



भारत सरकार
Government of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय, लखनऊ
Regional Office, Lucknow



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File No. XXI/ENV/NGT/CC/178/2025/01

Dated: 01.04.2025

BY-EMAIL

To,

**The Registrar General,
Principal Bench,
Hon'ble National Green Tribunal,
Copernicus Marg,
New Delhi-110001
Email: judicial-ngt@gov.in**

**Subject: Submission of Joint Committee Report in O.A. No. 756 of 2023,
Sachin Tyagi Vs Ritesh Sharma & Anr.**

Sir,

In compliance of the direction dated 10.12.2024 passed by this Hon'ble National Green Tribunal in O.A. No. 756/2023, Sachin Tyagi Vs Ritesh Sharma & Anr.

I am directed to enclose hereby the Joint Committee Report with a request to put up before Hon'ble Tribunal for kind perusal and consideration

Encl: As above

Yours Sincerely

(Dr. A.K.Gupta)
Scientist 'E'

Copy to:

1. **Dr. Narender Sharma, Regional Director/Scientist 'F', CPCB, RD, Chandigarh. Email: narendersharma.cpcb@gov.in**
2. **Dr. K Muthamizh Selvan, Scientist 'E', MoEF&CC, RO, Chandigarh. Email: ronz.chd-mef@nic.in**
3. **Dr. Krisnendu Mondal, Scientist 'D', MoEF&CC, New Delhi. Email: krisnendu.mondal@gov.in**

JOINT COMMITTEE REPORT IN THE MATTER OF

Original Application No. 756/2023

Titled as

Sachin Tyagi Vs Ritesh Sharma & Anr.

1. Background:

Hon'ble NGT, Principal Bench, New Delhi was pleased to pass the order dated 10.12.2024 in the matter of Original Application No. 756/2023 titled as Sachin Tyagi Vs Ritesh Sharma & Anr. and direct to visit the site in question specifically the sites disclosed in the photographs enclosed along with objections of Applicant and the area where the lease has been granted to the Respondent No. 5.

Relevant paras of the Hon'ble NGT order are as below: -

Para 04: *“In the aforesaid background, it is now required to be ascertained based on the disclosure made in the objections by the Applicant and the photographs enclosed therewith as to who has carried out the illegal midstream sand mining by using heavy machines and to what extent the Respondent No. 5 is responsible for the same.”*

Para 05: *“The Applicant has pointed out that such illegal midstream sand mining by using heavy machines is still going on between Baghpat and Panipat. Hence, we constitute a fresh Committee comprising of the representative of MoEF&CC, representative Member Secretary, CPCB and RO, MoEF&CC Chandigarh and Lucknow. The RO, MoEF&CC, Lucknow will act as the Coordinating Agency. The Committee will visit the site in question specifically the sites disclosed in the photographs enclosed along with objections of Applicant and the area where the lease has been granted to the Respondent No. 5.*

Para 06: *“The Committee will ascertain the extent of illegal sand mining being done in that area and the persons responsible for the same and extent of illegal sand mining, if any, done by the Respondent No. 5 and will submit the report before the Tribunal within 8 weeks.” (A copy of the order of Hon'ble NGT is annexed as Annexure No A)*

In compliance with said order, , the Following members were nominated from their respective departments:

- Dr. Narender Sharma, Regional Director/Scientist 'F', CPCB, RD, Chandigarh.

- Dr. K Muthamizh Selvan, Scientist 'E' MoEF&CC, RO, Chandigarh.
- Dr. Krisnendu Mondal, Scientist 'D', MoEF&CC, New Delhi
- Dr. A.K. Gupta, Scientist 'E', MoEF&CC, RO, Lucknow.

2. Meeting to comply with the Hon'ble Tribunal Order

A meeting was convened through hybrid mode by RO, MOEF&CC, Lucknow (i.e., Coordinating Agency) to discuss the matter and the modalities of the Site Inspection. **(A copy of the minutes of the meeting (MoM) is annexed as Annexure No. B)**

3. Inspection of Joint Committee:

A joint inspection of the site was carried out on 21.02.2025 by the joint committee. Dr. K Muthamizh Selvan, Scientist 'E' MoEF&CC, RO, Chandigarh could not participate in the site inspection. The following officials were also present for assisting the joint committee during the site visit:

- Shri Yogesh Kumar Sharma, Assistant Environmental Manager, UPPCB-RO, Meerut
- Shri Anuj Kumar, Mining Inspector, Baghpat
- Shri Monu, Lekhpal, Baghpat Chaprauli

3.1 Observations of the joint committee during visit to the Sites disclosed in the Photographs enclosed, along with objections raised by the applicant to ascertain the extent of illegal sand mining in that area and the persons responsible for the same:

- i. The applicant had enclosed the following nine photographs along with objections, which were taken between May 13, 2024, and June 1, 2024.09 **(Annexure-C)**:
 - a) Photograph 01: Latitude: 29.223476°; Longitude: 77.134177° dated 13/05/2024;
 - b) Photograph 02: Latitude: 29.223463°; Longitude: 77.134308° dated 13/05/2024
 - c) Photograph 03: Latitude: 29.22538°; Longitude: 77.133904° dated 24/05/2024
 - d) Photograph 04: Latitude: 29.225897°; Longitude: 77.133675° dated 24/05/2024

- e) Photograph 05: Latitude: 29.225904°; Longitude: 77.133666° dated 24/05/2024
 - f) Photograph 06: Latitude: 29.22589°; Longitude: 77.133676° dated 24/05/2024
 - g) Photograph 07: Latitude: 29.225878°; Longitude: 77.133674° dated 24/05/2024
 - h) Photograph 08: Latitude: 29.221657°; Longitude: 77.134653° dated 01/06/2024
 - i) Photograph 09: Latitude: 29.223669°; Longitude: 77.13424° dated 01/06/2024
- ii. The Joint Committee visited all the above sites on 21/02/2025.
 - iii. It has been observed that all the above locations fall under the State of Haryana.
 - iv. No mining activities (legal or illegal) were going on at these locations at the time Joint Committee's visit.
 - v. *The extent of illegal mining done, if any, in the past, as shown in the photographs enclosed by the applicant can be assessed and ascertained through 3 D satellite imagery by involving Haryana Space Application Centre (HARSAC), as the area under reference in the photographs enclosed by the applicant falls under the state of Haryana.*

3.2. Observation of the joint committee during visit to the site where the lease has been granted to the Respondent No. 5 (M/s Royal Construction Co :

- As per the record, environmental clearance (EC) has been obtained by **Respondent No. 5** via EC identification no. EC23B001UP110342 dated 7.10.2023 to M/s Royal Construction Co/370737, Devi Pura 2, Bulandshahar-203001 Prop. Shri Dayachand Bargoti, gram Chaprauli Khadar, tehsil Baraut, district Baghat, for sand mining in Gata no. 01/2, with an area of 9.5700 ha. **(A copy of EC is annexed as Annexure D)**
- The mining plan of Respondent No. 5 has also been approved, as per letter no. 2023/1/29/177038 dated 01.02.2023 for 60 months and excavation of 240000.00 cum/year to M/s Royal Construction Co/370737, Devi Pura 2, Bulandshahar-203001 Prop. Shri Dayachand Bargoti, gram Chaprauli Khadar,

tehsil Baraut, district Baghpat, for sand mining in Gata no. 01/2, with an area of 9.5700 ha. **(A copy of the mining plan approval is annexed as Annexure E)**

- Respondent No. 5 obtained consent to operate from the Uttar Pradesh Control Board vide letter no. 197311/UPPCB/Meerut (UPPCBRO)/CTO/both/Baghpat/2023 dated 29.11.2023, which is valid from 29.11.2023 to 31.12.2027 for 240000 cubic meter/year sand mining. **(A Copy of CTO Annexed as Annexure F)**
- Replenishment study (for pre-monsoon and post-monsoon period) was conducted by Central Mine Planning & Design Institute Limited, CMPDI (A Mini Ratna Company), 30.12.2022. Summary of DGPS survey stated that the highest sand Replenishment occurred in river Yamuna in kotana Khadar mine with 194050 Cum and lowest sand Replenishment occurred in river Yamuna in Sankround mine with 70431 Cum. **(A Copy of the Replenishment study annexed as Annexure G)**
- The Joint Committee observed that no mining activity was going in lease area on the day of Inspection. It was informed that the mining work has been stopped since 12.12.2024.
- The joint committee observed that boundary pillars were found intact, except 02 pillars were submerged in the river/washed away and not visible.
- The Joint committee observed that some portion of the leased land area is being used by local farmers for the cropping of seasonal crops, Mustard and wheat,
- Respondent No. 5 has established a weighing bridge along with the office, around 2 km from the lease boundary.
- At the project office site, two acoustic-type DG were found installed with proper stack height,
- Respondent No. 5 has installed a PTZ camera near the weighbridge, which was found in working condition during inspection.
- Respondent No. 5 has commissioned one bore well near the office/weight bridge area, which was found working with valid permission.
- Respondent No. 5 has deployed two tractor-mounted water sprinkling systems at the site office.
- Respondent No. 5 has provided a first aid facility in the site office.
- PP has planted approximately 30-40 plants near the office area (weighbridge area) of the project,

- Respondent No. 5 has not yet made an all-weather road from the site office to the main road.
- Respondent No. 5 has not yet installed a solar-mediated lighting system in the site office.
- Respondent No. 5 has not conducted an Environmental audit so far,
- Respondent No. 5 has not submitted a six-monthly compliance report regularly,
- Respondent No. 5 has not yet submitted the expenditure incurred under CSR to the concerned authority.
- As per the EC condition, “Project proponent has committed to plant 1000 trees/hectare...” No such effort has been noticed near the lease area and the site office.
- Sand mining from 25.10.2023 to 12.12.2024 well within the sanctioned limit during both the years (2023 and 2024). (Annexure H)
- During the discussion with local officers and others, it has been found that the river Yamuna has shifted toward the District Panipat (State Haryana). Various village lands of the district Baghpat (State Uttar Pradesh) have been shifted to the District Panipat (State Haryana) due to shifting of the path of the river Yamuna. Various meetings have also been convened by both districts' officers on village land issues.

3.2.1 Findings of the Joint Committee regarding the extent of illegal sand mining, if any, done by Respondent No. 5, M/s Royal Construction Co:

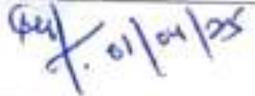
The Joint Committee adopted following approach to ascertain the extent of illegal sand mining, if any, done by Respondent No. 5, M/s Royal Construction Co:

- a. The joint committee tried to obtain free satellite images of the area for the period corresponding to the dates mentioned in the photographs submitted by the applicant by plotting the coordinates of the leased mining area on the Google Earth platform and accessing open-source satellite images from Airbus (EU) for the year 2014 for the mining lease of M/s Royal Construction Co. *The Joint Committee was able to access a satellite image dated 18/06/2024 (Annexure-3 I), which depicts illegal mining activities outside the leased mining area in the state of Uttar Pradesh. The image also revealed multiple trucks and earth-moving machinery, along with vehicles using the leased area of M/s Royal Construction Co. to access the illegally mined*

area. However, no mining activities were observed within the leased mining area of M/s Royal Construction Co.

- b. However, to ascertain the individual or company responsible for illegal mining outside the lease area as explained above, the Joint Committee asked the Mining Officer, Baghpat, to provide data on the total quantity of sand mined on 18/06/2024 by M/s Royal Construction Co, the date for which the Committee accessed satellite imagery. *According to the information provided by the Mining Officer, Baghpat, 578 cubic meters of sand on 18/06/2024 (Annexure- J).*
- c. *Since no mining activity was observed within the leased area of M/s Royal Construction Co. in the satellite image, it indicates that the company may have illegally mined the material from outside its designated lease area, as visible in the image.*
- d. Further, the Joint Committee requested the Mining Officer, Baghpat, *to provide details of illegal mining cases reported to or by the Mining Department within a 2 km radius of M/s Royal Construction Co.'s mining lease area in the past, along with information on the individuals responsible for the illegal mining reported, if any.* As per details provided by the Mining Officer, Baghpat (**Annexure- K**), M/s Royal Construction was found involved in;
- i. Illegal extraction of 210 cubic meters of sand outside its lease area on 01/04/2024.*
 - ii. Illegal extraction of sand below the water level on 06/04/2024.*
 - iii. Illegal extraction of 1142.25 cubic meters of sand outside its lease area on 03/06/2024.*
- e. In view of the above, ***the involvement of M/s Royal Construction Co, in illegal mining cannot be ruled out.*** About the extent of illegal mining, based on the data available with the Joint Committee for the period ***from 01/04/2024 to 18/06/2024, it indicates that M/s Royal Construction Co. has mined at least 1930.25 cubic meters of sand illegally.*** The extent of illegal mining by respondent No. 5, M/s Royal Construction Co., beyond the above period may be assessed by involving the Uttar Pradesh Remote Sensing Centre by accessing and interpreting historical 3D satellite images.
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List of Annexures:		
Ann. No.	Content	Pages
A.	Copy of the Hon'ble NGT Order	4
B.	Copy of Minutes of Meeting (MoM) of the Joint Committee	3
C.	Objections filed by the application along with Photographs of the site disclosed.	23
D.	Copy of Environmental Clearance (EC) granted to M/s Royal Construction Co.	11
E.	Copy of approved Mining Plan of M/s Royal Construction Co.	2
F.	Copy of Consent to Operate granted to M/s Royal Construction Co. by Uttar Pradesh Pollution Control Board.	6
G.	Copy of Replenishment Study	36
H.	Production Details of Respondent No. 5 M/s Royal Construction Co. for 2023 and 2024	1
I.	A copy of the free satellite image accessed by the Joint Committee	2
J	Production report of Respondent No. 5 M/s Royal Construction Co for 18.6.2024, as provided by the Mining Deptt	2
K	Report of Mining Officer regarding illegal mining activities of Respondent No. 5 M/s Royal Construction Co.	9
L	Photograph taken by the Joint Committee during Joint inspection	6

Name of the Committee member	Signature
1. Dr Krishnendu Mondal Scientist D, MoEF & CC, New Delhi	
2. Dr. K Muthamizh Selvan, Scientist 'E' MoEF & CC , Regional Office, Chandigarh	Absent
3. Dr. A.K. Gupta, Scientist, E MoEF & CC Regional Office, Lucknow.	
4. Dr. Narender Sharma, Scientist F CPCB, Regional Directorate, Chandigarh	
Dated: 28.03.2025	

Item No. 10

Court No. 1

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

Original Application No. 756/2023

Sachin Tyagi

Applicant

Vs.

Ritesh Sharma & Anr.

Respondent(s)

Date of hearing: 10.12.2024

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

Applicant: Mr. Sachin Tyagi, Applicant in Person

Respondents: Ms. Priyanka Swami, Adv. for DM, Baghpat
Mr. Saumitra Jaiswal, Mr. Shubham Upadhyay & Mr. Surya Gupta,
Advs. for R - 5
Mr. Pradeep Misra & Mr. Daleep Dhyani, Advs. for UPPCB (Through VC)
Mr. Rahul Khurana, Adv.
Mr. Mukesh Verma & Ms. Vatsala Tripathi, Advs. for Mining Department,
State of UP**ORDER**

1. In this Original Application, registered on the basis of letter petition, the Tribunal is considering the issue of illegal sand mining from Yamuna river bed by using heavy machines at village Hathwal, District Panipat, Haryana.

2. The Joint Committee appointed by the Tribunal had given the report dated 28.02.2024 disclosing that the mining was being done in the Yamuna river bed by the Respondent No. 5 by using JCB machines. The findings of the Joint Committee in this regard is as under:-

“4. During inspection it was found that mining was being done in the river Yamuna bed by the unit M/s Royal Construction Company, Village Chhapraula, Khadar, Tehsil Baraut, Distt. Bagpat by using JCB machines. The area where the mining is being done falls in the

jurisdiction of State of Uttar Pradesh and not falls in the jurisdiction of State of Haryana. A report from Naib-Tehsildar, Samalkha was also obtained to ascertain the area of jurisdiction where mining is being done in the River bed. As per report no. 1229 dated 22.02.2024 given by Naib Tehsildar, Panipat it has been informed the points A, B, C, D shown in the map attached with the report where the mining is in operation during inspection by the joint committee does not falls in the jurisdiction of village Hathwala, Tehsil Samlakra, District Panipat. Therefore, the mining area not relates to Village Hathwala. The copy of report is attached as Annexure- B. As such, the area marked as ABCD falls outside the administrative jurisdiction of Distt. Panipat Haryana.”

3. The District Magistrate Panipat-Respondent No. 6 has filed a separate report dated 21.03.2024 stating that the leaseholder is carrying out the mining within the lease area without violating the norms. The UP PCB has also filed the response dated 30.04.2024, enclosing therewith a copy of the EC, which was granted to the Respondent No. 5. Contradicting the stand of the UP PCB and District Magistrate Baghpat, objections have been filed by the Applicant and enclosing therewith the photographs with Geo-coordinates showing instream sand mining. The Respondent No. 9 has also filed the reply stating as under:-

“D.Observation:

- *The available cloud-free satellite data from January'2024 to October'2024 includes six datasets (five from LISS-IV MX and one from Cartosat-2E) were processed.*
- *Satellite images were orthorectified and Image maps were generated.*
- *Photo locations (provided by Hon'ble Court) and State boundaries obtained from the Survey of India (S01) are overlaid on orthorectified Satellite Images. The accuracy and authenticity of the state boundary lies with the Survey of India (S01).*
- *It is observed from Satellite images that, the Yamuna river course changes across the pre-monsoon, monsoon, and post-monsoon periods.*
- *Most of photograph locations lies in Haryana State and close to Uttarpradesh State boarder except Point No. 8, which is clearly seen in Uttarpradesh State area.”*

4. In the aforesaid background, it is now required to be ascertained based on the disclosure made in the objections by the Applicant and the photographs enclosed therewith as to who has carried out the illegal midstream sand mining by using heavy machines and to what extent the Respondent No. 5 is responsible for the same.

5. The Applicant has pointed out that such illegal midstream sand mining by using heavy machines is still going on between Baghpat and Panipat. Hence, we constitute a fresh Committee comprising of the representative of MoEF&CC, representative Member Secretary, CPCB and RO, MoEF&CC Chandigarh and Lucknow. The RO, MoEF&CC, Lucknow will act as the Coordinating Agency. The Committee will visit the site in question specifically the sites disclosed in the photographs enclosed along with objections of Applicant and the area where the lease has been granted to the Respondent No. 5.

6. The Committee will ascertain the extent of illegal sand mining being done in that area and the persons responsible for the same and extent of illegal sand mining, if any, done by the Respondent No. 5 and will submit the report before the Tribunal within 8 weeks.

7. Let a copy of the objection of the Applicant along with the photographs enclosed therewith be forwarded to the RO, MoEF&CC Lucknow.

8. On receipt of the report of the Joint Committee the concerned parties will have the option to download it from the website and file objection to the same within three weeks thereafter.

9. List on 04.04.2025.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

December 10, 2024
Original Application No. 756/2023
A..



भारत सरकार
Government of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
क्षेत्रीय कार्यालय, लखनऊ
Regional Office, Lucknow



केन्द्रीय भवन, प्यारवां ताल, पोस्ट एम, अलीगंज, लखनऊ-226024
Kendriya Bhawan, 11th Floor, Sector 11, Aliganj, Lucknow-226024, Phone No : 0522-2326696
Email: l.rocz.mef@nic.in, golmoefrotko@gmail.com

File No. XXI/ENV/NGT/CC/178/2025 / 332

Dated: 17.02.2025

**MINUTES OF THE FIRST MEETING OF THE JOINT COMMITTEE CONSTITUTED
IN THE NGT MATTER IN O.A NO. 756 OF 2023 TITLED SACHIN TYAGI Vs
RITESH SHARMA & ANR.**

Date: 14.02.2025 Time: 02.00 PM

Background:

Hon^{ble} NGT vide order dated 10.12.2024 has directed as follows:

"....5. The Applicant has pointed out that such illegal midstream sand mining by using heavy machines is still going on between Baghpat and Panipat. Hence, we constitute a fresh Committee comprising of the representative of MoEF&CC, representative Member Secretary, CPCB and RO, MoEF&CC Chandigarh and Lucknow. The RO, MoEF&CC, Lucknow will act as the Coordinating Agency. The Committee will visit the site in question specifically the sites disclosed in the photographs enclosed along with objections of Applicant and the area where the lease has been granted to the Respondent No. 5.

6. The Committee will ascertain the extent of illegal sand mining being done in that area and the persons responsible for the same and extent of illegal sand mining, if any, done by the Respondent No. 5 and will submit the report before the Tribunal within 8 weeks....."

Follow-up Action:

The Following members has been nominated from their respective departments:

1. Dr. A.K. Gupta, Scientist 'E', MoEF&CC, RO, Lucknow.
2. Dr. Narender Sharma, Regional Director/Scientist 'F', CPCB, RD, Chandigarh.
3. Dr. K Muthamizh Selvan, Scientist 'E' MoEF&CC, RO, Chandigarh.
4. Dr. Krisnendu Mondal, Scientist 'D', MoEF&CC, New Delhi

In compliance to directions of Hon^{ble} NGT in above said matter, first meeting of the committee was convened on 14.02.2025 in hybrid mode to discuss the modalities of site inspection. The List of the participants is annexed as **Annexure-A1**

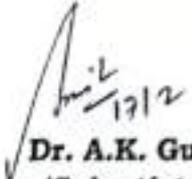
Records of discussion are as follows.

At the onset, Dr. A.K. Gupta, Scientist 'E' welcomed the committee members and explained about directions of Hon'ble NGT in detail.

The matter was discussed thoroughly by the present committee members and decided that the Joint Committee will visit the site in question on 21.02.2025.

The Regional Officer, UPPCB, Meerut & Mining Officer, Baghat are requested to assist the Joint Committee in Site Inspection and also provide the related documents/information of the matter as to enable the Joint Committee to comply with the Hon'ble Tribunal order(s).

The meeting ended with thanks to the Chair.


Dr. A.K. Gupta
(Scientist 'E')

Copy to:

1. District Magistrate, Bhagpat. Email: dmbag@nic.in with a request to direct the concerned officer to assist the Joint Committee.
2. Member Secretary, UPPCB, Lucknow, Email: ms@uppcb.in with a request to direct the concerned officer to assist the Joint Committee.
3. Dr. Narender Sharma, Regional Director/Scientist 'F', CPCB, RD, Chandigarh. Email: narendersharm.cpcb@gov.in
4. Dr. K Muthamizh Selvan, Scientist 'E', MoEF&CC, RO, Chandigarh. Email: ronz.chd-mef@nic.in
5. Dr. Krisnendu Mondal, Scientist 'D', MoEF&CC, New Delhi. Email: krisnendu.mondal@gov.in
6. Regional Officer, UPPCB, Meerut. Email: romeerut@uppcb.in
7. Mining Officer, Bhagpat. Email: baghatmo@gmail.com

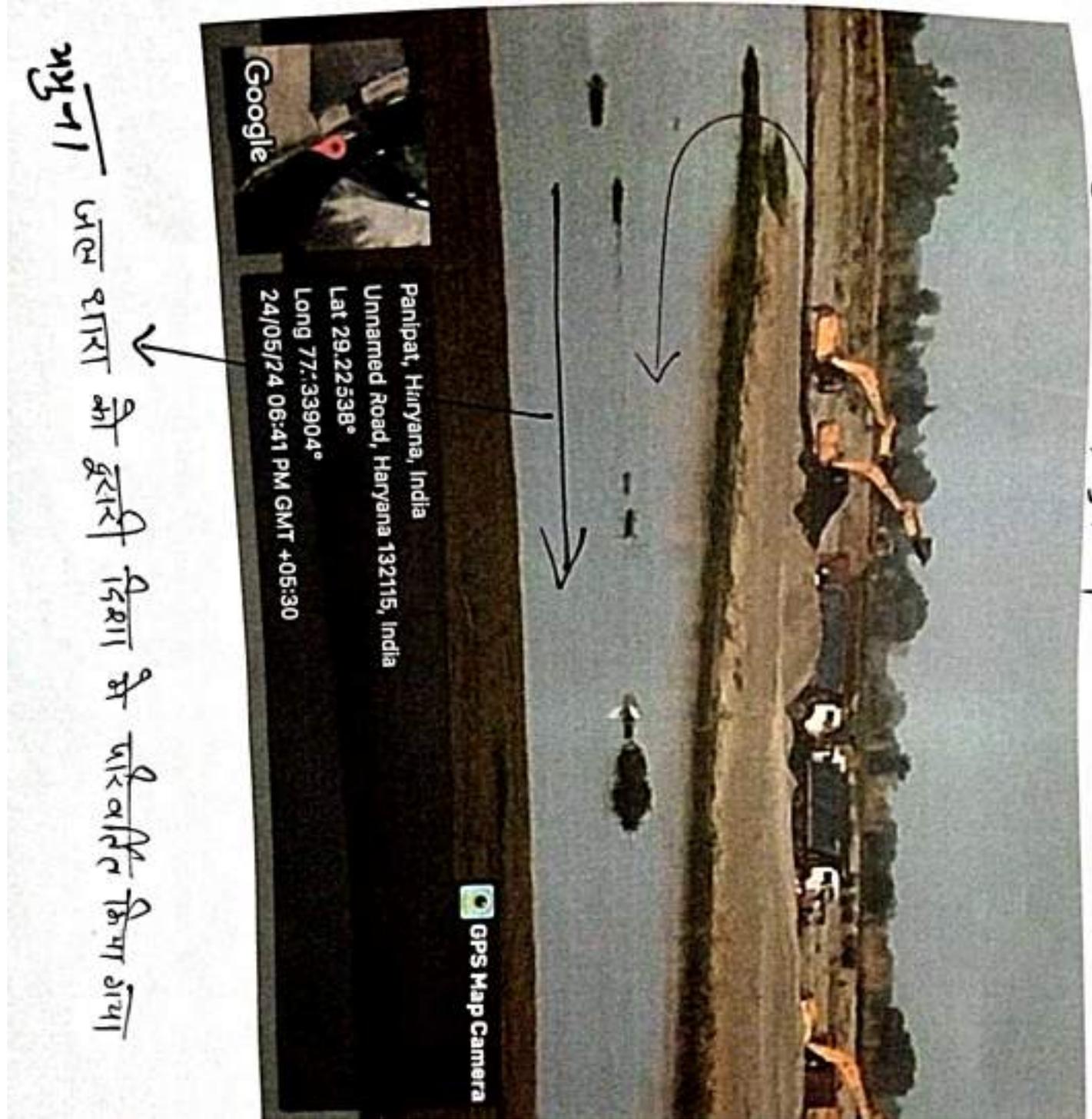
List of Participants

S.No.	Name	Designation	Email & Phone No.
1.	Dr. A.K. Gupta	Scientist 'E', MoEF&CC, RO, Lucknow	<u>roc.lko-mef@nic.in</u> 8004923480
2.	Dr. Narender Sharma	Regional Director/Scientist F', CPCB, RD, Chandigarh.	<u>narendersharm.cpcb@gov.in</u> 9814004377





D.O.P - 24/05/24



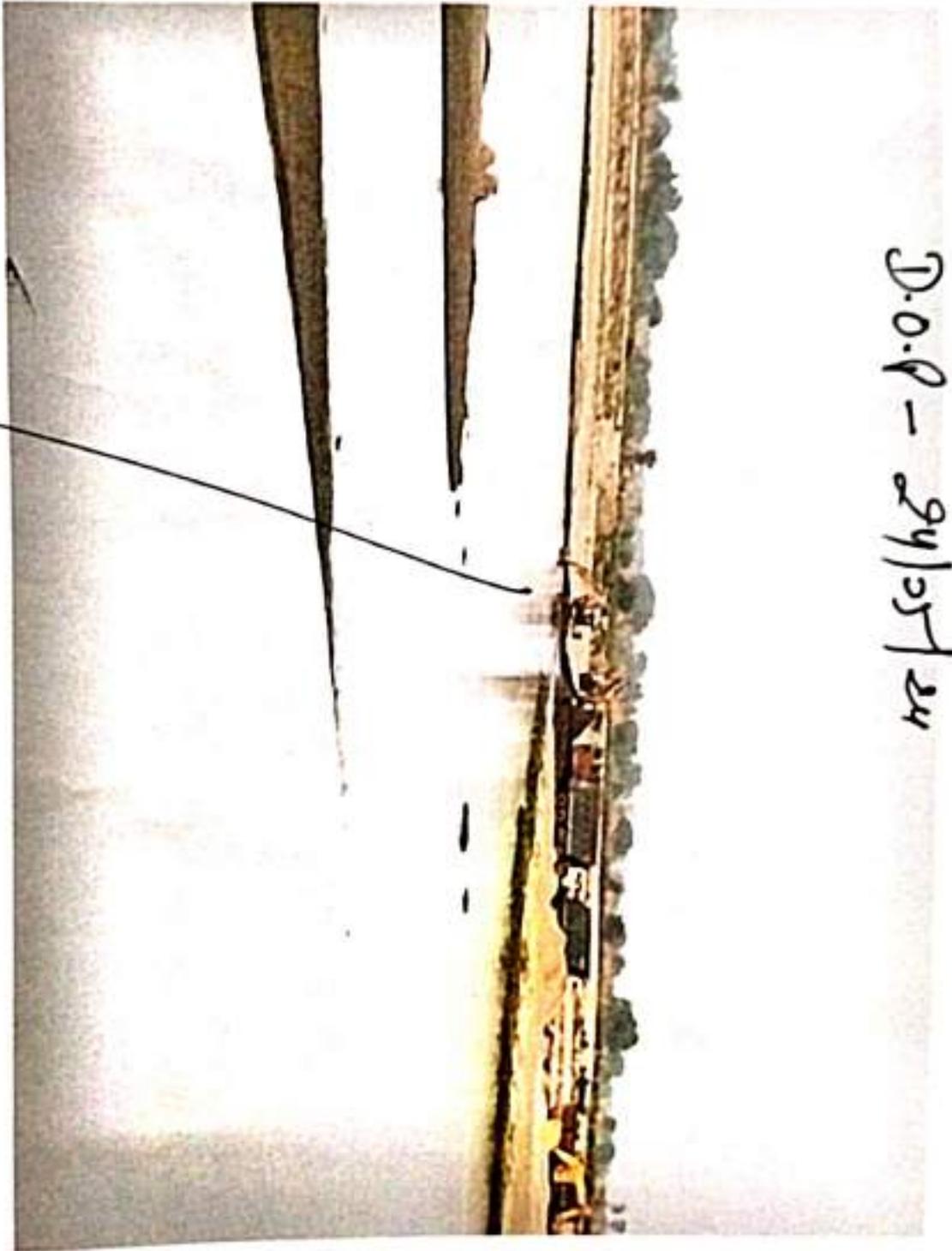
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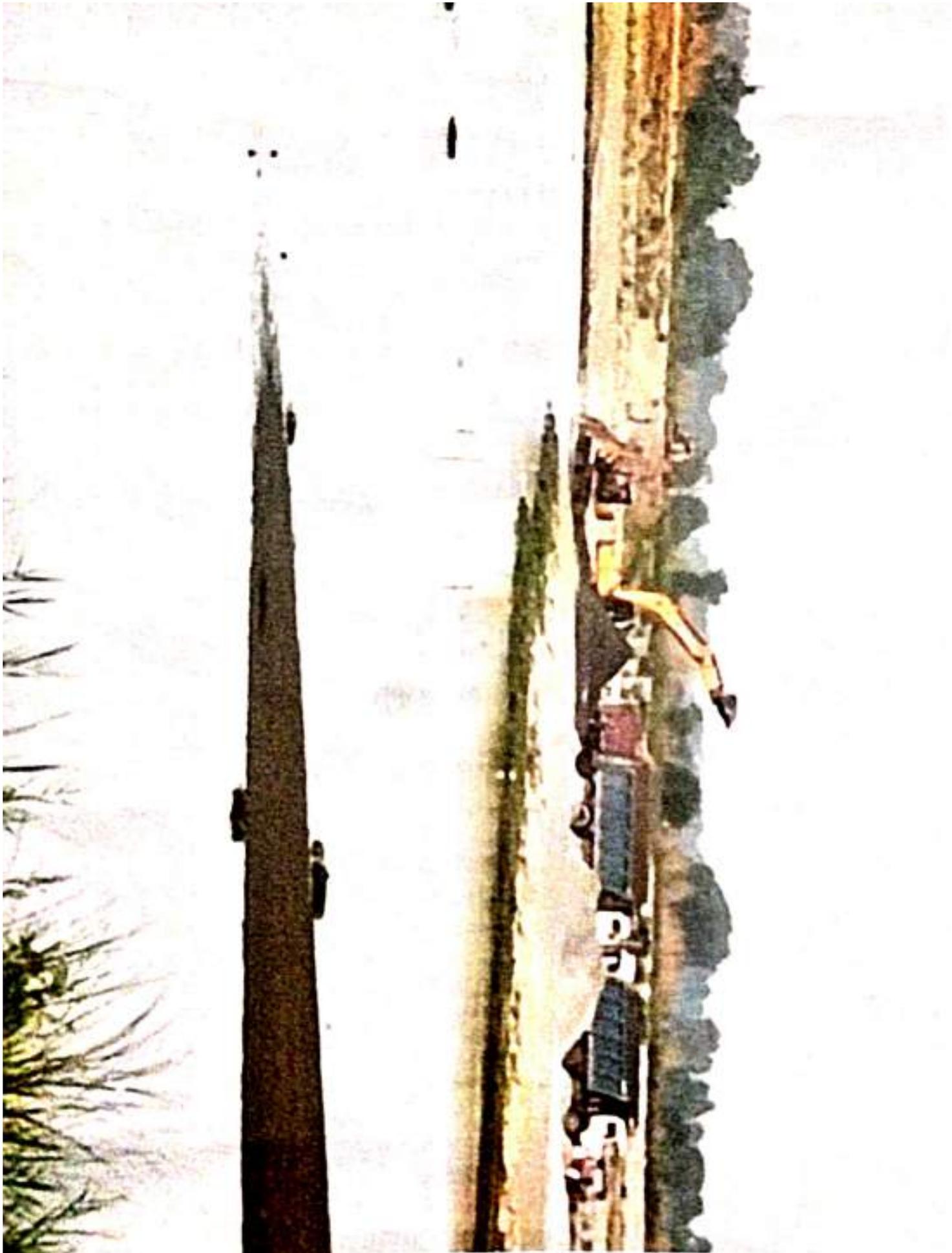
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 Long 77.33904°
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GPS Map Camera

D.O.P - 24/05/24

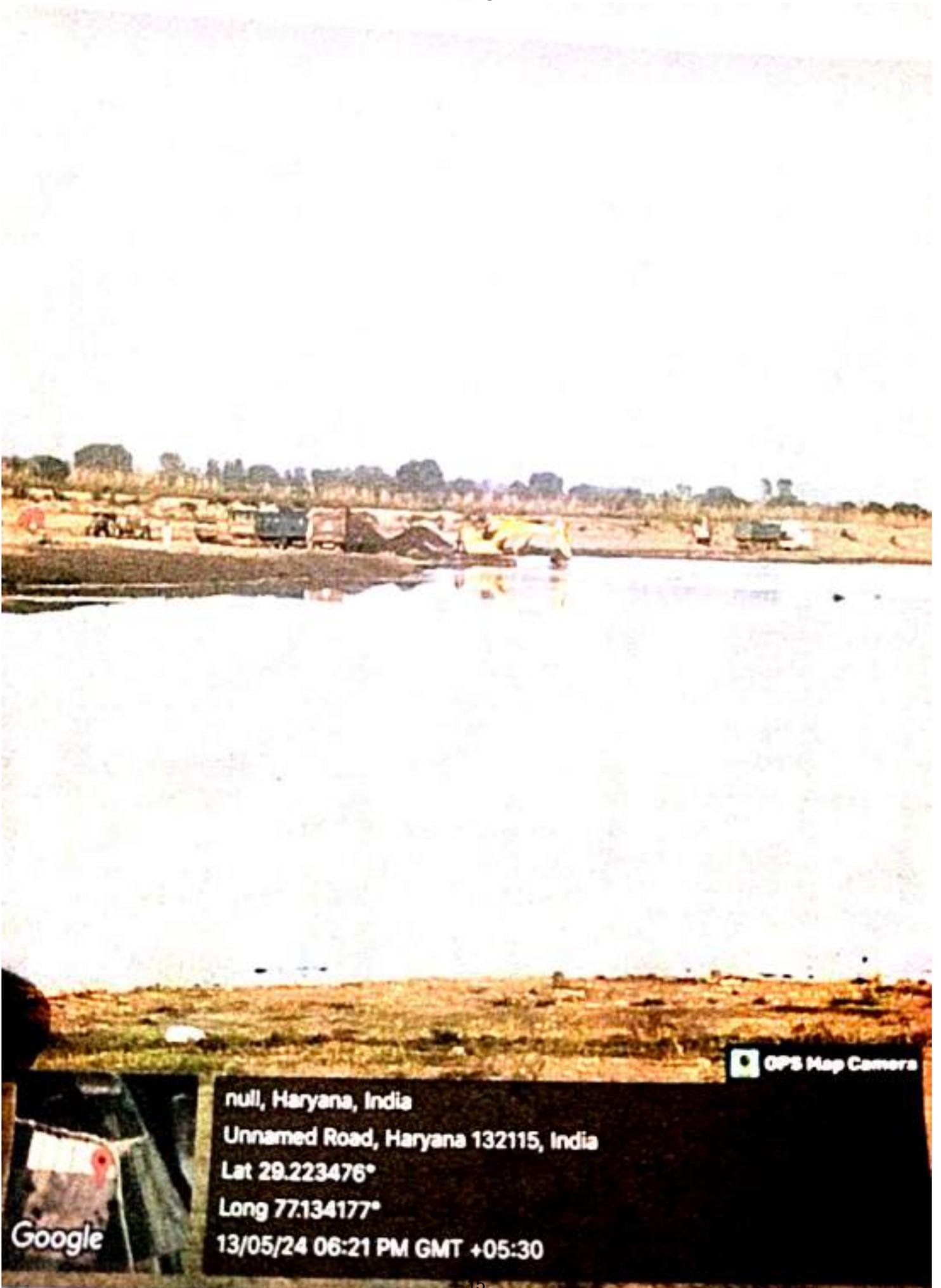


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D.O.P - 13/05/24



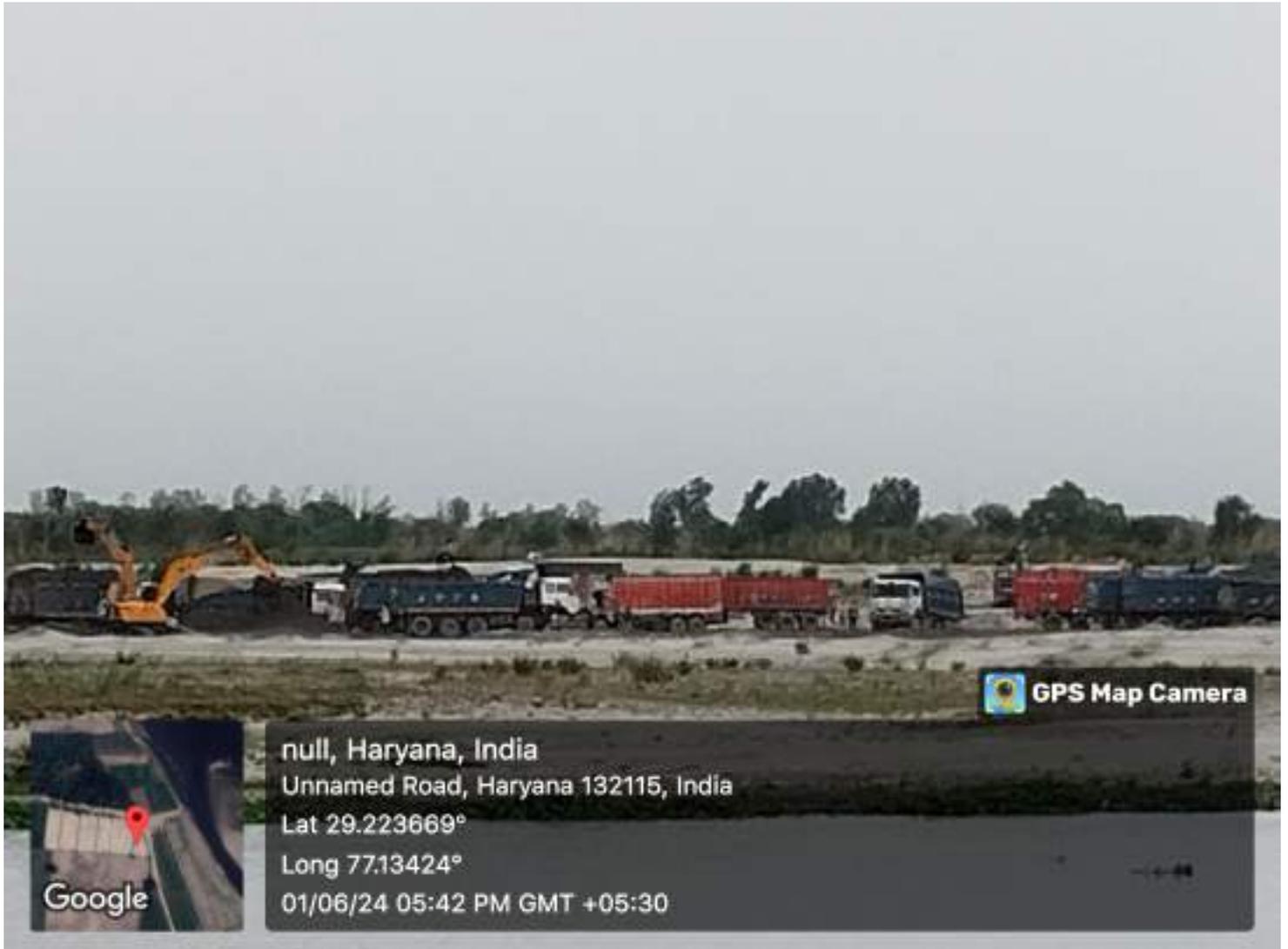
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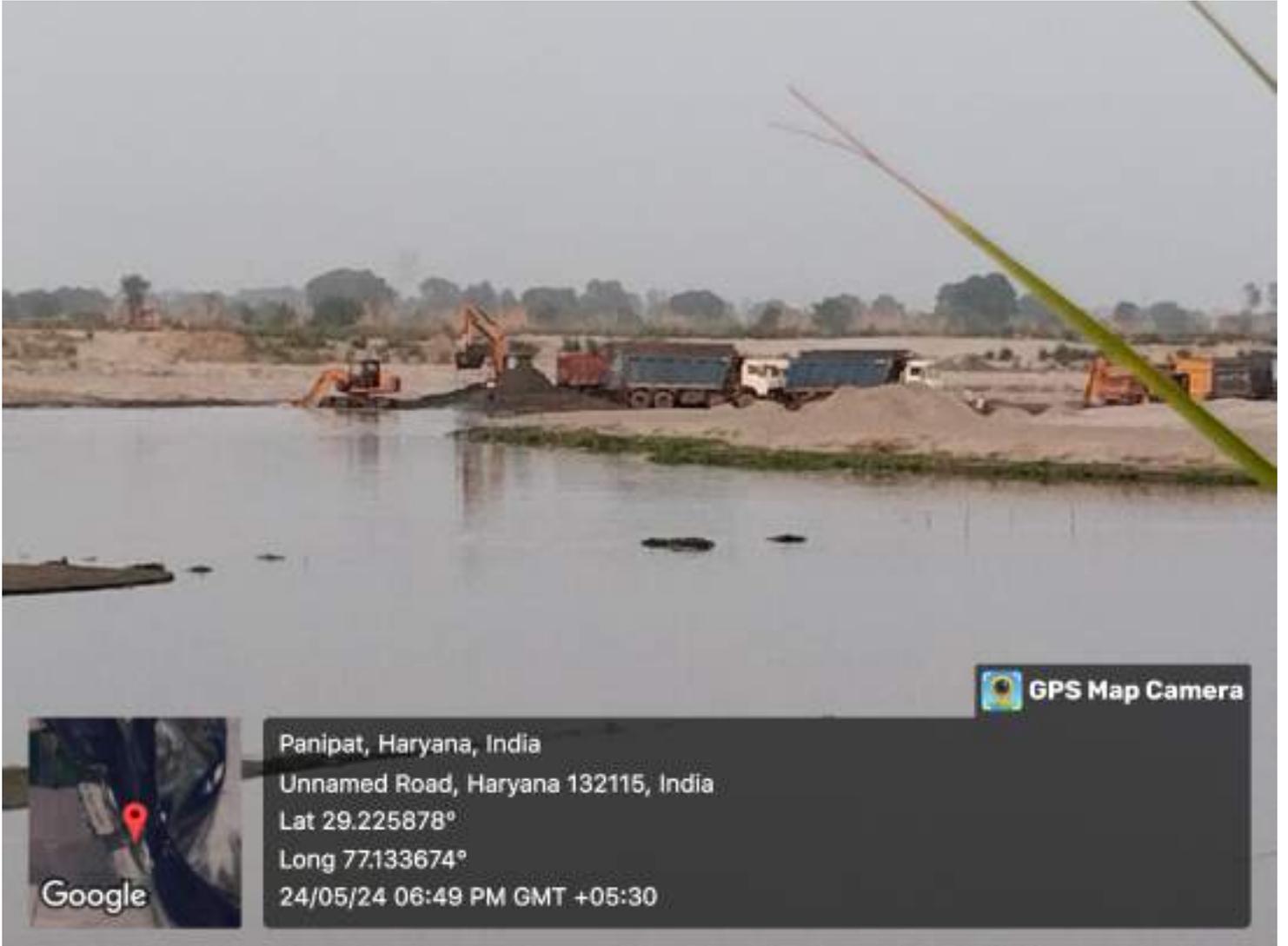
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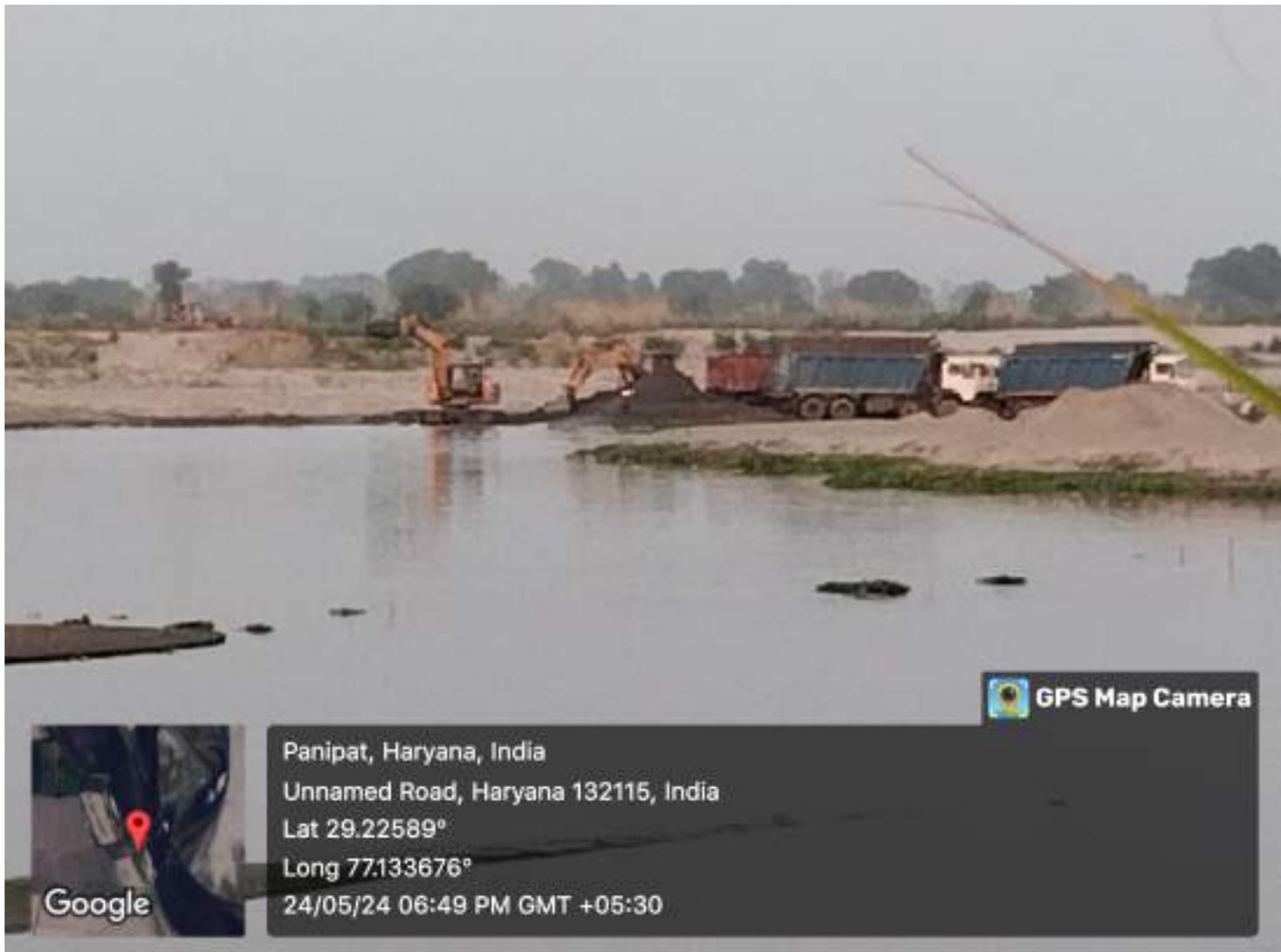


19 May 2024











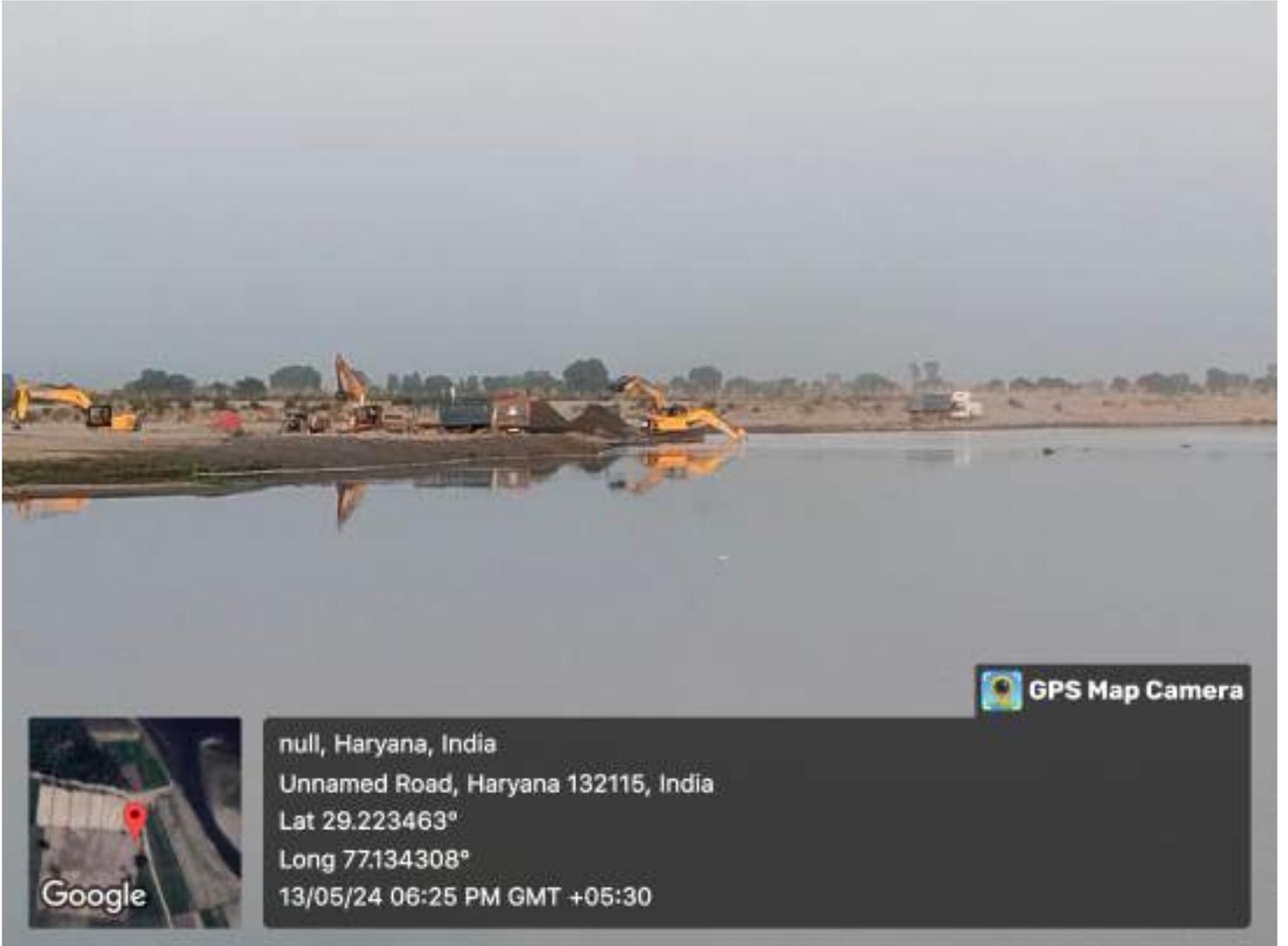




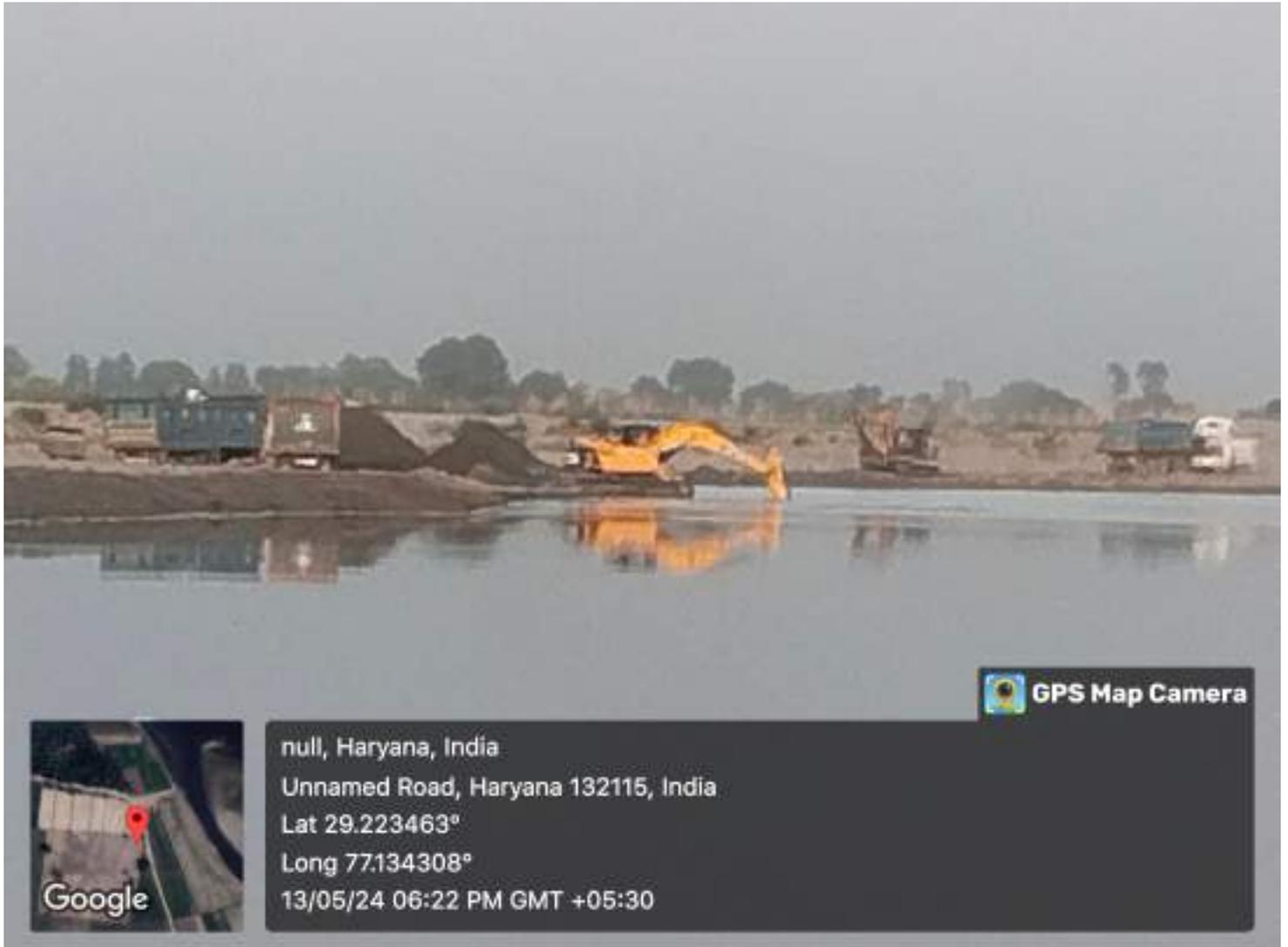
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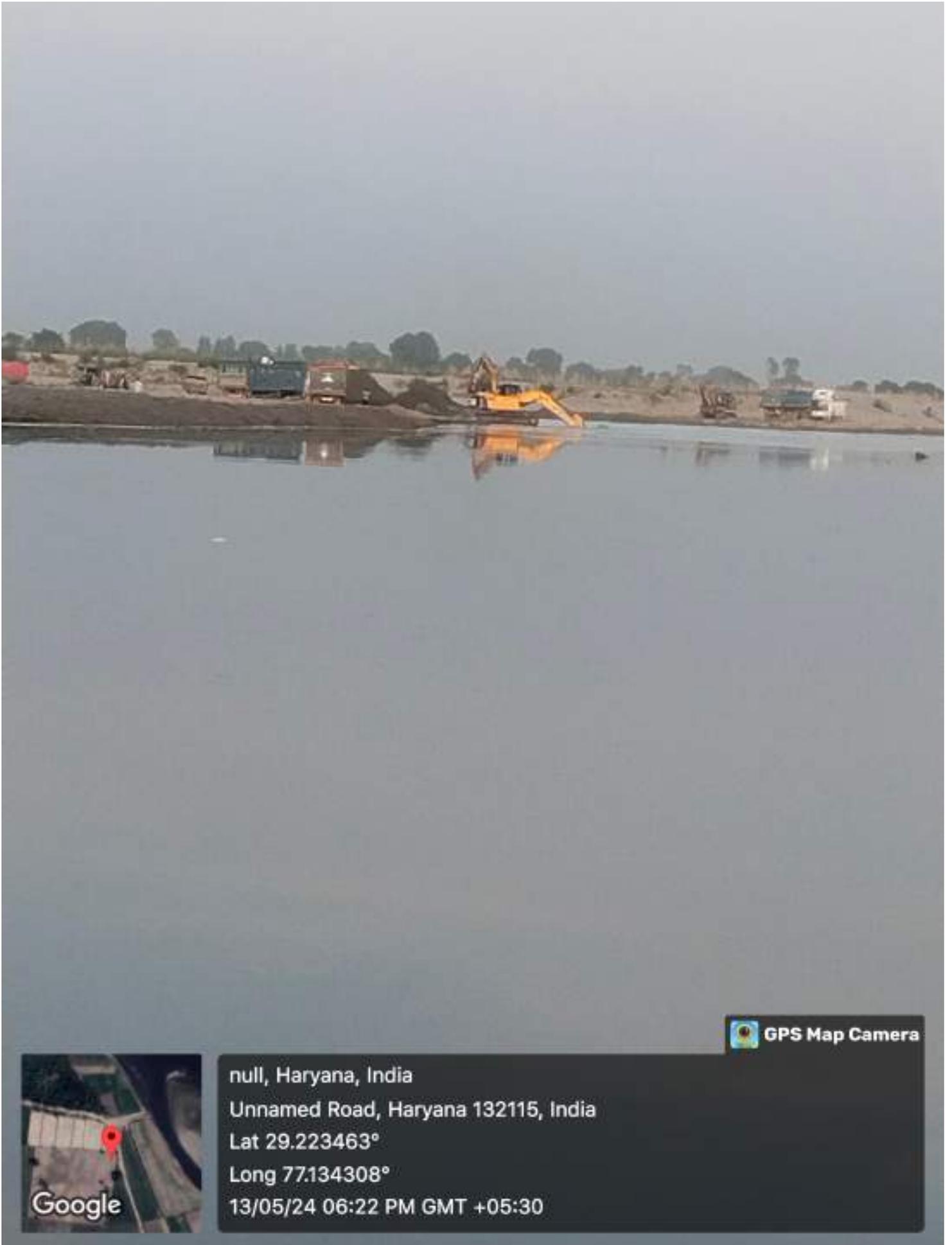














ENVIRONMENTAL
CLEARANCE

Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), UTTAR PRADESH)

To,

The -1

DAYACHAND BADGOTI

M. No 5 Nai Break Point Resturant, Bhur Chauraha K Pass, Yamunapur,
Bulanshahar U.P. -203001

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/UP/MIN/439838/2023 dated 10 Aug 2023. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	EC23B001UP110342
2. File No.	8077-7633
3. Project Type	New
4. Category	B
5. Project/Activity including Schedule No.	1(a) Mining of minerals
6. Name of Project	Proposed Chhaprauli Khadar Ordinary Sand Mining project on Yamuna Riverbed
7. Name of Company/Organization	DAYACHAND BADGOTI
8. Location of Project	UTTAR PRADESH
9. TOR Date	N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 07/10/2023

(e-signed)
 Ajay Kumar Sharma
 Member Secretary
 SEIAA - (UTTAR PRADESH)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

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State Level Environment Impact Assessment Authority, Uttar Pradesh

Directorate of Environment, U.P.

Vineet Khand-1, Gomti Nagar, Lucknow- 226010

E-Mail- doeuplko@yahoo.com, seiaaup@yahoo.com

Phone no- 0522-2300541

Reference- MoEFCC Proposal no SIA/UP/MIN/439838/2023 & SEIAA, U.P File no-8077/7633

Sub: Environmental Clearance for Proposed Ordinary Sand mining project on Riverbed of Yamuna River at Gata No. 1/2, Village- Chhaprauli Khadar, Tehsil- Baraut, and District: Baghpat, State- Uttar Pradesh, (Leased Area 9.570 ha.), M/s Royal Construction Company.

Dear Sir,

This is with reference to your application / letter dated 10-02-2023, 13-03-2023, 10-08-2023, 23-08-2023 above mentioned subject. The matter was considered by 777th SEAC in meeting held on 23-08-2023 and 758th SEIAA in meeting held on 19-09-2023.

A presentation was made by the project proponent along with their consultant M/s Cognizance Research India Pvt. Ltd to SEAC on 23-08-2023.

Project Details Informed by the Project Proponent and their Consultant

The project proponent, through the documents and presentation gave following details about their project –

1. The environmental clearance is sought for Ordinary Sand mining project on Riverbed of Yamuna River at Gata No. 1/2, Village- Chhaprauli Khadar, Tehsil- Baraut, and District: Baghpat, State- Uttar Pradesh, (Leased Area 9.570 ha.), M/s Royal Construction Company.
2. The Terms of Reference in the matter were issued by SEIAA, U.P vide Letter No. 45/Parya/SEIAA/7633/2022, Dated 23/03/2023.
3. The Public Hearing was organized on 12/07/2023 Final EIA report submitted by the project proponent on 10/08/2023.
4. Salient features of the project as submitted by the project proponent:

1.	On-line proposal No.	SIA/UP/MIN/439838/2023
2.	File No. allotted by SEIAA, UP	8077/7633
3.	Name of Proponent	M/S Royal Construction Company, Prop. Shri Dayachand Bargoti
4.	Full correspondence address of proponent and mobile No.	R/o M.No. 5, Nai Break Point Restaurant, Bhur Chauraha k pass, Yamunapur, District- Bulandshahar (U.P.)
		Mobile No-
		Email-
5.	Name of Project	Chhaprauli Khadar Ordinary Sand mining project on Riverbed of Yamuna River
6.	Project location (Plot/Khasra/Gata No.)	Gata No. 1/2
7.	Name of River	Yamuna River
8.	Name of Village	Chhaprauli Khadar
9.	Tehsil	Baraut
10.	District	Baghpat
11.	Name of Minor Mineral	Ordinary Sand
12.	Sanctioned Lease Area (in Ha.)	9.570 ha
13.	Max & Min mRL within lease area	Max- 224.0 mRL & 222.0 mRL

14.	Pillar Coordinates (Verified by DMO)	Sanctioned Mining Lease Area		
		Pillar No.	Latitude	Longitude
		A	29°13'14.6"N	77°08'39.3"E
		B	29°13'11.4"N	77°08'33.5"E
		C	29°13'21.8"N	77°08'21.33"E
D	29°13'25.7"N	77°08'29.7"E		
15.	Total Geological Reserves	4,08,354 Cum		
16.	Total Mineable Reserves in LOI	2,40,000 Cum/year		
17.	Total Proposed Production	12,00,000 cum in 5 Years		
18.	Proposed Production/year	2,40,000 Cum/year		
19.	Sanctioned Period of Mine lease	05 years		
20.	Method of Mining	Open Cast Semi-mechanized Method		
21.	No. of working days	260 days		
22.	Working hours/day	8 hrs		
23.	No. of workers	54		
24.	No. of vehicles movement/day	70		
25.	Ultimate Depth of Mining	2.90 m		
26.	Nearest metalled road from site	2.30 km (approx)		
27.	Water Requirement	PURPOSE		REQUIREMENT (KLD)
		Drinking		0.54
		Suppression of dust		3.0
		Plantation		19.0
		Others (if any)		0.54
		Total		23.08
28.	Name of QCI Accredited Consultant with QCI No and period of validity.	Cognizance Research India Pvt. Ltd. 1922, validity= 10, September 2023		
29.	Any litigation pending against the project or land in any court	No		
30.	Details of 500 m Cluster Map & certificate issued by Mining Officer	Yes, certified 342/Kha. li./2022-23 Dated- 10.01.2023		
31.	Details of Lease Area in approved DSR	Yes, given in the DSR 374/M 0-228/2017 (Khanan Niti)- DSR		
32.	Proposed CER cost/year	Rs 2,00,000/-		
33.	Proposed EMP cost/year	Recurring Cost- 8,88,000/-		
34.	Length and breadth of Haul Road	Length: 500 m, width: 6 m		
35.	No. of Trees to be Planted	9500 plants		

5. The mining would be restricted to unsaturated zone only above the phreatic water table and will not intersect the ground water table at any point of time.
6. This project does not attract any of the general conditions applicable on mining projects specified in EIA Notification 14/09/2006.
7. The mining operation will not be carried out in safety zone of any bridge or embankment or in eco-fragile zone such as habitat of any wild fauna.
8. There is no litigation pending in any court regarding this project.
9. The project proposal falls under category-1(a) of EIA Notification, 2006 (as amended).

Based on the recommendations of the State Level Expert Appraisal Committee Meeting (SEAC) held on 23-08-2023 the State Level Environment Impact Assessment Authority (SEIAA) in its Meeting held 19-09-2023 and decided to grant the Environmental Clearance to the title project for collection

of 2,40,000 Cum/year for lease area of 9.570 ha subject to effective implementation of the following General Conditions and specific conditions:-

General condition:

1. This environmental clearance is subject to allotment of mining lease in favour of project proponent by District Administration/Mining Department.
2. Forest clearance shall be taken by the proponent as necessary under law.
3. Any change in mining area, khasra numbers, entailing capacity addition with change in process and or mining technology, modernization and scope of working shall again require prior Environmental Clearance as per the provisions of EIA Notification, 2006 (as amended).
4. Precise mining area will be jointly demarcated at site by project proponent and officials of Mining/Revenue department prior to starting of mining operations. Such site plan, duly verified by competent authority along-with copy of the Environmental Clearance letter will be displayed on a hoarding/board at the site. A copy of site plan will also be submitted to SEIAA within a period of 02 months.
5. Mining and loading shall be done only within day hours' time.
6. No mining shall be carried out in the safety zone of any bridge and/or embankment.
7. It shall be ensured that standards related to ambient air quality/effluent as prescribed by the Ministry of Environment & Forests are strictly complied with. Water sprinklers and other dust control majors should be applied to take-care of dust generated during mining operation. Sprinkling of water on haul roads to control dust will be ensured by the project proponent.
8. All necessary statutory clearances shall be obtained before start of mining operations. If this condition is violated, the clearance shall be automatically deemed to have been cancelled.
9. Parking of vehicles should not be made on public places.
10. No tree-felling will be done in the leased area, except only with the permission of Forest Department.
11. No wildlife habitat will be infringed.
12. It shall be ensured that excavation of minor mineral does not disturb or change the underlying soil characteristics of the river bed /basin, where mining is carried out.
13. It shall be ensured that mining operation of Sand/Moram will not in any way disturb the, velocity and flow pattern of the river water significantly.
14. It shall be ensured that there is no fauna dependant on the river bed or areas close to mining for its nesting. A report on the same, vetted by the competent authority shall be submitted to the RO, PCB and SEIAA within 02 months.
15. Primary survey of flora and fauna shall be carried out and data shall be submitted to the RO, PCB and SEIAA within six months.
16. Hydro-geological study shall be carried out by a reputed organization/institute within six months and establish that mining in the said area will not adversely affect the ground water regime. The report shall be submitted to the RO, PCB and SEIAA within six months. In case adverse impact is observed /anticipated, mining shall not be carried out.
17. Adequate protection against dust and other environmental pollution due to mining shall be made so that the habitations (if any) close by the lease area are not adversely affected. The status of implementation of measures taken shall be reported to the RO, UPPCB and SEIAA and this activity should be completed before the start of sand mining.
18. Need-based assessment for the nearby villages shall be conducted to study economic measures which can help in improving the quality of life of economically weaker section of society. Income generating projects/tools such as development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such program me. The project proponent shall provide separate budget for community development activities and income generating programmes.

19. Green cover development shall be carried out following CPCB guidelines including selection of plant species and in consultation with the local DFO/Horticulture Officer.
20. Separate stock piles shall be maintained for excavated top soil, if any, and the top soil should be utilized for green cover/tree plantation.
21. Dispensary facilities for first-aid shall be provided at site.
22. An Environmental Audit should be annually carried out during the operational phase and submitted to the SEIAA.
23. The District Mining Officer should quarterly monitor compliance of the stipulated conditions. The project proponent will extend full cooperation to the District Mining Officer by furnishing the requisite data/information/monitoring reports. In case of any violations of stipulated conditions the District Mining Officer will report to SEIAA.
24. The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard & soft copies) to the SEIAA, the District Officer and the respective Regional Office of the State Pollution Control Board by 1st June and 1st December every year.
25. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation and Urban Local Body.
26. Transportation of materials shall be done by covering the trucks / tractors with tarpaulin or other suitable mechanism to avoid fugitive emissions and spillage of mineral/dust.
27. Waste water, from temporary habitation campus be properly collected & treated before discharging into water bodies the treated effluent should conform to the standards prescribed by MoEF/CPCB.
28. Measures shall be taken for control of noise level to the limits prescribed by C.P.C.B.
29. Special Measures shall be adopted to protect the nearby settlements from the impacts of mining activities. Maintenance of Village roads through which transportation of minor minerals is to be undertaken, shall be carried-out by the project proponent regularly at his own expenses.
30. Measure for prevention & control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion, if any, shall be carried-out with geo textile matting or other suitable material.
31. Under corporate social responsibility a sum of 5% of the total project cost or total income whichever is higher is to be earmarked for total lease period. Its budget is to be separately maintained. CER component shall be prepared based on need of local habitant. Income generating measures which can help in upliftment of poor section of society, consistent with the traditional skills of the people shall be identified. The programme can include activities such as development of fodder farm, fruit bearing orchards, free distribution of smokeless Chula etc.
32. Possibility for adopting nearest three villages shall be explored and details of civic amenities such as roads, drinking water etc proposed to be provided at the project proponent's expenses shall be submitted within 02 months from the date of issuance of Environment Clearance.
33. The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Integrated Regional Office, MoEF&CC, Gol, Lucknow, SEIAA, U.P and UPPCB.
34. Action plan with respect to suggestion/improvement and recommendations made and agreed during Public Hearing shall be submitted to the District mines Officer, concern Regional Officer of UPPCB and SEIAA within 02 months.
35. Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, if applicable to this project.
36. The proponent shall observe every 15 day for nesting of any turtle in the area. Based on the observations so made, if turtle nesting is observed, necessary safeguard measures shall be taken in consultation with the State Wildlife Department. For the purpose, awareness shall be

- created amongst the workers about the nesting sites so that such sites, if any, are identified by the workers during operations of the mine for taking required safeguard measures. In this regards the safety notified zone should be left so that the habitat/nesting area is undisturbed.
37. The project proponent shall undertake adequate safeguard measures during extraction of river bed material and ensure that due to this activity the hydro geological regime of the surrounding area shall not be affected.
 38. The project proponent shall obtain necessary prior permission of the competent Authorities for withdrawal of requisite quantity of water (surface water and groundwater), required for the project.
 39. Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the river from the vehicles used for transportation.
 40. Vehicular emissions shall be kept under control and regularly monitored. The vehicles carrying the mineral shall not be overloaded.
 41. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. (MoEF circular Dated : 22-09-2008 regarding stipulation of condition to improve the living conditions of construction labour at site).
 42. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
 43. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
 44. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Integrated Regional Office, MoEF&CC, Gol, Lucknow by e-mail.
 45. The green cover development/tree plantation is to be done in an area equivalent to 20% of the total leased area either on river bank or along road side (Avenue Plantation).
 46. Debris from the river bed will be collected and stored at secured place and may be utilized for strengthen the embankment.
 47. Safety measures to be taken for the safety of the people working at the mine lease area should be given, which would also include measure for treatment of bite of poisonous reptile/insect like snake.
 48. Periodical and Annual medical checkup of workers as per Mines Act and they should be covered under ESI as per rule.

Specific Conditions:

1. District Mining Officer shall ensure that if mineable quantity mentioned in LOI is amended as per replenishment study report the project proponent shall seek amended/fresh EC.
2. Directions/suggestions given during public hearing and commitment made by the project proponent should be strictly complied.

3. A certificate from Forest Department shall be obtained that no forest land is involved in mining or as a route and if forest land is involved the project proponent shall obtain forest clearance and permission of Central and State Government as per the provisions of Forest (conservation) Act, 1980 and submit before the start of work.
4. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora fauna etc.
5. If the proposed project is situated in notified area of ground water extraction, where creation of new wells for ground water extraction is not allowed, requirement of fresh water shall be met from alternate water sources other than ground water or legally valid source and permission from the competent authority shall be obtained to use it.
6. Project Proponent should submit action plan for carrying out plantation at least @1,000 plants / ha of lease area. In this case, PP should prepare a plan, duly approved either by Forest Department or district plantation committee, for planting at least 10,000 plants, either on government land or community land, within a periphery of 5 km from the boundary of the lease area along with provision for maintenance for 5 years. Survival of plants should not be less than the survival rate notified by Uttar Pradesh Forest Department otherwise it will be treated as violation of EC condition.
7. In consultation with District Environment Authority or an Authority nominated by concerned DM, project proponent will prepared a conservation and management plan for rejuvenation and management of water bodies having total surface area of more than 50 ha. Funds for the same will be kept in a separate bank account and six monthly compliance status will be presented by project proponent before the nominated authority in the District.
8. Department of Geology and Mines, Government of Uttar Pradesh and / or concerned district administration, before releasing the security deposit to Project Proponent will ensure that Project Proponent has fully complied with the EC conditions. Non-compliance, if any, should be reported to UPSPCB for appropriate legal action and recovery of compensation.
9. Any application for transfer of this EC, during its validity period unless it is cancelled by a competent authority, has to be necessarily accompanied with status of compliance of EC conditions duly certified by IRO, MoEFCC, GoI, Lucknow.
10. Directorate of Geology and Mining will ensure conduct of replenishment study from reputed institution for subsequent years in compliance of Hon'ble NGT orders. The quantity mentioned in Lol or quantity mentioned in replenishment study, whichever is less, would be maximum quantity which project proponent may extract. It will be ensured by District Administration and Geology and Mining Department.
11. NOC from Irrigation Department/ Concerning Authority regarding river bed mining to be obtained before start of mining activity.
12. Project proponent has committed to plant 1000 number of trees/hectare. The project proponent/consultant if desires may approach to concerned District Forest Authority to plant 1000 trees/ha on a land available to the Forest Department. The project proponent will deposit the required amount for this entire plantation work (including its maintenance and security) to the Forest Department.
13. The project proponent shall install solar light in their site office.
14. During the submission of 6 monthly compliance reports, the project proponent should make sure that the periodically taken site photographs should also be annexed along with the compliance report.
15. Preference should be given to indigenous local species as per the consultation of the local district Forest Officer.
16. Link Road from the quarry site to the main road shall be constructed as an all-weather road with blacktopping and maintained by the project proponent.

17. Vehicular emissions should be kept under control and regularly monitored. Suitable measures shall be taken for proper maintenance of vehicles used in a quarry operation and transportation.
18. The project proponent should explore the possibilities of rainwater harvesting.
19. Agreement/ Consent between project proponent and competent authority/ landowner for haulage road from lease site to link road.
20. Latest technology (water sprinklers/ tankers) to be adopted for mitigating dust at source points in lease area and haulage road during operational activity/vehicular movement.
21. As per the proposed plan, plantation with area specific plant species, number of plants to be planted and report of green belt development to be submitted to the concerning department
22. Water requirement details along with source of water and the permission/ agreement with the concerning authority/ water supplying agencies to be submitted.
23. Submit the Hydrological study report of lease area that the quantity given in Lol will be mined without affecting the geo-hydrology of the River.
24. The Environmental clearance will be co-terminus with the mining lease period/mining plan whichever is less.
25. At the time of operation, project proponent will comply with all the guidelines issued by Government of India/State Govt./District Administration related to Covid-19.
26. Environment management in according to environmental status and impact of the project.
27. During the school opening and closing time transportation of minerals will be restricted.
28. Selection of plants for green belt should be on the basis of pollution removal index. Project proponent should ensure survival of tree saplings. Mortality should be replaced from time to time.
29. No mining activity should be carried out in-stream channel as per SSMMG, 2016.
30. Pakkamotorable haul road to be maintained by the project proponent.
31. A separate Environmental Management Cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
32. Permission from the competent authority regarding evacuation route should be taken.
33. One month monitoring report of the area for air quality, water quality, Noise level. Besides flora & fauna should be examined twice a week and be submitted within 45 days for a record.
34. Provision for cylinder to workers should be made for cooking.
35. The capacity of trucks/tractor for loading purpose will be in tonnes as per Transport Department applicable norms and standard fixed by the Government.
36. Approach road kaccha is to be made motarable and tree saplings to be planted on both sides of the road. Width of the haul road shall be more than 6 meter.
37. Indigenous plants should be planted according to CPCB guidelines and in consultation with local Divisional Forest Officer.
38. The project proponent shall in 2 years conduct detailed replenishment study duly authenticated by a QCI-NABET accredited consultant, and the District Mines Officer.
39. Provision for two toilets and hand pumps should be made at mining site.
40. Drinking water for workers would be provided by tankers.
41. Mining should be done by Bar scalping methods extraction (typically 0.3 -0.6 m or 1 - 2 ft) as per sustainable sand mining management guidelines 2016.
42. A buffer/safe zone shall be maintained from the habitation as per mining guidelines.
43. Corporate Environmental Responsibility (CER) plan shall be prepared by the project proponent and the details of the various heads of expenditure to be submitted as per the guidelines provided in the recent CER notification No. 22-65/2017-IA.III dated 01/05/2018.
44. Health/Insurance card, Medical claim, regular health check-up camps, facilities shall be provided to the regular/temporary/Contractual or any base workers. Copy of receipt shall be produced to the Directorate of Environment along with the compliance report.

45. Measure for conservation of water through rainwater harvesting and cleaning and maintenance of natural surface water bodies of the nearby areas may be considered as one of the activity in CER.
46. The excavated mining material should be carried and transported in such a way that no obstruction to the free flow of water takes place. Suitable measure should be taken and details to be provided to concern Department.
47. Submit annual replenishment report certified by an authorized agency. In case the replenishment is lower than the approved rate of production, then the mining activity / production levels shall be decreased / stopped accordingly till the replenishment is completed.
48. The project proponent shall ensure that if the project area falls within the eco-sensitive zone of National park/ Sanctuary prior permission of statutory committee of National board for wild life under the provision of Wildlife (Protection) Act, 1972 shall be obtained before commencement of work.
49. If in future this lease area becomes part of cluster of equal to or more than 05 ha. then additional conditions based on the EIA shall be imposed. The lease holder shall mandatorily follow cluster conditions otherwise it will amount to violation of E.C. conditions. If the certificate related to cluster provided by the competent authority is found false or incorrect then punitive actions as per law shall be initiated against the authority issuing the cluster certificate.
50. Project falling within 10 KM area of Wild Life Sanctuary is to obtain a clearance from National Board Wild Life (NBWL) even if the eco-sensitive zone is not earmarked.
51. To avoid ponding effect and adverse environmental conditions for sand mining in area, progressive mining should be done as per sustainable sand mining management guidelines 2016.
52. In case it has been found that the E.C. obtained by providing incorrect information, submitting that the distance between the two adjoining mines is greater than 500mt. and area is less than 05 ha, but factually the distance is less than 500 mt and the mine is located in cluster of area equal or more than 05 ha, the E.C issued will stand revoked.
53. The project proponent shall in 2 years conduct detailed replenishment study duly authenticated by a QCI-NABET accredited consultant, and the District Mines Officer which shall form the basis for midterm review of conditions of Environmental Clearance.
54. The mining work will be open-cast and manual/semi mechanized (subject to orders). Heavy machine such as excavator, scooper etc. should not be employed for mining purpose. No drilling/blasting should be involved at any stage.
55. It shall be ensured that there shall be no mining of any type within 03 m or 10% of the width whichever is less, shall be left on both the banks of precise area to control and avoid erosion of river bank. The mining is confined to extraction of sand/moram from the river bank only.
56. The project proponent shall undertake adequate safeguard measures during extraction of river bank material and ensure that due to this activity the hydro-geological regime of the surrounding area shall not be affected.
57. The project proponent shall adhere to mining in conformity to plan submitted for the mine lease conditions and the Rules prescribed in this regard clearly showing the no work zone in the mine lease i.e. the distance from the bank of river to be left un-worked (Non mining area), distance from the bridges etc. It shall be ensured that no mining shall be carried out during the monsoon season.
58. The project proponent shall ensure that wherever deployment of labour attracts the Mines Act, the provision thereof shall be strictly followed.
59. The project proponent will provide personal protective equipment (PPE) as required, also provide adequate training and information on safety and health aspects. Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.

60. The critical parameters such as PM10, PM2.5, SO2 and NOx in the ambient air within the impact zone shall be monitored periodically. Further, quality of discharged water if any shall also be monitored [(TDS, DO, pH, Fecal Coliform and Total Suspended Solids (TSS)].
61. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads.
62. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
63. The extended mining scheme will be submitted by the proponent before expiry of present mining plan.
64. Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for monitoring PM10, PM2.5, SO2 and NOx. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
65. Common road for transportation of mineral is to be maintained collectively. Total cost will be shared/worked out on the basis of lease area among users.
66. Proponent will provide adequate sanitary facility in the form of mobile toilets to the labours engaged for the project work.
67. Solid waste material viz., gutkha pouchs, plastic bags, glasses etc. to be generated during project activity will be separately storage in bins and managed as per Solid Waste Management rules.
68. Natural/customary paths used by villagers should not be obstructed at any time by the activities proposed under the project.
69. Digital processing of the entire lease area in the district using remote sensing technique should be done regularly once in three years for monitoring the change of river course by Directorate of Geology and Mining, Govt. of Uttar Pradesh. The record of such study to be maintained and report be submitted to Integrated Regional Office, MoEF&CC, GoI, Lucknow, SEIAA, U.P. and UPPCB.
70. The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the SEIAA at <http://www.seiaaup.in> and a copy of the same shall be forwarded to the Integrated Regional Office, MoEF&CC, GoI, Lucknow, CPCB, State PCB.
71. The MoEF&CC/SEIAA or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
72. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
73. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.
74. Waste water from potable use be collected and reused for sprinkling.
75. A width of not less than 50 meter or 10% width of river can be restricted for mining activities from river bank. A condition can be imposed that mining will be done from river activities from river bank.

You shall also ensure that the proposed site is not a part of any no-development zone as required/prescribed/identified under law. In case of violation, this permission shall automatically

deem to be cancelled. Also, in the event of any dispute on ownership or land use of the proposed site, this clearance shall automatically deem to be cancelled.

Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

The above stipulated conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along-with their amendments and rules made there under and also any other orders passed by the Hon'ble Courts of Law relating to the subject matter.

The project proponent will have to submit approved plans and proposals incorporating the conditions specified in the Environmental Clearance within 03 months of issuance of this clearance. The SEIAA/MoEF reserves the right to revoke the environmental clearance, if conditions stipulated are not implemented to the satisfaction of SEIAA/MoEF. SEIAA may impose additional environmental conditions or modify the existing ones, if necessary.

This is to request you to take further necessary action in matter as per provisions of Gazette Notification No. S.O. 1533(E) dated 14/09/2006, as amended and send regular compliance reports to the authority as prescribed in the aforesaid notification.

Copy, through email, for information and necessary action to –

1. **Additional Chief Secretary, Department of Environment, Forest and Climate Change, Government of Uttar Pradesh, Lucknow (email – psforest2015@gmail.com)**
2. **Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India, 3rd Floor, Prithvi-Block, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003 (email – sudheer.ch@gov.in)**
3. **Deputy Director General of Forests (C), Integrated Regional Office, Ministry of Environment, Forest and Climate Change, Kendriya Bhawan, 5th Floor, Sector “H”, Aliganj, Lucknow – 226020 (email – rocz.lko-mef@nic.in)**
4. **District Magistrate, Bagpat.**
5. **Member Secretary, Uttar Pradesh Pollution Control Board, TC-12V, Paryavaran Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow-226010 (email – ms@uppcb.com)**
6. **Copy to Web Master for uploading on PARIVESH Portal.**
7. **Copy for Guard File.**

**(Ajay Kumar Sharma)
Member Secretary, SEIAA**

Signature Not Verified

Digitally signed by Ajay Kumar
Sharma
Member Secretary
Date: 10/7/2023 4:37:22 PM

प्रेषक,

निदेशक,
भूतत्व एवं खनिकर्म निदेशालय, उ०प्र०,
खनिज भवन, लखनऊ।

सेवा में

जिलाधिकारी
Baghpat

संख्या :-

2023/1/29/177038

दिनांक :- 2023-02-01

विषय :-

पट्टाधारक श्री M/s Royal Construction Co/370737, Devi Pura 2, Bulandshahar-203001 Prop. Shri DayachandBargoti के पक्ष में स्वीकृत जनपद Baghpat में तहसील Baraut ग्राम-Chhaprauli Khadar गाटा सं०-1/2, क्षेत्रफल 9.5700 हे० में उपखनिज साधारण बालू (प्रथम श्रेणी), के खनन पट्टे हेतु प्राप्त खनन योजना का अनुमोदन के संबंध में।

महोदय,

उपर्युक्त विषय के संदर्भ में सूचित करना है कि उक्त संदर्भित क्षेत्र के संबंध में पट्टाधारक श्री M/s Royal Construction Co/370737, Devi Pura 2, Bulandshahar- 203001 Prop. Shri DayachandBargoti द्वारा प्रस्तुत खनन योजना का अनुमोदन उत्तर प्रदेश उप-खनिज (परिहार) नियमावली, 1963 के नियम-34 के उपनियम (4) के अधीन प्रदत्त अधिकारों का प्रयोग करते हुये दिनांक 2023-02-01 को कर दिया गया है।

1-

“खनन योजना” का अनुमोदन निम्नलिखित शर्तों के अधीन किया गया है:-

(अ)

“खनन योजना” का अनुमोदन खनन पट्टा विलेख निष्पादन के दिनांक से आगामी 60 (माह में) अवधि तक के लिए अनुमोदित किया जाता है। खनन क्षेत्र से 240000.00 घन मी० प्रतिवर्ष खनिज का उत्पादन अनुमन्य किया गया है।

(ब)

अनुमोदित अवधि में किये गये खनन कार्य के निरीक्षण के उपरान्त यदि खनन योजना में संशोधन हेतु आदेश दिये जाते हैं, तब संशोधित खनन योजना प्रस्तुत करने का पूर्ण उत्तरदायित्व पट्टेदार का होगा।

(स)

आबद्ध नियोजित श्रमिकों को सुरक्षात्मक उपकरण प्रदान करने तथा सुरक्षित खनन कार्य करने हेतु सभी आवश्यक सावधानियां बरतने का दायित्व पट्टेदार का होगा।

(द)

अनुमोदित खनन योजना की एक-एक प्रमाणित प्रति संबंधित जिलाधिकारी कार्यालय एवं निदेशालय के क्षेत्रीय कार्यालय में अभिलेखार्थ यथाशीघ्र प्रस्तुत करने का दायित्व भी पट्टेदार का होगा।

(च)

अनुमोदित खनन योजना में विनिहित प्रक्रिया के अनुसार पट्टेदार द्वारा खनन कार्य न किये जाने के पाये जाने पर पट्टेदार के विरुद्ध पट्टे की शर्त का उल्लंघन माना जायेगा और तदनुसार कार्यवाही की जायेगी।

(छ)

खनन योजना को निम्नलिखित अतिरिक्त शर्तों के साथ अनुमोदित किया जाता है:-

1. बेंच की ऊँचाई अधिकतम 01 मी० एवं चौड़ाई न्यूनतम 10 मी० होनी चाहिए। खनन कार्य अधिकतम 03 मी० की गहराई तक या पानी के तल जो भी कम हो तक किया जायेगा। खनन कार्य जीरो लेवल से ऊपर की ओर किया जायेगा।

2. खनन कार्य अधिकतम 03 मी० की गहराई तक या पानी निकलने के तल, जो भी कम हो तक किया जायेगा।

3. खनन पट्टा स्थल पर फ्रूट एड बॉक्स व स्ट्रेचर रखे जायें।

4. श्रमिकों के लिये श्रमिक विश्राम गृह उनके पीने के पानी आदि की समुचित व्यवस्था की जायें।

5. खनन क्षेत्र से मुख्य मार्ग तक जाने वाले पहुँच मार्ग (कच्चे मार्ग) पर नियमित रूप से जल का छिड़काव किया जायेगा, ताकि वाहनों के आवागमन से उत्पन्न धूल को उड़ने से रोका जा सके।

6. नदी के तटबन्ध से नदी की ओर न्यूनतम 50 मी० तक खनन कार्य किया जाना वर्जित होगा। जहाँ तक व्यावहारिक हो नदी से तटबन्ध की ओर खनन **275** जायेगा।

7. पर्यावरण स्वच्छता के संबंध में भारत सरकार/राज्य सरकार द्वारा समय-समय पर जारी दिशानिर्देशों एवं माननीय न्यायालय के आदेशों का अनुपालन पट्टाधारक द्वारा किया जायेगा।

2-

अस्तु आपसे अनुरोध है कि अनुमोदित खनन योजना की संलग्न मूल प्रति सम्बन्धित पट्टेदार को अनुपालन हेतु उपलब्ध करा कर उनसे प्राप्ति रसीद प्राप्त कर निदेशालय को भिजवाने का कष्ट करें।

भवदीय

(अमित कौशिक)

Digitally signed by Amit Kaushik
Date: 2023.02.01 16:09:16

संख्या : - 2023/1/29/177038 (1)/मा० प्लान , तद् दिनांक

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

- 1- खान अधिकारी, भूतत्व एवं खनिकर्म विभाग, उ०प्र०, जनपद- **Baghat**
- 2- पट्टाधारक श्री M/s Royal Construction Co/370737, Devi Pura 2, Bulandshahar-203001 Prop. Shri DayachandBargoti नि० तहसील **Baraut** जनपद Baghat
- 3- खनन अनुभाग, भूतत्व एवं खनिकर्म निदेशालय, उ०प्र०, लखनऊ।

भवदीय

रत्नगर्भा वसुन्धरा

(अमित कौशिक)

Digitally signed by Amit Kaushik
Date: 2023.02.01 16:09:16

कृते निदेशक।





Uttar Pradesh Pollution Control Board

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

197311/UPPCB/Meerut(UPPCBRO)/CTO/both/BAGHPAT/2023

Date: 29/11/2023

To,

M/s

MS ROYAL CONSTRUCTION CO

Gata No 1/2 Mining Area 9.57 Ha Village - Chhaprauli Khadar , Tehsil
- Baraut , Dist - Baghpat , U.P ,BAGHPAT,250617

Application Id-
23653977

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

CCA is hereby granted to **MS ROYAL CONSTRUCTION CO** located at **Gata No 1/2 Mining Area 9.57 Ha Village - Chhaprauli Khadar , Tehsil - Baraut , Dist - Baghpat , U.P ,BAGHPAT,250617**. subject to the provisions of **the Water Act, Air Act** and the orders that may be made further and subject to following terms and conditions :-

1. This CCA MS ROYAL CONSTRUCTION CO granted for the period from **29/11/2023 to 31/12/2027** and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	SAND MINING, CUBIC METER/ANNUM	240000	Cubic Meters/Year

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

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

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	0.50 KLD - SEPTIC TANK	Septic Tank	SEPTIC TANK

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

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

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

Industrial Effluent Quality Standard

S.No.	Parameter	Standard
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(iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality. In case of stoppage of functioning of STP, production has to be

stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

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

S No.	Parameters	Standards
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3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

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

Air Pollution Source Details

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
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Emission Quality Standards

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

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

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

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

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

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

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

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

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

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

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

compliance of this direction, your consent will be revoked by the Board.

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

General Conditions:-

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

Specific Conditions:-

1. This CTO is valid only for the SAND MINING-2,40,000/- CUBIC METER/ANNUM ("Ordinary Sand Mining" only on the riverbed of Yamuna River at Gata No.1/2, Area 9.570 ha in Village-ChhprauliKhadar, Tehsil - Baraut, District - Baghat, Uttar Pradesh).
2. The ground water shall be abstracted only after obtaining NOC from the UPGWD and submit the copy to the Board within a months failing which CTO shall be deemed automatically cancelled.
3. The industry must submit a proof of Bank Guarantee submitted in the Board, if not then submit the Bank Guarantee as per CTE issued to unit on 10.05.2023 as per specific condition no. 3 and 34 within a month, failing which CTO shall be deemed automatically cancelled.
4. The unit must comply the EC transfer permission granted by SEIAA,U.P. vide its letter dated- 24.02.2023.
5. Unit must submitted balance fee of Rs. 75,000/- in the Board within 15 days of issuing this certificate

6. Unit must submit replenishment study in the Board immediately otherwise CTO issued by the Board shall be deemed cancelled automatically.
7. Unit must comply the conditions of CTE issued by the Board on 10.05.2023 and send the compliance report with specific conditions within 15 days to the Board.
8. In case of any change in production capacity, process, raw materials use etc. the unit will have to intimate the Board. For any enhancement of the above, fresh Consent to Establish has to be obtained from U.P. Pollution Control Board.
9. Unit shall comply with various Waste Management Rules as notified by MoEF&CC i.e. Plastic Waste Management Rules, 2016, Solid Waste Management Rules, 2016, Hazardous and Other Wastes (Management and Transboundary) Rules, 2016, E-waste (Management) Rules, 2016, Construction and Demolition Waste Management Rules, 2016, and Battery Rules 2000.
10. Under the Noise Pollution (Regulation and Control) Rule 2000, the unit shall take adequate measures for control of noise from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(A) during day time and 70 dB(A).
11. The unit shall provide adequate arrangement for fighting the accidental leakages/discharge of any air pollutant/gas/liquid from the Residential Colony etc. which are likely to cause fire hazard including environmental pollution.
12. Unit shall submit first compliance report with respect to conditions imposed within 30 days of issue of this permission.
13. Unit shall comply with direction issued under Graded Response Action Plan (GRAP) time to time by Hon'ble Supreme Court & Commission for Air Quality Management in NCR and Adjoining Areas (CAQM).
14. Operation and maintenance of APCS shall be done in such a way that the emission generated from stacks is always within prescribed norms of the Board.
15. Unit shall comply with the CAQM (Commission for Air Quality Management in NCR and Adjoining Areas) direction no. 53 and 62 and other direction issued time to time regarding use of cleaner fuel.
16. Unit shall comply with the CAQM (Commission for Air Quality Management in NCR and Adjoining Areas) direction no. 55, 62 & 68 regarding DG sets.
17. The unit shall be monitored all sources of emissions from Boiler/Thermopack etc. after fuel conversion from Regional Laboratories, UPPCB on payment basis within a month. To ensure emissions parameters as per CAQM order.
18. The industry shall establish Miyawaki forest inside the factory in sufficient area the treated effluent from the STP shall be used for forestation.
19. Unit must comply the Guideline of Mining Sustainable Sand Management Guideline, 2016.
20. Industry shall abide by directions given by Hon'ble Supreme Court, High Court, National Green Tribunals, Central Pollution Control Board and Uttar Pradesh Pollution Control Board for protection and safeguard of environment from time to time.
21. Units CTO may be withdrawn anytime by the UPPCB in case of non compliance of any conditions or in the case of a verified complaint against the unit.
22. To control the dust emission proper size water sprinkler and dust arrester shall be installed and its operation will be essential during the process period.
23. In case of D.G. Set operation it will ensure that any type of emission will not be the cause of public nuisance and environmental deterioration. The Canopy and proper exhaust stack shall maintained according to resides and human settlement of nearby area.
24. The Board reserves the right to deemed cancel this CTO which is being granted to the said industry at any time in case if the industry is violating any of the conditions of the consent to establish.
25. In case of violation of above mentioned conditions or any public complaint the CTE shall be withdrawn in accordance with law.

26. Industry shall submit first compliance report with respect to conditions imposed within 30 days of issue of this permission.
27. Industry shall submit monitoring reports of all stacks and ambient air quality from a certified/approved laboratory under E.P. Act 1986 within a month of starting the commercial production in the plant.
28. Industry shall comply with various provisions of Air (Prevention and Control of Pollution) Act 1981 as amended, Water (Prevention and Control of Pollution) Act 1974 as amended and all other applicable rules notified under E.P. Act 1986.
29. The unit shall obtain prior consents in the event of any addition of new emission generation sources such as- Boiler/ Furnace/ Heaters/ D.G. Sets or alteration of existing emission sources in accordance with section- 21/22 of air Act 1981 (as amended respectively).
30. This CTO will automatically stand cancelled on receipt of any complaint in future and on confirmation of investigation in the course of the complaint and non compliance of the directions/orders passed by Hon'ble National Green Tribunal from time to time.
31. The mining work be done by the project proponent in such a way that the contour of the river is not changed.
32. Mining should not be done by the project proponent after sunset or at night.
33. Minimum 33% of the land on which unit is established will be covered by the plantation of tall trees of suitable species as per the guidelines set up by the Board vide its Office Order no.H16405/220/2018/02 dt. 16/02/2018. The copy of this guideline is available at URL http://www.uppcb.com/pdf/Green-Belt-Guidle_160218.pdf. Beside this, the unit will install 5 additional saplings within the campus with protection measures for ensuring their survival.
34. This Consent to Operate (CTO) order shall automatically become invalid on issuance of Closure Order by C.P.C.B / UPPCB and further on Revoking of Closure order, the Consent order shall become valid.

Chief Environmental Officer (Circle 3)

Copy to:

Regional Officer, U.P. Pollution Control Board, Meerut to ensure the compliance of the conditions imposed in the certificate.

Chief Environmental Officer (Circle 3)



मिशन LIFE - पर्यावरण के लिए जीवन शैली
(Lifestyle For Environment)
जनसहभागिता का सन्देश



- स्वच्छता – देशमेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबहुस आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन टोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेंकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेंकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई – वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइकलिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय - सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है - वह भी क्या व्यक्तिगत रूप से ? छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- धरेलू स्तर पर कम से कम टोस अपशिष्ट का उत्सर्जन करें और इनका प्रथाङ्गीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें - उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 - 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रेफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |



भारत 2023
GAIL BARRH - GDS PAPER - GDL 111002

संलग्नक-30
सेन्ट्रल माईनिंग एण्ड डिजाइन इन्स्टीट्यूट लिमिटेड
(बोर्ड ऑफ़ मिनरल रिजर्व्स लिमिटेड की अग्रगण्य कम्पनी / भारत सरकार का एक सार्वजनिक उद्योग)
भारत सरकार, नर्मदा रोड, राँची - 834 031, झारखंड (भारत)
Central Mine Planning & Design Institute Limited
(A Subsidiary of Coal India Limited / Govt. of India Public Sector Undertaking)
Bondwana Place, Kanke Road, Ranchi - 834 031, Jharkhand (INDIA)
CORPORATE IDENTITY NUMBER - U1342923ML975001001223

फैक्स/ई-ऑफिस/स्पीड डाक द्वारा

पत्रांक : सीएमपीडीआई/बीडीडी/C-1036/ E-760656/46 दिनांक : 30.12.2022

To,
District Magistrate (Bagpat)
District Magistrate Office
Collectorate
Bagpat-250609
Uttar Pradesh
Mobile No: 9454417562
Email: dmbag@nic.in

Subject: Regarding Sand Replacement Study of river present in Bagpat, U.P.-Reg. Submission of Report.

**Ref: i. Offer Letter No.CMPDI/B.D./A(003) OFFER/E-760656/I-14623, Dated 02.06.2022
ii. Your work order letter no: -1313, dated. 18.06.2022**

महोदय,

With reference to the above, enclosed please find herewith 03 (Three) copies of the report on " Sand Replacement Study of river present in Bagpat, U.P." pertaining to the subject assignment.

धन्यवाद एवं सदैव अपनी सर्वात्मन सेवाओं के आश्वासन सहित ।

Encl: As above

भव दी य,

महाप्रबन्धक,
(व्यवसाय विकास)

Copy to:

i. The Director, Directorate of Geology & Mining, Gov. of U.P., Lucknow, U.P.



Scientific Sand Replenishment Study Baghpat District

December, 2022

Prepared By
Central Mine Planning & Design Institute Limited



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Sand Mining

Sand Mining is a process of the actual removal of sand from the foreshore including rivers, streams and lakes. Sand is mined from beaches and inland dunes and dredged from river bed. The sand is dug up, the valuable minerals are separated in water by using their different density, and the remaining ordinary sand is re-deposited. River sand is vital for human well-being and for sustenance of rivers. River sand is one of the world's most plentiful resources (perhaps as much as 20% of the Earth's crust is sand) and has the ability to replenish itself. As a resource, sand by definition is 'a loose, incoherent mass of mineral materials and is a product of natural processes. These processes are the disintegration of rocks and corals under the influence of weathering and abrasion.

Sand has become a very important mineral for society due to its many uses mainly in infrastructural activities. Sand and gravel have long been used as aggregate for construction of roads and buildings. Today, the demand for these materials continues to rise. In India, the main source of sand is from river flood plain sand mining, in-stream mining, coastal sand mining, paleo channel sand mining, and sand mining from agricultural fields.

River sand mining is a common practice as habitation concentrates along the rivers and the mining locations are preferred near the markets or along the transportation route, for reducing the transportation cost. River sand mining can damage private and public properties as well as aquatic habitats. Excessive removal of sand may significantly distort the natural equilibrium of a stream channel. The role of sand is very vital with regards to the protection of the coastal environment. It acts as a buffer against strong tidal waves and storm surges by reducing their impacts as they reach the shoreline. Sand is also a habitat for crustacean species and other related marine organisms.

1.1 Impact of Sand Mining

Sand mining has many positive impacts on the economy and on the quality of life of people. However, if extracted in excess amount beyond the replenishment rate, it has

adverse and destructive impact, on the river system, making it unsustainable. The impacts of sand mining are as under:

A. Positive Impacts

Sand deposition eventually leads to reduction in conveyance capacity of river leading to flood in rivers. Proper dredging of sand keeps the bed at the desired level. Thus if dredging is not done, due to continuous deposition of sand, the depth of river may get reduced. This will result in flooding of water and loss of properties. It also facilitates the navigation in the channel. Sand is the main fine aggregate in concrete. Riverbeds are major sources of clean sand. There is a change in traditional housing of people in India and sand has become one of the essential material for construction.

B. Negative Impacts

Taking into consideration the places of occurrences of the adverse environmental impacts of river sand mining, Kitem and Rowan (1997) classified the impacts broadly into two categories namely off-site impacts and on-site impacts. The off-site impacts are, primarily, transport related, whereas, the on-site impacts are generally channel related. The on-site impacts are classified into excavation impacts and water supply impacts. The impacts associated with excavation are channel bed lowering, migration of excavated pits and undermining of structures, bank collapse, caving, bank erosion and valley widening and channel instability. The impacts on water supply are reduced ground water recharge to local aquifers, reduction in storage of water for people and livestock especially during drought periods, contamination of water by oil, gasoline and conflicts between miners and local communities. Many reports show that depletion of sand in the streambed and along coastal areas causes the deepening of rivers and estuaries, and the enlargement of river mouths and coastal inlets. It may also lead to saline-water intrusion from the nearby sea. Thus in-stream sand mining results in the destruction of aquatic and riparian habitat through large changes in the channel morphology. Impacts include bed degradation, bed coarsening, lowered water tables near the streambed, and channel instability.

It is well understood that mining changes the physical characteristics of the river basin, disturbs the closely linked flora and fauna, and alters the local hydrology, soil structure as well as the socio-economic condition of the basin. In general, it was reported that in-stream mining resulted in channel degradation and erosion, head cutting, increased turbidity, stream bank erosion etc. All these changes adversely

affect fish and other aquatic organisms either directly by damage to organisms or through habitat degradation or indirectly through disruption of foodweb.

Ministry of Environment, Forests & Climate Change (MoEF&CC), Government of India, in the *Sustainable Sand Mining Management Guidelines, 2016* has identified the following impacts on account of sand and gravel mining:

- i. Extraction of bed material in excess of replenishment by transport from upstream causes the bed to lower (degrade) upstream and downstream of the site of removal.
- ii. In-stream habitat is impacted by increase in river gradient, suspended load, sediment transport, sediment deposition. Excessive sediment deposition for replenishment increases turbidity which prevents penetration of light required for photosynthesis and reduces food availability of aquatic fauna.
- iii. Riparian habitat including vegetative cover on and adjacent to the river banks controls erosion, provide nutrient inputs into the stream and prevents intrusion of pollutants in the stream through runoff. Bank erosion and change of morphology of the river can destroy the riparian vegetative cover.
- iv. Bed degradation are responsible for channel shifting, causing loss of properties and degradation of landscape, it can also undermine bridge supports, pipe lines or other structures.
- v. Degradation may change the morphology of the river bed, which constitutes one aspect of the aquatic habitat.
- vi. Degradation can deplete the entire depth of gravelly bed material, exposing other substrates that may underlie the gravel, which could in turn affect the quality of aquatic habitat. Lowering of ground water table in the flood plain because of lowering of riverbed level as well as river water level takes place because of extraction and draining out of excessive ground water from the adjacent areas. So, if a floodplain aquifer drains to the stream, groundwater levels can be lowered as a result of bed degradation.
- vii. Lowering of the water table can destroy riparian vegetation.
- viii. Excessive pumping of ground water in the process of mining in abandoned channels depletes ground water causing scarcity of irrigation and drinking water. In extreme cases it may create ground fissures and subsidence in adjacent areas.

- ix. Flooding is reduced as bed elevations and flood heights decrease, reducing hazard for human occupancy of floodplains and the possibility of damage to engineering works.
- x. The supply of overbank sediments to floodplains is reduced as flood heights decrease.
- xi. Rapid bed degradation may induce bank collapse and erosion by increasing the heights of banks.
- xii. Polluting ground water by reducing the thickness of the filter material especially if mining is taking place at top of recharge fissures.
- xiii. Choking of filter materials for ingress of ground water from river by dumping of finer material, compaction of filter zone due to movement of heavy vehicles. It also reduces the permeability and porosity of the filter material.
- xiv. Removal of gravel from bars may cause downstream bars to erode if they subsequently receive less bed material than is carried downstream from them by fluvial transport.
- xv. Ecological effects on bird nesting, fish migration, angling, etc.
- xvi. Direct destruction from heavy equipment operation; discharges from equipment and refueling.
- xvii. Bio-security and pests.
- xviii. Impacts on coastal processes.

The other deleterious impacts of indiscrete mining include-

Loss of riparian habitat resulting from direct removal of vegetation along the stream bank to facilitate the use of a dragline or through the process of lowering the water table, bank undercutting, and channel incision.

The physical composition and stability of substrates are altered as a result of in-stream mining and most of these physical effects may exacerbate sediment entrainment in the channel.

1.2 Sustainable Sand Mining Guidelines - MoEF&CC

Sand is naturally occurring granular material composed of finely divided rock and



mineral particles between 150 micron to 4.75 mm in diameter. Sand is formed due to weathering of rocks due to mechanical forces. In the process the weathered rocks forms gravel and then to sand.

Sand and gravel together known as aggregate, represent the highest volume of raw material used on earth. The mining of aggregate has been continuing for many years. Now the mining of aggregates has reached a level threatening the environment and ecosystem besides also reaching a level of scarcity that would threaten the economy. It is recommended that sand & aggregate mining, and quarrying should be done only after sound scientific assessment and adopting best practices to limit the impact on the environment.

It is also felt that the greater use of substitute material (manufactured sand) & construction technology, and sustainable use of the resource could drastically reduce adverse impact of mining on the environment.

The Guidelines has been based on the following principles:

- Uncontrolled sand mining is not sustainable.
- Compliance with present and future legislation and regulations on the subject is mandatory and not voluntary.
- Each lease holder should be given the opportunity to self-regulate to the extent that it can demonstrate compliance with legislation and regulations.
- Where self-regulation fails to deliver compliance with legislation and regulations, increased formal enforcement and monitoring should be implemented with punitive measures applied in line with the legal framework.
- There is a need to protect the environment and the right of the population to live in clean and safe surroundings, with the need to use natural resources in a way that will make a positive and sustainable contribution to the economy.

The main objectives of the Guidelines are:

- To ensure that sand and gravel mining is done in environmentally sustainable and socially responsible manner.
- To ensure availability of adequate quantity of aggregate in sustainable manner.
- To apply river model studies in identifying the aggradations zones and quantities suitable for mining.
- To improve the effectiveness of monitoring of mining and transportation of mined



out material.

Ensure conservation of the river equilibrium and its natural environment by protection and restoration of the ecological system.

- Avoid aggradations at the downstream reach especially those with hydraulic structures such as jetties, water intakes etc.
- Ensure the rivers are protected from bank and bed erosion beyond its stable profile.
- No obstruction to the river flow, water transport and restoring the riparian rights and in-stream habitats.
- Avoid pollution of river water leading to water quality deterioration.
- To prevent depletion of ground water reserves due to excessive draining out of groundwater
 - To prevent ground water pollution by prohibiting sand mining on fissures where it works as filter prior to ground water recharge.
 - To maintain the river equilibrium with the application of sediment transport principles in determining the locations, period and quantity to be extracted.
 - Streamlining and simplifying the process for grant of environmental clearance (EC) for sustainable mining.

1.3 Approaches to Sustainable Sand and Gravel Mining:

Following considerations should be kept in mind for sand / gravel mining:

- Parts of the river reach that experience deposition or aggradations shall be identified first. The Lease holder/ Environmental Clearance holder may be allowed to extract the sand and gravel deposit in these locations to manage aggradations problem.
- The distance between sites for sand and gravel mining shall depend on the replenishment rate of the river. Sediment rating curve for the potential sites shall be developed and checked against the extracted volumes of sand and gravel.
- Sand and gravel may be extracted across the entire active channel during the dry season.
- Abandoned stream channels on terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. Stream should not be diverted to form inactive channel.
- Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river.
- Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.



Points of braided river system should be used preferably filling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.

Sand and gravel shall not be extracted within 200 to 500 meter from any crucial hydraulic structure such as pumping station, water intakes, and bridges. The exact distance should be ascertained by the local authorities based on local situation. The cross-section survey should cover a minimum distance of 1.0 km upstream and 1.0 km downstream of the potential reach for extraction. The sediment sampling should include the bed material and bed material load before, during and after extraction period. Develop a sediment rating curve at the upstream end of the potential reach using the surveyed cross-section. Using the historical or gauged flow rating curve, determine the suitable period of high flow that can replenish the extracted volume. Calculate the extraction volume based on the sediment rating curve and high flow period after determining the allowable mining depth.

- Sand and gravel could be extracted from the downstream of the sand bar at river bends.
- Retaining the upstream one to two thirds of the bar and riparian vegetation is accepted as a method to promote channel stability.
- Flood discharge capacity of the river could be maintained in areas where there are significant flood hazard to existing structures or infrastructure. Sand and gravel mining may be allowed to maintain the natural flow capacity based on surveyed cross-section history.
- Alternatively, off-channel or floodplain extraction is recommended to allow rivers to replenish the quantity taken out during mining.
- The Piedmont Zone (Bhabhar area) particularly in the Himalayan foothills, where riverbed material is mined, this sandy-gravelly track constitutes excellent conduits and holds the greater potential for ground water recharge. Mining in such areas should be preferred in locations selected away from the channel bank stretches.
- Mining depth should be restricted to 3 meter and distance from the bank should be 3 meter or 10 percent of the river width whichever less.
- The borrow area should preferably be located on the river side of the proposed embankment, because they get silted up in course of time. For low embankment less than 6 m in height, borrow area should not be selected within 25 m from the toe/heel of the embankment. In case of higher embankment the distance should not be less than 50 m. In order to obviate development of flow parallel to embankment, cross bars of width eight times the depth of borrow pits spaced 50 to 60 meters centre-to-centre should be left in the borrow pits.
- Demarcation of mining area with pillars and geo-referencing should be done prior to start of mining.

Chapter 2: Project Description

General

BAGHPAT district is situated in western corner of Uttar Pradesh state and falls under upper gangetic plains-western plains agro climatic zone. Hindon river forms eastern boundary while Yamuna river forms western boundary of the district.

Baghpat district falls under Meerut Division and Baghpat city is the administrative headquarters of the district. There are 03 Tehsils (Baghpat, Baraut&Khekhra), 06 blocks (Baghpat, Baraut, Binsuli, Chhaprauli, Khekhra&Pilana); 03 Municipal Corporations (Baghpat, Baraut&Khekhra)& 287 Villages in the district.

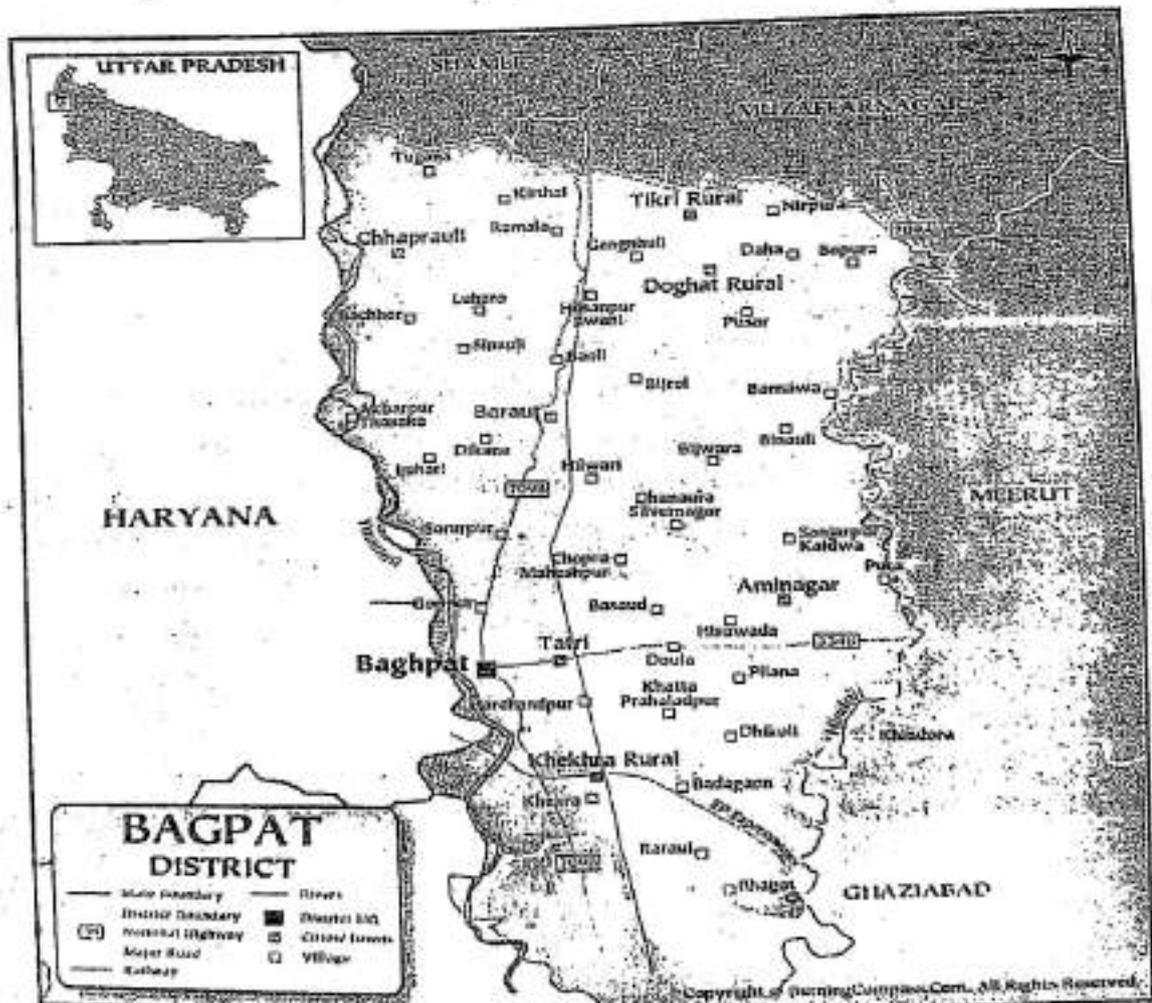


Figure 1: District Map of BAGHPAT

District Profile:

District BAGHPAT lies between Latitude 28° 47' 00" and 29° 18' 00" North and 77° 07' 30" and 77° 30' 00" East. The total geographic area of the districts is about 1333 Sq.Km.

To the north of the district are Shamli and Muzaffarnagar, to the east Meerut district to the south Ghaziabad & to the west across Yamuna river are Delhi, and Sonpat district of Haryana state.

Baghpat is one of the six districts of the Meerut division of Uttar Pradesh state. The district is having 05 Legislative Assembly seats (Vidhan Sabha) and 01 Parliamentary seat (Lok Sabha). As per the 2011 census the district has population of 13,03,048 of which male were 7,00,070 (53.7%) and female were 6,02,978 (46.3%). The sex ratio in the district is 861 females per 1000 males. The density of population in the district as per 2011 census is 881 per sq. km. Literacy rate of the district is 72.01%.

Sand and some minor minerals (Quartz, Feldspar mineral & Micaceous minerals and heavies) are available in Baghpat District. Sand is the main mineral available on the banks of the rivers Yamuna and Hindon. Sand is available which is used in construction. Minor minerals are used by the Public Work Department for road construction in and nearby districts. Baghpat district is drained by Yamuna, Hindon & Krishna rivers.

- 2 Climate Condition: The climate of the district is sub-humid and quite moderate. Summers are quite warm & May is the hottest month with mean daily maximum temperature 40°C to daily minimum temperature of 24.8°C. The maximum temperature may also as high as 48°C. Winters are quite cold with January is the coldest month with mean daily maximum temperature 20.6°C and mean daily minimum temperature 7.9°C. Winter period is from October/ November to February / March & summers are from April to June. Air is dry during the greater part of the year and April & May are usually driest months.
- 3 Rainfall & Humidity: Monsoon season prevails during mid June to mid September. The average rainfall during 2004-12 is 585.3 mm and normal annual rainfall for the period 1901-1970 is 615.4 mm. The mean monthly morning relative humidity is 67%. About 90% of the annual rainfall is received from south-west monsoon.
- 4 Topography & Terrain: The district forms a part of Yamuna - Hindon doab in Yamuna sub-basin

ic plain. It occupies part inter-fluvial belt of Ganga-Yamuna in the extreme western part of the state. The area presents an even topography with elevation of land surface from 218m to 233m above Mean Sea Level. The area shows gentle slope with general average gradient of 0.15m/km. The central part of the district exhibits slightly higher region which acts as a divider between Yamuna & Hindon rivers. The main eastern Yamuna canal is flowing along this divides from north to south.

Soil Types: The development of soils in the district can be attributed to differential erosional & depositional activities. Different morphological units have been bestowed with different types of soils. The soil ranges from pure sand to stiff clays and with combination of these are two extreme litho units. The pure sand is called bhur & clay is called matiyar. When the sand is mixed with clay in equal proportion the soil may be termed as domat or loam which is a good agricultural soil. Depending upon contents of sand and clay, there can be further classification of domat. The word kallar is used to denote the bold patches where nothing grows and may be infested with reh at patches. Alluvial soil occurring in flood plain of river is called kamp and yields good crop. Gauhan is highly manured soils and is restricted close to villages. The area is also marked by the development of ravines and bad land at places along the banks of Yamuna, Hindon & Krishna rivers. The ravenous soils are generally rich in iron (Fe) and aluminium (Al) contents.

- 5 **Water Course & Hydrology:** District Baghpat is underlain by thick fluvial sediments deposited by the river Yamuna and Hindon with right bank tributaries. Basically deposits belong to quaternary period and are floodplain deposits. The sediments are admixture of clay and sand of different grades. The district forms a part of Yamuna-Hindon doab in Yamuna sub-basin of indo-gangetic plain. It occupies part inter-fluvial belt of Ganga-Yamuna in the extreme western part of the state. The area presents an even topography with elevation of land surface from 218m to 233m above Mean Sea Level. The area shows gentle slope with general average gradient of 0.15m/km. The central part of the district exhibits slightly higher region which acts as a divider between Yamuna & Hindon rivers. The main eastern Yamuna canal is flowing along this divides from north to south. Geomorphologically, the area is divided into three broad geo-morphic units vis-à-vis older alluvial plain, older flood plain of Yamuna and Hindon rivers and the active flood plain of these rivers. Older alluvial plain is the oldest geo-morphic unit which covers about 80% of the district area. The older flood plain of Yamuna & Hindon rivers are limited to higher elevation zones and occur in narrow curvilinear, lenticular patches along the course of these rivers and are represented by either one or two terraces. The active flood plain is restricted to the present day active channels of the Yamuna, Hindon & Krishna rivers.

Quality:

Water in shallow aquifers, in general is potable and suitable for irrigation and industrial purposes. The electrical conductivity of ground water in phreatic zone ranges from 690 (Binauli block H/P) to 1430 $\mu\text{s}/\text{cm}$ at 25 °C (Pilana block H/P). The value of Fluoride content ranges from 0.04 (Pilana block H/P) to 1.85 mg/l (Baraut block H/P) and Nitrate value ranges from 0.1 mg/l (Khokra block H/P) to 90 mg/l (Bagpat block H/P). The Nitrate content $>45\text{mg}/\text{l}$ is also observed at Pilana block H/P at 65 mg/l. The high Nitrate content is most likely due to the use of fertilizers for agriculture and improper waste disposal. All other constituents viz. Th, Ca, Mg, Na, HCO_3 , SO_4 , K, Cl are within permissible limits. Ground water quality of deeper aquifer is also potable and suitable for irrigation and industrial purposes.

7 Ground Water Development:

The stage of ground water development in the district is 116.61%. This is quite high and calls for adoption of a careful strategy for further ground water development due to declining ground water trend. In canal command area, strategy of conjunctive use of surface and ground water needs to be adopted for future ground water development.

Keeping in view the negative availability of ground water resources in the district, over exploited category of ground water development for all blocks except only one block i.e. Baraut, that too falls in semi critical category and high overall stage of development for whole of the district, there is no feasibility for further ground water abstraction structures in the district.

8 Topography & Slope

The district forms a part of Yamuna-Hindon doab in Yamuna sub-basin of Indogangetic plain. It occupies part of interfluvial belt of Ganga-Yamuna in the extreme western part of the state. The area presents an even topography with elevation of land surface from 218 to 233m above mean sea level. The area shows a gentle slope with general average gradient 0.15m/km. The central part of the district exhibits slightly higher region which acts as water divide between rivers Yamuna and Hindon. The main eastern Yamuna canal is flowing along this, divide from north to south.

9 Drainage System

The total geographical area of the district is 13.33 lakh ha. The district of Bagpat is drained by river Yamuna and Hindon with their tributaries namely Daula Budhara, Tori, Kandhal etc. Average rain

is 585.3 mm. General climate of the district is sub-humid and is characterized by excess of air with an intensely hot summer and cold winter. In the district only 752 ha (constituting 7.15%) of net irrigated area of 105127 ha is irrigated by means of canals and 97597 ha (92.84%) is irrigated by tubewell.

Table 2.1: Drainage System with Description of main rivers

S. No.	Name of River	Length (km)	Area (sq. km)
1.	Yamuna River	1600	1.21 % of total area
2.	Hindon River	140	0.1% of total area
3.	Krishni/Karsani River	63	0.4% of total area

2.10 Description of Rivers

The main rivers running through the district are Yamuna and Hindon. A brief description of rivers of Baghpat district is provided below:

Yamuna River:

The River Yamuna is the largest tributary of River Ganga. The Yamuna River is one of the important and sacred rivers of India. It originates from the Yamunotri Glacier at a height of 6,387 meters on the south western slopes of Banderpooch peaks in the uppermost region of the Lower Himalaya in Uttarkashi, Uttarakhand State, and after travelling approximately a total length of 1,376 Kilometers through Uttarakhand, Himachal Pradesh, Delhi, Haryana and Uttar Pradesh finally meets with the river Ganges at Triveni Sangam, Prayagraj. The river is pre-dominantly snow fed and has a catchment area of approximately 7,083 square Kilometers and joins the Ganges at Sangam (25°25'25.75"N, 81°53'11.50"E) in Prayagraj District of U.P.

The Yamuna River is one of the important and sacred rivers of India. It is the largest tributary of the River Ganga. It originates from Yamunotri glacier in the Mussoorie range of the lower Himalaya, and after traversing 1,376 km joins the river Ganga at Allahabad. The drainage area of the Yamuna basin is 366,220 sq km, which comprises part of seven states, viz. Uttarakhand, Himachal Pradesh, Uttar Pradesh, Haryana, Delhi, Rajasthan and Madhya Pradesh. The Yamuna River has four main tributaries in the Himalayan region: Rishi Ganga, Hanuman Ganga, Tons, and Giri. In the plains, the main tributaries are the Hindon, Chambal, Sind, Betwa and Ken. The river water is generally used for irrigation, drinking and industries as well as for mass bathing, laundry, cattle bathing, and secretion of the cremation ash. The construction of diversion structures at regular intervals (Bachinikund, Wazirabad, Okhla, Gokul, etc.) for irrigation, domestic and industrial water supply, has largely modified the flow regime of the river. The inflow of

Water either treated or partially treated in the river further aggravates the water quality problem of the river. Though the green revolution was important for food security, but lack of regulation in the groundwater abstraction has led to ground water table depletion causes damage in causal linkage between surface and ground water, resulting change in surface water dynamics during the lean season of the river. This is the main reason of dry river segments observed between Hathnikund and Palla (Delhi).

Yamuna River enters in Baghpat at village Bodha and passes through 26 more villages namely, Tams, Nangal, Kuri, Dhaka, Badrakha, Kakar Khurd, Kakor Kalan, Shabga, Jaguas, Kutana, Kheri Pradhan, Kheralampur, Sultanpur, FaizpurNinhana, Nethala, Niwara, Baghpat, Pali, Katha, Nagla, Mawekalan, Sankraud, Nurpur Khalsa, Abdulpur and Subhanpur villages. The total length of Yamuna River in the district is approximately 60 Km.

Hindon River:

Hindon River, a tributary of Yamuna river, is a river in India that originates in the Saharanpur district, from the Shakumbhari devi range Upper Sivaliks in Uttar Pradesh. The river is entirely rainfed and has an approximate catchment area of 7,083 square kilometres (2,735 sq mi).

Hindon River enters Baghpat through Avelagarhi Reserve Forest and the last village through it exits from Baghpat District is Burampur Kalan its length in Baghpat District is around 75 kilometers.

Kali river, which originates in the Rajaji Range of Sivalik Hills and travels about 150 kilometres (93 mi) passing through Saharapur, Muzaffarnagar, Meerut and Baghpat districts, merges with Hindon River, before it merges with the Yamuna River. The Kali river is also highly polluted and adds to the pollution of the Hindon, as it passes through a populated and industrial belt of Uttar Pradesh.

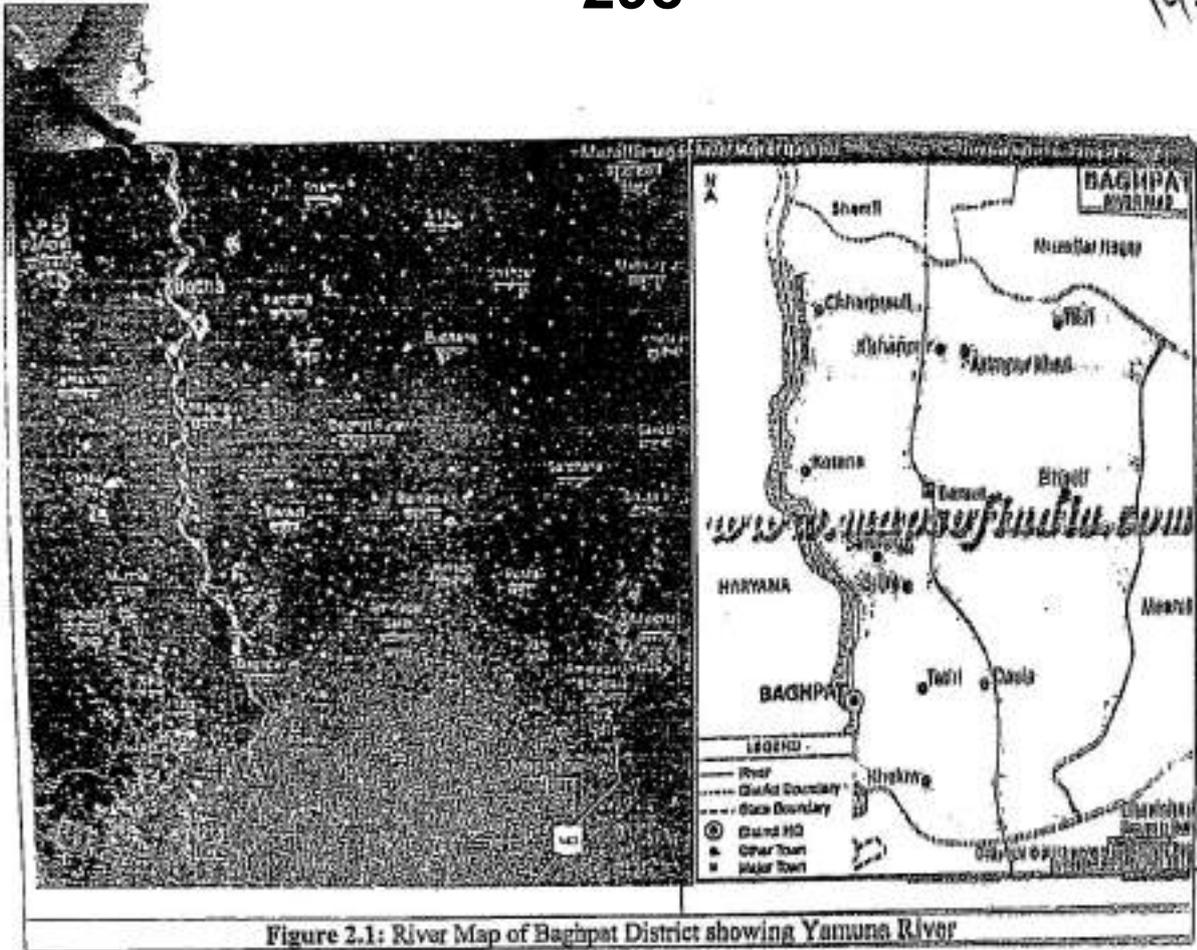


Figure 2.1: River Map of Baghpat District showing Yamuna River

GENERAL

As per Enforcement and Monitoring Guidelines for Sand Mining, 2022 the replenishment estimation is based on a theoretical empirical formula with the estimation of bedload transport comprising of analytical models to calculate the replenishment estimation. The iso-pluvial maps of IMD can be used for estimation of rainfall. Catchment yield is computed using different standard empirical formulas relevant to the geographical and channel attributes. eg. Strange's Monsoon runoff curves for runoff coefficient). Peak flood discharge for the study area can be calculated by using Dickens, Jarvis and Rational formula at 25, 50 and 100 years return period. The estimation of bed load transport using Ackers and White Equation or similar can be made. A simulation model is used with basic data generated from the field in the pre-study and post-study period (preferably pre-monsoon and post-monsoon) to estimate the volume of replenished material. The particle size distribution and bulk density of the deposited material are required to be assessed from a NABL recognized laboratory. Considering the bulk density and the volume, the estimation of replenishment in weight will be calculated after considering safeguards and stability of the slopes and riverine regime.

3.1 ESTIMATION OF SURFACE RUNOFF / RIVER FLOW

The importance of estimating the water availability from the available hydrological data for estimating the runoff is quite important for determination of replenishment. Many engineers in the past have developed empirical run off estimation formulae. These formulae are essentially rainfall-runoff relations with additional third or fourth parameters to account for climatic or catchment characteristics. Some of the empirical formulae used in various parts of India are as under:

❖ Binnie's Percentages

Sir Alexander Binnie measures the runoff from a small catchment near Nagpur (area of 16 km²) during 1869 and 1872 and developed curves of cumulative runoff against cumulative rainfall. The two curves are found to be similar. From these, he established percentage of runoff from the rainfall data. These percentages have been used in Madhya Pradesh and Vidarbha Region of Maharashtra for the estimation of yield.

Serial no.	Average annual rainfall in the catchment (mm)	Runoff % of annual rainfall
1	500	15
2	600	21
3	700	25
4	800	29
5	900	34
6	1000	38
7	1100	40

❖ Barlow's Tables

Barlow, the first Chief Engineer of the Hydro-electric Survey of India (1915), on the basis of his study in small catchments (area=130 km²) in Uttar Pradesh expressed runoff R as:

$$R = K_b P$$

Where K_b is the runoff coefficient which depends upon the type of catchment and nature of monsoon and P is the rainfall.

Table-3.1: Barlow's Runoff coefficient K_b in percentage (Developed for use in UP) Class

Class	Description of catchment	Value of K_b (Percentage)		
		Season I	Season II	Season III
A	Flat, cultivated and absorbent soils	7	10	15
B	Flat, partly cultivated and stiff soils	12	15	18
C	Average catchment	16	20	22
D	Hills and plains with little cultivation	28	35	40
E	Very hilly, steep and hardly any cultivation	36	45	51

Season I: Light rain, no heavy downpour

Season II: Average or varying rainfall, no continuous downpour

Season III: Continuous downpour

❖ Strange's Tables

Strange (1928) studies the available data on rainfall and runoff on the border areas of present day Maharashtra and Karnataka and obtained the values of runoff coefficient as,

$$K_s = R/P$$

as a function of the catchment character. For purpose of calculating the yield from the total monsoon rainfall, the catchments were characterized as "good", "average" and "bad". Value of the K_s for these catchments is shown in Table-3.2. Strange also gave a table for calculating the daily

daily rainfall. In this, the run-off coefficient depends not only on the amount of rainfall but also on the state of the ground. Three categories of the original ground state as "dry", "damp" and "wet" are used by him.

Table-3.2: Extract of Strange's table of Run-off Co-efficient Ks in percent

Total monsoon rainfall (cm)	Run-off Co-efficient Ks in percent		
	Good catchment	Average catchment	Bad catchment
25	4.3	3.2	2.1
50	15.0	11.3	7.5
75	26.3	19.7	13.1
100	37.5	28.0	18.7
125	47.6	35.7	23.8
150	58.9	44.1	29.4

Inglis and De'Souza Formula:

As a result of careful stream gauging in 53 sites in Western India, Inglis and De'Souza (1929) evolved two regional formulae between annual runoff R in cm and annual rainfall P in cm as follows:

For Ghat regions of western India, $R = 0.85 P - 30.5$

For Deccan plateau, $R = (1/254) P \cdot (P - 17.8)$

Khosla formula

Khosla (1960) analyzed the rainfall, runoff and temperature data for various catchment in India and USA to arrive at an empirical relationship between runoff and rainfall. The time period is taken as a month. His relationship for monthly runoff is

$$R_m = P_m - L_m$$

And $L_m = 0.48 T_m$ for $T_m > 4.50^\circ\text{C}$

where R_m = monthly runoff in cm

$R_m \geq 0$ P_m = monthly rainfall in cm

L_m = monthly losses in cm

T_m = Mean monthly temperature of the catchment in $^\circ\text{C}$

For $T_m \leq 4.50^\circ\text{C}$, the loss L_m may provisionally be assumed as:

T oC	4.5	-1	-6.5
Lm (cm)	2.17	1.78	1.52

$$\text{Annual run-off} = \Sigma R_m$$

Khosi's formula is indirectly based on the water balance concept and the mean monthly catchment temperature is used to reflect the losses due to evapotranspiration. The formula has been tested on a number of catchments in India and is found to give fairly good results for the annual yield for use in preliminary studies. This formula can also be used to generate synthetic run-off data from historical rainfall and temperature data.

All the above empirical formulae have been developed for a particular region of India and have their own limitations. For the present study, the area of the watershed for the river has been estimated using remote sensing satellite data. This estimation has also helped in determining the river parameters and soil erosion from the catchment area.

Computing Run-off by using Run-off Coefficient

The volume of run-off can be directly computed approximately, by using an equation of the form; $Q = K.P$

Where Q = Run-off, P = Precipitation, and

K = is a constant, depending upon imperviousness of the drainage area.

Various values of K , which are commonly used, are shown in Table-3.3 below.

Table-3.3: Values of Run-off Coefficient K

Type of Area	Flat areas (0-5% slope)	Moderately Sloped areas (5-10% slope)	Highly Sloped (10% slope)
1. (a) Urban areas			
30% area impervious (paved)	0.40	0.30	--
50% area impervious (paved)	0.55	0.65	--
70% area impervious (paved)	0.65	0.80	--
(b) Single-family residence in urban areas	0.30		
2 Cultivated areas			
Open sandy loam	0.30	0.40	0.52
Clay and silt loam	0.50	0.60	0.72
Tight clay	0.60	0.70	0.82
3 Pastures			
Open sandy loam	0.10	0.16	0.22
Clay and silt loam	0.30	0.36	0.42
Tight clay	0.40	0.55	0.60
4 Wooded land or Forested Areas			
Open sandy loam	0.10	0.25	0.30
Clay and silt loam	0.30	0.35	0.40
Tight clay	0.40	0.55	0.60

(Source: Irrigation Engineering & Hydraulic Structures by S.K. Garg)

The transport of sediment by rivers has been studied extensively by engineers and earth scientists for more than a century. The use of Bed load transport is a famous one for this analytical type of approach. The first bed load equation was developed by Du Boys in 1879. Since then, several equations have been proposed for the prediction of bed load transport. One of the major models among them was Meyer-Peters and Muller model (1948) which is still being held good for the prediction of bed load transport. The other models include Schoklitsch model (1962), Channing model (1939) and Shamove (1962). Each model fits into different scenarios. Bagnold (1980), Parker et al. (1982) were the major works carried out for the Meyer-Peter equations giving an empirical correlation of bed load transport rates in flumes and natural rivers. There were different reported studies which use the same model in different types of rivers. Dietrich and Smith (1984) studied the behavior of bed load transport in meandering river.

Another scientist Bathurst and Graf (1987) developed a bed load discharge equation for steep mountain rivers which are appropriate for coarse sediment. Carson and Griffiths (1987) had given a review on the behavior of the bed load transport in gravel channels. Meade et al. (1990) has made a detailed study on movement and storage of sediment of the rivers of United States and Canada. Parker (1990) made a study of bed load transport of Gravel Rivers. The study indicates that the bed load transport rate of mixtures should be based on the availability of each size range in the surface layer. Parker (1991) put forward a theory on selective sorting and abrasion of river gravel.

Recent studies on bed load transport incorporated the stochastic nature of the river sand inflow. Habib et al. (1994) developed a new formulation for estimation of bed load transport. Zhilin Sun and Donahue (2000) developed a statistical based bed load formula for non-uniform sediment. Maarten Klienans and Rijn (2002) introduced another stochastic model for bed load transport prediction. Nian-Sheng Cheng (2002) developed another exponential formula for the bed load transport which does not involve the concept of critical shear stress. Jaber Almedj and Biplas (2003) worked on bed load transport in gravel bed streams with uni-modal sediment. Strain et al. (2004) studied about the cluster formation and evolution by tackling the aspects associated with micro-topography and the bed load transport. Yantao and Parker (2005) presented a new numerical model for the simulation of gravel bed load transport and pulse evolution in Mountain Rivers.

The study of Darren et al. (2005) is an important one in the model study of bed load transport, which gave more attention and increases the applicability of Meyer-Peter's equation. Hyung et al. (2008) reported a study on sediment transport processes over a sand bank in narrow tidal channels.

as follow.

$$Q(T) = Q \cdot X$$

paper suggests that instream sand mining is the major responsible factor for the significant changes in the natural system of the upper, middle, and lower courses. Intense mining plays a significant role through the fluctuation in the flow and sediment regimen to change the nature of sediment loads (suspension and bedload).

D.Padmala and K.Maya, (2014) "River sand auditing". This chapter deals with the various procedures employed in sand auditing of the small rivers of Kerala (southwest India), taking the case of Periyar river an example. More specifically, this exercise has to be carried out to know how the mining processes and its execution would minimize the negative effects of sand mining on one hand and maximize positive effects on the other. The sand audit methodology developed and adapted by Padmalal et al. (2010) for the Manimala river draining into the Vombanad lagoon in the southwest coast of India has three major components.

Component I: Resource estimation

Component II: Resource allocation

Component III: Performance evaluation of sand mining.

Resource Allocation

The steps to be adopted for this purpose are described below:

Let 'X' be the total quantity of mineable sand in million cubic meters (Mm³), 'Y' the annual replenishment of river sand in Mm³, and 'N' the time span in years during which mining of river sand can be permitted in the entire river or that part of the river under examination.

Quantity of mineable sand in a year (Q_m) can be estimated as

$$Q_m = (X/N) + Y$$

Note 'N' should be fixed only after taking into account the physical, chemical and biological status of the river environment by the expert group. 'Y' can be calculated by subtracting quantity of sand output (Q_o) from the quantity of sand input (Q_i).

Performance Evaluation/Sand Resource Accounting

Assume that sand mining is uniform throughout the river stretch or riverbed in being leveled after every peak flow season (monsoon). Then,

$$\text{Quantity of sand mining, } Q_m = (Q_i - Q_o) + Q_o$$

the quantity of sand mined from the deposit other than natural replenishment in the river under investigation

$$Q_c = Q_m - (Q_i - Q_o)$$

Mining of Q_c from the rivers will be reflected in the seasonal cross-profile measurements as channel incision/riverbed lowering. The expected riverbed lowering (T_e) due to mining of Q_c from the river segment under examination can be calculated as

$$T_e = Q_c / LW$$

Apply the value of Q_c in Eq. $T_e = (Q_m - (Q_i - Q_o)) / LW$

Ideally, the computed T_e will be equal to the actual riverbed lowering (T_a) obtained from river cross-profile measurements, provided there is no unauthorized mining in the river stretch. In other words, a situation in which $T_a > T_e$ indicates prevalence of unauthorized mining in the stretch, the quantity of which (i.e., Q_{um}) can be calculated as:

$$Q_{um} = LWT_a - Q_m$$

Q_i quantity of sand input into the river/river segment under examination, Q_o quantity of sand output from the river/river segment, L length of the channel occupied by sand, W width of the channel occupied by sand, T_a actual river bed lowering.

Bingy Aliya Mattamana et al.(2013) "River Sand Inflow Assessment and Optimal Sand Mining Policy Development". This paper examines the determination of sand inflow in different stretches of the Periyar River and thereby optimizing the sand removal by considering several socio-economic and topographical features. In this study for the determination of sand inflow, Mayer-Peter's Formula is used, which is an analytical method for estimation of Bed Load Transport model. The paper describes about certain uncertainties in determining the actual bed load, for which some assumptions are made like, during the Monsoon season, the velocity of flow is high with turbulence and is observed around 0.6m/s which tend to more scouring than deposition. Hence the deposition is comparatively low. So, the study assumed that 70% of the sand transported is deposited during high flow period.

The paper suggests that there is seasonal variation of sand inflow and monsoon period shows more sand inflow than summer.

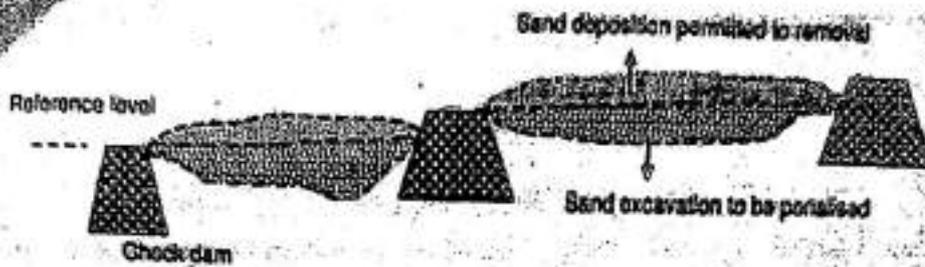


Fig No:3.1 River Cross section with Check Dams and Bench Mark

The major recommendation of this project study was to build check dams at regular intervals of each stretch of the river, thus helps to determine a specific reference line for the bed profile. The sand deposition above this check dam can be permitted for sand mining. And the local authorities should take the responsibility of maintenance of this reference line strictly and should be penalized for sand mining below this check dam or reference line.

3.3 METHODOLOGY FOR ESTIMATION OF SEDIMENT LOAD

The scientific solution for the crisis of sand mining needs an optimization of sand removal. Knowledge of sand inflow is the key part of determination of optimal sand removal. To determine this sand inflow an analytical study is carried out by using bed load transport model. The bed load transport can be estimated using different analytical model such as Meyer-Peter's, Einstein's Model, Shield's Formula, Du-Boy's Formula etc. However, in the present study, the most scientifically accepted Meyer-Peter's equation for estimation of bed load transport was used.

- ❖ *At first*, preliminary study with field data collection was done. The grain size analysis i.e. d_{16} , d_{50} , d_{84} and d_{60} , uniformity coefficient and coefficient of curvature was also determined as an input for estimation of bajri/sand replenishment of rivers under study.
- ❖ Digital survey by drone has been carried out for the study of replenishment of sand/bajri.
- ❖ *Further*, the study also incorporates the use of analytical model study of bed load transport from the rivers flowing through the mining lease area. The data for this study was taken from field survey, and approved mine plan of lease

Meyer-Peter's equation:

The present study used the Meyer-Peter's model for the estimation of bed load transport. It has wide acceptance and simplicity in computation. Models give reliable estimates for wide channels like canals. But the present study is considered with river body, in which the Meyer-Peter's equation is relevant.

Meyer-Peter's equation is based on experimental work carried out at Federal Institute of Technology, Zurich. Meyer-Peter gave a dimensionless equation based, for the first time, on rational basis. The simplified Meyer Peter's equation (Source: Irrigation Engineering & Hydraulic Structures by S.K. Garg) is as follows:

$$g_b = 0.417 [\tau_0 (\eta' / \eta)^{1.5} - \tau_c]^{1.5}$$

Where,

g_b = Rate of bed load transport (by weight) in N per m width of channel per second

η' = Manning's coefficient pertaining to grain size on an unrippled bed and Strickler formula

i.e. $\eta' = (1/24) \times d^{1/6}$ where d is the median size (d_{50}) of the bed sediment in m.

η = The actual observed value of the *roughness coefficient* on rippled channels. Its value is generally taken as 0.020 for discharges of more than 11 cumecs, and 0.0225 for lower discharges.

τ_c = Critical shear stress required to move the grain in N/m² and given by equation

$\tau_c = 0.687 d_a$, where d_a is mean or average size of the sediment in mm. This arithmetic average size is usually found to vary between d_{50} and d_{60} .

τ_0 = Unit tractive force produced by flowing water i.e. $\gamma_w R S$. Truly speaking, its value should be taken as the unit tractive force produced by the flowing water on bed = $0.97 \gamma_w R S$. R is the hydraulic mean depth of the channel (depth of flow for wider channel) and S is the bed slope.

The value of Manning's coefficient (η) depends upon channel condition and also upon discharges. The recommended values are provided in Table-3.3 and Table-3.4.

Table-3.4: Recommended values of Manning's coefficient (η) for unlined channels

Sl. No.	Condition of Channel	Value of η
1	Very good	0.0225
2	Good	0.025
3	Indifferent	0.0275

4	Poor	0.030
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Central Board of Irrigation has recommended the following values of η for different discharges:

Table-3.5: Recommended values of Manning's coefficient (η) for Different Discharge

Sl. No.	Discharge in Cumecs	Value of η
1	14 to 140	0.025
2	140 to 280	0.0225
3	280 and above	0.020

❖ Universal Soil Erosion Equation:

Soil Erosion Equation is defined as, $A = KR(LS)C$

Where, A = Estimate of soil loss rate in tons/hectare/year

K = Soil erodibility factor

R = Rainfall factor LS = Slope factor

C = Crop management factor

This will help us to determine the soil loss from the catchment area that finds place in the

river.

General:

Replenishment Rate is the rate at which Bajri is transported into the river channel, which is under examination or subjected to sand extraction. This volume is often considered as sustainable yield of that river. Estimation of Bajri discharge through stream bed and its residence period (temporary deposition) is one of the most difficult task in sediment budgeting. It is axiomatic that during high flow period, Bajri which is otherwise moved by siltation (i.e., partially suspension and partially bed load) will completely be in suspension in the overlying waters.

Estimation of annual sediment yield produced from a rainfall event requires applying many approaches to get acceptable and valid results. These approaches require quantitative estimation of the transported sediment volumes resulting from a rainfall event. There are many sediment transport equations which are suitable for use in the prediction of the replenishment rate of rivers/ watershed. The present study used the Meyer-Peterson's model for the estimation of bed load transport because of its wide acceptance and simplicity in computation.

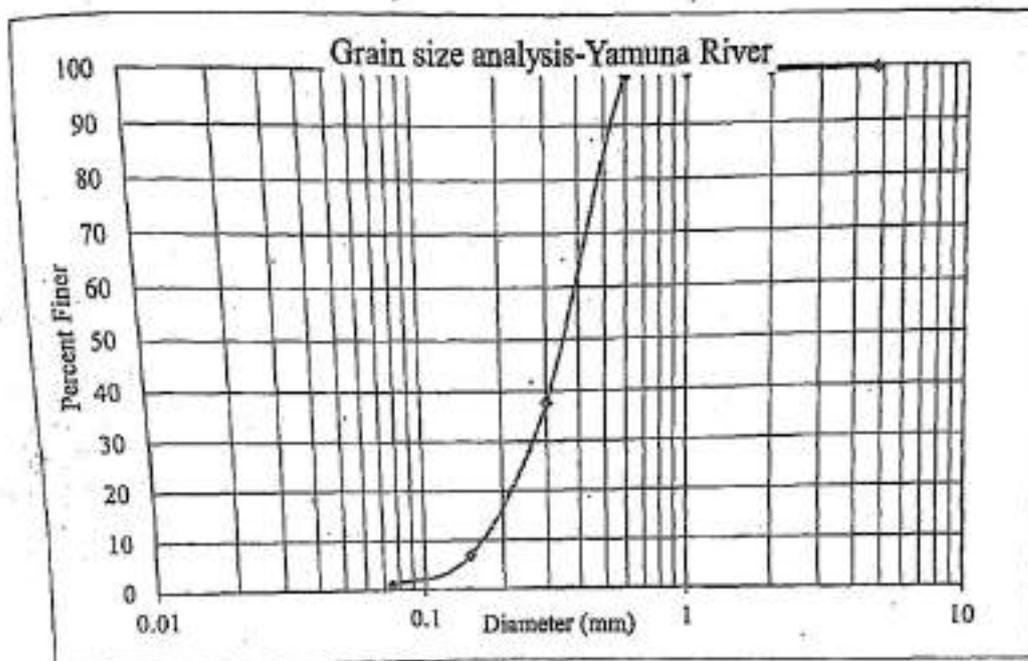
4.1 Grain Size Data Analysis:

During the surveying phase and site reconnaissance sand samples of the three rivers were collected. Sieve analysis was carried out on the sand sample for determination of their classification and coefficient of uniformity and curvature.

1000 gm of oven dried sand sample from 3 rivers was taken in the sieve analysis. Sieves as per IS standards (sieve 4.75mm, 2 mm, 1mm, 600 μ , 425 μ , 300 μ , 212 μ , 150 μ , 75 μ) were used for the test. The sieves were arranged such that at top 4.75mm, 2 mm, 1mm, 600 μ , 425 μ , 300 μ , 212 μ , 150 μ , 75 μ at bottom and last Pan. The sieve set was placed on the mechanical shaker and shake vigorously for at least 2 minutes. Then the weight of aggregate retained on each sieve was measured and expressed it as the percentage of passing. Plots were made for percentage finer and sieve size and the summary of the results is given below.

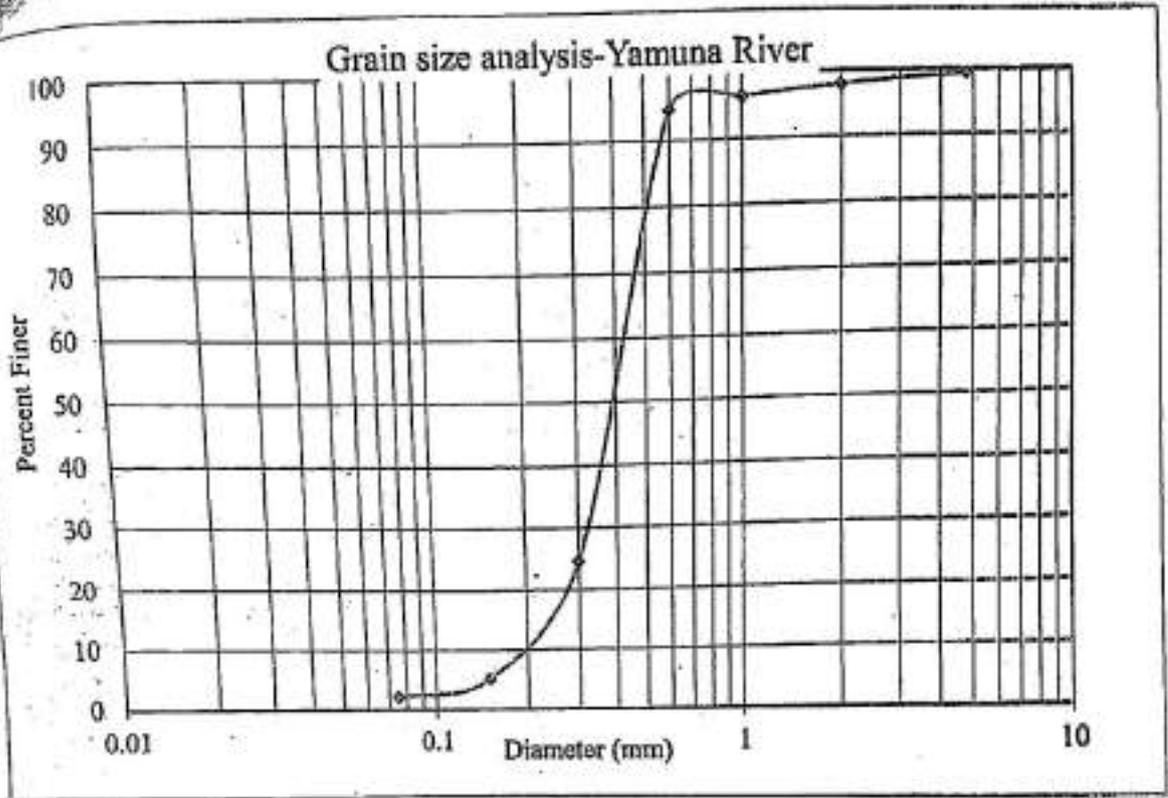
Figure 4.1: Grain Size Analysis at CMPDIL Lab, HQ, Ranchi

Grain size analysis - Yamuna River (Chaprauli Khadar Sand Mine)



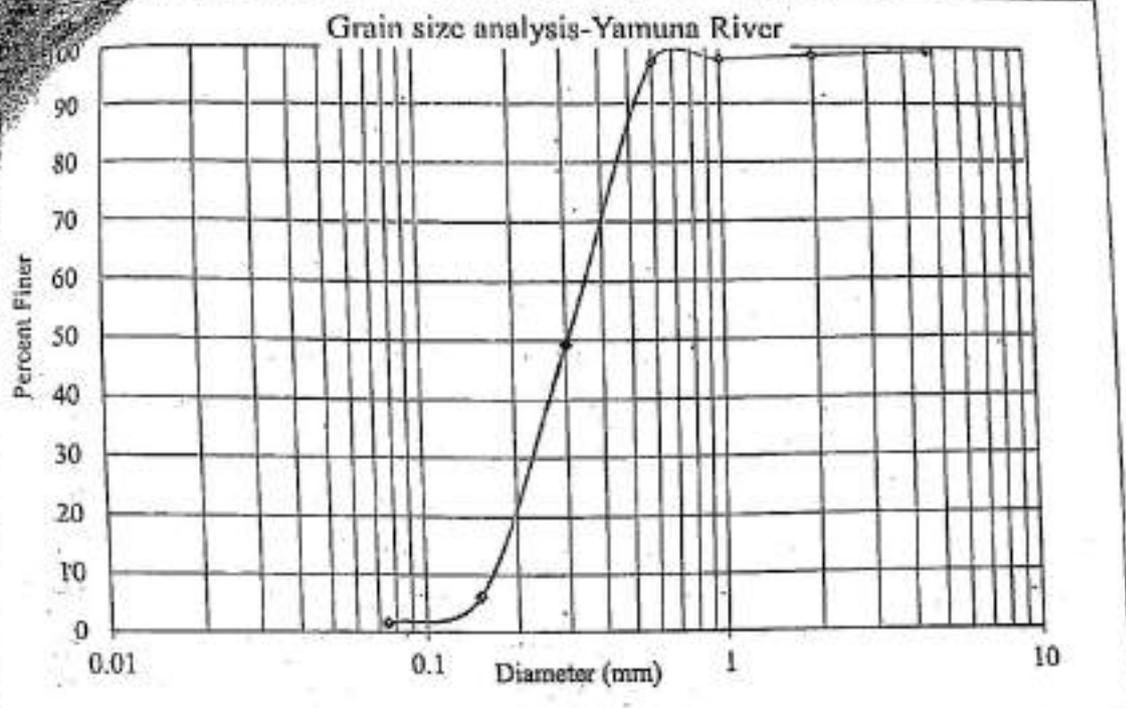
Gravel (%)	0.00
Sand (%)	99.10
Silt+Clay (%)	0.60
D ₆₀	0.39mm
D ₅₀	0.35mm
D ₃₀	0.27mm
D ₁₀	0.17mm
C _u	2.29
C _c	1.10
Class	SP
Remark	Poorly Graded Sand

Grain size analysis - Yamuna River (Kotana Sand Mine)



Gravel (%)	0.00
Sand (%)	98.00
Silt+Clay (%)	1.60
D ₆₀	0.43mm
D ₅₀	0.39mm
D ₃₀	0.33mm
D ₁₀	0.2mm
C _u	2.15
C _c	1.27
Class	SP
Remark	Poorly Graded Sand

analysis - Yamuna River Gouripur Sand Mine)



Gravel (%)	---
Sand (%)	98.50
Silt+Clay (%)	1.20
D ₁₀	0.35mm
D ₅₀	0.30mm
D ₇₀	0.23mm
D ₁₀₀	0.17mm
C _u	2.06
C _c	0.89
Class	SP
Remark	Poorly Graded Sand

DRONE SURVEY DETAILS:

Photogrammetry is a process by which information is extracted from photographs to create accurate three-dimensional maps and models. Drone based photogrammetry is a modern state of the art technology for generation of Ortho-photomosaic, Digital Terrain Model (DTM), Point Cloud Data and Contours. The photos are timed with a percentage of overlap so that they can be stitched together for a continuous image map containing digital information.

Reconnaissance survey must be carried out to rectify the location values by arranging ground control points (GCPs) appropriately to improve the accuracy of UAV-based 3D topographic maps of the sites. Accordingly, GCPs of suitable size, which are visible from flying Drone, are placed/ marked on the ground. For the survey, Post Processed Kinematic (PPK)-enabled Drones are used, which reduces the requirement of placing GCPs.

Differential Global Positioning System (DGPS) survey is done on each GCP wrt base station for which one unit of DGPS is kept stationary at base station and rover unit of DGPS is kept at each GCP, one by one for at least 10 minutes. Then the photographs from the drone mounted camera are taken with sufficient overlap, longitudinally as well as laterally.

After field survey work, data of DGPS as well as drone-based camera are downloaded and processed in their respective software. Coordinates of GCPs are utilized for geo-tagging and geo-referencing of the photographs/ Orthophoto mosaic. DTM is prepared in the software. Above procedure is done in pre-monsoon and post-monsoon period respectively and corresponding DTM are prepared. With the help of data processing software, the volume computation/replenishment quantity is estimated.

4.3 Field Observation:

CMPDIL team has conducted quick reconnaissance survey with senior experts from Environment, Civil and Mining background followed by detailed DGPS survey for measurement of RL in the selected mines. The sand/bajri sample were collected from the field and river water samples were also collected from the sites. Uniformity coefficient (Cu) and coefficient of curvature (Cc) was also determined as input for estimation of bajri/sand replenishment of rivers.

Estimation of mineral resources:

Pre-monsoon resources have been calculated based on RL of first survey which was conducted during the month of July, 2022. The post monsoon RL measurement was conducted in the month of November 2022.

The replenishment rate has been determined at the studied sites by differences of RL between the pre-monsoon and post monsoon survey determined through DGPS/Dro survey in Pre-monsoon and post-monsoon seasons over the area of consideration. The total sand stock/resource available has been determined based on 0.3m above the water level pre-monsoon survey and the average RL of Post-monsoon survey.

The estimated resources as on the date of survey are tabulated in 4.1 and 4.2

Details of volume Assessment after Post Monsoon Survey:

S. No.	Ghat Name	Area of Patch surveyed in Mine Lease Area (Ha)	Volume of Sand(cum.) Replenished (Approx.)	River
1	Chaprauli Khadar	9.67	189524	Yamuna
2	Kotana Khadar	17.31	274316	
3	Gauripur Khadar	18.47	230214	
4	Sankround	22.05	221857	

Note: The amount of replenishment is calculated based on the average representative RLs determined through Drone survey in Pre-monsoon and post-monsoon seasons over the area of consideration.

Table 4.2: Estimated Volume of sand in 04 leases of Baghpat district for season ending 2022:

SLNo.	Name of Mine lease	Mine Area(Ha)	Total Replenishment (CuM.)	Resource available at Pre-Monsoon (CuM.)	Total resource (CuM.)
1	Chaprauli Khadar	9.570	187564	50922	238486
2	Kotana Khadar	12.245	194050	44133	238183
3	Gauripur Khadar	14.022	174773	98034	272807
4	Sankround	7.00	70431	75789	146220

Chapter 5: Summary and Conclusion

Summary and recommendations

In order to determine the sand replenished in Yamuna river of Baghpat District, measurement of river bed level at strategic locations were undertaken both pre-monsoon and post-monsoon level. The sand samples were collected for grain size distribution analysis.

The survey provides the records of the RL at identified places that will work as base level for further observation and analysis for determining the amount of sand replenished during the upcoming monsoon season.

The determination of amount of sand deposited has been worked out based on the difference between pre-monsoon and post monsoon RL and river level recorded in the area.

The summary of DGPS survey is as mentioned below:

- a) Highest sand replenishment occurred in river Yamuna in Kotana Khadar mine with 194050 Cum.
- b) Lowest sand replenishment occurred in river Yamuna in Sankround mine with 70431Cum.

महोदय,

सादर अवगत कराना है कि ग्राम छपरौली खादर के गाटा संख्या 1/2 रकबा 9.570 है0 रॉयल कंस्ट्रक्शन कम्पनी देवीपुरा-2, बुलन्दशहर-203001 प्रो0 श्री दयाचन्द बरगौती पुत्र श्री हरस्वरूप निवासी मं0नं0 5 नई ब्रेक पॉइंट भूर चौराहा के पास यमुनापुरम, बुलन्दशहर के पक्ष में दिनांक 25.10.2023 से 24.10.2028 तक स्वीकृत है।

उक्त खनन क्षेत्र के संबंध में वित्तीय वर्ष 2023-24 एवं 2024-25 में साधारण बालू की खनन एवं परिवहन की गयी मात्रा निम्नवत् है-

अवधि	साधारण बालू की मात्रा (घनमीटर में)
25.10.2023 से 31.10.2023	0
01.11.2023 से 30.11.2023	154
01.12.2023 से 31.12.2023	21516
01.01.2024 से 31.01.2024	21470
01.02.2024 से 29.02.2024	23527
01.03.2024 से 31.03.2024	21263
01.04.2024 से 30.04.2024	16543
01.05.2024 से 31.05.2024	29805
01.06.2024 से 30.06.2024	19301
01.10.2024 से 31.10.2024	3328
01.11.2024 से 30.11.2024	16629
01.12.2024 से 12.12.2024	5599

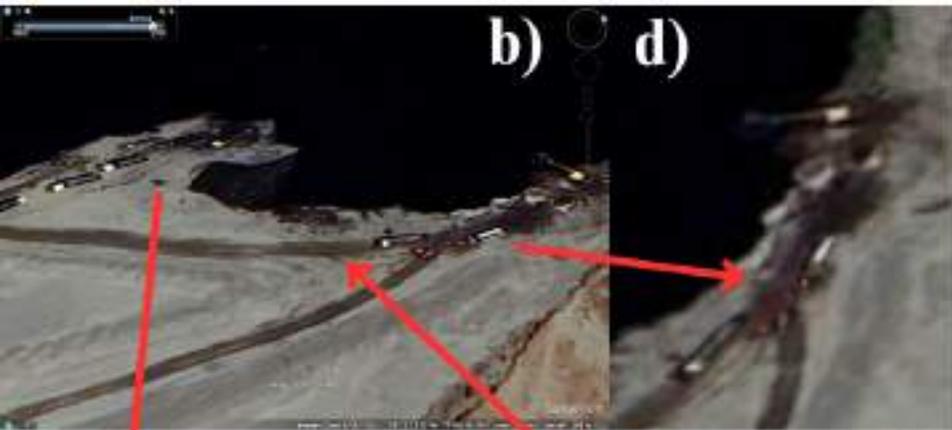
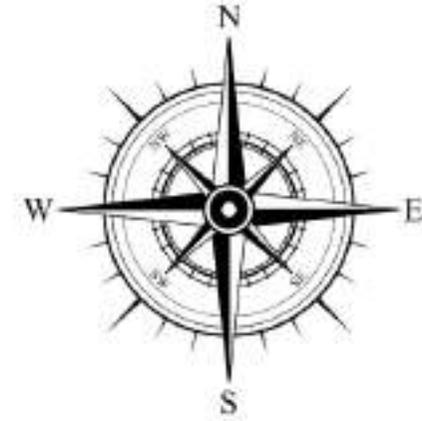
नोट:- उक्त खनन पट्टी मा0 राष्ट्रीय हरित न्यायाधिकरण, नई दिल्ली द्वारा ओ0ए0 1190 / 2024 में पारित आदेश दिनांक 10.12.2024 के अनुपालन में दिनांक 12.12.2024 से खनन कार्य बन्द है।


खान निरीक्षक,
बागपत।

319
Image Date: June 18, 2024

Source: Airbus

Annexure-I



a) Shows the mining lease area covered between pt1 - pt4
b) Illegal Mining Outside Lease Area
c) Visible Trucks
d) Visible Trucks and Earth Moving Machinery

a)

1985

Imagery Date: 6/18/2024 29°13'24.26" N 77°08'21.54" E elev: 244 m eye alt: 656 m

320
Image date: 18/06/2024

11/25/2023 8:10:00 pm
8:10:00 pm 8:10:00 pm
Yamuna River

4

3

2

1

3

2

Area: 9.60 ha

1





भूतत्व एवं खनिकर्म निदेशालय उत्तर प्रदेश

DIRECTORATE OF GEOLOGY AND MINING UTTAR PRADESH

Number Of eMM11 Generated

Enter eMM11 Generated Date:-

from:-

18/06/2024

to:-

18/06/2024

Submit

Total eMM11 Quantity(FromDate to ToDate):-

578

[Back](#)

Sr.No	Name of Lessee	Father Name	Lessee Id	eMM11 Number	eMM11 Generated Date/Time	eMM11 Validity Date/Time
1	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210225	18/06/2024 04:33:24	18/06/2024 11:38:24
2	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210226	18/06/2024 04:37:33	18/06/2024 11:42:33
3	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210227	18/06/2024 04:51:26	18/06/2024 11:56:26
4	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210228	18/06/2024 04:59:51	18/06/2024 12:04:51
5	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210229	18/06/2024 05:03:19	18/06/2024 10:06:19
6	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210230	18/06/2024 05:30:46	18/06/2024 14:35:46
7	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210231	18/06/2024 05:39:51	18/06/2024 14:44:51
8	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210232	18/06/2024 05:55:24	18/06/2024 13:00:24
9	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210233	18/06/2024 06:00:50	18/06/2024 13:05:50
10	Dayachand Bargoti	Har Swaroop	316523090162	31652309016210234	18/06/2024 06:06:21	18/06/2024 13:11:21

[1](#)[2](#)[3](#)[4](#)[5](#)

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Designed, Developed and Hosted by **National Informatics Centre (NIC), Uttar Pradesh.**

अपर जिलाधिकारी(वि०/रा०)
बागपत।

महोदय,

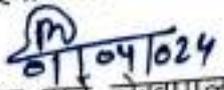
सयुक्त जॉच आख्या

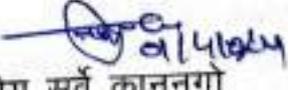
कार्यालय के पत्रांक 20/एम०सी०/2023-24 दिनांक 21-03-2024 के अनुपालन में अवगत कराना है कि जनपद-बागपत की तहसील-बडौत स्थित ग्राम-छपरौली खादर के गाटा संख्या 1/2 क्षेत्रफल 9.570 है० में साधारण बालू का खनन पट्टा दिनांक 25.10.2023 से दिनांक 24.10.2028 तक Royal Construction Company Devipura 2 bulandshahar 203001 प्रो० श्री दयाचन्द बरगौती पुत्र हरस्वरूप, निवासी मकान नं०-5, नई ब्रेक पाइंट रेस्टोरेन्ट, भूर चौराहा के पास यमुनानगर, बुलन्दशहर के पक्ष में स्वीकृत है। उक्त खनन पट्टे की जॉच दिनांक 01.04.2024 को क्षेत्रीय सर्वे लेखपाल छपरौली खादर, खान निरीक्षक, बागपत द्वारा की गयी। जॉच आख्या निम्नवत है:-

- 01- जॉच में पाया गया कि पट्टाधारक द्वारा स्वीकृत क्षेत्र में पीलर सी व बी से बाहर जीओ कॉर्डिनेट N- 29° 13' 14.195" E-77° 8'25.115" के आस-पास 35 मीटर लम्बाई, 15 मीटर चौड़ाई औसत 0.4 मीटर की गहराई में कुल 210 घनमीटर उपखनिज बालू का अवैध खनन/अवैध परिवहन किया गया।
- 02- जॉच के दौरान रात्रि में खनन क्षेत्र में खनन किया जाना नहीं पाया गया।
- 03- जॉच में पट्टेदार द्वारा नदी की जलधारा को न तो परिवर्तित किया गया है और न ही नदी की जलधारा में खनन किया जाना पाया गया।
- 04- जॉच के समय ओवरलोड वाहन/बिना परिवहन प्रपत्र के कोई भी वाहन उपखनिज बालू का परिवहन करते हुए नहीं पाया गया।

इस प्रकार पट्टेधारक द्वारा स्वीकृत खनन क्षेत्र के बाहर पीलर से अवैध बालू खनन/परिवहन 210 घनमीटर की रायल्टी 65/-रु० प्रति घनमीटर की दर से 13650/-रु०, खनिज मूल्य रायल्टी का पाँच गुना अंकन 68250/-रु० तथा उ०प्र० उपखनिज(परिहार) नियमावली-2021 के नियम 58 के अन्तर्गत अर्थदण्ड अंकन 2,00,000/-रु० कुल धनराशि अंकन 2,81,900/-रु० देय है।

अतः प्रकरण के संबंध में सर्वे लेखपाल द्वारा प्रस्तुत नजरी नक्शा सहित जॉच आख्या सादर प्रेषित है।


क्षेत्रीय सर्वे लेखपाल,
ग्राम छपरौली।


क्षेत्रीय सर्वे कानूनगो,
छपरौली।


खान निरीक्षक
बागपत

कार्यालय जिलाधिकारी, बागपत।

(खनिज अनुभाग)

दिनांक: 04 अप्रैल, 2024

पत्रांक: 051 / एम0सी0-अवैध खनन / 2024

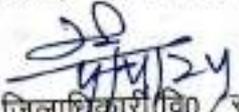
नोटिस

ROYAL CONSTRUCTION COMPANY
DEVIPURA 2 BULANDSHAHAR-203001
प्रो० श्री दयाचन्द बरगौती पुत्र हरस्वरूप,
निवासी मकान नम्बर-5, नई ब्रेक पॉइंट
रेस्टोरेन्ट भूर चौराहा के पास यमुनापुरम,
बुलन्दशहर।

आपके पक्ष में जनपद-बागपत की तहसील-बडौत स्थित ग्राम-छपरौली खादर के गाटा संख्या 1/2 क्षेत्रफल 9.570 है० में साधारण बालू का खनन पट्टा दिनांक 25.10.2023 से दिनांक 24.10.2028 तक स्वीकृत है। पत्र दिनांक 21.03.2024 के क्रम में उक्त खनन पट्टे की जाँच दिनांक 01.04.2024 को क्षेत्रीय सर्वे लेखपाल, छपरौली खादर, खान निरीक्षक, बागपत द्वारा की गयी। जाँच आख्यानुसार आपके द्वारा स्वीकृत क्षेत्र में पीलर सी व बी से बाहर जीओ कॉर्डिनेट N- 29° 13' 14.195" E-77° 8' 25.115" के आस-पास 35 मीटर लम्बाई, 15 मीटर चौड़ाई औसत 0.4 मीटर की गहराई में कुल 210 घनमीटर उपखनिज बालू का अवैध खनन/अवैध परिवहन किया गया।

आपका उक्त कृत्य खान एवं खनिज (विकास एवं विनियमन) अधिनियम-1957, उ0प्र0 उपखनिज (परिहार) नियमावली-2021 में दी गयी व्यवस्था एवं खनन पट्टा विलेख की शर्तों का स्पष्ट उल्लंघन है। आप द्वारा अपने स्वीकृत पट्टा क्षेत्र से बाहर कुल 210 घनमीटर बालू का अवैध खनन/परिवहन किया गया है, जिससे हुई राजस्व की क्षति वसूली योग्य है। स्वीकृत खनन क्षेत्र से बाहर कुल 210 घनमीटर बालू का अवैध खनन/परिवहन कर राज्य सरकार को रायल्टी के रूप में 13650/-रु०, खनिज मूल्य के रूप में अंकन 68250/-रु० तथा उ0प्र0 उपखनिज(परिहार) नियमावली-2021 के नियम 58 के अन्तर्गत अर्थदण्ड अंकन 2,00,000/-रु० कुल धनराशि अंकन 2,81,900/-रु० की राजस्व की क्षति पहुँचाई गयी है।

अतः आपको निर्देशित किया जाता है कि उक्त अवैध खनन/परिवहन की अधिरोपित धनराशि 2,81,900/-रु० तत्काल निर्धारित लेखाशीर्षक में जमा कराकर चालान की प्रति इस कार्यालय को एक तत्काल उपलब्ध कराना सुनिश्चित करें। यदि निर्धारित अवैध में उक्त धनराशि जमा कर चालान की प्रति उपलब्ध नहीं करायी जाती है तो उक्त धनराशि की वसूली भू-राजस्व के बकाये की भौति वसूल करने की कार्यवाही प्रारम्भ कर दी जायेगी, जिसके लिये आप स्वयं उत्तरदायी होंगे।


अपर जिलाधिकारी(वि०/रा०)/
प्रभारी अधिकारी(खनन),
बागपत।

संख्या व दिनांक उपरोक्तानुसार।
प्रतिलिपि:-

जिलाधिकारी महोदय, बागपत को सादर अवलोकनार्थ प्रेषित।


अपर जिलाधिकारी(वि०/रा०)/
प्रभारी अधिकारी(खनन),
बागपत।

398

प्रपत्र संख्या-43 ए (1) (प्रस्तर 417 एवं 478 देखिए)
घनराशि जमा करने का चालान फार्म

- 1. उपकोषागार/बैंक का नाम व शाखा स्टेट बैंक बांगलूर/कैंट
- 2. जिस व्यक्ति (पदनाम यदि आवश्यक हो) या संस्था के नाम से घनराशि जमा की जा रही है उसका नाम श्री रायल कोस्ट्रक्शन कंपनी
- 3. पता श्री देवानन्द वरगोरी श्री देवस्वामी
निवा - बुलन्दशहर
- 4. पंजीकरण संख्या/पत्र का नाम व चाद संख्या (यदि आवश्यक हो) बालू कोस्ट्रक्शन कंपनी खाता
- 5. जमा की जा रही घनराशि का पूर्ण विवरण श्री श्री कृष्ण कोस्ट्रक्शन को. लि. बंगलूर
- 6. घनराशि किस हेतु जमा की जा रही है तथा किस विभाग के पत्र में जमा की जा रही है 210 - धर्मश्री बालू की रायल्टी
- 7. चालान की सकल राशि व खनिज मूल्य व 21 मनु. मूल्य
- 8. चालान की निबल राशि
- 9. लेखाशीर्षक का पूर्ण विवरण/लेखा शीर्षक की मुहर 1365/रायल्टी 6825 व खनिज मूल्य
- 10. लेखा-शीर्षक का 13 डिजिट कोड 20000 of अर्थदण्ड

मुख्य लेखा-शीर्षक	उप-मुख्य-शीर्षक	जघु शीर्षक	उप-शीर्षक	ध्वीरेवार शीर्षक	घनराशि (अंकों में)
0853	00	102			81900-
					200000-

घनराशि (शब्दों में) दश लाख इक्यासी हजार नौ सौ मात्र योग 281900-

चालान में लेखा शीर्षक को पुष्टि करने वाले
विभागीय अधिकारी के हस्ताक्षर मुहर सहित



जमाकर्ता का नाम व हस्ताक्षर

श्री देवानन्द वरगोरी

केवल उपकोषागार/बैंक के प्रयोगार्थ

चालान संख्या _____ अंकों में 503465

दिनांक _____ शब्दों में 503465



281900

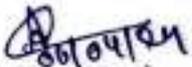
प्राप्त किया
जमाकर्ता के हस्ताक्षर
उपकोषागार/बैंक की
पुष्टि सहित

अपर जिलाधिकारी(वि०/रा०)-
प्रभारी अधिकारी खनन,
बागपत।

महोदय,

सादर अवगत कराना है कि जनपद-बागपत की तहसील-बडौत स्थित ग्राम-छपरौली खादर के गाटा संख्या 1/2 क्षेत्रफल 9.570 है० में साधारण बालू का खनन पट्टा दिनांक 25.10.2023 से दिनांक 24.10.2028 तक ROYAL CONSTRUCTION COMPANY DEVIPURA 2 BULANDSHAHAR प्र० श्री दयाचन्द बरगौती पुत्र हरस्वरूप, निवासी मकान नम्बर-5, नई ब्रेक पॉइंट रेस्टोरेन्ट भूरा चौराहा के पास यमुनापुरम, बुलन्दशहर स्वीकृत है। उक्त खनन पट्टे के संबंध में दिनांक 06.04.2024 को दूरभाष पर प्राप्त शिकायत के क्रम में दिनांक 06.04.2024 को उक्त खनन क्षेत्र की जाँच में पाया गया कि पट्टाधारक द्वारा जल स्तर के नीचे से मशीनों द्वारा बालू उठाये जाने के चिन्ह देखे गये। उ०प्र० उपखनिज परिहार नियमावली 2021 के नियम 42(ज)(1) में प्राविधानित है कि पट्टेदार नदी तल में तीन मीटर की गहराई अथवा जल स्तर जो भी कम हो, के परे कोई खनन संकियाएं नहीं करेगा। पट्टाधारक द्वारा उक्त नियम 42(ज)(1) का स्पष्ट उल्लंघन किया गया है जिस पर उ०प्र० उपखनिज (परिहार) नियमावली-2021 के नियम 60(4) के अन्तर्गत यदि कोई पट्टेधारक उक्त नियमों के उपबंधों का उल्लंघन करता पाया जाता है तो प्रत्येक अवसर पर पाँच लाख रुपये की दर से शास्ति के लिए दायी होगा जो जिला मजिस्ट्रेट या निदेशक के आदेश पर वसूला जायेगा। शास्ति की उपरोक्त उल्लिखित धनराशि को जमा करने में विफल होने पर उस धनराशि को जिला मजिस्ट्रेट द्वारा सम्बन्धित पट्टे के सापेक्ष जमा की गयी प्रतिभूति की धनराशि से कटौती की जायेगी। जाँच से स्पष्ट है कि पट्टेधारक द्वारा 42(ज)(1) के उल्लंघन किया गया है जिस पर पट्टेधारक के ऊपर नियम 60(4) के अन्तर्गत रुपये पाँच लाख रुपये की शास्ति की देयता बनती है।

आख्या सादर प्रेषित है।


(अनुज कुमार)
खान निरीक्षक,
बागपत।

327

कार्यालय जिलाधिकारी, बागपत।

(खनिज अनुभाग)

पत्रांक: 66 / एम0सी0-अवैध खनन / 2024

दिनांक: 8 अप्रैल, 2024

नोटिस

ROYAL CONSTRUCTION COMPANY
DEVIPURA 2 BULANDSHAHR-203001प्रो० श्री दयाचन्द बरगौती पुत्र हरस्वरूप,
निवासी मकान नम्बर-5, नई ब्रेक पॉइंट
रेस्टोरेन्ट भूरा चौराहा के पास यमुनापुरम,
बुलन्दशहर।

आपके पक्ष में जनपद-बागपत की तहसील-बडौत स्थित ग्राम-छपरौली खादर के गाटा संख्या 1/2 क्षेत्रफल 9.570 है० में साधारण बालू का खनन पट्टा दिनांक 25.10.2023 से दिनांक 24.10.2028 तक स्वीकृत है। उक्त खनन क्षेत्र के संबंध में दिनांक 06.04.2024 को दूरभाष पर प्राप्त शिकायत के क्रम में दिनांक 06.04.2024 को उक्त खनन क्षेत्र की जाँच में पाया गया कि पट्टाधारक द्वारा जल स्तर के नीचे से मशीनों द्वारा बालू उठाये जाने के चिन्ह देखे गये।

उ०प्र० उपखनिज (परिहार) नियमावली-2021 के नियम 42(ज)(1) में प्राविधानित है कि पट्टेदार नदी तल में तीन मीटर की गहराई अथवा जल स्तर जो भी कम हो, के परे कोई खनन संक्रियाएं नहीं करेगा। पट्टाधारक द्वारा उक्त नियम 42(ज)(1) का स्पष्ट उल्लंघन किया गया है जिस पर उ०प्र० उपखनिज (परिहार) नियमावली-2021 के नियम 60(4) के अन्तर्गत यदि कोई पट्टेधारक उक्त नियमों के उपबंधों का उल्लंघन करता पाया जाता है तो प्रत्येक अवसर पर पाँच लाख रुपये की दर से शास्ति के लिए दायी होगा जो जिला मजिस्ट्रेट या निदेशक के आदेश पर वसूला जायेगा। शास्ति की उपरोक्त उल्लिखित धनराशि को जमा करने में विफल होने पर उस धनराशि को जिला मजिस्ट्रेट द्वारा सम्बन्धित पट्टे के सापेक्ष जमा की गयी प्रतिभूति की धनराशि से कटौती की जायेगी। जाँच से स्पष्ट है कि पट्टेधारक द्वारा 42(ज)(1) के उल्लंघन किया गया है जिस पर पट्टेधारक के ऊपर नियम 60(4) के अन्तर्गत रुपये पाँच लाख रुपये की शास्ति की देयता बनती है।

अतः आपको निर्देशित किया जाता है कि उपरोक्तनुसार देय धनराशि 5,00,000/- (पाँच लाख रुपये) 15 दिवस के अन्दर निर्धारित लेखाशीर्षक में जमा कराकर चालान की प्रति उक्त के संबंध में अपने स्पष्टीकरण सहित इस कार्यालय को उपलब्ध कराना सुनिश्चित करें। यदि शास्ति की धनराशि निर्धारित अवधि में जमा करने में विफल होने पर सम्बन्धित पट्टे के सापेक्ष जमा की गयी प्रतिभूति की धनराशि से कटौती की जायेगी। जिसके लिये आप स्वयं उत्तरदायी होंगे।

अपर जिलाधिकारी(वि०/रा०)/
प्रभारी अधिकारी(खनन),
बागपत।

संख्या व दिनांक उपरोक्तानुसार।

प्रतिलिपि:-

✓ जिलाधिकारी महोदय, बागपत को सादर अवलोकनार्थ प्रेषित।

अपर जिलाधिकारी(वि०/रा०)/
प्रभारी अधिकारी(खनन),
बागपत।

वित्तीय नियम संग्रह खण्ड-5, भाग-2

प्रपत्र संख्या-43 ए (1)
(प्रस्तर 417 एवं 478 देखिए)

400

धनराशि जमा करने का चालान फार्म

उपकोषागार/बैंक का नाम व शाखा
1. जिस व्यक्ति (पदनाम यदि आवश्यक हो) या संस्था के नाम से धनराशि जमा की जा रही है उसका नाम एवं पता

स्टेट बैंक बागपट। बरौट
मै० रामलाल कानूनी सेवा कम्पनी
डॉ० दयाचन्द वज्रवीर शर्मा
नि० 8 नवशहर

2. पंजीकरण संख्या/पक्ष का नाम व वाद संख्या (यदि आवश्यक हो)
3. जमा की जा रही धनराशि का पूर्ण विवरण (धनराशि किस हेतु जमा की जा रही है तथा किस विभाग के पक्ष में जमा की जा रही है)
4. जमा की जा रही धनराशि
5. लेखा शीर्षक का पूर्ण विवरण/मुहर

वालू के धरोली ब्रांच के
खनन पदवाक्य का उक्त
नियम 42(अ)(1) का उल्लंघन
पर पायल 1200 रुपये 201-20 जमा है

6. लेखा शीर्षक का 13 डिजिट कोड
मुख्य लेखाशीर्षक उप मुख्य शीर्षक लघु शीर्षक उप शीर्षक ब्यौरेवार शीर्षक धनराशि अंकों में

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8300/01/170003249

धनराशि (शब्दों में) पायल लाल के पक्ष में
अनुप कुमार की पुष्टि करने वाले
विशेषाज्ञान (निरीक्षण) ताक्षर मुहर सहित

भारतीय स्टेट बैंक/SBI (00740) बाग
मुख्य शाखा, बागपट/Main Branch, Baghat
24 APR 2024 जमा करने का नाम व हस्ताक्षर
Maker/Checker

केवल उपकोषागार/बैंक के प्रयोगार्थ

चालान संख्या	अंकों में ₹0	500000
दिनांक	शब्दों में ₹0	

भारतीय स्टेट बैंक / S.B.I. (0740)
मुख्य शाखा, बागपट
24 APR 2024
P.F. No. 7088168 (RUPENDER KUMAR)

प्राप्त किया।
उपकोषागार/बैंक की मुहर

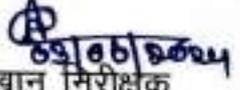
जनपद-बागपत की तहसील-बडौत स्थित ग्राम-छपरौली खादर के गाटा संख्या 1/2 क्षेत्रफल 9.570 है० में साधारण बालू का खनन पट्टा दिनांक 25.10.2023 से दिनांक 24.10.2028 तक स्वीकृत है। पत्र दिनांक 21.03.2024 के क्रम में उक्त खनन पट्टे की जाँच दिनांक 03.06.2024 को की गयी। जाँच के दौरान पाया गया कि पट्टाधारक द्वारा स्वीकृत खनन क्षेत्र के बाहर जीओ कॉर्डिनेट N- 29° 13' 23.6" E-77° 8'20.95" के आस-पास 02 पिटो में उपखनिज बालू का अवैध खनन/अवैध परिवहन किया गया है जिसका विवरण निम्नवत् है:-

पिट नं०1- 27 मीटर लम्बाई, 17 मीटर चौड़ाई तथा औसत 0.75 मीटर की गहराई में 344.25 घनमीटर।

पिट नं०2- 42 मीटर लम्बाई, 19 मीटर चौड़ाई तथा औसत 1.00 मीटर की गहराई में 798 घनमीटर।

इस प्रकार पट्टाधारक द्वारा कुल 1142.25 घनमीटर बालू का अवैध खनन/परिवहन किया जाना पाया गया। जोकि उ०प्र० उपखनिज (परिहार) नियमावली-2021 के नियमों, पट्टा शर्तों का उल्लंघन है। स्वीकृत खनन क्षेत्र से बाहर कुल 1142.25 घनमीटर बालू का अवैध खनन/परिवहन कर राज्य सरकार को रायल्टी के रूप में 74246.25/-रु०, खनिज मूल्य के रूप में अंकन 3,71,231.25/-रु० तथा उ०प्र० उपखनिज(परिहार) नियमावली-2021 के नियम 58 के अन्तर्गत अर्धदण्ड अंकन 2,00,000/-रु० कुल धनराशि अंकन 6,45,477.50/-रु० की राजस्व की क्षति पहुँचाई गयी है।

जाँच आख्या अग्रिम कार्यवाही हेतु सादर प्रेषित है।


खान निरीक्षक,
बागपत

कार्यालय जिलाधिकारी, बागपत।

(खनिज अनुभाग)

पत्रांक: 225/एम0सी0/2023-24

दिनांक: 7 जून, 2024

रॉयल कंस्ट्रक्शन कम्पनी/370737 देवीपुरा-2
प्रो0 दयाचन्द बरगोती पुत्र हरस्वरूप,
नि0 म0नं0-5, नई ब्रेक पॉइंट रेस्टोरेंट,
भूर चौराहा के पास यमुनापुरम, बुलन्दशहर।

आपके पक्ष में जनपद-बागपत की तहसील, बडौत के ग्राम-छपरौली खादर के गाटा संख्या 1/2 क्षेत्रफल 9.570 है0 में दिनांक 25.10.2023 से 24.10.2028 तक शर्तों के अधीन उपखनिज बालू का खनन पट्टा स्वीकृत है।

खान निरीक्षक, बागपत की आख्या दिनांक 03.06.2024 में अवगत कराया गया है कि आपके द्वारा स्वीकृत खनन क्षेत्र के बाहर जीओ कॉर्डिनेट N- 29° 13' 23.6" E-77° 8' 20.95" के आस-पास 02 पिटों में उपखनिज बालू का अवैध खनन/अवैध परिवहन किया गया है जिसका विवरण निम्नवत् है:-

पिट नं01- 27 मीटर लम्बाई, 17 मीटर चौड़ाई तथा औसत 0.75 मीटर की गहराई में 344.25 घनमीटर।

पिट नं02- 42 मीटर लम्बाई, 19 मीटर चौड़ाई तथा औसत 1.00 मीटर की गहराई में 798 घनमीटर।

इस प्रकार आपके द्वारा कुल 1142.25 घनमीटर बालू का अवैध खनन/ परिवहन किया जाना पाया गया। जोकि उ0प्र0 उपखनिज (परिहार) नियमावली-2021 के नियमों, पट्टा शर्तों का उल्लंघन है। स्वीकृत खनन क्षेत्र से बाहर कुल 1142.25 घनमीटर बालू का अवैध खनन/परिवहन कर राज्य सरकार को रायल्टी के रूप में 74246.25/-रु0, खनिज मूल्य के रूप में अंकन 3,71,231.25/-रु0 तथा उ0प्र0 उपखनिज(परिहार) नियमावली-2021 के नियम 58 के अन्तर्गत अर्थदण्ड अंकन 2,00,000/-रु0 कुल धनराशि अंकन 6,45,477.50/-रु0 की राजस्व की क्षति पहुँचाई गयी है। जिसकी देयता आप पर बनती है।

अतः आपको निर्देशित किया जाता है कि उक्त अवैध खनन/परिवहन की अधिरोपित धनराशि अंकन 6,45,477.50 रु0 तीन दिवस के अन्दर निर्धारित लेखा शीर्षक में जमा कराकर चालान की प्रति कार्यालय को तत्काल उपलब्ध कराना सुनिश्चित करें, यदि निर्धारित अवधि में उक्त धनराशि जमा कर चालान की प्रति उपलब्ध नहीं करायी जाती है तो उक्त धनराशि की वसूली भूराजस्व की बकाये की भँति वसूल करने की कार्यवाही प्रारम्भ कर दी जायेगी। जिसके आप स्वयं उत्तरदायी होंगे।

अपर जिलाधिकारी(वि0/रा0)/
प्रभारी अधिकारी(खनिज),
बागपत।

संख्या व दिनांक उपरोक्तानुसार

प्रतिलिपि:- ✓ जिलाधिकारी महोदय, बागपत की सेवा में सादर अवलोकनार्थ।

अपर जिलाधिकारी(वि0/रा0)/
प्रभारी अधिकारी(खनिज),
बागपत।

वित्तीय नियम संग्रह खण्ड-5, भाग-2

प्रपत्र संख्या-43 ए (1)
(प्रस्तर 417 एवं 478 देखिए)

धनराशि जमा करने का चालान फार्म

51

उपकोषागार/बैंक का नाम व शाखा
1. जिस व्यक्ति (पदनाम यदि आवश्यक हो) या संस्था के नाम से धनराशि जमा की जा रही है उसका नाम एवं पता

स्टेट बैंक वाणज्य क्लब
रामलाल इन्व्हेस्ट कम्पनी
क्र० देवाचन्द बरगोटी अं० हरद्वार
नि. कुल-दशहर

2. पंजीकरण संख्या/पक्ष का नाम व वाद संख्या (यदि आवश्यक हो)

3. जमा की जा रही धनराशि का पूर्ण विवरण (धनराशि किस हेतु जमा की जा रही है तथा किस विभाग के पक्ष में जमा की जा रही है)

वालू के दपरोली खात (मिस्त्री)
शे० से वाए वालू का अवेक
अवेक परिवहन किफायत कुल 1142-2
क०पी का खानन 3050 इयु खमिअपी

4. जमा की जा रही धनराशि

5. लेखा शीर्षक का पूर्ण विवरण/मुहर

मिपगवली 21 के मिपन 58 की 21 हे का
मुहान पर सपली वखाप
लेघु शीर्षक उप शीर्षक ब्यारिवार शीर्षक धनराशि अंकों में

6. लेखा शीर्षक का 13 डिजिट कोड
मुख्य लेखाशीर्षक उप मुख्य शीर्षक

0853	00	102			371231-25
					200000

धनराशि (शब्दों में)
अनुज कुमार लाल दे तालीत दजा (जा) मो सहरद्वार
(खाते निरीक्षक)
चालान में लेखा शीर्षक को पुष्टि करने वाले
विभागीय अधिकारी के हस्ताक्षर मुहर सहित

जमाकर्ता का नाम व हस्ताक्षर

645477

भारतीय स्टेट बैंक/SBI (0740)
नवकाश प्रोवाइडर/नवकाश

केवल उपकोषागार/बैंक के प्रयोगार्थ

28 JUN 2024

Maker..... Checker

चालान संख्या

अंकों में रू०

दिनांक

शब्दों में रू०

ANSHUL KAPUR
A5718
प्राप्त किया 116317

प्राप्तकर्ता के हस्ताक्षर

उपकोषागार/बैंक की मुहर

PS 06178

Annexure – L











