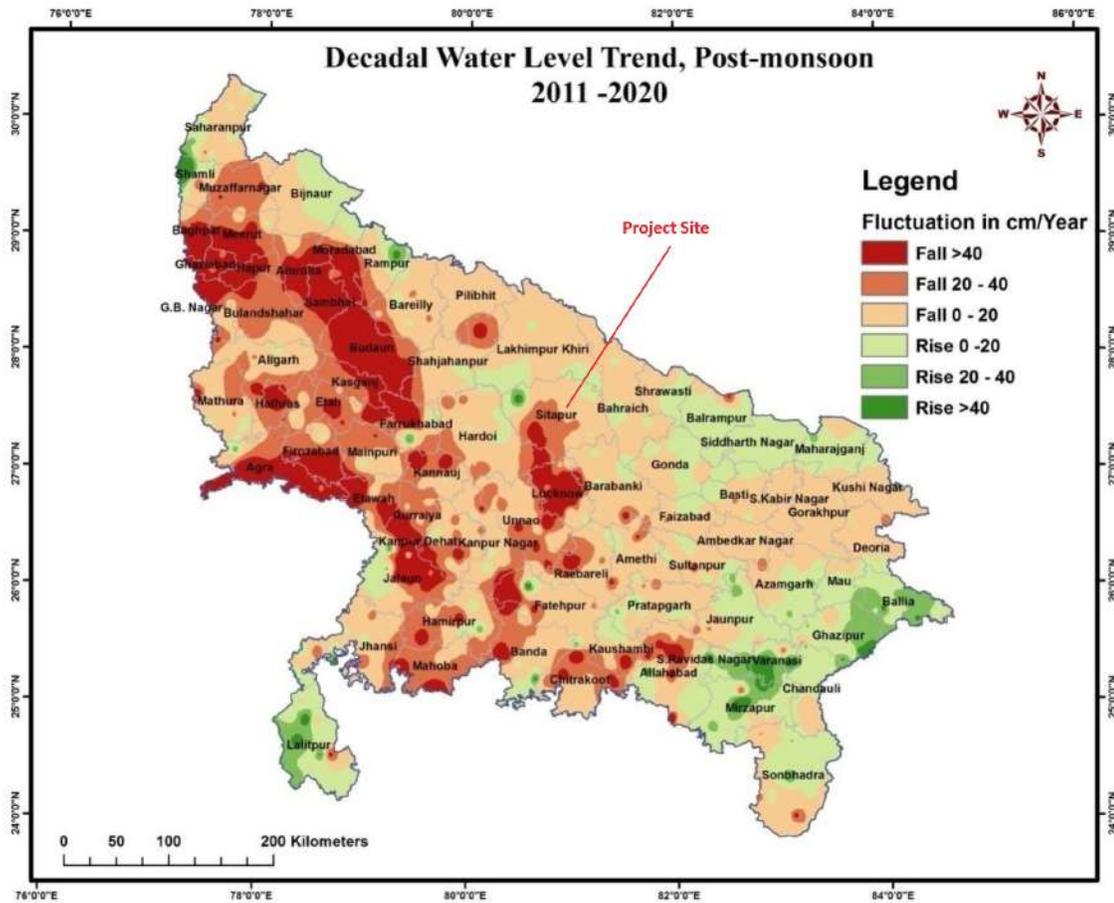


Figure 6.2. Decadal water level trend, Post-monsoon 2011-220

There is a declining trend in 63.40% of the monitoring wells over 10 years period. Decline of 0 – 20 cm/yr is mostly observed in 35.57% wells followed by 20 – 40 cm/yr in 13.88% wells and more than 40 cm/yr is found in 15.94% wells. The low decline is spread all over the state but dominant in central, eastern part and along Terai belt of the state. Higher decline occurs in most of the districts of western, north western and southern parts and along Yamuna River.

There is a rise in trend in 36.59% of the monitoring wells over 10 years period. Rise of 0 – 20cm/year is found in 28.74% followed by 20-40cm/year in 4.34% and very few wells of 3.50% showing water level trend of more than 40cm/year. Decadal water level trend, Post-monsoon 2011-2020 Sitapur district came under 0 – 20 cm/yr decline category.

**6.2 Impact on surface water sources**

There is no as such surface body within 5 km radius from project site.

**6.3 Impact on water quality**

Effluent generated from industrial and domestic activity is being treated. Periodic testing of treated water is also being done by NABL accredited laboratory.

**6.4 Mitigation Measures**

Water management practices can reduce water consumption. and helps in preventing pollution of surface and groundwater resources. To arrest the further decline in ground water levels and depletion of ground water resources, there is urgent need to implement both Supply side and Demand side measures which includes artificial recharge and water conservation, On-farm activities and adoption of water use efficiency measures.

**Table 6.2 Groundwater management options**

<b>Supply side Interventions</b>	<b>Demand side Interventions</b>
<ul style="list-style-type: none"> <li>• Construction of check dams/nala bunds</li> <li>• Revival and renovation of ponds</li> <li>• On farm activities like laser leveling, bench terracing, construction of farm ponds, plantation of forests etc.</li> <li>• Government Irrigation and Water Supply tube well should tap 2nd Aquifer. However, caution is to be applied to keep piezometric head maintained.</li> </ul>	<ul style="list-style-type: none"> <li>• Water use efficiency through piped and pressurized irrigation (drip &amp; Sprinkler)</li> <li>• Furrow irrigation with raised bed planting in wide row crops should be practiced.</li> <li>• Irrigation in checks in close row crops should be practiced</li> <li>• Measures for reducing Evapo-transpiration losses etc.</li> <li>• Diversification of cropping pattern.</li> </ul>
<p>Scope of supply side interventions is limited due to topography, land availability and less availability of surplus water</p>	<p>Most effective option to reduce ground water withdrawal by 35-40% specially for Sugarcane areas by adopting new irrigation practices</p>

**6.4.1 ARTIFICIAL RECHARGE TO GROUND WATER FROM THE VILLAGE POND**

Pond in the village is generally filled with water only during the rainy season and during summer, they are dry. It is proposed to adopt these village ponds to take up artificial

recharge to ground water of the pond water, which is overflowing to adjacent areas during monsoon period. The artificial recharge to ground water in the pond area will result into rise in water levels in the village tube well as wells and increase the supply of water to the land adjacent for irrigation purposes. Thus, recharge scheme in the pond will benefit the tube wells.

Natural pond has been adopted for the artificial recharge in groundwater.

**Table 6.3: Detail of adopted ponds**

Type	Location of Pond	Gata No.	Area in Hectare	Total Depth (M)
Pond	Advena grant	186	0.8580	3.5
Pond	Advena grant	734	0.5100	3.5
Pond	Advena grant	1405	0.3360	3.5
Pond	Mathna	383	0.8450	3.5
Pond	Mathna	398	0.2230	3.5
Pond	Mathna	455	1.1420	3.5
Pond	Mathna	859	0.2180	3.5
Pond	Mathna	901	0.2350	3.5
Pond	Kharepara	179	0.2270	3.5
Pond	Kharepara	183	0.1740	3.5
Pond	Kharepara	185	0.3340	3.5
Pond	Kharepara	320K	0.0570	3.5
Pond	Nerinkalan	69/1	0.1250	3.5
Pond	Nerinkalan	127/2	0.1050	3.5
Pond	Nerinkalan	169/3	0.4290	3.5
Pond	Nerinkalan	196/4	0.3880	3.5
Pond	Nerinkalan	340K	1.1330	3.5
Pond	Nerinkalan	418/9 -	0.1700	3.5
Pond	Nerinkalan	418/3	0.1540	3.5
Pond	Nerinkalan	418/1	0.1540	3.5
Pond	Victoria	11 Mi	0.1940	3.5
Pond	Victoria	504	1.3480	3.5
Pond	Amipur grant	164	0.2060	3.5
Pond	Amipur grant	558	0.4770	3.5
Pond	Mirzapur	144	3.2620	3.5
Pond	Khagesiyamau	240	0.3480	3.5
Pond	Khagesiyamau	242/3	0.4050	3.5
			<b>14.0570</b>	<b>3.5</b>

#### 6.4.4 Conclusion

The treated effluent is clear without any odour or turbidity. The pollutants like BOD, COD, TSS and dissolved solid are much below the prescribed limits of CPCB/UP Pollution Control Board. The treated effluent will be taken into treated water reservoir and pumped through adjoining pipeline for irrigation and recirculation in the process. The experiments carried out in the agricultural field of factory by irrigation for plantation with the treated effluent yielded

encouraging results and there is huge demand for this. The surplus treated effluent, if any, may be used in the process.

### 6.5 GW MODELLING

GW Modeling studies are required to assess the impact of withdrawal on GW system on long term basin. Following are the criteria where modeling studies are required.

Assessment Unit	Aquifer Type	Quantum of Groundwater (m <sup>3</sup> /day)
Over-exploited, Critical and Semi-critical (OCS)	Non-Alluvium	>500
	Alluvium	>1000
Safe	Non-Alluvium	>500
	Alluvium	>2000

Not applicable as per the guideline.

## Chapter 7: WATER BALANCE, RECYCLE AND REUSE

### 7.1 Water Balance

The CGWA NOC has been issued vide NOC Number CGWA/NOC/IND/REN/1/2019/5584 dated 28/02/2019. The water balance given at each stage is given below;

### 7.2 Effluent Treatment Plant

Effluent Treatment Plant has been given by the management of M/s J B Daruka Papers Ltd

#### Plant Capacity

The treatment plant has been designed to treat 1620 M<sup>3</sup>/day. The duration of treatment considered as 24 operating hours a day.

**Table 7.1 Design parameter of waste water quality**

S. No	Parameter	Concentration
1	pH	5.0 – 7.0
2	BOD mg/l	3000
3	COD mg/l	5000
4	Suspended Solids	1000
5	Fatty material	80

**Table 7.2 Characteristics of Treated water quality**

S. No.	Parameter	Concentration	Expected Conc
1	pH	6.5 - 9.0	6.5 - 9.0
2	BOD mg/l	30	<30
3	COD mg/l	250	<250
4	Suspended Solids mg/l	30	<30
5	Fatty material mg/l	10	<10

Treated effluent is to consist, all the parameters within the prescribed limits of the UP State Pollution Control Board, for example B.O.D. is to be brought down to less than 30 mg/l .

### 7.3 Existing effluent treatment scheme

The treatment system for treatment effluent generated from industrial process consists of following treatment unit in three stages namely.

#### Raw Effluent Transport:

Raw effluent from the unit is carried to the treatment site through suitably designed channel or drain. Raw effluent is received in a sump.

**Bar Screen:**

The waste water is made to pass through bar screen so that the free floating material is separated with the help of bar screen and waste water would then be flown into the Equalization tank.

**Chemical Mixing Tank:**

The waste water is collected and that free floating solid can be removed manually and waste water is fed into the solid separator.

**Equalization Tank:**

Stabilization of effluents takes place in equalization tank. Effluent from equalization tank shall then be passing after pH adjustment.

**Primary Clarifier:**

Effluent is transferred to the primary clarifier tank. Sludge is settled down and clear water is overflowed to aeration tank. Sludge is transferred to sludge bed with the help of sludge pump.

**Aeration Tank:**

Water from primary clarifier comes to aeration tank. Here air is passed through water with the help of fine bubble diffuser, which helps the reduction of BOD and COD of water. This would help in better destruction of Organics and lowering the BOD & COD levels by activated suspended growth process.

**Secondary Clarifier:**

Secondary clarifier is constructed in RCC and hopper bottom for sludge collection and withdrawal. Part of the settled sludge at the bottom of the settling tank is pumped to the aeration tank and part of it is discharged on sludge drying beds as per operational requirement. This sludge being fully mineralized is suitable for sun drying on sand drying beds.

**Clear water/Chlorination tank:**

The clear water tank is to collect the clear water overflowed from secondary clarifier out let so that clear water could be pumped in to the SF and ACF.

**Sand Filter:**

The sand filter serves as a unit to prevent the overflowing solids to go to the recycling system. It comprises of a pressure vessel that contains graded quartz and this media filters the water as it flows from the top to the bottom. The out let water would have low levels of suspended solids to the tune of < 5 ppm.

**Activated Carbon Filter:**



**ETP section**

41.	Installed capacity (KLD):...1620 KLD. Utilized capacity (KLD):...1200 (KLD)			
42.	Effluent treatment technology: Physico-chemical/ Biological			
	ETP unit	Dimension	Capacity	Retention time
	Bar screen chamber	-		
	Equalization tank	(3 x 5 x 5) mtr.	75 m <sup>3</sup>	1.2 Hour
	Primary clarifier	(11 x SWD 4) mtr.	380 m <sup>3</sup>	6.7 Hour
	Aeration tank	(25 x 15 x 4.25) mtr.	1590 m <sup>3</sup>	23.5 Hour
	Secondary clarifier	(11.88 x SWD 3.65) mtr.	405 m <sup>3</sup>	6 Hour
	Polishing Tank (if available)	-		
	Tertiary treatment units		100 m <sup>3</sup> /HR	
43.	Type of aerators in aeration tank	Surface/Diffused		Details:
	Rate of aeration	.....		
	Provision for sludge recirculation	Yes/No		
44.	Type of clarifier (Conventional/ Lamella clarifier/ Tube settler)	Primary clarifier: <b>Conventional</b> Secondary clarifier: <b>Conventional</b>		
45.	Fiber Separation unit:			
	Sedicell/Krofta/DAF			

## Chapter 8: SUMMARY AND CONCLUSION

### 8.0 Conclusion & Recommendations

Groundwater abstraction for irrigation that can lead to aquifer depletion. In fact, groundwater resources worldwide are being depleted at alarming rates because of the overwhelming groundwater exploration in the second half of the 20th century to support agriculture, industry, and domestic water demand.

All the blocks of the district fall under the safe category. The need for water conservation and artificial recharge need not be over emphasized in canal command area. Available groundwater resources indicate that the block falling in the canal command area have high ground water resource and low draft, resulting in shallow water level in pre-monsoon period and become water logged during post monsoon period.

Exploitation of ground water in these blocks would push the water level to desirable depth. De-siltation of canals and control of seepage will enhance the irrigation potential of these canals especially in the tail end of the canal command area.

As per the ground water board some recommendation has been issued for the groundwater development.

1. Ground water development in the district can be made with the help of shallow tube well, bamboo borings and deep tube well.
2. Chemical quality of ground water is found suitable for drinking and irrigation purposes.
3. Diesel operated pump sets enhances the lifting cost of tube well water. In order to reduce the financial burden, alternative low cost energy should be provided for the energisation of pumps.
4. Non-conventional energy resource can be used for the energization of pumpsets, where it seem feasible

Based on the study conducted by Earthvision Envirotech Pvt Ltd following recommendations are drawn for augmenting ground water by considering Guidelines of CGWA, Notification 24th September 2020.

- The project site M/s J B Daruka Papers Limited, A-1, Industrial Area, Advenia Grant, Shahjahanpur Road, Ailiya, Sitapur - 261001.
- The total area of M/s J B Daruka Papers Limited plant site is 159891.44 sqm.
- Greenbelt area is 79381.44 sqm i.e. 50% of the total land area and will remain as it is.
- The ground water quality in the study area confers as BIS Drinking water standards.
- There are 2 tube well capable to fulfill present per annum fresh groundwater requirement for M/s J B Daruka Papers Limited.
- Installation of 2 No. digital water flow meter (confirming to BIS/IS standards) having telemetry system with Monthly water level data will be submitted to the Ground

Water Department. Industry will monitor quality of groundwater from the abstraction structures twice in a year from NABL Laboratory.

**11. ACCREDITATION CERTIFICATE**



## Accreditation Board of CGWA

### Certificate of Accreditation

*M/s. Earthvision Envirotech Pvt. Ltd.*

*Has been accredited as a Ground Water Professionals to prepare reports in the  
Functional Areas of*

*- Impact Assessment Report without Modelling.*

*Valid from : 01.10.2021*

*Certificate No. : CGWA/RGI/014*

*Valid thru : 30.09.2026*

*Dated : 30.11.2021*

*IAR For M/s JB DARUKA PAPERS LIMITED*

*Sitapur U.P.*

*[Signature]*  
क्षेत्रीय निदेशक  
Regional Director  
आरजीएनजीडब्ल्यूटीआरआई  
RGNGWT&RI

*[Signature]*  
सदस्य  
Member  
आरजीएनजीडब्ल्यूटीआरआई  
RGNGWT&RI

*[Signature]*  
(Shikhar Srivastava)  
25/2/22

Earthvision Enviro-tech Pvt.ltd.  
Lucknow(U.P.)  
Accredited By CGWA.valid Up To 30.9.2026

## Annexure

### Water Sample Report



# ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 (EMS) Certified)  
 Recognized from MoEF & CC under EOPAA 1986  
 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com | Website: http://www.ultralabnoida.com



TC-8198

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## TEST REPORT

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### Water Sample Analysis

#### Discipline/Group-Chemical/Water

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Report Code: W-26032022-01 Issue Date: 30/03/2022

ISSUED TO : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

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Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sample Description : Ground Water  
 Sampling Location : Sample Collected from Khairepara  
 Source : Private Handpump  
 Sampling Procedure : IS 3025(Part-01)  
 Sample Quantity : 1.0 Litre  
 Analysis Duration : 26/03/2022 to 30/03/2022

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### RESULTS

As per IS 10500:2012

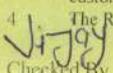
S.No	Parameter	Test Method	Results	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	pH	IS:3025(Part-11)	7.43	-	6.5-8.5	-
2	Colour	IS:3025(Part-04)	<5.0	Hazen	5	15
3	Odour	IS:3025(Part-05)	Agreeable	-	Agreeable	Agreeable
4	Taste	IS:3025(Part-07)	Agreeable	-	Agreeable	Agreeable
5	Turbidity	IS:3025(Part-10)	0.8	NTU	1	5
6	Total Hardness (as CaCO <sub>3</sub> )	IS:3025(Part-21)	228	mg/l	200	600
7	Calcium(as Ca)	IS:3025(Part-40)	64.00	mg/l	75	200
8	Magnesium(as Mg)	IS:3025(Part-46)	16.52	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32)	82.19	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53)	<0.05	mg/l	0.3	No Relaxation
11	Fluoride(as F)	IS:3025(Part-60)	0.77	mg/l	1	1.5
12	Alkalinity(as CaCO <sub>3</sub> )	IS:3025(Part-23)	208	mg/l	200	600
13	Total Dissolved Solid	IS:3025(Part-16)	470	mg/l	500	2000
14	Nitrate (as NO <sub>3</sub> )	IS: 3025 (Part-34)	7.03	mg/l	45	No Relaxation
15	Sulphate (as SO <sub>4</sub> )	IS:3025(Part-24)	29.21	mg/l	200	400

\*\*End Of Report\*\*

Notes:

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.
- The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval of the lab.

For ULTRA TESTING & RESEARCH LABORATORY  
 (Authorized Signatory)

Checked By:  Assuring you of best our services at all times.



## ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified)  
 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com  
 Website: http://www.ultralabnoida.com

### TEST REPORT

#### Bacteriological Quality of Drinking Water

Report Code : W-26032022-01 Issue Date: 30/03/2022  
 Issued To : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sampling Location : Sample Collected from Khairepara  
 Sample Description : Ground Water  
 Source : Private Handpump  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Requirements
1	E.coli	IS-1622	Not detected ( < 2 )	E.Coli/100ml	Shall not be detectable in 100 ml sample
2	Total Coliform	IS-1622	Absent	MPN/100ml	Shall not be detectable in 100 ml sample

\*\*End Of Report\*\*

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
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- The Report can not be used as evidence in a court of law without the written approval of the lab.

*Vijay*  
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For ULTRA TESTING & RESEARCH LABORATORY  
 (Authorized Signatory)



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 E-mail: ultraresearchlab@gmail.com | Website: http://www.ultralabnoida.com



### TEST REPORT

Water Sample Analysis  
 Discipline/Group-Chemical/Water

Report Code: W-26032022-02  
 ISSUED TO

Issue Date: 30/03/2022

M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sample Description : Ground Water  
 Sampling Location : Sample Collected from Alipur Aliraja  
 Source : Private borewell  
 sampling Procedure : IS 3025(Part-01)  
 Sample Quantity : 1.0 Litre  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	pH	IS:3025(Part-11)	7.53	-	6.5-8.5	-
2	Colour	IS:3025(Part-04)	<5.0	Hazen	5	15
3	Odour	IS:3025(Part-05)	Agreeable	-	Agreeable	Agreeable
4	Taste	IS:3025(Part-07)	Agreeable	-	Agreeable	Agreeable
5	Turbidity	IS:3025(Part-10)	<0.5	NTU	1	5
6	Total Hardness (as CaCO <sub>3</sub> )	IS:3025(Part-21)	312	mg/l	200	600
7	Calcium(as Ca)	IS:3025(Part-40)	80.00	mg/l	75	200
8	Magnesium(as Mg)	IS:3025(Part-46)	27.22	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32)	117.41	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53)	<0.05	mg/l	0.3	No Relaxation
11	Fluoride(as F)	IS:3025(Part-60)	0.86	mg/l	1	1.5
12	Alkalinity(as CaCO <sub>3</sub> )	IS:3025(Part-23)	236	mg/l	200	600
13	Total Dissolved Solid	IS:3025(Part-16)	606	mg/l	500	2000
14	Nitrate (as NO <sub>3</sub> )	IS: 3025 (Part-34)	6.70	mg/l	45	No Relaxation
15	Sulphate (as SO <sub>4</sub> )	IS:3025(Part-24)	48.34	mg/l	200	400

\*\*End Of Report\*\*

- Notes:
- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.
  - The customer asked for the above tests only.
  - This test report will not be used for any publicity/legal purpose.
  - The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
  - The Report can not be used as evidence in a court of law without the written approval of the lab.
- For ULTRA TESTING & RESEARCH LABORATORY  
 (Authorized Signatory)
- Checked By: *[Signature]*

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## ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified)  
 Laboratory: C-43, Sector-88, Phase-II, Noida, UP  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com  
 Website: http://www.ultralabnoida.com

### TEST REPORT

#### Bacteriological Quality of Drinking Water

Report Code : W-26032022-02 Issue Date: 30/03/2022  
 Issued To : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sampling Location : Sample Collected from Alipur Aliraja  
 Sample Description : Ground Water  
 Source : Private borewell  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Requirements
1	E.coli	IS-1622	Not detected ( < 2 )	E.Coli/100ml	Shall not be detectable in 100 ml sample
2	Total Coliform	IS-1622	Absent	MPN/100ml	Shall not be detectable in 100 ml sample

\*\*End Of Report\*\*

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval of the lab.

Checked By: *Vijay*

For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)



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 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
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 E-mail: ultraresearchlab@gmail.com | Website: http://www.ultralabnoida.com



### TEST REPORT

#### Water Sample Analysis Discipline/Group-Chemical/Water

Report Code: W-26032022-03      Issue Date: 30/03/2022  
 ISSUED TO : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, ALIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sample Description : Ground Water  
 Sampling Location : Sample Collected from Bhavanipur  
 Source : Private borewell  
 sampling Procedure : IS 3025(Part-01)  
 Sample Quantity : 1.0 Litre  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	pH	IS:3025(Part-11)	7.29	-	6.5-8.5	-
2	Colour	IS:3025(Part-04)	<5.0	Hazen	5	15
3	Odour	IS:3025(Part-05)	Agreeable	-	Agreeable	Agreeable
4	Taste	IS:3025(Part-07)	Agreeable	-	Agreeable	Agreeable
5	Turbidity	IS:3025(Part-10)	1.3	NTU	1	5
6	Total Hardness (as CaCO <sub>3</sub> )	IS:3025(Part-21)	248	mg/l	200	600
7	Calcium(as Ca)	IS:3025(Part-40)	64.00	mg/l	75	200
8	Magnesium(as Mg)	IS:3025(Part-46)	21.38	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32)	76.32	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53)	0.070	mg/l	0.3	No Relaxation
11	Fluoride(as F)	IS:3025(Part-60)	0.71	mg/l	1	1.5
12	Alkalinity(as CaCO <sub>3</sub> )	IS:3025(Part-23)	196	mg/l	200	600
13	Total Dissolved Solid	IS:3025(Part-16)	452	mg/l	500	2000
14	Nitrate (as NO <sub>3</sub> )	IS: 3025 (Part-34)	3.59	mg/l	45	No Relaxation
15	Sulphate (as SO <sub>4</sub> )	IS:3025(Part-24)	30.45	mg/l	200	400

\*\*End Of Report\*\*

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  - The Report can not be used as evidence in a court of law without the written approval of the lab.

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For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)





## ULTRA TESTING & RESEARCH LABORATORY

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 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com  
 Website: http://www.ultralabnoida.com

### TEST REPORT

#### Bacteriological Quality of Drinking Water

Report Code : W-26032022-03 Issue Date: 30/03/2022  
 Issued To : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sampling Location : Sample Collected from Bhavanipur  
 Sample Description : Ground Water  
 Source : Private borewell  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Requirements
1	E.coli	IS-1622	Not detected ( <2 )	E.Coli/100ml	Shall not be detectable in 100 ml sample
2	Total Coliform	IS-1622	Absent	MPN/100ml	Shall not be detectable in 100 ml sample

\*\*End Of Report\*\*

Note:-

- 1 The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
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- 3 The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- 4 The Report can not be used as evidence in a court of law without the written approval of the lab.

*Nijay*  
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For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)



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Recognized from MoEF & CC under EoA 1986

Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.

Ph.: No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com | Website: http://www.ultralabnoida.com



TC-8198

### TEST REPORT

#### Water Sample Analysis Discipline/Group-Chemical/Water

Report Code: W-26032022-04

Issue Date: 30/03/2022

ISSUED TO

M/S JB DARUKA PAPERS LIMITED  
A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
Sample Drawn By : UTRL  
Sample Description : Ground Water  
Sampling Location : Sample Collected from Mathana  
Source : Private borewell  
sampling Procedure : IS 3025(Part-01)  
Sample Quantity : 1.0 Litre  
Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	pH	IS:3025(Part-11)	7.27	-	6.5-8.5	-
2	Colour	IS:3025(Part-04)	<5.0	Hazen	5	15
3	Odour	IS:3025(Part-05)	Agreeable	-	Agreeable	Agreeable
4	Taste	IS:3025(Part-07)	Agreeable	-	Agreeable	Agreeable
5	Turbidity	IS-3025(Part-10)	<0.5	NTU	1	5
6	Total Hardness (as CaCO <sub>3</sub> )	IS:3025(Part-21)	368	mg/l	200	600
7	Calcium(as Ca)	IS:3025(Part-40)	78.40	mg/l	75	200
8	Magnesium(as Mg)	IS:3025(Part-46)	41.80	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32)	219.17	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53)	0.055	mg/l	0.3	No Relaxation
11	Fluoride(as F)	IS:3025(Part-60)	1.07	mg/l	1	1.5
12	Alkalinity(as CaCO <sub>3</sub> )	IS:3025(Part-23)	272	mg/l	200	600
13	Total Dissolved Solid	IS:3025(Part-16)	891	mg/l	500	2000
14	Nitrate (as NO <sub>3</sub> )	IS: 3025 (Part-34)	8.94	mg/l	45	No Relaxation
15	Sulphate (as SO <sub>4</sub> )	IS:3025(Part-24)	108.89	mg/l	200	400

\*\*End Of Report\*\*

- Notes:
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For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)



## ULTRA TESTING & RESEARCH LABORATORY

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 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com  
 Website: http://www.ultralabnoida.com

### TEST REPORT

#### Bacteriological Quality of Drinking Water

Report Code : W-26032022-04 Issue Date: 30/03/2022

Issued To : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sampling Location : Sample Collected from Mathana  
 Sample Description : Ground Water  
 Source : Private borewell  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Requirements
1	E.coli	IS-1622	Not detected ( <2)	E.Coli/100ml	Shall not be detectable in 100 ml sample
2	Total Coliform	IS-1622	Absent	MPN/100ml	Shall not be detectable in 100 ml sample

\*\*End Of Report\*\*

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
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### TEST REPORT

#### Water Sample Analysis Discipline/Group-Chemical/Water

Report Code: W-26032022-05 Issue Date: 30/03/2022  
 ISSUED TO : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sample Description : Ground Water  
 Sampling Location : Sample Collected from Narhara  
 Source : Private borewell  
 sampling Procedure : IS 3025(Part-01)  
 Sample Quantity : 1.0 Litre  
 Analysis Duration : 26/03/2022 to 30/03/2022

RESULTS As per IS 10500:2012						
S.No	Parameter	Test Method	Results	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	pH	IS:3025(Part-11)	6.98	-	6.5-8.5	-
2	Colour	IS:3025(Part-04)	<5.0	Hazen	5	15
3	Odour	IS:3025(Part-05)	Agreeable	-	Agreeable	Agreeable
4	Taste	IS:3025(Part-07)	Agreeable	-	Agreeable	Agreeable
5	Turbidity	IS-3025(Part-10)	<0.5	NTU	1	5
6	Total Hardness (as CaCO <sub>3</sub> )	IS:3025(Part-21)	288	mg/l	200	600
7	Calcium(as Ca)	IS:3025(Part-40)	68.80	mg/l	75	200
8	Magnesium(as Mg)	IS:3025(Part-46)	28.19	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32)	119.37	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53)	<0.05	mg/l	0.3	No Relaxation
11	Fluoride(as F)	IS:3025(Part-60)	0.63	mg/l	1	1.5
12	Alkalinity(as CaCO <sub>3</sub> )	IS:3025(Part-23)	232	mg/l	200	600
13	Total Dissolved Solid	IS:3025(Part-16)	640	mg/l	500	2000
14	Nitrate (as NO <sub>3</sub> )	IS: 3025 (Part-34)	5.92	mg/l	45	No Relaxation
15	Sulphate (as SO <sub>4</sub> )	IS:3025(Part-24)	94.01	mg/l	200	400

\*\*End Of Report\*\*

- Note:
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For ULTRA TESTING & RESEARCH LABORATORY  
 (Authorized Signatory)





## ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified)  
 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com  
 Website: http://www.ultralabnoida.com

### TEST REPORT

#### Bacteriological Quality of Drinking Water

Report Code : W-26032022-05

Issue Date: 30/03/2022

Issued To : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sampling Location : Sample Collected from Narhara  
 Sample Description : Ground Water  
 Source : Private borewell  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Requirements
1	E.coli	IS-1622	Not detected ( <2)	E.Coli/100ml	Shall not be detectable in 100 ml sample
2	Total Coliform	IS-1622	Absent	MPN/100ml	Shall not be detectable in 100 ml sample

\*\*End Of Report\*\*

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
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*Vijay*  
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For ULTRA TESTING & RESEARCH LABORATORY

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Ph. No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com | Website: http://www.ultralabnoida.com



TC-8198

### TEST REPORT

#### Water Sample Analysis

#### Discipline/Group-Chemical/Water

Report Code: W-26032022-06

Issue Date: 30/03/2022

ISSUED TO

M/S JB DARUKA PAPERS LIMITED  
A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
Sample Drawn By : UTRL  
Sample Description : Ground Water  
Sampling Location : Sample Collected from Haluwapur  
Source : Private Borewell  
sampling Procedure : IS 3025(Part-01)  
Sample Quantity : 1.0 Litre  
Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	pH	IS:3025(Part-11)	7.62	-	6.5-8.5	-
2	Colour	IS:3025(Part-04)	<5.0	Hazen	5	15
3	Odour	IS:3025(Part-05)	Agreeable	-	Agreeable	Agreeable
4	Taste	IS:3025(Part-07)	Agreeable	-	Agreeable	Agreeable
5	Turbidity	IS:3025(Part-10)	<0.5	NTU	1	5
6	Total Hardness (as CaCO <sub>3</sub> )	IS:3025(Part-21)	332	mg/l	200	600
7	Calcium(as Ca)	IS:3025(Part-40)	76.80	mg/l	75	200
8	Magnesium(as Mg)	IS:3025(Part-46)	34.02	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32)	152.63	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53)	<0.05	mg/l	0.3	No Relaxation
11	Fluoride(as F)	IS:3025(Part-60)	0.69	mg/l	1	1.5
12	Alkalinity(as CaCO <sub>3</sub> )	IS:3025(Part-23)	248	mg/l	200	600
13	Total Dissolved Solid	IS:3025(Part-16)	742	mg/l	500	2000
14	Nitrate (as NO <sub>3</sub> )	IS: 3025 (Part-34)	6.17	mg/l	45	No Relaxation
15	Sulphate (as SO <sub>4</sub> )	IS:3025(Part-24)	108.36	mg/l	200	400

\*\*End Of Report\*\*

1. The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.  
2. The customer asked for the above tests only.  
3. This test report will not be used for any publicity/legal purpose.  
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.  
5. The Report can not be used as evidence in a court of law without the written approval of the Lab.

Checked By  
Vijay

For ULTRA TESTING &amp; RESEARCH LABORATORY

(Authorized Signatory)

Assuring you of best our services at all times



## ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified)  
 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com  
 Website: http://www.ultralabnoida.com

### TEST REPORT

#### Bacteriological Quality of Drinking Water

Report Code : W-26032022-06

Issue Date: 30/03/2022

Issued To : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sampling Location : Sample Collected from Haluwapur  
 Sample Description : Ground Water  
 Source : Private Borewell  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Requirements
1	E.coli	IS-1622	Not detected ( <2)	E.Coli/100ml	Shall not be detectable in 100 ml sample
2	Total Coliform	IS-1622	Absent	MPN/100ml	Shall not be detectable in 100 ml sample

\*\*End Of Report\*\*

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval of the lab.

Checked By

For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory



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## ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 (EMS) Certified)  
 Recognized from MoEF & CC under E.O.A 1986  
 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com | Website: http://www.ultralabnoida.com



### TEST REPORT

#### Water Sample Analysis Discipline/Group-Chemical/Water

Report Code: W-26032022-07 Issue Date: 30/03/2022  
 ISSUED TO : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sample Description : Ground Water  
 Sampling Location : Sample Collected from Mallahpur  
 Source : Private Borewell  
 sampling Procedure : IS 3025(Part-01)  
 Sample Quantity : 1.0 Litre  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	pH	IS:3025(Part-11)	7.32	-	6.5-8.5	-
2	Colour	IS:3025(Part-04)	<5.0	Hazen	5	15
3	Odour	IS-3025(Part-05)	Agreeable	-	Agreeable	Agreeable
4	Taste	IS:3025(Part-07)	Agreeable	-	Agreeable	Agreeable
5	Turbidity	IS-3025(Part-10)	0.8	NTU	1	5
6	Total Hardness (as CaCO <sub>3</sub> )	IS:3025(Part-21)	196	mg/l	200	600
7	Calcium(as Ca)	IS:3025(Part-40)	54.40	mg/l	75	200
8	Magnesium(as Mg)	IS:3025(Part-46)	14.58	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32)	64.58	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53)	<0.05	mg/l	0.3	No Relaxation
11	Fluoride(as F)	IS:3025(Part-60)	0.45	mg/l	1	1.5
12	Alkalinity(as CaCO <sub>3</sub> )	IS:3025(Part-23)	164	mg/l	200	600
13	Total Dissolved Solid	IS:3025(Part-16)	430	mg/l	500	2000
14	Nitrate (as NO <sub>3</sub> )	IS: 3025 (Part-34)	4.51	mg/l	45	No Relaxation
15	Sulphate (as SO <sub>4</sub> )	IS:3025(Part-24)	60.55	mg/l	200	400

\*\*End Of Report\*\*

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.
- The Customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval of the lab.

Checked By

For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)

Assuring you of best our services at all times



## ULTRA TESTING & RESEARCH LABORATORY

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 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com  
 Website: http://www.ultralabnoida.com

### TEST REPORT

#### Bacteriological Quality of Drinking Water

Report Code : W-26032022-07 Issue Date: 30/03/2022  
 Issued To : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sampling Location : Sample Collected from Mallahpur  
 Sample Description : Ground Water  
 Source : Private Borewell  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Requirements
1	E.coli	IS-1622	Not detected ( < 2 )	E.Coli/100ml	Shall not be detectable in 100 ml sample
2	Total Coliform	IS-1622	Absent	MPN/100ml	Shall not be detectable in 100 ml sample

\*\*End Of Report\*\*

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval of the lab.

Checked By

For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)



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 Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.  
 Ph.: No.: +91-9971912476, 9350952231  
 E-mail: ultraresearchlab@gmail.com | Website: http://www.ultralabnoida.com



### TEST REPORT

Water Sample Analysis  
 Discipline/Group-Chemical/Water

Report Code: W-26032022-08  
 ISSUED TO

Issue Date: 30/03/2022

: M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sample Description : Ground Water  
 Sampling Location : Sample Collected from Sahaspur  
 Source : Private Borewell  
 sampling Procedure : IS 3025(Part-01)  
 Sample Quantity : 1.0 Litre  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Acceptable Limit	Permissible Limit in the Absence of Alternate Source
1	pH	IS:3025(Part-11)	7.29	-	6.5-8.5	-
2	Colour	IS:3025(Part-04)	<5.0	Hazen	5	15
3	Odour	IS:3025(Part-05)	Agreeable	-	Agreeable	Agreeable
4	Taste	IS:3025(Part-07)	Agreeable	-	Agreeable	Agreeable
5	Turbidity	IS:3025(Part-10)	1.3	NTU	1	5
6	Total Hardness (as CaCO <sub>3</sub> )	IS:3025(Part-21)	236	mg/l	200	600
7	Calcium(as Ca)	IS:3025(Part-40)	64.00	mg/l	75	200
8	Magnesium(as Mg)	IS:3025(Part-46)	18.47	mg/l	30	100
9	Chloride(as Cl)	IS:3025(Part-32)	82.19	mg/l	250	1000
10	Iron(as Fe)	IS:3025(Part-53)	0.085	mg/l	0.3	No Relaxation
11	Fluoride(as F)	IS:3025(Part-60)	0.71	mg/l	1	1.5
12	Alkalinity(as CaCO <sub>3</sub> )	IS:3025(Part-23)	188	mg/l	200	600
13	Total Dissolved Solid	IS:3025(Part-16)	514	mg/l	500	2000
14	Nitrate (as NO <sub>3</sub> )	IS: 3025 (Part-34)	5.61	mg/l	45	No Relaxation
15	Sulphate (as SO <sub>4</sub> )	IS:3025(Part-24)	70.11	mg/l	200	400

\*\*End Of Report\*\*

1. The results given above are related to the tested sample, for various parameters, as observed at the time of sampling.
2. The customer asked for the above tests only.
3. This test report will not be used for any publicity/legal purpose.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
5. The Report can not be used as evidence in a court of law without the written approval of the Manager.

Checked By

For ULTRA TESTING & RESEARCH LABORATORY  
 (Authorized Signatory)

Assuring you of best our services at all times.



## ULTRA TESTING & RESEARCH LABORATORY

(An ISO 9001:2015, ISO 45001:2018, ISO 14001:2015 Certified)

Laboratory: C-43, Sector-88, Phase-II, Noida, U.P.

Ph.: No.: +91-9971912476, 9350952231

E-mail: ultraresearchlab@gmail.com

Website: http://www.ultralabnoida.com

### TEST REPORT

#### Bacteriological Quality of Drinking Water

Report Code : W-26032022-08

Issue Date: 30/03/2022

Issued To : M/S JB DARUKA PAPERS LIMITED  
 A-1, INDUSTRIAL AREA, ADVENIA GRANT,  
 SHAHJAHANPUR ROAD, AILIYA, SITAPUR - 261001.

Sample Drawn On : 25/03/2022  
 Sample Drawn By : UTRL  
 Sampling Location : Sample Collected from Sahaspur  
 Sample Description : Ground Water  
 Source : Private Borewell  
 Analysis Duration : 26/03/2022 to 30/03/2022

#### RESULTS

As per IS 10500:2012

S.No	Parameter	Test Method	Results	Units	Requirements
1	E.coli	IS-1622	Not detected ( <2)	E.Coli/100ml	Shall not be detectable in 100 ml sample
2	Total Coliform	IS-1622	Absent	MPN/100ml	Shall not be detectable in 100 ml sample

\*\*End Of Report\*\*

Note:-

- The results given above are related to the tested sample, for various parameters, as observed at the time of sampling. The customer asked for the above tests only.
- This test report will not be used for any publicity/legal purpose.
- The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.
- The Report can not be used as evidence in a court of law without the written approval of the lab.

Vijay  
 Checked By

For ULTRA TESTING & RESEARCH LABORATORY

(Authorized Signatory)



Assuring you of best our services at all times.



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



**TEST REPORT: WATER LABORATORY(SURFACE WATER)**

Ref no-22533933/CENTRAL/2023

Date:30/08/2023

- 1- Sample Location: Gadiya nala, near shahjahanpur road, Sitapur
- 2- District: Sitapur
- 3- Address: Shahjahanpur Road, Sitapur
- 4- Sample Source: Drain
- 5- Type of sample : Surface Water
- 6- Sample Collected By : Ankur Gautam, MA, Pankaj Shukla ASO.
- 7- Odour : None
- 8- Quantity and Packing : 2 lit. Plastic jerrycan
- 9- Date of Sample Collection : 21/08/2023
- 10- Analysis Indented by : RO Lucknow
- 11- Date of sample receipt in Lab : 22/08/2023

Parameter	Unit	Results	Detection Range
pH,4500 H B Electronic method	-	7.16	02-12
Suspended Solids , 2540 D Total Suspended Solids dried at 103-105 0C	mg/l	78.0	5.0 -10000 mg/l
BOD, 3 day 27 0C IS 3025 ( Part 44): 1993 Bio	mg/l	20.0	1.0 -1000 mg/l
COD, 5220 B Open Reflux Method	mg/l	104.0	4.0 -1000 mg/l

Remark:\* - NA

Analysed by  
[Arti Gupta(SA)]

Authorized by  
VINAY  
Digitally signed  
by VINAY DUBEY  
Date: 2023.08.30  
16:17:21 +05'30'  
DUBEY  
Vinay Dubey (ASO)

RAM  
Digitally signed  
by RAM-GOPAL  
Date: 2023.08.30  
16:17:37 +05'30'  
GOPAL  
Chief Environmental Officer  
Central Laboratory



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



**TEST REPORT: WATER LABORATORY(SURFACE WATER)**

Ref no-22534192/CENTRAL/2023

Date:30/08/2023

- 1- Sample Location: U/S PIRAI RIVER Shahjahanpur road SITAPUR
- 2- District: Sitapur
- 3- Address: SHAHJAHANPUR ROAD BRIDGE SITAPUR
- 4- Sample Source: River
- 5- Type of sample : Surface Water
- 6- Sample Collected By : Ankur Gautam, MA, Pankaj Shukla ASO.
- 7- Odour : None
- 8- Quantity and Packing : 2 lit. Plastic jerrycan &1 DO bottle
- 9- Date of Sample Collection : 21/08/2023
- 10- Analysis Indented by : RO Lucknow
- 11- Date of sample receipt in Lab : 22/08/2023

Parameter	Unit	Results	Detection Range
pH,4500 H B Electronic method	-	7.60	02-12
Suspended Solids , 2540 D Total Suspended Solids dried at 103-105 0C	mg/l	52.0	5.0 -10000 mg/l
BOD, 3 day 27 0C IS 3025 ( Part 44): 1993 Bio	mg/l	5.6	1.0 -1000 mg/l
COD, 5220 B Open Reflux Method	mg/l	28.4	4.0 -1000 mg/l
D.O. , 4500-OB Iodometric Method	mg/l	4.29	0.2-14.0 mg/l

Remark:\* - NA

Analysed by  
[Arti Gupta(SA)]

Authorized by  
VINAY  
Digitally signed  
by VINAY DUBEY  
Date: 2023.08.30  
16:13:56 +05'30'  
Vinay Dubey (ASO)

RAM  
Digitally signed  
by RAM GOPAL  
Date: 2023.08.30  
16:14:09 +05'30'  
GOPAL  
Chief Environmental Officer  
Central Laboratory



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



**TEST REPORT: WATER LABORATORY(SURFACE WATER)**

Ref no-22534296/CENTRAL/2023

Date:30/08/2023

- 1- Sample Location: D/s Pirai river, hardoi road, sitapur
- 2- District: Sitapur
- 3- Address: Hardoi Road, Sitapur
- 4- Sample Source: River
- 5- Type of sample : Surface Water
- 6- Sample Collected By : Ankur Gautam, MA, Pankaj Shukla ASO.
- 7- Odour : None
- 8- Quantity and Packing : 2 lit. Plastic jerrycan & 1 DO bottle
- 9- Date of Sample Collection : 21/08/2023
- 10- Analysis Indented by : RO Lucknow
- 11- Date of sample receipt in Lab : 22/08/2023

Parameter	Unit	Results	Detection Range
pH,4500 H B Electronic method	-	7.32	02-12
Suspended Solids , 2540 D Total Suspended Solids dried at 103-105 0C	mg/l	64.0	5.0 -10000 mg/l
BOD, 3 day 27 0C IS 3025 ( Part 44): 1993 Bio	mg/l	9.2	1.0 -1000 mg/l
COD, 5220 B Open Reflux Method	mg/l	52.8	4.0 -1000 mg/l
D.O. , 4500-OB Iodometric Method	mg/l	2.16	0.2-14.0 mg/l

Remark:\* - NA

Analysed by  
[Arti Gupta(SA)]

Authorized by  
VINAY Digitally signed  
by VINAY DUBEY  
Date: 2023.08.30  
16:15:49 +05'30'  
DUBEY  
Vinay Dubey (ASO)

RAM Digitally signed  
by RAM GOPAL  
Date: 2023.08.30  
16:15:49 +05'30'  
GOPAL  
Chief Environmental Officer  
Central Laboratory

## शिकायत पत्र निरस्त करने हेतु प्रार्थना पत्र

मैं सुनील कुमार पुत्र रामराजीवन व रामहेत पुत्र पुतलीलाल निवासी गण ग्राम अखोनिवा गांव, मजरा शंकरपुर, इन्द्रानगर थाना रामकोट जिला सीतापुर का निवासी हूँ। हम लोग किसी के बहकावे में आकर जे०वी० दारुका पेपर लिमिटेड, ए। इन्डस्ट्रियल एरिया अखोनिवा ग्राम, सीतापुर के खिलाफ वायु प्रदूषण और जल प्रदूषण सम्बन्धित अनगने प्रार्थना पत्र शासन को दे दिए थे बाद में मुझे पेपर मिल के बारे में पूरी जानकारी मिली इस प्रकार की प्रदूषण से सम्बन्धित कोई भी परेशानी नहीं हो रही है क्योंकि मिल में प्रदूषण सम्बन्धित सरकार के द्वारा बनाए गए सभी नियमों का पालन हो रहा है और कोई भी जानवर नाले का पानी पीने से बच तो बीमार हुए है और न ही कभी किसी जानवर की मृत्यु हुई है हम लोग किसी के बहकावे में आकर दिनांक- 10.03.2023, 15.03.2023, 21.03.2023 व 27.03.2023 इस प्रकार से कई शिकायत पत्र हमने शासन को दिए थे जो कि अनुचित थे जिनकी शिकायत संख्या - 20015423009129, 60000230063934, 20015423010150 आदि हैं।

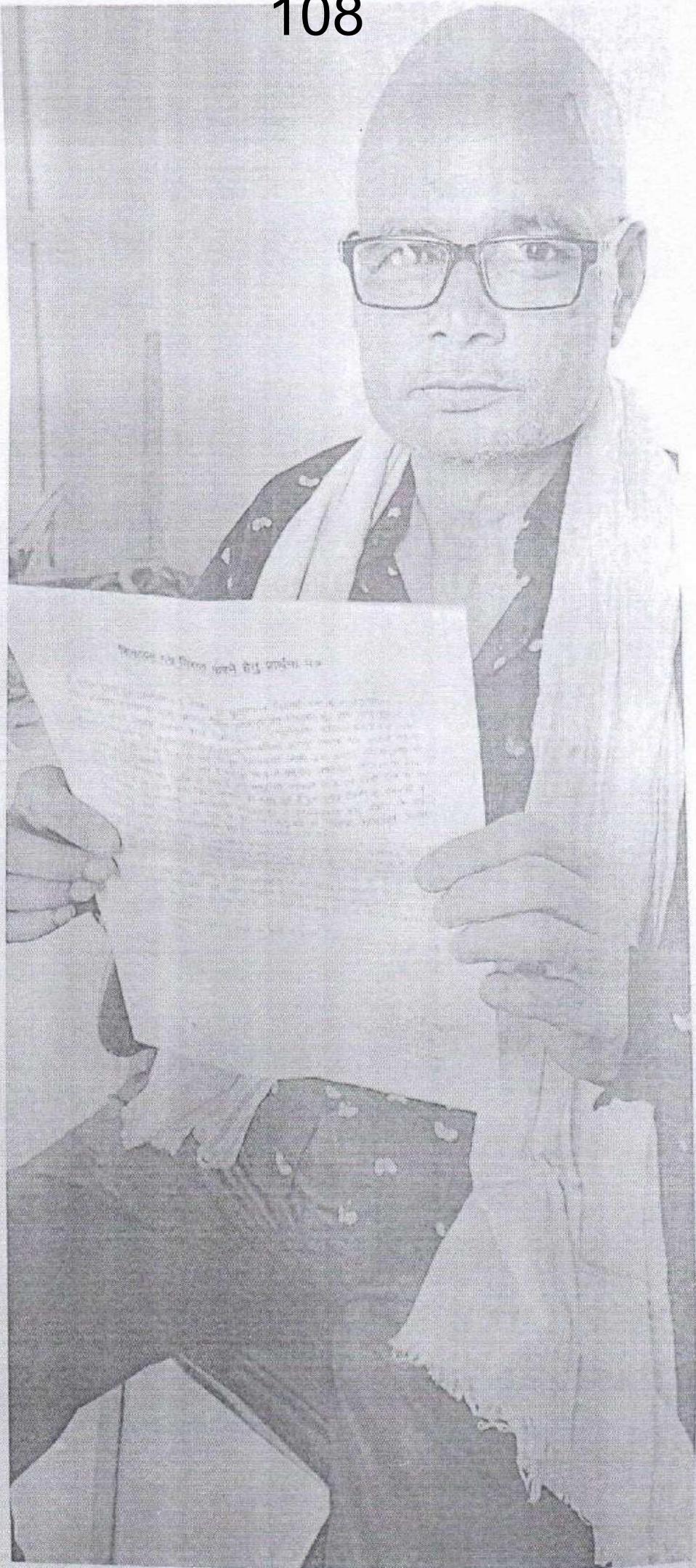
महोदय ये सभी शिकायत पत्र जो हम लोगो ने दिए थे वो किसी के बहकावे में आकर दिए थे इसका मुझे बहुत ही खेद है क्योंकि सच्चाई हमें मालूम हो गई है कि पेपर मिल से किसी प्रकार का कोई प्रदूषण नहीं फैला रहा है बल्कि हमारे क्षेत्र में पेपर मिल लगने से काफी विकास हुआ है व लगभग पाँच सौ लोगों के परिवार का भरण पोषण हो रहा है जो मिल में कार्य करते हैं। हम लोग भविष्य में बिना जानकारी के या किसी के बहकावे में आकर पेपर मिल के खिलाफ शिकायत नहीं करेंगे, जे०वी० दारुका पेपर मिल भारत सरकार के द्वारा निर्देशित नियमों के अनुसार ही चल रहा है हम लोगो को पेपर मिल से किसी भी प्रकार की कोई भी समस्या नहीं है।

अतः आप से अनुरोध है मेरे द्वारा दिए गए सभी शिकायत पत्रों को निरस्त करने का कृपा करें।

धन्यवाद!

दिनांक - 14.04.2023

सुनील कुमार  
रामहेत  
निवासी अखोनिवा





क्षेत्रीय कार्यालय  
उ०प्र० प्रदूषण नियंत्रण बोर्ड  
चतुर्थ तल, बी-ब्लॉक, पिकप भवन, विभूति खण्ड, गोमती नगर, लखनऊ।  
ई-मेल : rolucknow@uppcb.in

पत्र संख्या : 1302/रिड माचिडा-142/2023 दिनांक : 01/09/23

सेवा में,

जिला कृषि अधिकारी,  
जनपद-सीतापुर।

मा०एन०जी०टी० प्रकरण/पंजीकृत डाक

विषय:-माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ०ए० संख्या-424/2023 सुनील कुमार रामहेत बनाम स्टेट आफ यू०पी० में पारित आदेश दिनांक 01/08/2023 के सम्बन्ध में।

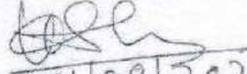
महोदय,

कृपया उपरोक्त विषयक माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ०ए० संख्या-424/2023 सुनील कुमार रामहेत बनाम स्टेट आफ यू०पी० में पारित आदेश दिनांक 01/08/2023 का सन्दर्भ ग्रहण करने का कष्ट करें (छायाप्रति संलग्न)। उक्त आदेश में मैसर्स जे०बी० दारुका पेपर लि०, इण्डस्ट्रीयल एरिया, अडवानिया ग्रन्ट, शाहजहांपुर रोड, सीतापुर द्वारा निस्तारित उत्प्रवाह एवं चिमनी से उत्सर्जित धुएं से आस-पास की फसलों पर दुष्प्रभाव पड़ने का उल्लेख किया गया है।

उक्त प्रकरण की जांच कर आख्या अतिशीघ्र इस कार्यालय में प्रेषित करना सुनिश्चित करें, जिससे कि माननीय राष्ट्रीय हरित अधिकरण, दिल्ली में ससमय रिपोर्ट दाखिल की जा सके।

संलग्नक-यथोपरि।

भवदीय,

  
01/09/2023  
(डॉ० उमेश चन्द्र शुक्ला)  
क्षेत्रीय अधिकारी

प्रतिलिपि-1. जिलाधिकारी महोदय, सीतापुर को सादर सूचनार्थ प्रेषित।

2. मुख्य पर्यावरण अधिकारी (वृत्त-5), उ०प्र० प्रदूषण नियंत्रण बोर्ड, लखनऊ को सूचनार्थ प्रेषित।

  
क्षेत्रीय अधिकारी  
de  
  


ईमेल/पंजीकृत

प्रेषक,

जिला कृषि अधिकारी,  
सीतापुर।

सेवा में,

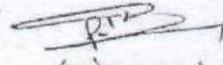
श्री० उमेश चन्द शुक्ला,  
क्षेत्रीय अधिकारी,  
क्षेत्रीय कार्यालय उ०प्र० प्रदूषण नियंत्रण बोर्ड,  
चतुर्थ तल, वी-ब्लाक, पिकप भवन,  
विभूति खण्ड गोमतीनगर, लखनऊ।पत्रांक- 934 / जांच-आख्या/मा०एन०जी०टी० प्रकरण/2023-24 दिनांक-11-9-2023  
महोदय,

कृपया अपने कार्यालय पत्र संख्या-1302/रिट याचिका-142/2023 दिनांक-01.09.2023 का संदर्भ ग्रहण करने का कष्ट करें, जिसके द्वारा माननीय राष्ट्रीय हरित अधिकरण, नई दिल्ली में योजित ओ०ए० संख्या-424/2023 सुनील कुमार समहेत बनाम स्टेट ऑफ यू०पी० में पारित आदेश दिनांक-01.08.2023 से सम्बन्धित मैसर्स जे०वी० दारूका पेपर लि० इण्डस्ट्रियल एरिया, अडवनिया ग्रन्ट, शाहजहांपुर रोड सीतापुर द्वारा निस्तारित उत्प्राह एवं चिमनी से उत्सर्जित धुंए से आस-पास की फसलों पर दुष्प्रभाव पड़ने के सम्बन्ध में जांच कर आख्या प्रेषित किये जाने हेतु पत्र प्रेषित किया गया है।

उपर्युक्त संदर्भ में अवगत कराना है कि अधोहस्ताक्षरी के पत्रांक-925 दिनांक-06.09.2023 द्वारा 04 सदस्यीय समिति गठित कर दिनांक-11.09.2023 को गठित समिति द्वारा मैसर्स जे०वी० दारूका पेपर लि० इण्डस्ट्रियल एरिया, अडवनिया ग्रन्ट, शाहजहांपुर रोड सीतापुर का निरीक्षण किया गया। निरीक्षण के समय फर्म द्वारा निस्तारित उत्प्राह एवं चिमनी से उत्सर्जित धुंए से आस-पास की फसलों पर कोई प्रभाव परिलक्षित नहीं हो रहा है।

  
(जसवंत वर्मा)

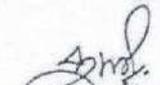
ए०टी०एम  
ऐलिया

  
(प्रमोद शुक्ला)

सहायक विकास अधिकारी(कृषि), अपर जिला कृषि अधिकारी,  
ऐलिया-सीतापुर

  
(मनोज कुमार)

11.09.2023  
सीतापुर

  
(मनजीत कुमार)

जिला कृषि अधिकारी,  
सीतापुर

पत्रांक- /प०/तददिनांक।

प्रतिलिपि:-निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु:-

1. मुख्य विकास अधिकारी, महोदय सीतापुर की सेवा में सादर सूचनार्थ।
2. जिलाधिकारी, महोदय सीतापुर की सेवा में सादर अवलोकनार्थ।

जिला कृषि अधिकारी,  
सीतापुर।