

जिला खनन कार्यालय, वैशाली

पत्रांक..... / एम०, दिनांक.....

सेवा में,

Shri Upendra Mahto
S/o Vanarsi Mahto
At- Maile Chowk, Bhairapur Deodhi,
Vaishali, Bihar-844102

विषय:- खनन योजना (Mining Plan) अनुमोदन के संबंध में।

महोदय,

उपर्युक्त विषय के आलोक में कहना है कि वैशाली जिलान्तर्गत राघोपुर अंचल के मीजा- परियारपुर, खाना संख्या-353 खाता संख्या-127, 113 खेसरा संख्या-384, 385, 211 रकबा 4.39 हेक्टेयर में लघु खनिज साधारण मिट्टी के खनन हेतु प्रस्तुत खनन योजना का अनुमोदन संयुक्त सचिव, खान एवं भूतत्व विभाग, बिहार, पटना के पत्रांक- 4158/एम०, दिनांक 27.12.2016 के आलोक में निम्न शर्तों के साथ अनुमोदन किया जा रहा है।

1. खनन योजना का अनुमोदन 73,093 घन मी० एक वर्ष तक साधारण मिट्टी के उत्पादन हेतु अनुमान्य किया गया है।
2. खनन कार्य से पूर्व संबंधित जिला खनन कार्यालय में रीयल्टी जमा कर खनन की अनुमति लेना अनिवार्य है।
3. खनन कार्य हेतु सम्बंधित विभागों/संस्थाओं से अनापति पत्र आवश्यक होगा।
4. साधारण मिट्टी खनन की गहराई सातह से 02 मीटर से अधिक नहीं होगा।
5. खनन कार्य ग्राउण्ड वाटर लेवल से कम से कम 02 मीटर उपर तक ही सीमित रखा जाएगा।
6. प्रस्तावित उत्खनन की गहराई के कम से कम आवे के बराबर चौड़ाई रखने वाले सटे मैदानों की सीमा से पटरी छोड़ दी जाएगी।
7. ईंट निर्माण, पथ निर्माण, तटबंध निर्माण आदि के प्रायोजनार्थ ईंट मिट्टी और साधारण मिट्टी के खनन/ उत्खनन से संबंधित किया-कलाप में विस्फोटक का प्रयोग नहीं होगा।
8. खनन/ उत्खनन संबंधी किया-कलाप कार्य क्षेत्र के सामान्य जल निकासी के प्रतिरूप (पैटर्न) को परिवर्तित नहीं करेगा।
9. खोदे गए/ उत्खनित गड्ढा (पिट) को परियोजना प्रस्तावक द्वारा उपयोगी प्रयोजन (प्रयोजनों) के लिए पुनः स्थापित किया जाएगा।
10. खोदे गए/ उत्खनित गड्ढा के चारों ओर समुचित घेराबंदी कर दी जाएगी, ताकि किसी दुर्घटना से बचा जा सके।



11. ढुलाई के दौरान खोदी गई/ उत्खनित मिट्टी के फैलने से धूल उत्सर्जन को रोकने के लिए उपाय किए जाएंगे।
12. मिट्टी के खनन/ उत्खनन के कारण सृजित जल निकासों में रोग वाहकों (बैक्टीर) के प्रजनन के कारण स्वास्थ्य खतरों के विरुद्ध सुरक्षा मानक अपनाये जाएंगे।
13. कामगारों/ मजदूरों को पेयजल और सफाई संबंधी सुविधाएँ प्रदान की जाएँगी।
14. किसी उत्खनन क्षेत्र की परिधि से किसी आर्सेनिक संरचना की दूरी कम से कम 15 मीटर रखी जाएगी।
15. राष्ट्रीय पार्कों और वन्य प्राणी अभ्यारण्य की सीमा के 1 किलोमीटर के अन्दर उत्खनन के क्षेत्र के मामले में ईट मिट्टी अथवा साधारण मिट्टी के खनन/ उत्खनन की अनुमति नहीं दी जाएगी।
16. खनन योजना में खनन कार्य बैंच बना कर किया जाएगा जिसकी अधिकतम उँचाई 2 मी० एवं चौड़ाई कम से कम 3.0 मीटर होनी चाहिए।
17. खनन कार्य के दौरान निकाले गये टॉप स्पायल को व्यवस्थित रूप से एकत्रित कर रखा जाएगा, जिसे खनन कार्य समाप्त होने के उपरान्त उसी क्षेत्र में फैला दिया जाएगा।
18. खनन योजना में वर्णित भूमि के स्वामित्व तथा भूस्वामियों की सहमती से संबंधित अभिलेखों की पूर्ति करा लिया जाना अपेक्षित होगा।
19. भविष्य में किसी प्रकार की कोई भी गलती खनन योजना अथवा कार्य में पायी जाएगी तो खनन योजना स्वतः निरस्त माना जाएगा।

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खनिज विकास पदाधिकारी,
जिला खनन कार्यालय,
वैशाली।

ज्ञापक 1238...../एम०, दिनांक 20/11/24.....

प्रतिलिपि:— निदेशक, खान एवं भूतत्व विभाग, बिहार पटना को सूचनार्थ प्रेषित।

प्रतिलिपि:— M/S PRANEJA ENVIRO-CARE & MANAGEMENT PVT. LTD., ASHIYANA, KHAJPURA, PATNA-800014 को सूचनार्थ प्रेषित।

20/11/24

खनिज विकास पदाधिकारी,
जिला खनन कार्यालय,
वैशाली।

20/11/24

Mining Plan & Mine Closure Plan

Minor Mineral- Soil/Earth

Submitted under rule (17) of Bihar Minerals (Concession, Prevention of Illegal Transportation & Storage) Rules, 2019 amended till date

(Category-B2 as per EIA notification 2006 amended till date)

**MAUZA-WARIYARPUR, BLOCK- RAGHOPUR,
DISTRICT- VAISHALI (BIHAR)**

Total Lease Area: 4.39 Ha. (10.87 acres)

Plan Period: 1 Year

20/11/24
APPROVED

Mineral Development Officer

Vaishali

Vin. Letter No. 1228 Date 21/11/24

Applicant

Mr. Upendra Mahto
S/o Vanarsi Mahto
At- Maile Chowk, Bhairapur Deodhi,
Vaishali, Bihar-844102

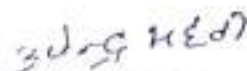
Prepared by

M/s Praneja Envirocare & Management Pvt. Ltd.
Ground, Opp. Vamika Apartment,
Near Passport Office, Ashiyana,
Khajpura, Patna-800014 (Bihar)
Ph. 0612-2581824, 9708251824
email: - pemangementindia@gmail.com
RQP: Sl. No.-30/ M.No. - 3825 DT. 07.11.2019

30/11/24

CERTIFICATE

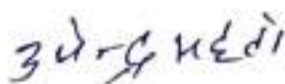
I **Upendra Mahto** S/o Vanarsi Mahto resident at- Maile Chowk, Bhairipur Deodhi, Vaishali, Bihar-844102, the lease/land holder of Soil Mining project for Soil (Mineral) over **4.39 Hectares**, in **Wariyarpur mauza in Raghapur block of Vaishali district** hereby solemnly affirm that the plans and programs in this Mining Plan will be scrupulously implemented by me/us and I/We will be strictly held responsible for any deviation thereof. I/We also hereby certify that the provisions of Mines and Minerals (Development and Regulation) Act 1957, and along with the provisions of Bihar Mineral (Concession, Prevention of Illegal Mining, Transportation and Storage) Rules, 2019 and subsequent amendment will be strictly adhered to while implementing this Mining Plan and wherever specific permissions will be required. I/We will approach the concerned authorities of Director, Mines & Geology, Government of Bihar as the case may be.



Upendra Mahto
(Authorized Signatory)

Date:

Place:



AUTHORISATION LETTER BY THE APPLICANT

I, **Upendra Mahto** S/o Vanarsi Mahto resident at- Maile Chowk, Bhairapur Deodhi, Vaishali, Bihar- 844102 hereby do authorize M/s. Praneja Envirocare & Management Pvt. Ltd, RQP to prepare the Mining Plan submitted under the notification of Ministry of Environment, Forest and Climate Change & Rule No 17 of Bihar Minerals (Concession, Prevention of Illegal Mining, Transportation & storage) Rules 2019 amended till date in respect of **Thana No.-353 Khata No.- 127, 113 Khasra No.- 384, 385 & 211 at Mauza- Wariyarpur, Block- Raghapur, District- Vaishali, Bihar**

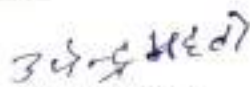
I request The Directorate, Mines and Geology, Bihar government to make further correspondence regarding Mining Plan to answer your query and clarification to the RQP. He is also authorized to collect approved mining plan.

Name of RQP: **M/s. Praneja Envirocare & Management Pvt. Ltd, Memo No. - (SL No.- 30/ M. No.- 3825 DT. 07.11.2019 of Dept. of Mines & Geology, Govt. of Bihar).**

1. **Ravi Shankar (Mining Engineer),**
Mob-748509640
2. **Praveen Kumar Roy (Mining Engineer)**
Mob: 9708251824,

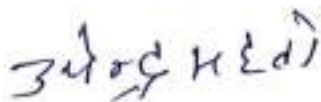
Address:

Ground Floor, Opp. Vamika Apartment,
Near Passport Office, Ashiyana,
Khajpura, Patna-800014 (Bihar)
Email ID : pemanagementindia@gmail.com


Upendra Mahto
(Authorized Signatory)

Date:

Place:



CONTENT

SL.NO.	PARTICULARS
1.	Introduction
2.	Project Description
3.	Location, General and Accessibility
4.	Geology & Exploration Topography
5.	Mines & Mining Method
6.	Drilling and blasting
7.	Mine Drainage System
8.	Stacking of Mineral Rejects and Waste Disposal Arrangements
9.	Anticipated Environmental Impacts, Mitigation Measures and Environmental Management Plan
10.	Mine Closure Plan

LIST OF ANNEXURES

SL. NO.	TITLES
1	Consent & Declaration
2	Copy Of RQP Certificate
3	I.D. of Applicant
4	Copy Of Land Agreement / Deed/ Revenue Receipt
5	Location Map/Cadastral Map/ Khasra Map
6	Map & Plates

34/54 KED



CHAPTER-I

I. INTRODUCTION

1.1	Applicant Name & Full address Contact No. & E-mail ID	Mr. Upendra Mahto S/o Vanarsi Mahto At- Maile Chowk, Bhairampur Deodhi, Vaishali, Bihar-844102 Mob: +919931793536 Email ID:																
1.2	Applicant's post/social status	Individual																
1.3	Mineral or Minerals which the applicant intends to mine	Earth/ Soil																
1.4	Applied area for mining lease	Mauza- Wariyarpur, Block- Raghapur, District- Vaishali (Bihar) <table><tr><td>Thana No,</td><td>Khata No.</td><td>Khesra No.</td><td>Area (Ha.)</td></tr><tr><td>353</td><td>127</td><td>384, 385</td><td>3.78</td></tr><tr><td></td><td>113</td><td>211</td><td>0.61</td></tr><tr><td colspan="3">Total</td><td>4.39</td></tr></table>	Thana No,	Khata No.	Khesra No.	Area (Ha.)	353	127	384, 385	3.78		113	211	0.61	Total			4.39
Thana No,	Khata No.	Khesra No.	Area (Ha.)															
353	127	384, 385	3.78															
	113	211	0.61															
Total			4.39															
1.5	Mineral (s) which are occurring in the area and which the applicant intend to mine	Ordinary Earth																
1.6	Period for which mining lease granted/ renewed/ proposed to be applied	Validity: 1 Year																
1.7.1	Name of RQP preparing the mining plan	M/s. Praneja Envirocare & Management Pvt. Ltd, Memo No. - (Sl. No.- 30/ M. No.- 3825 DT, 07.11.2019 of Dept. of Mines & Geology, Govt. of Bihar), 1. Ravi Shankar (Mining Engineer) Mob-748509640 2. Praveen Kumar Roy (Mining Engineer) Mob: 9708251824																
1.7.2	Address	Ground Floor, Opp. Vamika Apartment, Near Passport Office, Ashiyana, Khaipura, Patna-800014 (Bihar)																
1.17.3	Mobile Number & E-mail ID	Mob: 9708251824 Email ID: pcrmanagementindia@gmail.com																
1.8	Name of the prospecting agency	The base data and information is collected from various geological report of the department of Mines & Geology and local authorities as well as detailed prospecting of the area is carried out by the RQP																
1.9	Reference No. and date of the grant / communication received from the state Govt.	RQP certificate copy as Annexed																



30.9.2019

CHAPTER-2

2. PROJECT DESCRIPTION

2.1. JUSTIFICATION OF PROJECT

The proposed project is a mining of earth/ Soil at *Mauza- Wariyarpur Block- Raghapur, District- Vaishali (Bihar)*. The proposed project is having lease area of 4.39 Ha falls under Category- "B2" as per EIA Notification 14th September 2006 and subsequent amended, of the Ministry of Environment Forests & Climate Change, New Delhi.

The proposed production capacity of soil/ earth is 73,093 cum (1,11,832 tonnes) for 1 year. The proposed area is Rayati property. (Land documents enclosed).

Earth shall be excavated and used for sale/commercial purpose, thus as per notifications prior environment clearance is required. (Affidavit Enclosed)

It is for this purpose that 'Mining Plan' is being drawn so that all its aspects are taken care of justifiably, according to law, protecting the environment, removing all adverse impacts and creating a direct and indirect employment opportunities, improving socio- economic conditions of the local inhabitants and all-around status of life, achieving thereby a sustainable development.

2.2 BACKGROUND OF THE PROJECT

The Department of Mines & Geology, Bihar required under Bihar Minor Mineral (Concession, Prevention of illegal mining, transportation and storage) Rules, 2019. The general conditions of mining lease for minor minerals are mentioned here below:

- ✓ Under rule 17(4) Approval and submission of mining plan- All mineral concession holder or the government/corporation as the case may be shall submit a mining plan duly prepared by an RQP and approved by the Director or any officer/ person/ academic institution/govt. agency authorized by the dept. in this regard within a period of three months from the date on which communication regarding grant of mineral concession is received or such other period as may be decided/ allowed by the dept. for the submission of the approved Mining Plan.
- ✓ While preparing the Mining Plan, proper attention has been paid to ensure that the relevant provisions under MMDR Act-1957, MMR-1961, and Mines Act-1952 & Mines Rule- 1955 have been followed. All safety measures, provided in the statute, will be taken into consideration. On 17-09-2019 Bihar govt. took its policy decisions vide notification no -4/v.Mu-20-93/ 18-3174/M. That all Mining Lease/Settle under rule 17 of the said rules, the Lessee shall submit a Mining Plan with Progressive Mine Closure Plan for approval to the competent officer, Department of Mines & Geology, Bihar.
- ✓ Mining operation to be in accordance with Environmental Clearance.
- ✓ For baseline data assistance has been taken from the data, available from local authority.

2.3 RESTRICTED AREAS FOR EARTH QUARRYING

- I. The activity associated with mining / excavation of brick earth and ordinary Soil / earth for purpose of brick manufacturing, construction of roads, embankments etc. shall not involve blasting.
- II. The mining / excavation activity shall be restricted to a maximum depth of 3m below normal ground level at the site.
- III. The mining / excavation activity shall be kept above the ground water table at the site.
- IV. The mining / excavation activity should not alter the natural drainage pattern of the area.
- V. The mined/ excavated pit shall be restored by the project proponent for useful purpose(s).
- VI. Appropriate fencing all around the mined / excavated pit shall be made to prevent any mishap.
- VII. Measures shall be taken to prevent dust emission by covering of mined /excavated earth during transportation.
- VIII. Safeguard shall be adopted against health risks on account of breeding of insects in the water bodies created due to mining/ excavation of earth.
- IX. Workers / laborers shall be provided with facilities for drinking water and first aid.



30/09/2023

- X. A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation.
- XI. A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.
- XII. No mining of earth / excavation of brick earth or ordinary earth shall be permitted in case the area of mining excavation is within 1km of boundary of national parks and wild life sanctuaries.

30/8/2017



CHAPTER-3

3. LOCATION, GENERAL AND ACCESSIBILITY

3.1 LOCATION

(a) Details of the area

(i)	Lease-hold area				
	Location	Mauza- Wariyarpur, Block- Raghupur, District- Vaishali (Bihar)			
		Thana No.	Khata No.	Khesra No.	Area (Ha.)
		353	127	384, 385	3.78
			113	211	0.61
		Total			4.39
		Geo-Coordinates of the project sites			
		Block-A	A	25°38'50.13"N 85°17'42.19"E	3.78 Ha.
			B	25°38'51.44"N 85°17'40.11"E	
			C	25°38'35.27"N 85°17'30.19"E	
			D	25°38'34.16"N 85°17'32.06"E	
		Block-B	A	25°39'2.69"N 85°17'27.33"E	0.61 Ha.
			B	25°38'55.82"N 85°17'23.47"E	
			C	25°38'58.05"N 85°17'23.56"E	
			D	25°39'3.10"N 85°17'26.36"E	
		Total			4.39 Ha.
(ii)	Mining Lease Map	Mining lease Google Map is attached			
(iii)	District & State	Vaishali district of Bihar			

(b) Key plan of area: -

Key plan of the site.

Total mining area is completely outside of any restricted or protected area by any state or central government.

3.2 GENERAL

(a) Mineral being worked	Soil/Earth
(b) Period of Mining Lease	1 Year from the date of execution
(c) Category of Land used	Raiyati Land
(d) Range of Block Proposed area	Area 4.39 Ha
(e) Existing pits	There is no pit available in the proposed Applied Area.

3.3 ACCESSIBILITY

Vaishali is one of the 38 districts of Bihar. The name derives its name from King Vishal. Even before the advent of Buddhism and Jainism, Vaishali was the capital of the vibrant Vajji confederation, since before the birth of Mahavira (c. 599 BC), which suggests that it was perhaps the first republic in the world, like those later found in ancient Greece. In that period, Vaishali was an ancient metropolis and the capital city of the republic of the Vajji confederation of Mithila, which covered most of the Himalayan Gangetic region of present-day Bihar.

TRANSPORT FACILITIES

Hajipur is the head quarter of Vaishali district and it is the main market for sand business. Due to high demand, often sand from Ganga, Gandak and other rivers are transported to Patna and other districts to fulfil the demand.

Nearest major roads are SH-74 and SH-93 are situated in the eastern direction of Gandak River and northern direction of Ganga River respectively. NH-19, NH-103 and NH-77 are situated in the northern direction of

3205 KEDT



Ganga River. Hajipur junction railway station is the major railway station and Jay Prakash Narayan International Airport is the nearest airport to the Vaishali district.

LOCATION MAP OF THE MINE AREA



3d - 4 ned)



CHAPTER-4

4. GEOLOGY & EXPLORATION TOPOGRAPHY

4.1 GEOLOGY

LOCAL GEOLOGY

The area comprises thick quaternary sediments ranging in age from Pleistocene to recent and are classified into three stratigraphic units such as (i) Sonpur/Hajipur formation, (ii) Vaishali formation and (iii) Diara formation. Sonpur/Hajipur formation comprises clayey sediments of the oxidized older alluvium of Pleistocene to early Holocene age. Vaishali formation represents the unoxidized silty deposits of middle to late Holocene age. Diara formation constitutes sand, silt and clay deposits of recent times confined within the firm banks of the rivers as well as sandy deposits in channel and point bars.

Lithology	Geological Unit	Age	Nature
Loose sand, silt, loam and their admixtures/fine to coarse sand	Diara formation	Late Holocene	Flat or gentle slope; soft unconsolidated Quaternary sediments mostly inundated in rainy season, bank erosion and redeposition
Unoxidised clayey silt or sandy silt	Vaishali formation	Middle to Late Holocene	Gentle slope; unconsolidated sediments prone to flooding in rainy season
Oxidised brownish yellow silty clay impregnated with caliche	Sonpur/Hajipur formation	Pleistocene to Early Holocene	Consolidated compact Quaternary sediments

REGIONAL GEOLOGY

Regionally, the area constitutes a part of the Ganga River Basin. The north-eastern part is predominantly characterized by sedimentary lithology in the Sub-Himalayan zone comprising Subathus, Dargahis, Kasaulis and Siwaliks. A general Regional stratigraphic sequence of the area is given below.

Geologically, it represents nearly two third of Bihar is under cover of Ganga basin composed of alluvium and masks the nature of basement rocks.

Geological succession and their Geographic distribution

Age	Geology	Geography
Quaternary	Alluvial deposits (Sand/ Clay, Silt, fragments)	North Bihar plain & Centre Bihar Plan
Tertiary	Sand, Stones and Clay stones	North Champaran Hills
Gondwana	Coal Measures forming a series of small outlier basins	Banka district
Vindhyan	Sand, stones shales, Limestone etc.	Geography part of Bhabhua and Rohtas district
Satpura	Schist, Phyllite, Quartzite	Part of Aurangabad, gaya, Nawada, Nalanda, Sheikhpura and Munger districts of Bihar
Proterozoic	Mica Schist, amphi-Bolitr, quartzite, Granite, dolerite and pegmatite	Nawada Jamui & Banka
Achaean	Gneisses, Granite, Schist, phyllite, amphibolite, quartzite and intrusive all metamorphosed Sedimentary and Igneous rocks	Parts of Aurangabad, Gaya, Nawada, Jamui, Banka and Bhagalpur



30/9/2017

Nearly two third of Bihar is under cover of Ganga herein compared of alluvium and marks the nature of basement rocks.

4.2 PHYSIOGRAPHY

- **General Landforms:** The district constitutes a flat-landscapes sloping gently towards southeast and belongs to the Ganga River basin; the western fringe being a part of Gandak sub-basin and the whole eastern part under the Burhi Gandak subbasin. The highest elevation is 51 m and the lowest 46 m amsl. The area may be classified into two major geomorphic units: recent flood plain and older flood plain with palaeo levee complexes, the former represented by diara Formation and later by Vaishali Formation and Sonpur/ Hajipur Formation.
- **Soil and rock pattern:** Vaishali district is characterized by a wide variety of soils which can be broadly grouped into two categories according to U.S Survey Staff in 1975.
 - 1) Entisols: They are younger alluvial soils locally known as Balsundari. They are deficient in nitrogen, phosphoric acid but generally rich in potash and lime. The Balsundari soils are generally a light friable loam with higher portion of sand and silt. The soil is most fertile and suitable for cultivation of high yielding crops like sugarcane and wheat.
 - 2) Inceptisols: Calcareous alluvial soils occur mostly in the central part and locally known as Mathivari. The percentage of both phosphoric acid and potash are higher in this region. This soil is richer in lime content and kanker than Balsundari soil. This forms the typical paddy land of Bihar.

4.3 GEOMORPHOLOGY

The Bihar state can be broadly subdivided into three major unit's i.e., main physical subdivisions is the Northern Mountains, the Gangetic Plains and the Central Highlands. Northern Mountains comprises the Himalayan ranges including their foot hills. The Gangetic plains, situated between the Himalayas and the Deccan plateau constitute the most fertile plains of the subbasin ideally suited for intensive cultivation. The Central highlands lying to the south of the Great plains consists of mountains, hills and plateaus intersected by valleys and river plains. They are largely covered by forests. Aravali uplands, Bundelkhand upland, Malwa plateau, Vindhyan and Narmada valley lie in the region. Predominant soil types found in the subbasin are sandy, loamy, clay and their combinations such as sandy loam, loam, silty clay loam and loamy sand soils.

Geomorphologically the area may be divided into (i) Pediplain, (ii) Ridges and Valleys (iii) Flood plain and (iv) Terraced alluvial plain. The elevation of gently sloping pediplain varies from 100 m to 75 m above m.s.l. The Sone and Punpun are the two major rivers flowing through the western part of the district.

The district comprises extensive plain formed by the alluvium brought by the Ganga, the Gandak and distributaries of Gandak. The morphology of the area has been shaped mainly by Gandak river which originates in the Himalayas in Nepal. Morphologically it can be classified into three broad categories.

- 1) Hazipur Surface: It is the oldest morpho-unit of the area comprising yellow-brown to brownish-grey compact clay.
- 2) Vaishali Surface: It overlies the Hazipur surface. This surface comprises ash-grey-silt/silt-clay/clayey-silt and has been found development on the eroded and very gently sloping Hazipur surface.
- 3) Diara Surface: It is the lowest and youngest geomorphic unit which emerges from river bed. The diara surface has come into existence after the

4.5 FOREST

There is no forest in Vaishali district of Bihar

4.6 VEGETATION:

There is no vegetation in the proposed area.

4.7 SOILS

The district is an extensive plain formed by the rich alluvial soil brought down by several rivers and streams. Soil/Earth is unanimously spread over the area. inceptisols and entisols are major soil in the district. There is no need of prospecting work. As mentioned, the thickness of top soil is considered up to 0.15 m. The depth of suitable earth excavation is considered 2 m bgl. Earth mining is being proposed up to a short depth of 2 m from the surface level. Once soil removed, no excavation will be carried in future. Hence, it is proposed of a proposal of future prospecting.



4.8 MINERAL RESERVES

Earth reserves have been estimated as per the standard procedures. The area of mining land is around 1.76 Ha. and the average thickness of mineral (2 m) are multiplied to get the volume. 10% area wise left for 1 m wide berm all along the periphery of mining land to get the available for actual mining. About 10% mining losses reserves blocked due to slope has been considered to get the mineable quantity. Detail of calculation is given ahead:

Maunza	Area in Ha	Area in Sq. m	Max th depth (m)	Area of Berm left (10%)	Area Considered for Mining in Sq. m	Top soil in cubic meter	Reserves In cubic meter	
							Geological reserve	Mineable reserve
Wariyarpur Block-A	3.78	37800	2	3780	34020	5670	75600	62937
Wariyarpur Block-B	0.61	6100	2	610	5490	915	12200	10156.5
Total	4.39	43900	2	4390	39510	6585	87800	73093.5 or say 73093

4.9 CLASSIFICATION OF RESERVES

All the quantity estimated as above is considered under proved (111) category under UNFC classification) category

UNFC is a three-digit code-based system, the Economic viability axis representing the first digit, the Feasibility axis the second digit and the Geologic axis the third digit. The three categories of Economic viability have codes 1, 2 and 3 in decreasing order; similarly, the three categories of Feasibility viability have also codes 1, 2 and 3 while the four stages of geological assessment are represented by four codes i.e., 1 (detailed exploration), 2 (general exploration), 3 (prospecting) and 4 (reconnaissance). Thus, the highest category of resources under UNFC system has the code (111) and for lowest category the code is (334).

4.10 GEOLOGICAL RESERVES

Particulars	Unit	
Total Area available for mining (As per document)	43900	Sq.m
Average Thickness considered	2	M
Total Volume of Mineral (Earth)	87800	Cum
Total Geological Reserves (Earth)	87800	Cum

4.11 MINEABLE RESERVES

Particulars	Unit	
Total Area available for mining (As per document)	43900	Sq.m
Peripheral Strip Area (Area wise 10% of total area)	4390	Sq. m
Mineable area	39510	Sq. m
Thickness of top soil	0.15	M
Total top soil	6585	Cum
Average Thickness considered for mining	1.85	M
Total Mineable Reserves	73093	Cum
Maximum production proposed	73,093	Cum
In tones (volume x 1.53 ton/m ³)	1,11,832	Tons

The geological reserves have been for individual block. Geological reserves have been completed through cross sectional area method. The area of each section line is multiplied by strike influence to get the volume.

4.12 LIFE OF MINE

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Life of mine is up to 1 year. During this period 73,093 cum of earth shall be excavated and use for land filling work (Commercial) (Affidavit enclosed) which require prior environment clearance.

34/2/2017



CHAPTER - 5

MINES & MINING METHOD

5.0 MINING

Mining will be done as per the guideline of Bihar Mineral (Concession, prevention of illegal mining, Transportation & Storage) Rules, 2019

- This is an open-cast mining project. The operation will be carried semi- mechanized. The earth/soil will be collected in its existing form.
- Mining will be carried out only up to depth of 2 m bgl of above ground water level (whatever is less).
- No drilling/ blasting is required as the material is loose in nature
- Proper benching of 1 m height and 6-meter width will be maintained for mining block as per guideline M.M.R.-1961, under rule, 106.
- Mining will be done only during the day time and completely stopped during the monsoon period.

5.1 RESTRICTION ON MINING

- I. The activity associated with mining / excavation of brick earth and ordinary clay / earth for purpose of brick manufacturing, construction of roads, embankments etc. shall not involve blasting.
- II. The mining / excavation activity shall be restricted to a maximum depth of 3m below normal ground level at the site.
- III. The mining / excavation activity shall be kept above the ground water table at the site.
- IV. The mining / excavation activity should not alter the natural drainage pattern of the area.
- V. The mined/ excavated pit shall be restored by the project proponent for useful purpose(s).
- VI. Appropriate fencing all around the mined / excavated pit shall be made to prevent any mishap.
- VII. Measures shall be taken to prevent dust emission by covering of mined /excavated earth during transportation.
- VIII. Safeguard shall be adopted against health risks on account of breeding of vectors in the water bodies created due to mining/ excavation of earth.
- IX. Workers / laborers shall be provided with facilities for drinking water and sanitation.
- X. A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation.
- XI. A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.
- XII. No mining of earth / excavation of 'brick earth' or ordinary earth shall be permitted in case the area of mining excavation is within 1km of boundary of national parks and wild life sanctuaries:

5.2 PROPOSEED METHOD OF MINING

The Mining will be carried out as per new minor mineral policy by Bihar Government. Only dry soil will be transported.

- Excavation of soil/ earth will be done open cast semi- mechanized method.
- No OB/ waste material will be produced at the mining site. The earth shall be exploited up to depth of 2 meter only through the formation of bench height 1 meter & width 6 meters. An approach road having width 6 meters and gradient 1:12 shall be provided for the movement of loaded machineries & transportation of earth. Earth/Soil shall be exploited through semi-mechanized tool & filled into tractors /Trucks and transported to road development site.
- No drilling/ blasting are required as the material is loose in nature.
- Proper benching of 1 m height will be maintained.
- Roads will be properly made and sprayed by water for suppression of dust.
- Roads in the lease area for the movement of loaded trippers/ trucks will not have slopes more than 1 in 16.

34/5/2021



5.3 TRANSPORTATION PLAN

Dumper/Truck: -

- ✓ Every dumper /tractor will be provided with efficient brakes.
- ✓ Efficient audible warning devices will be provided with the vehicle.
- ✓ Every dumper /tractor will be under the charge of a competent person, authorized in writing by the manager.
- ✓ No person, other than the driver or his helper, if any, will ride on a dumper /tractor.
- ✓ No person will be permitted to ride in the running board of a dumper /tractor.
- ✓ The loaded dumpers /tractors will not be reversed on gradients.
- ✓ Sufficient stop blocks will be provided at every tipping point and these will be used on every occasion when material is dumped.
- ✓ Standard traffic rules shall be adopted and followed during movement of all dumpers /tractors.
- ✓ They shall be prominently displayed at relevant places in the opencast workings.
- ✓ When not in use, every dumper will be moved to and stood on proper parking places.
- ✓ No person will be permitted to work on a chassis of a dumpers /tractors, with the body in rest position, until after the dumpers /tractors body has been securely blocked-in position.
- ✓ No unauthorized person will be permitted to enter or remain in any turning points.
- ✓ While inflating tyres, suitable protective cages shall be used.
- ✓ Tyres will never be inflated by sitting either in the front or on the top of the same.
- ✓ While the vehicle is being loaded / unloaded on gradient, the same will be secured stationary by the parking brake, and other means suitably designed stopper block, which could be placed below the tyres.
- ✓ At least once in every two weeks the brakes of every dumper will be tested as below: -

Service Brake test: - The brake will be tested on a specified gradient and speed when the vehicle is fully loaded. The vehicle should stop within the specified distance when the brake is applied.

Parking brake test: - The parking brake shall be capable to hold the vehicle when it is fully loaded and placed at the maximum gradient. Maximum gradient of the roadway which is permitted only for a period of at least 10 minutes.

A record of such test will be maintained in a bound paged book and will be signed by the competent person carrying out the test. These records will be countersigned by the engineer and manager.

All vehicles shall be tested and examined once at least in every 6 months.

A notice shall be displayed outside every vehicle that "No Unauthorized Travelling Allowed".

Duties of dumpers /tractors operators: -

At the commencement of every shift, the operator shall personally inspect and test the machine, paying special attention to the following details: -

- i. Tyre pressure, brakes, horn and the Lights are in working order.
- ii. The driver will neither take out the machine for work nor will he work the machine unless he is satisfied that it is mechanically shown and in efficient working order.
- iii. The driver will maintain a record of every inspection made in a bound paged book, kept for the purpose and shall sign every entry made therein.
- iv. The driver will keep the cab window clean so to ensure clear vision at all times.
- v. Driver will ensure that the gear is in neutral position before stopping the engine. He will park the vehicle
- vi. In reverse gear, on level roads and down gradients.
- vii. In low gear, on up gradients.
- viii. The driver will negotiate downhill gradients in low gear, so that minimum of braking is required.

- ix. The driver will not drive too fast, avoid distractions and drive defensively.
- x. Before crossing a road / railway line he will reduce his speed looking both directions along the road or railway line and will proceed across the road or line only if it is safe to do so.
- xi. The driver will not operate the dumper in reverse unless he has a clear view of the area behind the vehicle.
- xii. The driver will see that the vehicle is not overloaded.
- xiii. The material is not loaded in a dumper so as to project horizontally beyond the sides of its body.
- xiv. The driver will not allow any unauthorized person to ride on the vehicle.
- xv. When there is a poor visibility, the speed of a vehicle will be restricted in a manner that the braking distance is maintained shorter the distance of visibility.
- xvi. The driver will not leave his machine during the shift. When he finishes his work, he will hand over the machine to his reliever or lock the excavator's cab.

Model traffic rules: -

Rule 1: Procedure

- a. No person will drive or operate a vehicle in or about the mine unless authorized to do so for that vehicle or class of vehicle by mines manager.
- b. A private vehicle will not be driven within the mine premises, unless authorized by mines manager.
- c. Any driver, not regularly working in or about the mine, will get permission to enter the mine premises from the mine manager, or an official of the mine authorized for the purpose, prior to driving a vehicle within the mine premises, which will be prominently delineated.

Rule 2: Speed Limits

- a. Permanent or temporary speed limits, set by the mine manager, for any area of the mine or any vehicle or class of a vehicle will be adhered to.
- b. Where visibility or road conditions are poor, a driver shall reduce the speed of his vehicle to the extent necessary to maintain effective control.

Rule 3: Right of Way (Traffic Management)

- a. At intersections, which are not controlled by traffic signs, all drivers should give way to the vehicle on the right, except as stated below: -
 - i. All drivers will give way to emergency vehicles showing a **flashing red light**.
 - ii. Vehicles being used for grading, rolling, watering and repair of roads have right of way over all vehicles except emergency vehicles. These vehicles will show an **amber flashing light**.
- b. The driver of a vehicle, having right of way over another vehicle, will not endanger himself or others through insistence on that right, if this is likely to cause a collision.

Rule 4: Parking and Standing

- a. A driver will not park or stand his vehicle in a position that will endanger other traffic on the mine premises.
- b. A driver will not park or stand a vehicle opposite another vehicle on haul road.
- c. A driver will not park or stand his vehicle within 30 meters of the working area of the mobile equipment, or where his vehicle cannot be clearly observed.
- d. A driver will not park or stand his vehicle within the area of swing of the dragline, without first obtaining permission from the operator.



- e. A driver, before leaving his vehicle, shall ensure that the vehicle is secure, that parking brakes have been applied, and that all implements have been lowered. If circumstances dictate that a heavy vehicle must be parked on a grade, then the wheels should be chocked, and the steering turned off centre.
- f. A driver of a vehicle will. Before moving from a parked position, ensure that its path is free of any obstruction and/ or personnel.
- g. A driver of a light vehicle will observe the following rules while parking his vehicle: -
 - ✓ Stop engine;
 - ✓ Leave vehicle in first or reverse gear;
 - ✓ Apply hand brake;
 - ✓ Not Park in front of or behind a heavy vehicle;
 - ✓ Not Park within 30 meters radius of a Shovel/ excavator;
 - ✓ Chock the wheels, if parked fencing is up or down a slope.

Rule 5: General

- (a) Vehicles will not be driven over electric cables, air hoses or water lines unless these are properly protected.
- (b) Seat belt will be provided for the operators' personnel safety. They are to be worn at all times while the vehicle is operating.
- (c) Passenger will not be carried on any vehicle, unless seated in approved seating, or where authorized for training purposes by the mine manager.
- (d) A caution signed or hazard lights are to be placed at the front and rear of any vehicle which is being towed, or which has been broken down and is obstructing the roadway.
- (e) Operators and drivers are responsible for cleanliness, oil and water checks, tyres, and fuel, for the machines and vehicles under their control.
- (f) Operators and drivers are responsible for ensuring that their vehicle is correctly illuminated during hours of darkness.
- (g) Headlights are to be dipped when approaching other traffic or mobile equipment in working areas.
- (h) All earth moving equipment will sound blast horn before moving off from parked position.
- (i) No smoking or naked lights are permitted during re- fuelling and the checking of batteries.
- (j) Dumpers are to be loaded in such a manner that spillage is minimized. Loads should be centralized to maximize stability. Loads, which have an excess of 1.2 meters, shall be clearly marked by a red flag during day and red light at night. All loads will be made secure for travel.
- (k) The driver will make sure that the vehicle has adequate clearance, particularly when reversing, parking, passing other vehicles and units, or passing stationary and static equipment.

Rule 6: Overtaking

- a. The driver of the vehicle may overtake any other vehicle with due caution, provided that
 - i. The speed limit is not exceeded.
 - ii. There is sufficient visibility of the road ahead.
 - iii. The vehicles are the clear of any road intersection or junction.
- b. No overtaking will be permitted in the vicinity of road dividers.
- c. While driving behind the haul truck the driver will ensure that he is visible in the rear-view mirror until he puts off or overtake.

Rule 7: Signs

- a. All signs are to be obeyed.
- b. Temporary signs will be removed immediately after their need is over.

30.9.2021



- c. Warning signs are to be noted at all times.

Rule 8: Mechanical condition of vehicles

- The drivers of each heavy vehicle in use will at least, daily examined his machine to ensure that it is in safe working order and make a written record of his observations of such examinations.
- The driver of any vehicle will report, to his supervisor, any defect in the vehicle as well as any damage to the vehicle are injury to himself arising out of a vehicle incident of the mine.

Traffic Study: -

The loaded & unloaded dumpers /tractors will move on the National Highway, SH or approach road for the further transportation of minerals from the lease area to other places of road development project.

Keeping in view that, the movement of dumpers /tractors may increase the traffic density of the nearest highway. A traffic Study on the present traffic scenario have been made to measure the increase PCU/hr.

5.6 EXTENTION OF MECHANIZATION

Machinery Requirement:

Machinery required for earth mining will be Back Hoe Loader and Tractor. Proposed Production of earth is 73093 cubic meter in 210 days i.e. 348 cum/day

- Excavator & Back Hoe loader -2 for cutting and loading soil in tractor trollies
- Tractor-2 for transportation of soil to the dumping site(s).
- Dumpers-2, 9 CU/M Capacity
- Water Tanker - 1 of capacity 5000 Lt. for sprinting of water on approach road & irrigation of plants

Type of Machinery

SL NO	MACHINERY	NUMER OF MACHINERY
1	Excavator & Back Hoe Loader	2
2	Dumpers	2
3	Tractor	2
4	Water Tanker	1

Manpower Requirement:

Manpower required is as below table:

SL NO	DESIGNATION	NO OF PERSONS
1	Administrator cum supervisor	1
2	Back Hoe Loader Operator	1
3	Dumper Driver	2
4	Tractor Driver	3
5	General helper	6
TOTAL		13

Output Per Man Per Shift (OMS)

Total production in a day = 348 M³

Total Manpower = 13

Hence, output per man/shift (OMS) = $348/13 = 26.76$ or say 27 M³/Man

348/13 = 26.76



Diesel Consumption:

Sl. No	Machinery	Number of Machinery	Average Fuel Required/ Hour	Effective Production Hr./ Day	Total Fuel Consumption (L.)
1	Excavator & Back Hoe Loader	2	6	6	72
	Dumper	2	3	6	36
2	Tractor	2	1.5	6	18
3	Water Tanker	1	1.5	4	6
Total					132

So, Diesel consumption factor = $132 \text{ L.} / 348 = 0.38 \text{ L.}$

Hence Total Diesel Requirement for Project = $0.38 \times 73093 = 27775 \text{ L.T}$

Daily Diesel requirement = 132 L.

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CHAPTER -6

6.1 DRILLING AND BLASTING

No drilling and blasting are required in excavation of earth.

30/05/2024



CHAPTER-7

7.0 MINE DRAINAGE SYSTEM

7.1 BASIN/SUB-BASIN, DRAINAGE:-

The Vaishali district constitutes a part of Ganga River basin. It has two sub-basins, namely Gandak sub-basin and Burhi Gandak sub-basin. The major part of the district falls under Burhi Gandak sub-basin. The Gandak is the main river flowing in the south-easterly direction and forming western boundary of the district. It discharges in the river Ganga near Hajipur. The river Gandak does not receive any important tributary in its course. There are two important distributary channels namely the Gandaki and the Baya rivers flowing parallel to the river Gandak and discharge into the river Ganga. The Baya runs through the central part of the district in north-south direction.

7.2 HYDROLOGY

Quaternary Alluvial deposit consisting of alternate layers of sand, silt, clay, and gravel forms prolific unconfined and confined aquifer system. The unconfined aquifer system consists of sand layers with parting of thin clay layers up to a depth of 60-70 m. The clay layers at shallow depth are not regionally extensive as such the entire sequence behaves as unconfined aquifer system. The transmissivity of the aquifer varies from 1000 to 5000 m²/day. The specific yield varies between 8-12%. The movement of ground water is in south-east direction towards the river Ganga. The aquifer is highly potential. A yield of 50- 100 m³/hr may be obtained from a well tapping 40 m thick aquifer for nominal drawdown.

Depth to ground water level during pre-monsoon and postmonsoons for the year 2011 indicates that water level is ranges from 7.15 to 8.90 m bgl and in post-monsoon its ranges between 3.68 to 6.06 m bgl.

Exploratory drillings down to depth range of 127 to 300.15 m by CGWB at Lalganj, Hazipur and Garoul confirm presence of highly potential and thick sand & gravel layers. The zones tapped at Kohnara ranges from 86 to 248 for a total drilled depth of 300 m and the zones tapped at Lalganj ranges from 141 to 220 meter for a total drilled depth of 240 m. Due to impervious clay layers at greater depth the aquifers are semi-confined to confined in nature. The storativity value of the deeper confined aquifer is 0.13×10^{-7} and transmissivity value ranges between 621 and 5163 m²/day. The piezometric head has been found to rest within 5 mbgl. A high discharge of more than 200 m³/hr may be obtained from a well drilled to 300 m tapping sufficient thickness of confined aquifer.

7.3 GROUND WATER RESOURCES

Annually replenishable dynamic ground water resource of the unconfined aquifer has been estimated as on 31st march 2009 for all the blocks following GEC-1997 norm. The net annual replenishable ground water resource of the district is 71952 ham. The gross draft for all uses, (irrigation, domestic and industrial water supply) as on 31st March 2009, is 40288 ham. The allocation for 8 domestic and industrial requirements supply up to next 25 years is 8730 ham. The stage of ground water development of the district is 56%. Except the Rajapakar Block, all the fifteen blocks of district fall under safe category. The ground water can be further exploited for irrigation and other uses. Maximum ground water development is in Rajapakar block (74.7%), while minimum in Vaishali block (35.4%).



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CHAPTER-8

8.0 STACKING OF MINERAL REJECTS AND WASTE DISPOSAL ARRANGEMENTS

Brief description of the arrangements made for top soil mineral rejects and waste disposal including precautions taken in selection of disposal site (s) along with their respective quantity likely to be generated.

The mining activity is being carried out in leased location. Upper 0.15m thick layer of soil has been considered as top soil which will be kept on the berm safely.

This will be dumped temporarily on the berm or earmarked place near mine working and after removing Earth the top soil will be spread over the mined-out area to restore the proposed fields or used beside the place where plantation is to be done.



30/05/2021

CHAPTER-9

9.0 ANTICIPATED ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND ENVIRONMENTAL MANAGEMENT PLAN

The pollution potential of the proposed project, its possible impacts on the surrounding environment during pre-operational and operational phases and the necessary management actions proposed for control and abatement of pollution are furnished hereunder.

9.1 AIR ENVIRONMENT

Mitigation Measures for Fugitive Dust Emission:

- ❖ Tractors will be covered by tarpaulin sheet to prevent dust emission.
- ❖ Water will be sprayed after loading activity (if soil would be in dry condition).
- ❖ The dust suppression measures like water spraying will be done on the haul roads and working areas.

For Vehicular Emission

- ❖ Overloading of tractors and trolleys will be prevented.
- ❖ Vehicular emission can pose serious health hazard. During the clay/soil mining extraction, tractor would be used for transportation. Tractor comprises of diesel engine produce particles are dangerously fine of PM_{10} & $PM_{2.5}$. It is known fact that combustion of diesel generates small particulate matter, nitrogen oxides and sulphur dioxide.
- ❖ Ultra low sulphur diesel would be used in vehicle. CPCB prescribed emission Standards for the vehicle would be followed.

9.2 WATER ENVIRONMENT

Mitigation measure

- ❖ Safeguards will be adopted against health risks on account of breeding of vectors in the water bodies created due to borrowing/excavation of earth by sprinkling of pesticides.
- ❖ Labourers would not be allowed to through trashes in water bodies.
- ❖ Utmost care will be taken to minimize or control oil spills or leakage from vehicles used for earth transportation.
- ❖ The washing of tractors and trolleys on the land will be avoided.
- ❖ Water Quality Monitoring for the, ground water shall be carried out seasonally to ensure that the water quality is not affected by the project activities.
- ❖ The contractor will add here all guidelines and rules for proper and scientific method of mining during the period of extracting earth/clay. Thus, the project activities shall not have any adverse effect on the physical components of the environment and therefore may not have less effect on the recharge of ground waters or affect the water quality.

9.3 LAND ENVIRONMENT

Anticipated impact

The major impact of earth/ clay mining on land is changes in landscape, land stability and soil loss. Due to continued and unscientific clay mining, pits of different dimensions would be formed in the affected areas. Some of the pits may later be covered with water to form artificial ponds. The artificial ponds created in random location due to indiscriminate clay mining may lead to land stability problems in the adjoining areas. The problem of subsidence will be aggravated in areas where the subsurface geology is with sand and clay alternations. Other impacts on land include:

- ❖ Disposal of packing materials, carried by the workers. This packing material would include used sachet / gutka /pan masala pouches. Polythene/plastic bag are by used by the workers to bring their foods etc.

Mitigation measures

- ❖ **Top soil (0.15 m)** will be scooped first and stored for further reclamation of mined area. Soil/earth mining will be limited to 2 m only from the surface.



- ❖ No foreign material like polythene/plastic bag, jute bag and useless articles should be allowed to remain / spill on the land, or no pits/pockets will be allowed to be filled with such material.
- ❖ Mining will not exceed beyond the agreed extraction depth.

9.4 NOISE ENVIRONMENT

Anticipated impacts

As far as noise pollution is concerned, clay mining does not contribute much to noise pollution, except the noise generated from the vehicles that transport raw clays scooped from lands and the products from the clay-based industrial units. Noise level in the working environment is compared with the standards prescribed by Central Pollution Control Board which has been adopted and enforced by the Govt. of India through The Noise Pollution (Regulation and Control) Rules, 2000.

Mitigation measures

- ❖ Well maintained vehicles will be used in order to reduce the noise during movement of vehicles.
- ❖ Regular and proper maintenance of transportation vehicles tractor will be ensured.
- ❖ There would be restriction on vehicular movement during night time.

9.5 BIOLOGICAL ENVIRONMENT

9.5.1 Impact on ecological factors

The area where earth /clay mining is practiced is usually barren and waste lands which are generally devoid of any natural vegetation. There will not be any impact on the biological environment in the surrounding area. There will not be any impact on the biological environment in the surrounding area.

9.6 GREENBELT DEVELOPMENT

It is proposed to have plantation on un-worked areas (lease periphery or berm of about 1m width) and along haul roads to provides cover against dust dissemination. Plantation will also be carried out as social forestry programmed in villages schools and the areas allocated by the Panchayat/ State Authorities. During plantation, local plant species will give preference or in consultation with local forest officials.

The proponent will plant about 50 saplings on the boundary/ berm.

9.7 THREES PROPOSED FOR AVENUE PLANTATION FOR GREEN BELT DEVELOPMENT

Sl. No.	Agro climatic zone & Sub zone	Middle Genetic Plains, north west alluvial sub zone	
	Scientific name	Common Name	Pollution control feature
1	Acacia nilotica	Babul	Tolerant to SO ₂
2	Azadirachta indica	Neem	Tolerant to SO ₂
3	Pithecolibium duclouxii	Jungle jalebi	Tolerant to SO ₂ and Dust control
4	Mangifera indica	Aam	Tolerant to Dust control
5	Tectona grandis	Sagon	Tolerant to Dust control
6	Ficus benghalensis	Bargad	Tolerant to Dust control
7	Seigium cumuni	Jamun	To stop soil erosion
8	Terminalia arjuna	Arjun	To stop soil erosion
9	Populus ciliate	Popular	Fast growing
10	Ficus religiosa	Peepal	Dust particles absorbance

9.8 SOCIO-ECONOMIC ENVIRONMENT

In the trade-off between the socio-economic needs and environmental conservation, generally cannot be takes the upper hand socio-economic condition of the project area, the activities cannot be ignored. As regard socio-economic condition of the project area, the earth/clay mining activity provides employment opportunities to various people. The economic base of the region will also be enhanced, if the mining is allowed. In the case of land use, it is clear that any type of quarrying would drastically change the existing land use.

30/5/2024



The proponent will take care of all the facilities for workers at the mining site area.

- ❖ For sanitation purpose portable/mobile toilets will be provided by the proponent.
- ❖ Provision of drinking water: Water required for drinking purpose will be obtained through tankers/nearby sources with proper permission.

9.9 ENVIRONMENT MANAGEMENT PLAN

To mitigate the adverse impacts which are likely to be caused due to the mining operation and overall scientific development of local habitat, environmental management plan (EMP) has been formulated and integrated with the mine planning. Proper environmental management plan is proposed for 'Sandy Soil/Earth' mining project to initiate the impact during the mining operations.

- i. A berm will be left from the adjoining field having a width 1.0 meter (equal to at least half the depth of proposed excavation). Further plantation will be done above the berm.
- ii. No labour camps will be established on Mining site.
- iii. No cooking, or burning of wood will be allowed at the mine site.
- iv. Prior to commencement of mining, a short awareness program will be conducted for labours to make them aware of way of working and various precautions to be taken while at work. Such program will be repeated occasionally.
- v. No tree cutting, chopping, lumbering, uprooting of shrubs and herbs will be allowed.
- vi. Collection of air and water samples at strategic locations with frequency suggested and by analyzing thereof. If the parameters exceed the permissible tolerance limits, corrective regulation measure will be taken.
- vii. Collection of earth/ clay samples at strategic locations once in every year and analysis thereof with regard to deleterious constituents, if any.
- viii. Measurement of water level fluctuations in the nearby ponds dug wells and bore wells.
- ix. Plantation/a forestation will be done as program i.e. along mining lease, road sides and near civic amenities, which will be allotted by Government bodies. Post plantation, the area will be regularly monitored in every two years for evaluation of success rate. For selection of plant species local people should also be involved.

9.10 RISK & HAZARDS MANAGEMENT

As it is soil/ earth mining project, so there are no major risk and hazard activities associated with the proposed activities. But the project proponent will must take care the site location by:

- ❖ Proper fencing all around the mining site so that it can prevent any mishap or accident in future.
- ❖ The materials being transported after excavation will be properly covered with tarpaulin sheet.
- ❖ Periodic water sprinkling will be done to arrest dust.

9.11 LAND RECLAMTION PLAN

Brief description of the reclamation plan giving the proposed plantation programme, scope of backfilling worked out pits.

As stated earlier that the total generated top soil will be kept safety on the berm of mining site. After removal of all the proposed quantity of Earth/clay, the top soil will be spread over the mined-out pit so that the fields can be used for agricultural activity.

9.12 STRATEGY FOR PROTECTION OF RIVER COURES, NALAS, WATER TANKS, VILLAGES, IMPORTANT MONUMENTS:

Briefly outlined the proposed strategies for protection of the following:

- a) River courses
- b) Nalas
- c) Water tanks
- d) Villages / houses / hutments / agricultural land

No nala or drainage passes within or near mining area. There are no important monuments and waters tanks nearby the mining area. Mining is confined in very small scale. Earth from proposed field will be mined out.

34/05/2024

✓

Upper top fertile of proposed field will be kept safely. After removal of earth from the area, safely kept top soil will be spread back on the mined-out field. Thus, the mined-out area will be used for agricultural activities in future.

9.13 SITE SERVICES

Working Office: Temporary working office will be maintained at site. This will be a temporary structure and can be easily shifted one side to another site as & when required. Safe drinking water will be kept in covered buckets / clay pitcher and will be provided to mine workers.

Rest Shelter: A temporary structure as a rest shelter to labours will be provided to the workers near mine site.

Primary Health/First Aid: First aid box with principal medicine will be kept at mine site to facilitate the first aid treatment to the workers.

Water arrangement: Water for drinking is required. Project Manager/authored leader will arrange a water tanker for the purpose. Separate arrangements for drinking water for the labours will be made in the working office.

Socio-Economic Benefits

Mining industry play an important role in economic sector in India. The region, where the project is situated, mostly people depend on agriculture. The important benefits accruing from the project to the state in the form of royalty can thus be stated as-boost to local and regional economy. The development of mining in the area provides direct and indirect employment opportunities, better infrastructural facilities, communication and socio-economic infrastructure.

9.14 WATER REQUIREMENT

Total water requirement for the project is 6KLD. Breakup details are as below-

Sl. No.	Purpose	Water requirement (KLD)
1.	Domestic Use	1
2.	Water Sprinkling	4
3.	Plantation	1

30/08/2021



CHAPTER-10 MINE CLOSURE PLAN

10.0 Introduction:

Applicant Name & Full address	Mr. Upendra Mahto S/o Vanarsi Mahto At- Maile Chowk, Bhairapur Deodhi, Vaishali, Bihar-844102		
Contact No. & E-mail ID	Mob: +919931793536 Email ID:		
Status of Lessee:	Individual		
Location:	Mauza- Wariyarpur, Block- Raghapur, District- Vaishali (Bihar)		
	Thana No.	Khata No.	Khesra No. Area (Ha.)
	353	127	384, 385 3.78
		113	211 0.61
	Total		4.39
Extent of Lease area	4.39 hectare		
Type of Lease	Non- Forest Land		
Present Land use pattern	Non-Forest Land		
Present method of Mining and mineral processing	refer Chapter No.- 5		

10.1. Reasons for Closure:

The mineral soil/ earth will be excavated for use of land filling at road development project site. After completion of excavation of mineral up to depth of 2 m, the mine will be closed as per rules, regulations and orders. No premature closure is anticipated.

10.2. Statutory Obligations:

As per rule 17 (7) of Bihar Minerals (Concession, Prevention of Illegal Mining, Transportation & Storage) Rules, 2019, 22 of amended rules of BMMC Rules 2014 & 23 B of MCDR 1988 for every fresh grant of mining lease a progressive mine closure plan is required to be submitted in compliance of the aforesaid rule of MCDR 1988, the mine closure plan is being in accordance with the guidelines issued by Chief Controller of Mines (CCOM) vide circular no. 14/2003,

10.3. Closure plan preparation:

a). Name and address of the Applicant:

Mr. Upendra Mahto
S/o Vanarsi Mahto
At- Maile Chowk, Bhairapur Deodhi,
Vaishali, Bihar-844102

b). Name & address of R.Q.P.:

M/s Praneja Envirocare & Management Private Limited
Admn Off: Ground Floor, Opp. Vamika Apartment,
Near Passport Office, Ashiyara, Khajpura,
Patna-800014 (Bihar)
Mob: +91-9708251824, 9308014108
Email Id: pemanagementindia@gmail.com

c). Name of the executing agency:

Not Applicable



The lessee himself shall execute the provisions of mine closure plan.

10.4	Mine Description:	
10.4.1	Geology and Exploration	Given at Chapter -4
10.4.2	Physiography	
10.4.3	Regional Geology	
10.4.4	Local Geology	
10.4.5	Exploration	
10.4.6	Estimation of Reserves	Given at Chapter -5
10.4.7	Proposed Mining Method	

10.5. Review of implementation of Mining Plan/scheme of mining including mine closure plan up to the final closure of mine:

Not applicable.

10.6. CLOSURE PLAN:

10.6.1 Mined out land:

In general, the environmental impact will always be adverse, due to mining operations if proper abatement measures will not be taken. The magnitude and significance of the environmental pollution caused by mining depends on type of mineral, method of mining and beneficiation etc. As a result of mining operation, the original ground profile will be altered. No proposal can be given for concurrent back-filling. Top soil is proposed to be spread over mined out areas so that it can be reused for agriculture proposes.

Land Use Pattern

Non-Forest Land

10.6.2. Water Quality Management:

Activity is limited up to 2 m below the ground level only and above the Water table. Thus, change in Ground water quality does not anticipate.

10.6.3. Air Quality Management:

Activity is limited. Any change in air quality does not anticipate. If required water sprinkling will be done regularly on haul roads. Vehicles are covered with tarpaulin sheets during transportation.

10.6.4. Waste Management:

For sanitation purpose portable/mobile toilets will be provided by the proponent. No cooking, or burning of wood will be allowed at the mine site and Labourers would not be allowed to through trashes in water bodies. Details are in **Chapter-9**

10.6.5. Tailing Dam Management:

Not applicable.

10.6.6. Infrastructure:

The proposed area is well connected with tehsil and district head quarter by all weather roads where all facilities are available. The proponent will have his own facility soon after start of excavation.

10.6.7. Disposal of Mining Machinery:

No specific immovable mining machinery is used in the excavation of soil/earth. It will be a semi-mechanized mine.

10.6.8. Safety and Security:



The proponent will follow all the rules and regulations as per provision of DGMS for safety and security of the proposed mine. To prevent access to the surface opening or excavated area from cattle's and local people the proponent will arrange security both by fencing or any other manner round the clock.

10.07. Disaster Management and Risk Assessment:

The proposed area is small. Activity is limited up to 2 m depth below ground level and final pit slopes will be kept 45°, hence chances of land slide, subsidence etc. is nil. **The proposed site falls in Seismic zone-IV.**

10.08. Care and Maintenance during Temporary Discontinuance:

During such time the mine will be protectively fenced and staff will be employed for care and maintenance. As well as all the precaution laid down in the statute during temporary discontinuance will be maintained and followed.

10.09. Economic Repercussions of Closure of mine and manpower retrenchments:

It is not inferred to discuss economic repercussions of closure of mine and manpower retrenchment at this stage.

10.10. Time Scheduling for abandonment:

There is no proposal for abandonment of mine or initiating closure operations during the mine plan period, so question of abandonment does not arise. The time scheduling for abandonment in mining of earth will be after completion of excavation of mineral up to depth of 2 m only.

10.11. Abandonment Cost:

It is very difficult to estimate the actual abandonment cost at this stage. The applicant / Proponent is bound to comply the provision laid down under rules, regulations, acts, and order made by the centre or state government, statutory organization, court etc.

10.12. Any other information:

The lessee also intends to spend some amount towards community service. The figures are tentative and are subject to generation of profit. Around of 5% of the profit will be diverted towards this activity.

10.13. Financial Assurance:

The applicant shall comply the provisions for financial assurance as per rule of Bihar Minerals (Concession, Prevention of Illegal Mining and Transportation & Storage) Rules, 2019. However, it is not possible to calculate financial assurance at this stage.

12.14. Certificate:

The required Certificates are annexed separately and enclosed with the Mining Plan.

12.15. Plans, Sections etc.:

All the plans and sections are enclosed with the Mining Plan.

Date:
Place:


Praneja Envirocare & Management Pvt. Ltd.
RQP/SL No. 30/M. No. 3825/M, DT 07/11/2019

Authorized Signatory
Praneja Envirocare & Management Pvt. Ltd.

30-8-11-2019

RULES & NOTIFICATION

No L-11011/47/2011-LA BMD
Government of India
Ministry of Environment & Forests

Parasaram Bhawan,
C.O.O. Complex, Lodhi Road,
New Delhi-110003

Dated: 24th June, 2013

OFFICE MEMORANDUM

Subject: Guidelines for consideration of proposals for grant of environmental clearance under EIA Notification, 2006 for mining of 'brick earth' and 'ordinary earth' having lease area less than 5 ha - regarding categorization as Category 'B2'

The Hon'ble Supreme Court, vide its order dated 27.02.2012 in I.A.No.12-13 of 2011 in SLP (C) No.19628-19629 of 2009 titled Deepak Kumar etc. Vs. State of Haryana & Ors. has inter alia ordered that leases of minor mineral including their renewal for an area less than 5 ha be granted by the State / Union Territory only after getting environment clearance (EC) from the Ministry of Environment & Forests (MoEF). In order to ensure compliance of the aforesaid order of the Hon'ble Supreme Court, MoEF issued an OM No L-11011/47/2011-LA BMD dated 18.05.2012 stating inter alia that all mining projects of minor minerals including their renewal, irrespective of the size of the lease would henceforth require prior EC and that the projects of minor minerals with lease area less than 5 ha would be treated as Category 'B' as defined in EIA Notification, 2006 and will be considered by the respective State Environment Impact Assessment Authorities (SEIAAs) notified by MoEF and following the procedure prescribed under the EIA Notification, 2006.

2. MoEF has received a number of representations conveying problems being faced by the brick kiln manufacturers in obtaining EC for 'brick earth' mined by them for making bricks and by the developers of road projects in respect of mining of 'ordinary earth' used for road construction. The brick kiln manufacturers have requested that as the digging of 'brick earth' for making bricks is a small scale activity requiring digging only upto a certain depth, the activity may be kept outside the purview of EC. The project proponents developing roads have represented that the 'ordinary earth' required for road construction is generally taken from the farmers / individuals along the road alignment from their borrowings. It would be impractical to ask the farmers / individuals to obtain EC for such digging. In a nutshell, the arguments being put forth are that while digging of 'brick earth' for brick making and 'ordinary earth' for road making do not have serious environmental implications, the provisioning for EC for such operations is impeding these development activities because of practical problems in obtaining EC.

Page 1 of 3

34/6/13



3. MoEF vide OM No.F.No.J-11013/12/2013-1A-III(I) dated 30.01.13 has constituted an Expert Committee, under the Chairmanship of Director, NEERI, Nagpur, to categorize Category "B" projects / activities into Category "B1" and "B2" under EIA Notification, 2006 and review classification of projects / activities into "A" and "B" and General conditions as contained in the aforesaid Notification. The issues raised by brick kiln manufacturers regarding 'brick earth' and road developers in respect of 'ordinary earth' were referred by MoEF to this Expert Committee to give their recommendations. The Committee deliberated upon these issues and has since given its recommendations in the matter.

4. The recommendations of the Committee have been examined by MoEF and the following has been decided:

(a) The activities of borrowing / excavation of 'brick earth' and 'ordinary earth', upto an area less than 5 ha, may be categorized under 'B2' Category subject to the following guidelines in terms of the provisions under '7.1 Stage(I)-Screening' of EIA Notification, 2006:

- (i) The activity associated with borrowing/excavation of 'brick earth' and 'ordinary earth' for purpose of brick manufacturing, construction of roads, embankments etc. shall not involve blasting.
- (ii) The borrowing/excavation activity shall be restricted to a maximum depth of 2 m below general ground level at the site.
- (iii) The borrowing/excavation activity shall be restricted to 2 m above the ground water table at the site.
- (iv) The borrowing/excavation activity shall not alter the natural drainage pattern of the area.
- (v) The borrowed/excavated pit shall be restored by the project proponent for useful purposes(s).
- (vi) Appropriate fencing all around the borrowed/excavated pit shall be made to prevent any mishap.
- (vii) Measures shall be taken to prevent dust emission by covering of borrowed/excavated earth during transportation.
- (viii) Safeguards shall be adopted against health risks on account of breeding of vectors in the water bodies created due to borrowing/excavation of earth.
- (ix) Workers / labourers shall be provided with facilities for drinking water and sanitation.
- (x) A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation.



30/01/13

(vii) A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.

(viii) The concerned SI/IAA while considering granting environmental clearance for such activity for brick earth / ordinary earth will prescribe the guidelines as stated at (i) to (vi) above and specify that the clearance so granted shall be liable to be cancelled in case of any violation of above guidelines.

(ix) Notwithstanding what has been stated in (i) above, the following will apply -

- (i) No borrowing of earth / excavation of 'brick earth' or 'ordinary earth' shall be permitted in case the area of borrowing/excavation is within 1 km of boundary of national park and wild life sanctuaries.
- (ii) In case the area of borrowing / excavation is likely to result into a cluster situation i.e. if the periphery of one borrow area is less than 500 m from the periphery of another borrow area and the total borrow area equals or exceeds 7 ha, the activity shall become Category 'B1' Project under the EIA Notification, 2006. In such a case, mining operations in any of the borrow areas or the cluster will be allowed only if the environmental clearance has been obtained in respect of the cluster.

This order is with the approval of the Commission Authority.

Sd/-
(Dr. Surej)
Director
Tel: 011-23464867

To

1. All the Officers of IX Division
2. Chairpersons/Member Secretaries of all the SI/IAAs/SEACs
3. Chairman, CPM
4. Chairpersons / Member Secretaries of all the SPI/HA/IPCAs

Copy to:-

1. D6 to NLE
2. DPS to Secretary (H&E)
3. DPS to ADG (P)
4. DPS to ADG (W)
5. DPS to DG (A)
6. DPS to K&T (A)
7. Withdwn. MoU
8. Guard File

Page 2 of 3

34/08 HED



9	Dr. Ashish Sharma	9753386659	Ph.D (Geology)	As per approved rate of Govt. of Bihar		Ward Villa Naga Tola (near Bazar, Purnea, Bihar - 854100)									
10	Mrs. Indique Khan	7093510996	M.Tech (Environmental Science & Engineering)	As per approved rate of Govt. of Bihar		Flat No-01 Ground Floor, Naga villa, Naga Tola Near Bazar, Purnea, Bihar - 854100									
11	Dr. Rakesh Kumar Singh	8085370600	Ph. D. (Coal Geology) M. Sc (Geology)	As per approved rate of Govt. of Bihar		Village: Chhaprahat, P.O. - Barhwa (Bihar), District: Kaimur, B.P. 221105									
12	Shashish Kumar Singh	9811496506	M.Sc (Applied Geology) B.Sc. Tech (Remote Sensing)	Rs. 25,000/-		B-8, Prachi Sanskrita Apartment, Sector Sampriti Road, PO- Rajendra Nagar, District- Patna, Bihar-16									
13	Arunabha Das, IIT	9372401424	B.E. Computer Science & Engineering	Rs. 31,860/-	Rate per hectare (Rs.1,000/- + GST @18% (Rs. 484/-) =Rs. 31,860/-	10, Koppalaha Nagar, Muzaffar - 480011									
14	Bhoomi Choudhary Pvt. Ltd.	9595733278	Required qualification not attached	Rate provided as per slab	a. For 0.12 Ha - Rs. 30,000/- b. For Above 0.12 Ha to 5.0 Ha - Rs. 30,000/- c. Above 5.0 Ha - Rs. 20,000/- *All rates are per hectare or part thereof. (Example - rate of 5.50 Ha shall be considered as 2.0 Ha)	C/O Veena Gupta W/O Suresh Gupta, Shop No. 191, Plot No 3/75 Golabari New Delhi Road Near Bazar Chak, Aurangabad Bihar - 824101									
15	Sonu Kumar Consultancy Pvt. Ltd.	8219810845	M. Sc. (Geology)	Rs. 15,000/- (inclusive of all GST & Taxes)		101 Main Road Opposite Pura Tola Sectors, Purnea, District, Bihar - 824002, Bhaktinagar									
16	Mohan S. Bhargava	9868440581	M.Sc. Technology (Geology)	Rs. 33,670/-	Rate per hectare (Rs. 1,000/- + GST @ 18% (Rs. 167/-) =Rs. 33,670/-	Mahesh Sutar Opposite Sarda Vihar, South Bihar Colony, Naga Tola, Purnea - 800075									
17	Enigma India Pvt. Ltd.	7078121026	Required Qualification of the employees attached	Rate as per the rate provided	<table><tr><td></td><td>For 1/4 Ha (area less than 5 Ha)</td><td>For 1/2 Ha (area less than 10 Ha)</td></tr><tr><td>Rate upto 5 Ha</td><td>Rs. 10,000/-</td><td>Rs. 10,000/-</td></tr><tr><td>Rate more than 5 Ha</td><td>Nil</td><td>Rs. 5,000/-</td></tr></table> * Rate is inclusive of GST and other applicable Taxes.		For 1/4 Ha (area less than 5 Ha)	For 1/2 Ha (area less than 10 Ha)	Rate upto 5 Ha	Rs. 10,000/-	Rs. 10,000/-	Rate more than 5 Ha	Nil	Rs. 5,000/-	C/O Rajendra Prasad, Chhaprahat Road-2, Rajkumari Bazar Road, Patna - 800014
	For 1/4 Ha (area less than 5 Ha)	For 1/2 Ha (area less than 10 Ha)													
Rate upto 5 Ha	Rs. 10,000/-	Rs. 10,000/-													
Rate more than 5 Ha	Nil	Rs. 5,000/-													
18	Ravi Shankar	7485090040	B.E. (Mining)	Rate as per the rate provided	(i) Rs. 50,000/- per mining plan upto 5 Ha (ii) For above 5 Ha area rate will be charged 10000/- per Ha additionally upto and above to 5 Ha upto 25 Ha (iii) Rs. 2,00,000/- per mining plan for area of 25 Ha and will be charged additionally Rs. 1000/- per Ha upto and above to 25 Ha upto 50 Ha (iv) Rs. 3,00,000/- per mining plan for area of 50 Ha and will be charged additionally Rs. 2000/- per Ha upto and above to 50 Ha upto 100 Ha	Village: Nagan, P.O. - Bhojia, P.S. - Gola, Dist. Aurangabad (Bihar) - 824114									
19	Indian Mining & Environmental Consultancy	7542948037	B.E. (Mining)	Rs. 2,000/- per Hectare (Bihar State Mining Plan - Rs. 30,000/-)		Indian Mining And Environmental Consultancy, 201, 2nd Floor, Mangal Mahal, Pura Bazar, Sany Road, Patna-16									

34/5/24



20	Ravi Kumar Sinha	7542949077	B.E. (Mining)	Rs. 2,000/- per Hour (Each Block Mining Plan - Rs. 30,000/-)		201, 2nd Floor, Mangal Market, Raja Ratan, Bakley Road, Patna-14
21	M/s. Tansel Waste Greeners Mining & Environment Pvt. Ltd.	9534037552	M.Sc. (Geology)	Rs. 5,000/- (Including GST)		Greeners Mining & Environment Pvt. Ltd., 205 Mangal Market, Raja Bakley Road Patna 800014
22	Pradyot Kumar Srivastava	8827477206	B.E. (Mining)	Rs. 8,000/-		Flat No-101, Road No- 01, Bhoodh Nagar, Chirya Tara, Patna-800002
23	Ashok Kumar Singh	8764955664	Mining Engineer	Rs. 8,000/-		C/o Shri Ram Prasad Singh, Mohua - Magal Nagar, P.O. - Sahasra, P.S. - Sahasra, Dist. - Nalanda, Bihar - 803118
24	Sandeep Kumar	8116251110	B.Tech. (Applied Geology)	Rs. 10,000/-		Akshaya Bhawan, C/O Ravi Kumar, Sankar Nagar, Loka Path, Jagdeo Path, Patna 800014 (Bihar)
25	United Exploration India Pvt. Ltd.	9411206262 9514304303	Request Qualifications of the employees attached	Rs. 5,200/- (inclusive of Taxes)		201, 2nd Floor, Sufed Kamra Singh Complex, Anantnagar, Patna-800002
26	Ravi Kumar Pvt. Ltd.	9433289638	Request Qualifications of the employees attached	Rs. 5,100/- (inclusive of Taxes)		201, 2nd Floor, Mangal Market, Raja Bakley Road Patna 800014
27	Acarya Sankar Pvt. Ltd.	8594207910	Request Qualifications of the employees attached	Rs. 4,750/- (inclusive of Taxes)		401, 4th Floor, Mangal Market, Raja Bakley Road Patna 800014
28	M/s. Baghel Environment & Waste Management Pvt. Ltd.	9436047552	Qualifications of candidates are attached	As decided by the Department of Mining & Geology, Govt. of Bihar		Baghel Environment & Waste Management Pvt. Ltd., 1st Floor, 27, Gaur Sahay Lal Nagar, Road No. 2, Anantnagar Colony, Ashwari Nagar, Patna - 800025, Bihar
29	Shri Ram Sinha	9934482711	Qualifications of candidates are attached	Rs. 7,000/-	Note - 1. Movement rate for a Sand Block - Rs. 75,000/- 2. Movement rate for a Sand Block - Rs. 60,000/- OR As decided by the Department of Mining & Geology, Govt. of Bihar Remarks - Fee should not be less than 20,000 or more than 50,000 (thousand for single block) (Including GST) OR As decided by the Department of Mining & Geology, Govt. of Bihar	27, Gaur Sahay Lal Nagar, Anantnagar Colony, Ashwari Nagar, Patna - 800025, Bihar
30	Prateek Environment & Management Pvt. Ltd.	9788251824	Qualifications of candidates are attached	Rs. 10,000/- (Excluding GST) @10%		109, Bhagwati Kalyan apartment, Road No. 10, Anantnagar Colony, Bakaspur, Patna (Bihar) - 800014
31	Ministry of Environment and Eco Development (MVED)	904625817	Details of Qualification Attached	Rs. 10,000/- (Excluding GST)	Rate will be negotiable as per direction from Department of Mining & Geology, Govt. of Bihar	Admin. Office - Gaur Nagar, Shri Ram Colony, Bakaspur Path, Bakley Road, P.O.-D.V. College, Patna - 800014
32	Development and Infrastructure Systems (India) Pvt. Ltd.	9224007470 9335911118	Details of Qualification Attached	Rs. 2,750/- (inclusive of Taxes)		Postha Niketan, Road No.-12, Patel Nagar, Near Patel Puri, Patna 800010

30/05/2021



33	Indusnet Pvt. Ltd.	9433040118	Bachelor of Engineering (Mining)	Rate for each District is enclosed	Enclosure A	H.No-21, First Floor, 445 Colony, S.K. Nagar, Patna-800001
34	M/S Sanyukt Engrs	729608868	Bachelor of Architecture	Rs. 1,500/-		South of Mushaban Housing complex, Mahuli Paldi, Patna-800020
35	Saathi Promoters Pvt. Ltd.	9815877778	Details of Qualification attached	Rs. 12,000/-		C/O Mr. Anil Kumar, plot No. 1-171, Road No. 23 Near Mahanagar, Sri Krishna Nagar, Patna-800031
36	Overseas Info-Tech Consultants	9860120384	Details of Qualification attached	Rs. 11,000/-		501, 5th Floor, Apex Tower, Park Road, Jhapa-800015, Tel: 9141-2340569

3. प्राप्त सभी EOI की समीक्षा के उपरांत विभागीय समिति द्वारा सर्वसम्मति से खनन योजना हेतु देय राशि प्रति खनन योजना अधिकतम ₹30,000/- (तीस हजार) ₹0 GST सहित (यह सहायिग पुरान किलने भी हेवटैपर का हो) का भुगतान की अनुमति दी गई।

4. समिति द्वारा उक्त न्यूनतम दर को स्वीकृत करते हुए उक्त न्यूनतम दर पर अभिरूचि की अभिव्यक्ति आमंत्रण में शामिल वेसे प्रतिष्ठान, जो वांछित योग्यता को पूरा करते हो तथा जिनका वर्तमान में पटना या बिहार राज्यान्तर्गत अन्य जिलों में कार्यालय संचालित है ऐसे प्रतिष्ठान को तत्काल प्रभाव से empanelled करने की अनुमति दी जाती है।

शेष अन्य एजेंसी/व्यक्ति अगर भविष्य में बिहार राज्यान्तर्गत कार्यालय खोलने संबंधी साक्ष्य/दस्तावेज प्रस्तुत करते है तो उन्हें भी भविष्य में उक्त दर पर लघु खनिजों के खनन योजना तैयार करने हेतु RQP के रूप में empanelled करने की अनुमति दी जाती है।

5. Empanelled एजेंसियों को अपने दस्तावेजों का सत्यापन विभागीय समिति से कराना आवश्यक होगा।

80/- सोसायटिज, सदस्य
 80/- सोनो (मु०) सदस्य
 80/- अवर सचिव, सदस्य
 80/- उप निदेशक, पटना अथवा पटना सदस्य
 80/- उप निदेशक (मु०) सदस्य
 80/- अवर सचिव-सह-निदेशक, अजमेर

80/-
सरकार के अवर सचिव

ज्ञापक:- _____/एम० दिनांक:- _____

प्रतिलिपि:- सभी समाहर्ता को सूचनार्थ एवं आवश्यक कार्यवाई हेतु प्रेषित।

80/-
सरकार के अवर सचिव

ज्ञापक:- _____/एम० दिनांक:- _____

प्रतिलिपि:- सभी उप निदेशक/सभी सहायक निदेशक/सभी खनिज विकास पदाधिकारी/सभी खन निरीक्षक को सूचनार्थ एवं आवश्यक कार्यवाई हेतु प्रेषित।

80/-
सरकार के अवर सचिव

उत्तराखण्ड



आपक- 3825 / एम०, दिनांक- 04/11/19

प्रतिनिधि- माननीय मंत्री के आप्त सचिव/प्रधान सचिव के प्रधान आप्त सचिव/निदेशक
कोषांग/उप निदेशक (गु०)/सहायक निदेशक (गु०)/खनिज विकास
पदाधिकारी (गु०) को सूचनार्थ एवं आवश्यक कार्यवाई हेतु प्रेषित।

निदेश
31/11/19

सरकार के अवर सचिव

उपस्थित



भारत सरकार
Government of India

जन्म प्रमाणिका
Certificate of Birth

आम आदमी का अधिकार
Right of Every Citizen

6917 4949 7958

आम आदमी का अधिकार
Right of Every Citizen


Unique Identification Authority of India
 Unique ID for Every Indian
 www.uidai.gov.in
 6917 4949 7958

Significance

भारत सरकार
GOVT OF INDIA

References



34.5 kcal

LAND DEED & REVENUE RECEIPT

34-5 HED





Registration Department,
Government of Bihar



INDIA NON JUDICIAL



Other

First Party Name * : Not Applicable
Second Party Name * : UPENDRA MAHATO
Purchased By * : UPENDRA MAHATO
Certificate Number : BR038161211730792641683
Consideration Price : ₹0.00/-
Stamp Duty Paid : ₹1000.00/-
Registration Fee & Other Fees : ₹0.00/-
LLR & Proc Fee : ₹0.00/-
Miscellaneous Fees : ₹0.00/-
Discre SC : ₹0.00/-
Total Amount : ₹1000.00/- (One Thousand)



----- This stamp paper will only be valid if embossed below with special RED ink impression -----

युक्त सहायक

मैं, रामकृष्ण राय, जगन्नाथ राय, कर्माकर राय, दोनों पिता-राधेन्द्र राय, ग्राम-माईल, पोस्ट- भैरोपुर, जिला- वैशाली, धाना-बीवपुर, मैं अपना कमीन 2 मीटर मिट्टी ताधारण दे रहा हूँ 2 मीटर मिट्टी काटने के लिए, जितना छाता 127 क्वेरा 384 रकबा 4 खड़ 84 डीमीनल है जितना मौजा-वीरियारपुर है, 1 वर्ष के लिए ।

रामकृष्ण राय, पिता- नारायण राय, ग्राम-माईल, पोस्ट- भैरोपुर, जिला- वैशाली धाना-बीवपुर, मैं अपना कमीन 2 मीटर मिट्टी ताधारण दे रहा हूँ 2 मीटर मिट्टी काटने के लिए जितना छाता 127 क्वेरा 385 रकबा 4 खड़ 51 डीमीनल है, जितना मौजा-वीरियारपुर है ।

रामकृष्ण राय, राम त्वार्थ राय, दोनों भाई के पिता-स्व० राजनी राय, ग्राम-माईल, पोस्ट- भैरोपुर, धाना-बीवपुर, जिला- वैशाली, मैं अपना कमीन अपने भाई के 2 मीटर मिट्टी काटने के लिए ताधारण मिट्टी दे रहा हूँ । जितना छाता

उपरोक्त



113 छेत्रा- 211, रकबा 1 एकड़ 52 डिस्मिन्त है। जितका सभी मौजा-
 वीरवारपुर है। दूसरा पक्ष - अयेन्द्र महतो, पिता - बनारसी महतो, ग्राम-
 माईल, पोस्ट-बेलेपुर, थाना-बिन्दुपुर, जिला-पैशाही (बिहार) का रहने वाला
 है, जितका 2 मीटर मिट्टी ताधारण छोड़ने का ^{करार्ड सम्मति है} ~~करार्ड सम्मति है~~ रखा हुआ अपना
 नर्वी है। उपेन्द्र महतो



मौजा - छाता	छेत्रा	रकबा	डिस्मिन्त	मौजा
127	384	4 एकड़	84 डिस्मिन्त	मौजा-वीरवारपुर
127	385	4 एकड़	31 डिस्मिन्त	मौजा-वीरवारपुर
113	211	1 एकड़	52 डिस्मिन्त	मौजा-वीरवारपुर

पथक पक्ष का हस्ताक्षर

राजकीर राय
 चर्मवीर राय
 शैलवीर राय
 राजकान राय
 रामशेखर राय
 रामबकरी राय

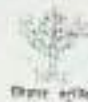
द्वितीय पक्ष का हस्ताक्षर

उपेन्द्र महतो

ATTESTED
 05/11/24
 NOTARY (K. ROY)
 VAISHALI, N. No. 7434/123

उपेन्द्र महतो





बिहार, भारत

बिहार सरकार राजस्व एवं भूमि सुधार विभाग

पृष्ठ संख्या

विवरण

भाग संख्या	1	पृष्ठ संख्या	127
खिला का नाम	Vaishali	अनुमंडल नाम	Hajipur
जिल्ला का नाम	Muzaffarpur	हस्ता का नाम	सरायपुर
मालिक का नाम	सुविमानसुंदर	कैलिंग संख्या	N/A
प्राप्त नाम	Shashan	राजस्व धाना	355
लॉरी संख्या	0	इस्टेट का नाम	BIHAR

क्र. सं.	विवरण का नाम	प्रति	विपरीत
1	सुविमानसुंदर राय/बाल/अम् - सुविमानसुंदर राय	N/A	
2	सुविमानसुंदर राय/बाल/अम् - सुविमानसुंदर राय	N/A	

प्लॉट का विवरण

क्र. सं.	प्लॉट संख्या	प्रति संख्या	रकबा
1	127	384	4 एकड़ 80 डिगमील 0 सेक्टर
2	127	385	4 एकड़ 51 डिगमील 0 सेक्टर

रकबा का कुल परिमाण : 9 एकड़ 35 डिगमील 0 सेक्टर

निर्धारित शर्तानुसार

क्र. सं.	भू-भाग	विभागीय	रैड रोल	समाप्त रोल	भूमि रोल	कुल
1	270.00	135.00	67.50	135.00	5.4.00	667.50

अंतिम भुगतान का विवरण

विशेष नोट: राजस्व/राजस्व/राजस्व

अंतिम रसीद का विवरण

समाप्त रसीद का विवरण

रसीद

उपेन्द्र मंडो



समक्ष,

लेख्य प्रमाणक,

हाजीपुर, वैशाली

शपथ - पत्र



मैं, राज करण राय, पिता - स्व० नारायण राय, ग्राम भदरेशपुर, पटो - गेरोपुर, थाना - विदुपुर जिला - वैशाली शपथ पूर्वक ज्ञान करती हूँ कि -

1. वही मैं उपरोक्त पता का स्थायी निवासी हूँ।

2. यह कि मेरे परिवार का वंशावली निम्न प्रकार है -

स्व० पुरवाई राय

1. स्व० नारायण राय

1. राज करण राय



है कि आवश्यक कार्य हेतु वंशावली हेतु शपथ पत्र बना रहा हूँ।

है कि उपरोक्त वर्णित रायों को मेरी ज्ञानकारी से सह है।

अतः यह शपथ - पत्र है।

शपथकर्ता - राज करण राय को

श्री - *राज करण राय*
अथवा हाजीपुर के द्वारा जाने
वो पहचाने गये वो शपथ पत्र इनके
इत्तम से सही है।

लेख्य प्रमाणक, हाजीपुर, वैशाली
JAISHALI (BIHAR)
No 7424/12.

राज करण राय

शपथकर्ता का हस्ताक्षर
प्रमाणित किया जाता है कि शपथकर्ता
द्वारा जाने वो पहचाने गये वो शपथ पत्र
इनके इत्तम से सही है।

Rajay Kumar
अथवा हाजीपुर, वैशाली 1/10/24

उपस्थित





INDIA JUDICIAL Government of Bihar

137/
211

e-Court Fee

e-Court Fee Receipt No. : BRECH079C21000919666
 Date & Time : 17-Oct-2024 10:15 AM
 Name of the ACC Registered User : District Co-operative Central Bank, Vaishali
 Location : Civil Court Vaishali (Hajipur)
 Name of Applicant : DEPONENT
 e-Court Fee Amount : 100 (One Hundred Rupees Only)



IN 2402120733

Solvency Alert

1. The authenticity of this Stamp certificate character printed at this Court shall be guaranteed using application Mobile App.
2. Any discrepancy in the details of this Certificate and its availability on the web or Mobile App is void.
3. The price of checking the legitimacy is on the user of this certificate.
4. In case of any discrepancy please inform the Court when available.



30-9-2024

समक्ष,

के. प्रभाकर,

हाजीपुर, वैशाली ।

म. १ - ५१



मैं, रमणीर राय, पता - सड रावेन्द्र राय, पु. - हाजीपुर, जिला - वैशाली,

जाना - सिद्धपुर, जिला - वैशाली, अपने अपने निवास स्थान पर निवास करता हूँ।

1- यह कि मैं उपरोक्त पता पर निवासी निवासी हूँ।

2- यह कि मेरे परिवार का संभावनी निम्न प्रकार है -

स्व. महाश्वरी राय

1
स्व. रावेन्द्र राय,



रमणीर राय

रमणीर राय

रमणीर राय

यह कि उपरोक्त सभी पदों पर संभावनी रूप से पद पर बना रहा हूँ।

3- यह कि उपरोक्त सभी पदों पर मैं व्यक्ति तारों का बंधे पदों पर बना रहा हूँ।

अतः यह सत्य - सत्य है।

उपस्थिति - रमणीर राय को

श्री - संजय कुमार

अभिज्ञता हाजीपुर द्वारा जाने

वो पदवाने गये वो पद पर इनके

हस्त के सहित है।

Kand 21/10/24
हस्ता प्रमाणित हाजीपुर, वैशाली ।

NOTARY
(AISHALI (BIHAR))
No - 424/12

21/10/24 राय

उपस्थिति पर हस्ताक्षर

प्रमाणित किया जाता है कि उपरोक्त पदों

द्वारा जाने वो पदवाने गये वो पद पर

हस्ता हस्त के सहित है।

Sanjay Kumar 21/10/24
अभिज्ञता हाजीपुर, वैशाली



उपस्थिति सहित



INDIA JUDICIAL Government of Bihar

1873
21/10

e-Court Fee

e-Court Fee Receipt No. **BRDCR070C240000090664**
 Date & Time **17/10/2024 10:11 AM**
 Name of the A/C Registered User **District Co-operative Central Bank, Vaishali**
 Location **Civil Court Vaishali (Hapur)**
 Name of Applicant **DEPONENT**
 e-Court Fee Amount **100 (One Hundred Rupees Only)**



IN 240220630



DEPONENT'S SIGNATURE

Important Instructions:
 1. This authority of this e-Court certificate should be verified at https://e-court.bihar.gov.in. Also, you can verify the same through the e-Court App.
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 4. In case of any discrepancy please refer the Competent Authority.



30/10/24

INDIA JUDICIAL Government of Bihar

e-Court Fee

e-Court Fee Receipt No. **BRFC 3079C 241000015265**
 Date & Time **05-Oct-2024 02:59 PM**
 Name of the ACU/Registered User **District Cooperating Central Bank, Vaishali**
 Location **Court Court Vaishali (Hapur)**
 Name of Applicant **DEPOSENT**
 e-Court Fee Amount **100 (One Hundred Rupees Only)**



IN 402055906

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2. Any discrepancy in the details on this Certificate will be available on the website Mobile App within 3 hours.
3. The duty of checking the legitimacy is on the users of the certificate.
4. In case of any discrepancy please inform the Competent Authority.

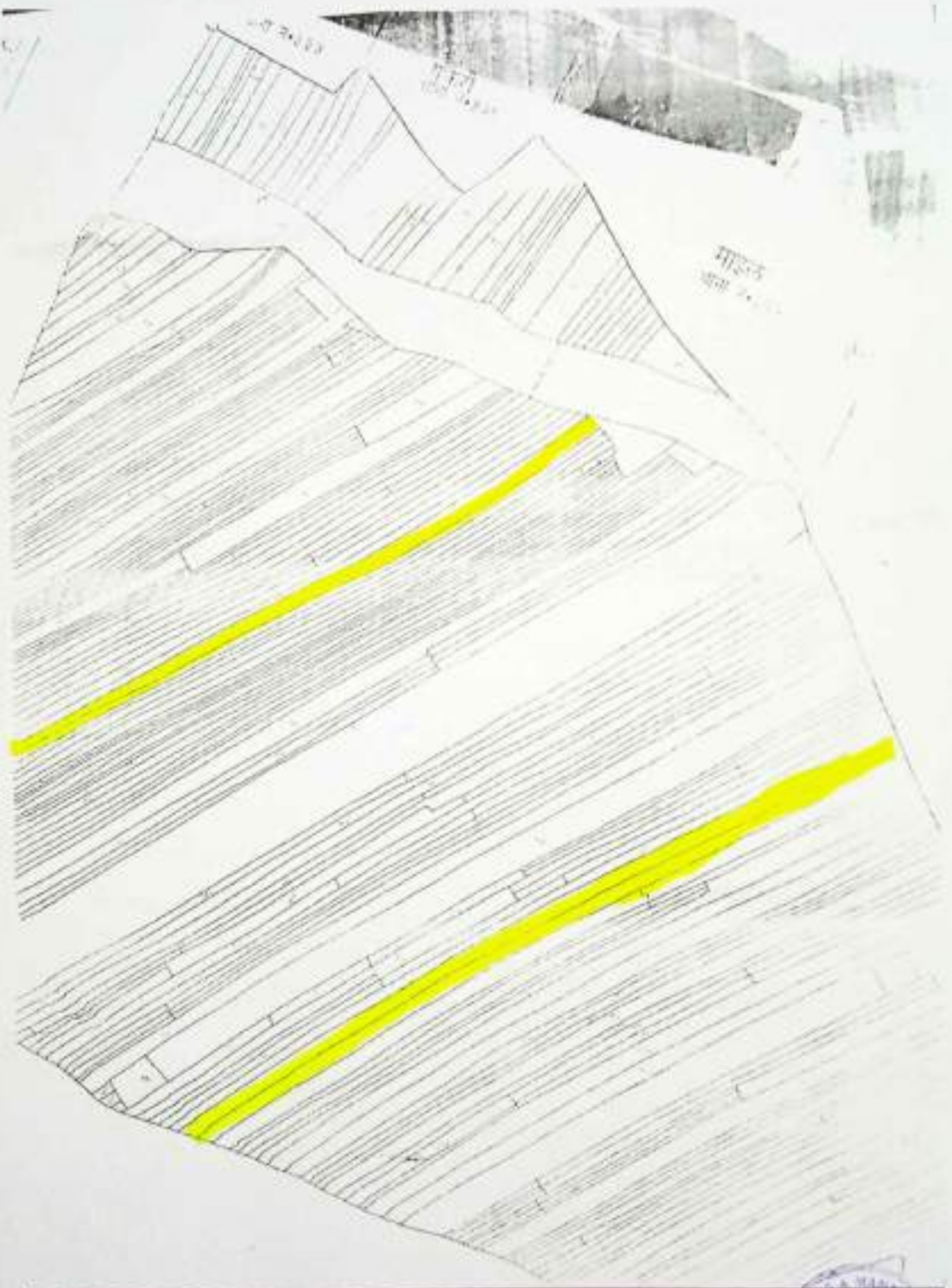


30-5-2024

KHASRA MAP

34.9 HED





૩૫૨૫૬૮૬



PLATES & SITE PHOTOGRAPH

3405 HED



34094261



Block-A And B Earth Mining Project
MINERAL- EARTH MINING

SATELLITE-GOOGLE
500m BUFFER LOCATION MAP
OF THE STUDY AREA

Mauza- Wariyarpur, Block- Raghopur,
Dist- Vaishali, Bihar
Applicants:
Shri Upendra Mahto
S/o Vanarasi Mahto
AREA- MINING BLOCK-A 3.78 Ha.,
Block-B- 0.61 Ha
Mining Depth-2 m

Legend

- SPB Boundary Location
- Boundary Buffer_500m
- Project Boundary

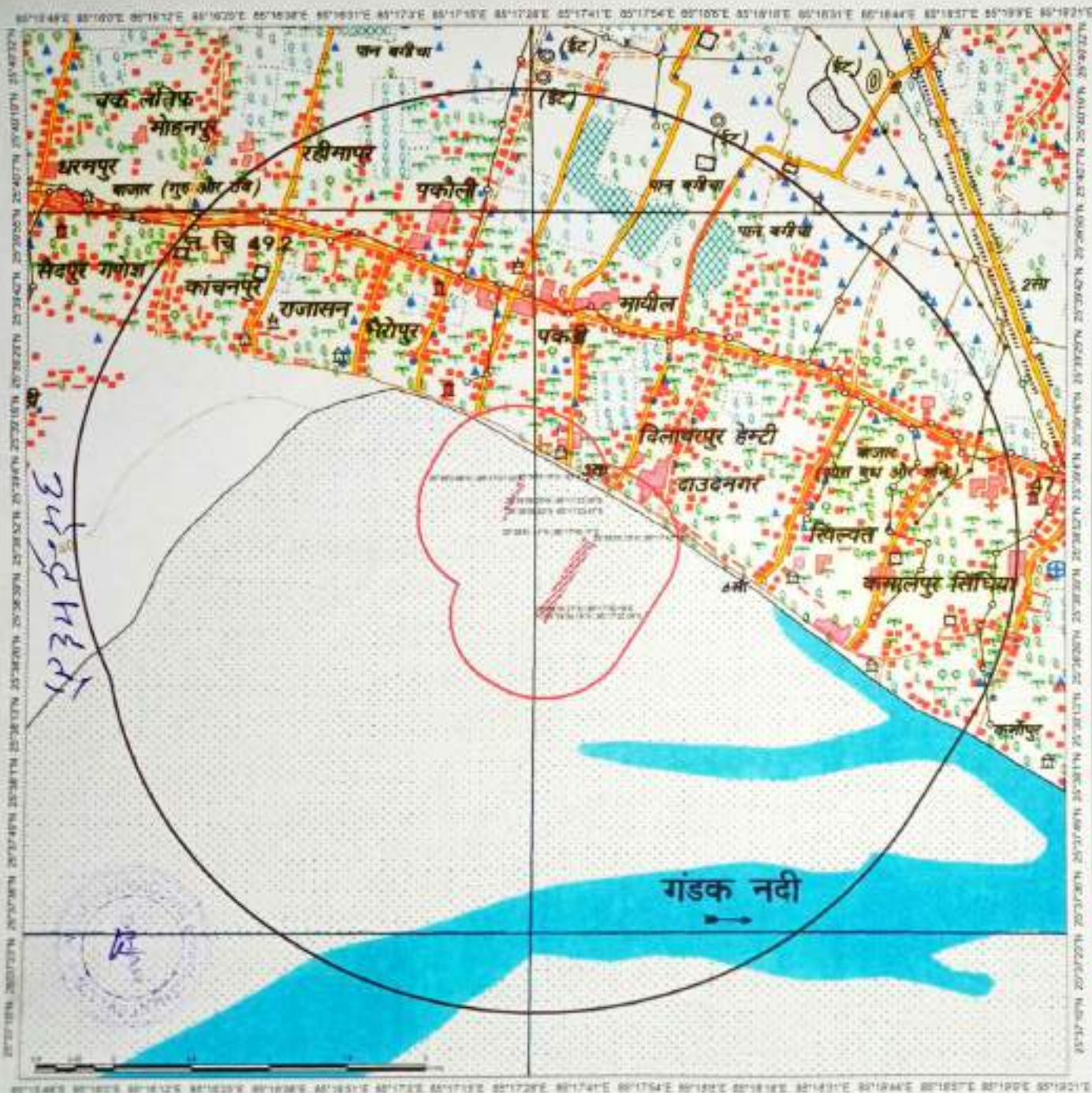
Satellite_Upendra1.img
RGB

- Red: Layer_1
- Green: Layer_2
- Blue: Layer_3

Image © 2014 Airbus

Imagery Date: 4/22/2023

Source
SATELLITE-GOOGLE 2024



**Block-A And B Earth Mining Project
MINERAL- EARTH MINING**

**TOPOSHEET
2500m BUFFER LOCATION MAP
OF THE STUDY AREA**

Mauza- Wariyarpur, Block- Raghopur,
Dist- Vaishali, Bihar
Applicants:
Shri Upendra Mahto
S/o Vanarasi Mahto
AREA- MINING BLOCK-A 3.78 Ha.
Block-B- 0.61 Ha
Mining Depth-2 m



Legend

- GPS Boundary Location
- Project Boundary
- Buffer_500m
- Buffer_2500m
- 72g2_g6_mosaic1.img**
- RGB**
- Red_Layer_1
- Green_Layer_2
- Blue_Layer_3

Source
TOPOSHEET- 72G/2 AND G/6

Block-A And B Earth Mining Project MINERAL- EARTH MINING

Mauza- Wariyarpur, Block- Raghopur,
Distt- Vaishali, Bihar

Applicants:

Shri Upendra Mahto

S/o Vanarasi Mahto

AREA- MINING BLOCK-A 3.78 Ha.,

Block-B- 0.61 Ha

Mining Depth-2 m

Index

GPS Boundary Location

Contour (1m) Interval

Mining Depth 2.0m

Geological Plan

Project Boundary

Agriculture Land (LU) Landuse

PLATE NO-1

SURFACE & GEOLOGICAL PLAN

Block-A And B Earth Mining Project

Applicants: Shri Upendra Mahto

S/o Vanarasi Mahto

Near Matli Chowk, Bhadrupur Deodhi,
Vaishali, Bihar-844102

AREA- MINING BLOCK-A 3.78 Ha.,

Block-B- 0.61 Ha

Mining Depth-2 m

Mauza- Wariyarpur, Block- Raghopur, Distt- Vaishali,
Bihar

SCALE- 1:500

DATE OF SURVEY

PREPARED BY :-

SIGNATURE

20°40'45"N 85°17'45"E

BLOCK-A

BLOCK-B



345/2024

Block-A And B Earth Mining Project MINERAL- EARTH MINING

Mazra- Wariyarpur, Block- Raghopur,
Dist- Vaishali, Bihar

Applicants:

Shri Upendra Mahito
S/o Vinayak Mahito

AREA- MINING BLOCK-A 3.78 Ha.

Block-B- 0.61 Ha

Mining Depth- 2 m

Index

GPS Boundary Location

Contour (1m) interval

Mining Depth 2.0m

Geological Plan

Project Boundary

Agriculture Land (A/L) Landuse

PLATE NO-2

DEVELOPMENT PLAN

Block-A And B Earth Mining Project

Applicants: Shri Upendra Mahito

S/o Vinayak Mahito

Near Maile Chowk, Bhairpur Daudhi,
Vaishali, Bihar-844192

AREA- MINING BLOCK-A 3.78 Ha.

Block-B- 0.61 Ha

Mining Depth- 2 m

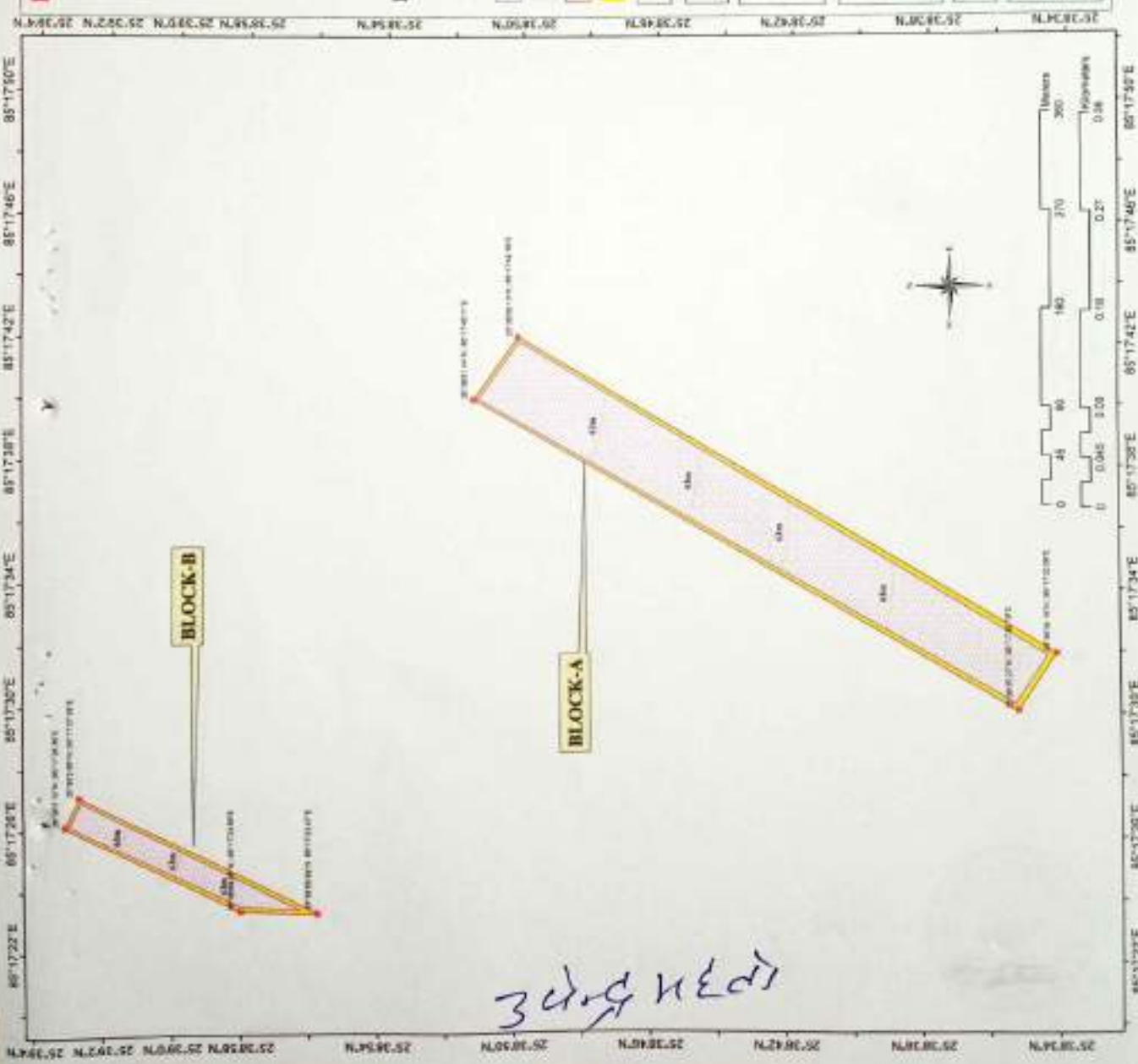
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DATE OF SURVEY

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34.5 Hectar

Block-A And B Earth Mining Project MINERAL- EARTH MINING

Mauza- Wariyarpur, Block- Raghopur,
District- Vaishali, Bihar

Applicants:

Sri U. pendra Mahito

S/o Vanarasi Mahito

AREA- MINING BLOCK-A 3.78 Ha.

Block-B- 0.61 Ha

Mining Depth-2 m

Index

EMP

GPS Boundary Location

Contour (1m) interval

Mining Depth 2.0m

Geological Plan

Project Boundary

Agriculture Land (LU) Landuse

PLATE NO-3

EMP PLAN

Block-A And B Earth Mining Project

Applicants-Sri U. pendra Mahito

S/o Vanarasi Mahito

Near Maithi Chowk, Bhaironpur Dredhli,

Vaishali, Bha.844102

AREA- MINING BLOCK-A 3.78 Ha.

Block-B- 0.61 Ha

Mining Depth-2 m

Mauza- Wariyarpur, Block- Raghopur, Distt. Vaishali,

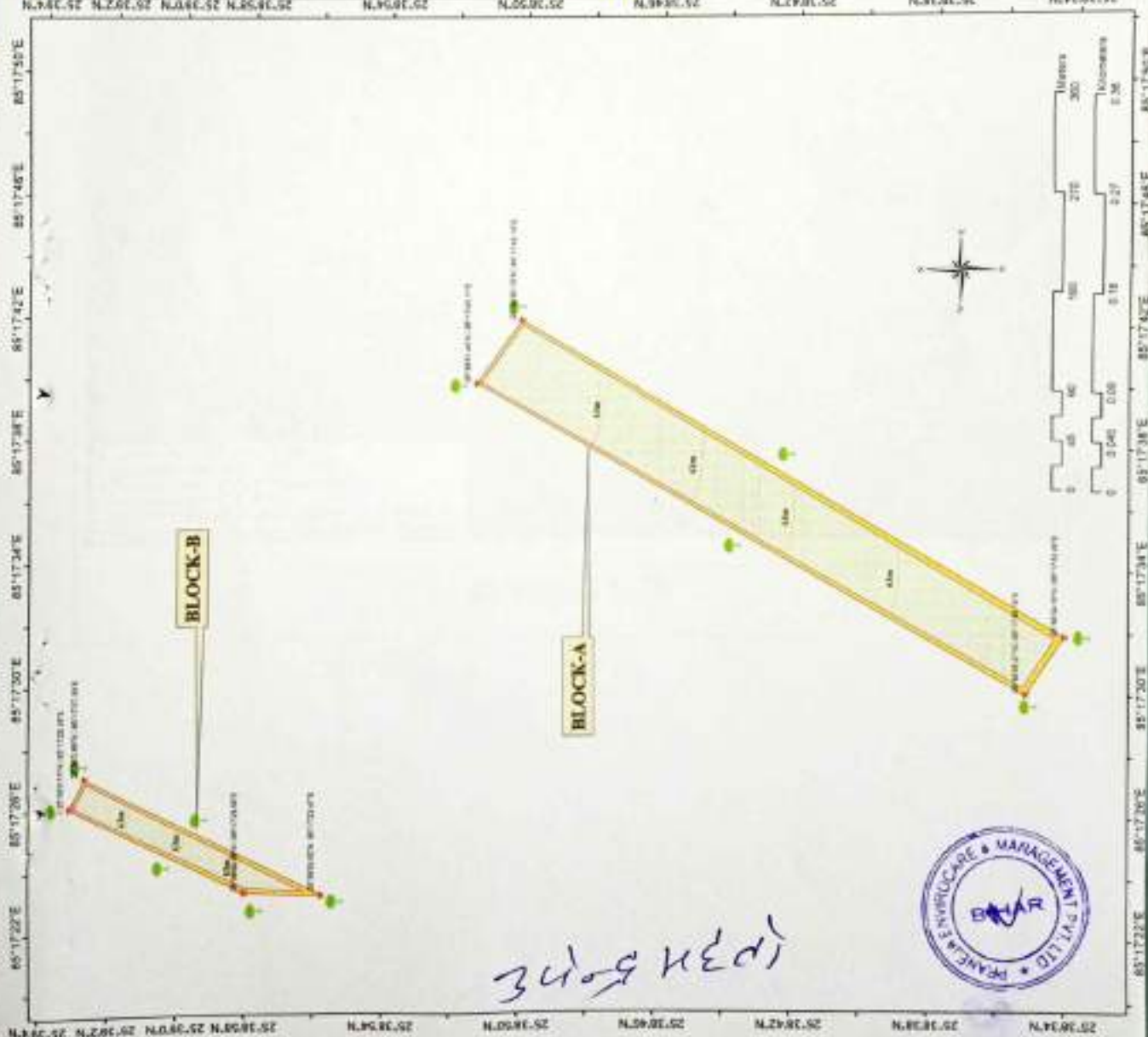
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3405 HED



MINING SITE

30/10/24

