



राज्य स्तरीय पर्यावरण समाघात निर्धारण प्राधिकरण, झारखण्ड

State Level Environment Impact Assessment Authority, Jharkhand

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सत्यमेव जयते

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प्रेषक:

सदस्य सचिव,
राज्य स्तरीय पर्यावरण समाघात निर्धारण
प्राधिकरण (SEIAA), झारखण्ड।

सेवा में,

उपायुक्त,
जिला : लोहरदगा।

विषय : लोहरदगा जिला का पत्थर खनिज से संबंधित DSR के अनुमोदन के संबंध में।

प्रसंग : आपका कार्यालय का पत्रांक-1014/एम0, दि0-12.08.2023।

महाशय,

उपर्युक्त विषयक आपके कार्यालय के प्रासंगिक पत्र दिनांक 12.08.2023 द्वारा लोहरदगा जिला का पत्थर खनिज से संबंधित DSR की एक प्रति अनुमोदन हेतु दिनांक 11.09.2023 को SEIAA कार्यालय में समर्पित किया गया।

तदनुसार SEAC, झारखण्ड की 108वीं बैठक दिनांक 19.09.2023 से दिनांक 25.09.2023 में Shri Rajaram Prasad, District Mining Officer, Lohardaga and Shri Rakesh Roshan Panna, Assistant Director, Geology, Gumla की उपस्थिति में दिनांक 20.09.2023 में SEAC के समक्ष Presentation दिया गया, जिसमें DSR के Salient Feature निम्नवत् बताये गये :-

The DSR has been prepared as per the format provided by MoEF & CC vide S.O. no. 3611 (E), dated 25.07.2018. The DSR submitted has been approved by the Sub-Divisional Committee. All the aspects of the notification dated 25.07.2018 are incorporated in the DSR and found to be satisfactory.

SEAC द्वारा उपरोक्त तथ्यों के आलोक में सर्वसम्मति से आपके द्वारा समर्पित DSR को अनुमोदन हेतु SEIAA को अपनी अनुशंसा भेजी गयी।

FINAL COPY

**LOHARDAGA DISTRICT SURVEY REPORT
FOR
MINOR MINERALS (STONE)
OTHER THAN SAND MINING OR RIVER
BED MINING**

*As per Notification No.- S.O.3611 (E), dated : 25th July, 2018, of
Ministry of Environment Forest and Climate change, Government of India, New Delhi*

Raja Ram Prasad

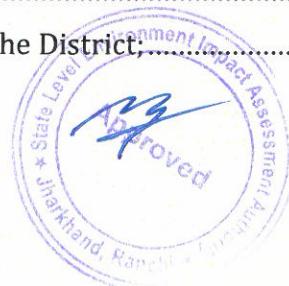


AUGUST, 2023

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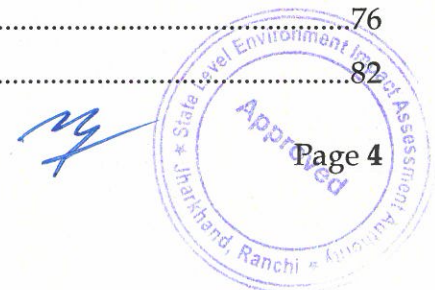
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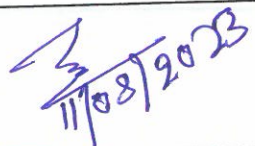


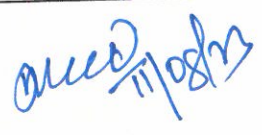


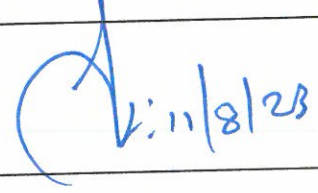

ANNEXURE

Annexure - I	Estimated demand for various government sponsored projects
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Annexure - IV	Potential Resource Area (Zone Map)



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28/09/23
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State Level Environment Impact
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Chairman
State Level Environment Impact
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28/09/2023
Member Secretary
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CHAPTER - I INTRODUCTION

1.1 Regulatory Frame Work

EIA notification 1994 published by MoEF & CC mandated that all mining project of all major minerals having lease area more than 5Ha. will have to obtain environment clearance from designated regulatory authority. Mining projects for minor minerals were exempted from obtaining environment clearance.

EIA notification No. S.O. 1533 (E) dated 14/09/2006 mandates that all activities listed in the schedule attached with the notification are required to obtain environment clearance from competent regulators. Mining activities are listed at Sl. No. 1(a) in the schedule. This notification exempted mining activities having lease area less than 5 Ha. from obtaining environment clearance.

Hon'ble Supreme Court in its judgement at 27th February, 2012 in 1A No. 12-13 of 2011 in special leave petition (C) No. 10628-19629 of 2009 in the matter of Deepak Kumar VS State of Haryana & other made prior environment clearance mandatory for minor minerals irrespective of area of mining lease.

In order to comply with judgment of Hon'ble Supreme Court the MoEF & CC issued S.O. 141(E) dt. 15/01/2016. Further the MoEF & CC vide notification S.O. 3611 (E) dt. 25/07/2018 provided the details on structure of DSR for sand mining projects.

1.2 Structure of District Survey Report as per MOEF & CC

The District Survey Report for minor minerals other than sand mining or River bed mining shall be as per structure mentioned below: -

FORMAT FOR PREPARATION OF DISTRICT SURVEY REPORT FOR MINOR MINERALS OTHER THAN SAND MINING OR RIVER BED MINING

- (1) Introduction;
- (2) Overview of Mining Activity in the District;
- (3) General Profile of the District;
- (4) Geology of the District;
- (5) Drainage of Irrigation pattern;
- (6) Land Utilisation Pattern in the District: Forest, Agricultural, Horticultural, Mining etc.
- (7) Surface Water and Ground Water scenario of the district
- (8) Rainfall of the district and climatic condition;
- (9) Details of the mining leases in the District as per the following format



Lohardaga District Survey Report for Stone

Sl. No.	Name of the Miner	Name of the Lessee	Address & Contact No. of Lessee	Mining lease Grant Order No. & date	Area of Mining lease (ha)	Period of Mining lease (Initial)		Period of Mining lease (1st/2nd...renewal)	
						From	To	From	To
1	2	3	4	5	6	7	8	9	10

Date of commencement of Mining Operation	Status (Working / Non Working / Temp. Working for dispatch etc.)	Captive/ Non-Captive	Obtained Environmental Clearance (Yes/No), If Yes Letter No with date of grant of EC.	Location of the Mining lease (Latitude & Longitude)	Method of Mining (Opencast / Underground)
11	12	13	14	15	16

(10) Details of Royalty or Revenue received in last three years;

(11) Details of Production of Minor Mineral in last three years;

(12) Mineral Map of the District;

(13) List of Letter of Intent (LOI) Holders in the District along with its validity as per the following format:-

Sl. No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Area of Mining lease to be allotted	Validity of Lol	Use (Captive / Non-Captive)	Location of the Mining lease (Latitude & Longitude)
1	2	3	4	5	6	7	8	9



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- (14) Total Mineral Reserve available in the District;
- (15) Quality /Grade of Mineral available in the District;
- (16) Use of Mineral;
- (17) Demand and Supply of the Mineral in the last three years;
- (18) Mining leases marked on the map of the district;
- (19) details of the area of where there is a cluster of mining leases viz. number of mining leases, location (latitude and longitude);
- (20) Details of Eco-Sensitive Area, if any, in the District;
- (21) Impact on the Environment (Air, Water, Noise, Soil, Flora & Fauna, land use, agriculture, forest etc.) due to mining activity;
- (22) Remedial Measures to mitigate the impact of mining on the Environment;
- (23) Reclamation of Mined out area (best practice already implemented in the district, requirement as per rules and regulation, proposed reclamation plan); (24) risk Assessment & Disaster Management Plan;
- (24) Risk Assessment & Disaster Management Plan;
- (25) Details of the Occupational Health issues in the District. (Last five-year data of number of patients of Silicosis & Tuberculosis is also needs to be submitted);
- (26) Plantation and Green Belt development in respect of leases already granted in the District;
- (27) Any other information.



Lohardaga District Survey Report for Stone

Chapter - II Overview of Mining Activity in the District;

Major Mineral - Bauxite

Minor Mineral - Sand, Stone & Soil

5 Stone Mines & 41 Brick Kilns are working in the district.

SOURCE: - WEBSITE OF DEPARTMENT OF MINES & GEOLOGY



Figure 1 Mineral Map of the District

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Approved

State Level Environment Impact Assessment Authority

Jharkhand

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Lohardaga District Survey Report for Stone

Chapter - III General Profile of the District;

Table 1 General Profile of the District

District	Lohardaga
Headquarter	Lohardaga
No. of Sub Division	01
No. of Blocks	07
No. of Panchayats	66
No. of Villages	354
Area (Sq. Km.)	1,491.48
No. of Police Stations	14
Water Bodies	South Koel River North Koel River Sankh River Nandani River Sapahi River
Toposheet	F45A6, F45A7, F45A10, F45A11, F45A14 & F45A15
Co-ordinate	Longitude: 23°16' N to 23°40' N Latitude: 84°23' E to 84°57' E
Total Population	4,61,790
Male Population	2,32,629
Female Population	2,29,161
Percentage urban Population	12.43%
Percentage Rural Population	87.57%
Sex Ratio	985
Child Sex Ratio (0-6)	970
Percentage Literacy	
Male-	77.41%
Female-	57.69%
ST Population	2,62,734
SC Population	15,330
Total Workers	2,21,332
Total Male Worker	1,21,605
Total Female Worker	99,727
Total Main Workers	1,03,001
Total Male Main Workers	71,000
Total Female Main Workers	32,001
Total Marginal Worker	1,18,331
Total Male Marginal Worker	50,605
Total Female Marginal Worker	67,726
Total Non-Worker	2,40,458
Total Male Non-Worker	1,11,024
Total Female Non-Worker	1,29,434



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Lohardaga District Survey Report for Stone

Chapter - IV Geology of the District;

The rock type exposed in the region consist of a series of a meta sediment like mica schist, quartz schist, quartzite, garnetiferous mica gneiss, feldspathic mica gneiss intruded by granite plutons, amphibolites, dolerites, pegmatite's and quartz veins. Large-scale migmatization and feldspathisation is responsible for conversion of mica schist to mica-gneiss. The generalized geological succession of these rock types occurring in area is as follows:

Stratigraphic Succession:

Recent	Alluvium-Laterite-Bauxite Quartz vein Pegmatite Dolerite / metadolerite Amphibolite
Cretaceous	Granite gneiss (feldspathised) Mica schist, biotites schist Tall schist
Cambrian	Quartzite, quartz schist Calc. silicate rocks

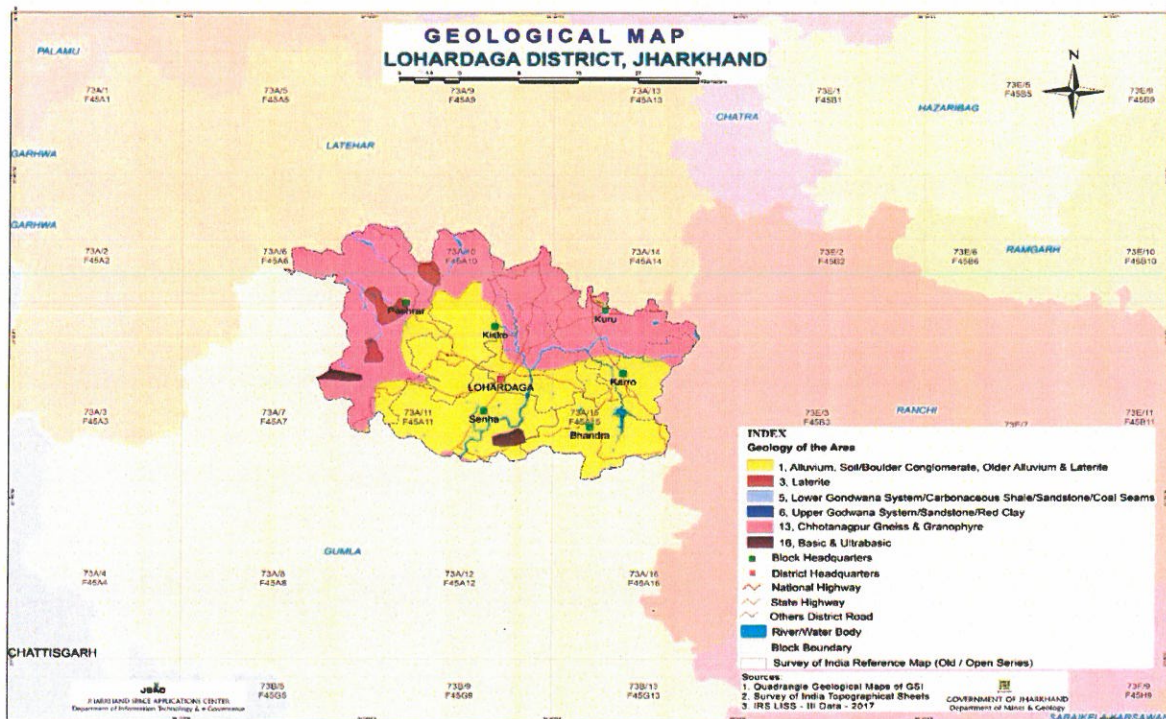


Figure 2 Geological Map of Lohardaga (Source-JSAC)



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Lohardaga District Survey Report for Stone

Chapter - V Drainage of Irrigation pattern;

The Lohardaga district covers the south - western part of Chotanagpur plateau. The range of elevation of the district vary approximately between 610 and 640 m amsl. In plain areas and around 1000 meter in plateau region. The topography of the district is l undulating and rugged. Lohardaga district is drained by the tributaries of three major river of the state viz. North Koel, South Koel and Damodar. The plateau region in west of Lohardaga town is the major water divide for north and south Koel river. The plateau region of the district is highly dissected by down cutting of the tributaries of these rivers. Drainage of the district have been shown in figure-8. A brief description of the rivers of the district is given below:

(i) **South Koel River**

This river originates at Piska near Ranchi. It flows in westward direction, draining the northern part of the district. Near Nawatoli, it takes a turn and flows towards south till it leaves Lohardaga and enters into Gumla district.

(ii) **Sankh River**

This river is the major tributary of South Koel river which rises near Khamer pat at an altitude of 1064 m above msl. It flows southward till it joins the South Koel near Bhakso.

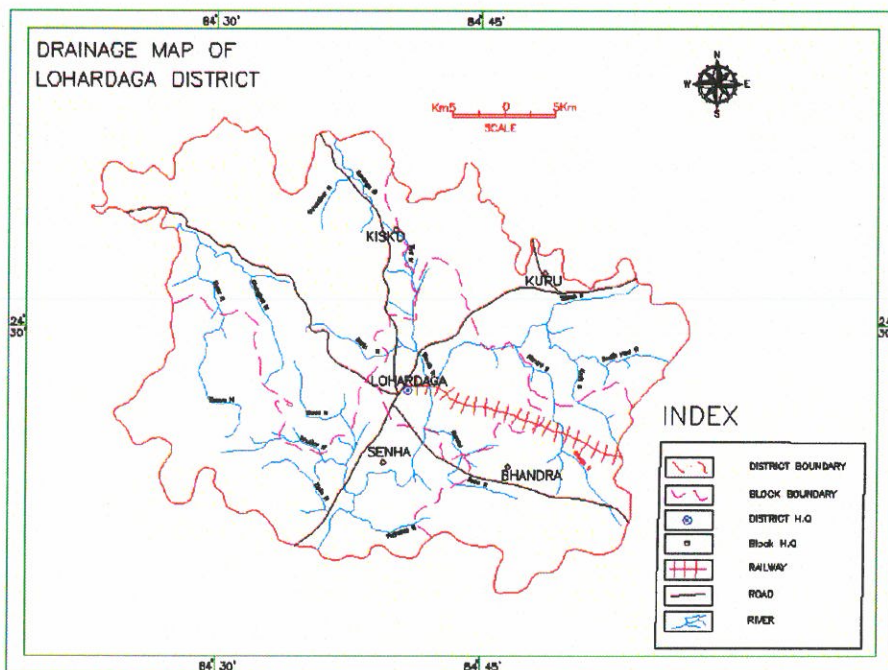


Figure 3 Drainage Map of Lohardaga (Source-CGWB)



Lohardaga District Survey Report for Stone

Chapter - VI Land Utilisation Pattern in the District: Forest, Agricultural, Horticultural, Mining etc.

Table 2 Classification of Land Utilization Statistics in the district Lohardaga

Year	Reporting Area	Forest Area	Area Non-agricultural use	Barren & unculturable land	Permanent pastures & other grazing land	Land under misc. tree groves not included in net area sown	Culturable waste land	Fallow land other than current fallow	Current fallow	Net area sown
1	2	3	4	5	6	7	8	9	10	11
2010-11	149158.29	44373.54	844.05	9305.62	58.30	1772.63	4978.48	15713.94	20121.49	44713.28
2011-12	149158.29	44373.54	844.05	9305.62	58.30	1772.63	4978.48	17259.70	28519.40	42046.60
2012-13	368421.00	109602.04	23941.69	25069.68	62.76	5135.44	18098.16	51729.05	4628.17	88553.45
2013-14	368421.00	109602.64	23941.69	25069.68	62.76	5185.44	18098.16	55688.15	42007.32	88815.86
2014-15	368421.00	109602.64	26677.89	24961.50	143.26	4771.13	19198.16	58293.15	41249.69	83523.58

Source - District Statistics Note - 2010-11&2011-12 Data is in Hectors and 2012-13 to 2014-15 data is in Acre



Lohardaga District Survey Report for Stone

Chapter - VII Surface Water and Ground Water scenario of the district

7.1 Surface Water

Rivers in the District					
Sl. No.	Name of the River or Stream	Total Length in the District (in Km)	Place of origin	Altitude at Origin (in AMSL)	Catchment (Sq. Km.)
1.	Sapahi River	10	Gutuwa	699	--
2.	Nandani River	22	Chatti	743	--
3.	Sankh River	19	Kasitanr	760	145.92
4.	South Koel River	55	Piska	724	603.14
5.	Hargari River	15	Rudhi	1064	--

Dams in the District					
Sl. No.	Name	Purpose	River	Length (m)	Max Height above Foundation (m)
1.	Nandani Dam	Irrigation	Nandini	1646.34	17.08

7.2 Ground Water

The district is underlain by hard rock formations belonging to the Pre-Cambrian period and recent alluvium, confined to the valley part. The geology and the structure of the underlying basement control the occurrence and movement of ground water. No primary porosity is available in the hard rock formation and the ground water occurs in secondary porosity such as joints, fractures and the extent of interconnections within them, facilitates ground water movement.

Ground water occurs within the weathered residuum at favourable locations. The average thickness of the weathered residuum of the district varies from 15 to 20 meter. Besides, the patches of laterite deposits contain copious amount of ground water within its primary porosity in the western part of the district. The valley has been formed mainly by South Koel and its tributaries like Sankh. Ground water also occurs in the unconsolidated sediments deposited by these rivers. The hydrogeology of the area has been presented in figure below :



Lohardaga District Survey Report for Stone

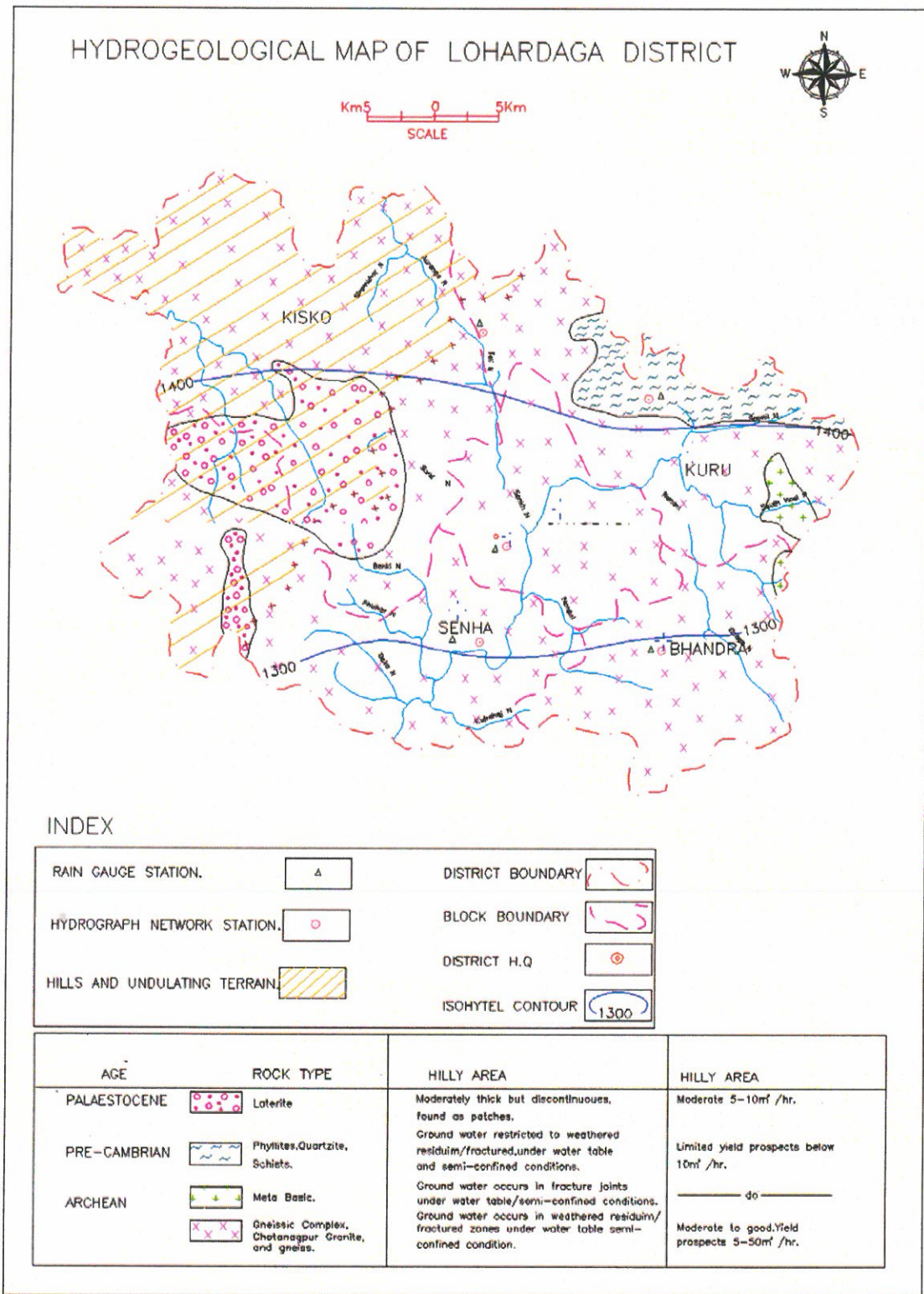
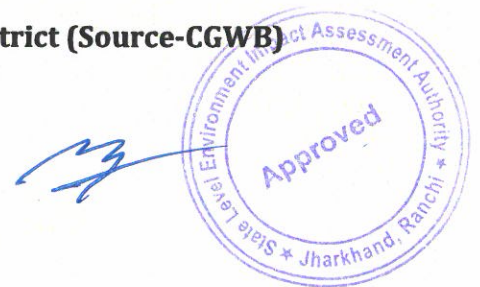


Figure 4 Hydrogeological map of Lohardaga district (Source-CGWB)



Lohardaga District Survey Report for Stone

7.3 Depth to Water Level

Central Ground Water Board has established network of observation wells for monitoring of groundwater level to know the behaviour of ground water regime in the district. There are seven monitoring stations which are monitored every year in January, May, August & November.

During pre-monsoon season the minimum and maximum water level were observed as 5.86 mbgl at Senha and 11.00 mbgl at Kisko respectively. The water level during the post-monsoon season of the district ranges from 2.40 at Senha to 6.31 mbgl at Kisko respectively. The pre-monsoon and post-monsoon depth to water level has been presented in figure below;

Table 3 Ground Water Level

Sl.No.	Administrative Units	Ground water Assessment Sub- Unit	Rainfall (Actual 2019-20)	Rainfall (Normal)	Average Pre-monsoon Water level	Average Post-monsoon Water level	Average Water level Fluctuation	Number of Ground Water Structures for Irrigation (As per 5th MI Census)		
			(mm)	(mm)	(mbgl)	(mbgl)	(m)	DW	STW	DTW
1	Bhandra	Non-Command	1114.40	1194.30	8.94	5.70	3.24	1243	1	1
2	Karro	Non-Command	916.00	1194.30	8.02	4.78	3.24	636	0	0
3	Kisko	Non-Command	1223.20	1194.30	11.00	6.31	4.69	960	1	0
4	Kuru	Non-Command	1372.60	1194.30	8.42	4.65	3.77	1193	2	0
5	Lohardaga	Non-Command	1017.60	1194.30	7.42	3.77	3.65	1455	8	0
6	Peshrar	Non-Command	1169.40	1194.30	8.43	4.31	4.12	432	0	0
7	Senha	Non-Command	1069.30	1194.30	5.86	2.40	3.46	1039	24	1

REPORT ON DYNAMIC GROUND WATER RESOURCE OF JHARKHAND (2020)

Prepared by Central Ground Water Board

Lohardaga District Survey Report for Stone

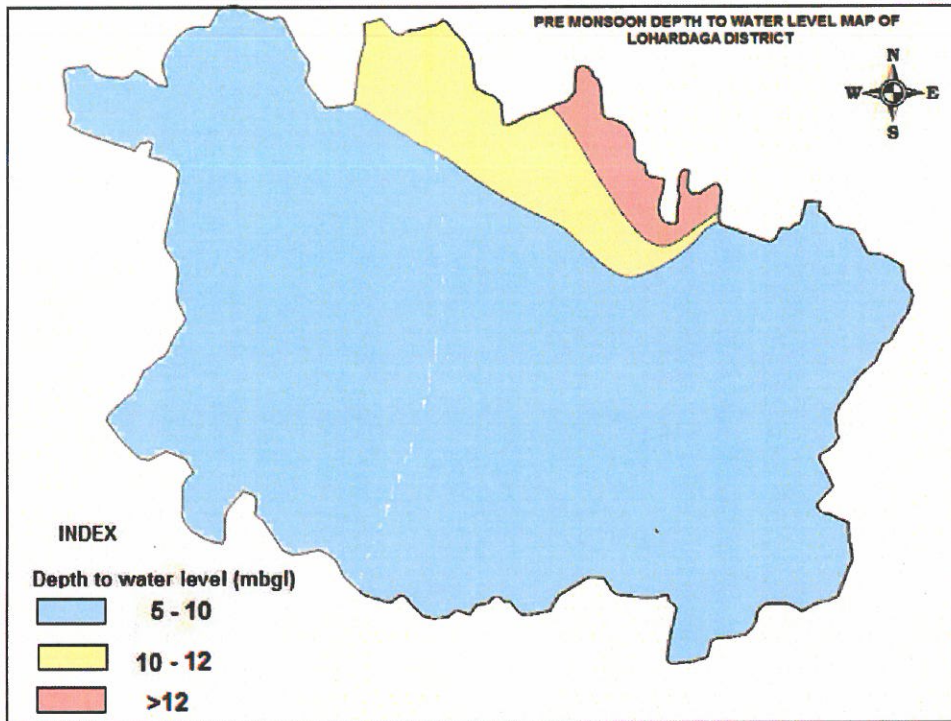


Figure 5 Depth to water level map of Lohardaga district (Source-CGWB)

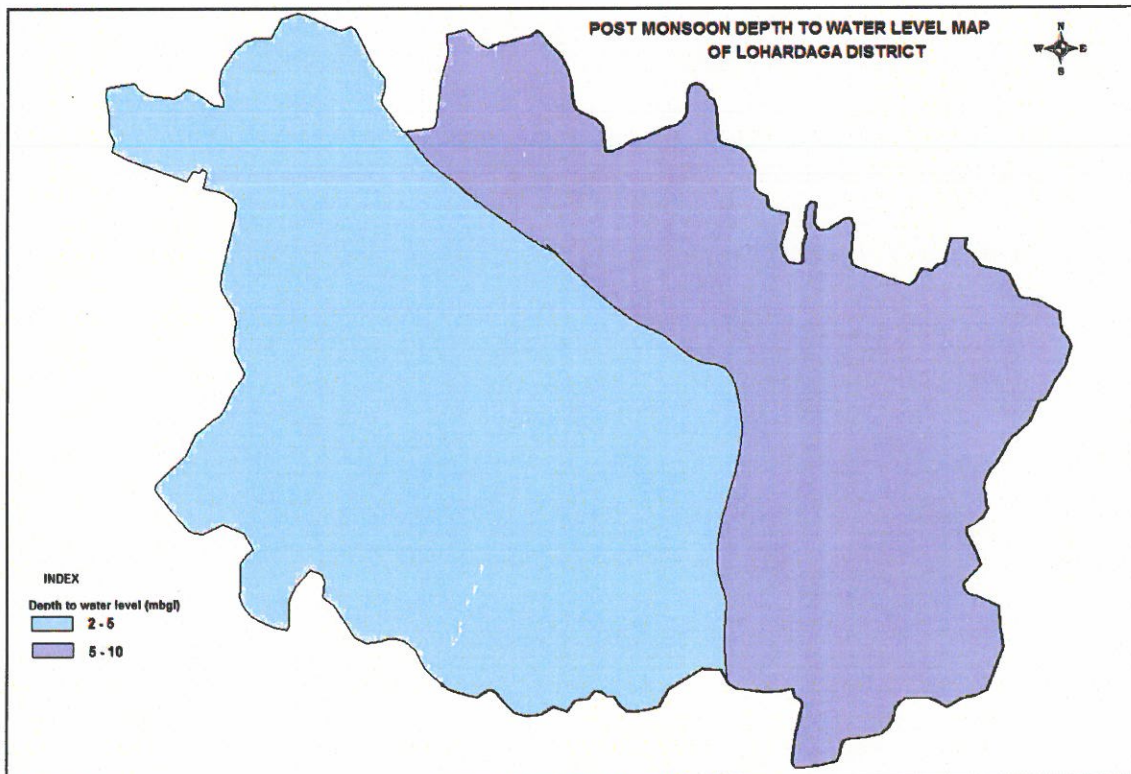
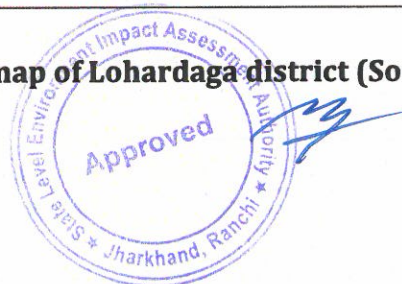


Figure 6 Depth to water level map of Lohardaga district (Source-CGWB)



Lohardaga District Survey Report for Stone

7.4 Hydrogeological Profile of the zones Present Scenario

In the district, bed rock is igneous and metamorphic rocks of Precambrian age. Ground water has been observed to occur in weathered zone and underlain secondary porosities like fractures, joints and fissures weathered zone varies from 5-20m.

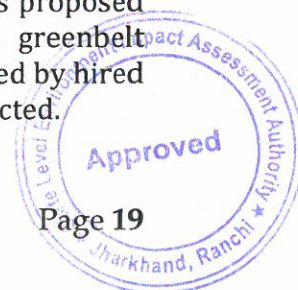
In the district, ground water table in series of open wells lying in the identified potential mining zones were measured in wells on 22/09/2023. Table below gives details of such wells, their location, ground RL, Depth of ground water table & RL of GWT.

Table 4 Zone Wise Ground Water Level

Zone	Location		Ground RL (m amsl)	Depth of Ground Water Table (m)	Ground Water Table (m amsl)
	Latitude	Longitude			
1	23°21'10.5"N	84°40'05.8"E	642.00	6.71	635.29
	22°20'40.0"N	84°39'54.05"E	635.00	3.05	631.95
	23°10'52.8"N	84°39'30.0"E	641.00	2.44	638.56
2	23°18'45.7"N	84°41'24.7"E	655.00	4.88	650.12
3	23°18'56.3"N	84°48'36.4"E	715.00	3.05	711.95
	23°17'49.5"N	84°48'49.9"E	705.00	3.66	701.34
	23°18'44.0"N	84°49'58.9"E	701.00	1.52	699.48
	23°19'31.6"N	84°52'28.5"E	721.00	2.13	718.87
4	23°21'48.2"N	84°53'38.2"E	717.00	3.66	713.34
	23°21'17.3"N	84°53'15.7"E	715.00	4.88	710.12
5	23°21'44.6"N	84°47'17.6"E	688.00	5.79	682.21
	23°22'08.6"N	84°47'38.6"E	686.00	0.91	685.09
	23°22'15.6"N	84°48'37.0"E	710.00	0.76	709.24
6	23°24'41.0"N	84°52'49.1"E	677.00	3.66	673.34
7	23°30'49.2"N	84°51'17.8"E	662.00	3.35	658.65
	23°29'43.3"N	84°50'53.6"E	663.00	4.27	658.73
8	23°29'56.0"N	84°48'47.5"E	659.00	3.96	655.04
9	23°25'24.5"N	84°45'23.6"E	675.00	3.05	671.95
	23°26'04.8"N	84°45'02.5"E	676.00	1.52	674.48
10	23°21'52.9"N	84°42'29.3"E	631.00	3.66	627.34
11	23°22'55.5"N	84°40'48.8"E	636.00	5.18	630.82
	23°22'42.0"N	84°40'20.5"E	633.00	4.27	628.73
12	23°28'08.9"N	84°40'44.0"E	668.00	3.05	664.95
	23°28'32.8"N	84°40'44.7"E	661.00	7.62	653.38
13	23°27'1.68"N	84°37'30.07"E	717.00	3.80	713.20

Impact on Ground Water

It is proposed to limit mining 1m above Ground Water Table (GWT). Therefore, mining activities are not likely to impact groundwater profile in the district. Also, it is proposed that water demand for other purposes i.e. potable, dust suppression & greenbelt development would be sourced from surface water source. They will be supplied by hired water tankers. Thus, on this account also ground water source will not be impacted.



Lohardaga District Survey Report for Stone

Water Demand

A stone mine needs water for following purposes;

- ✓ Potable
- ✓ Dust Suppression
- ✓ Greenbelt Development

Average demand for above purpose are;

Potable

On an average number of persons employed for a mine having lease area of 5 Ha. ranges from 40-50. Taking potable water demand as 30 litre per day, purpose works out to 1.5 KLD.

Dust Suppression

Use of water for dust suppression is for haul road and other degraded area. On an average taking 0.2 Ha. as area for haul road and average water demand for dust suppression on haul road is 30 KLD per Ha. Water demand for dust suppression in every mine would be 6 KLD.

Greenbelt Development

Greenbelt is developed at;

- ✓ Safety zone of mine
- ✓ Avenue plantation on link road

Safety zone is 7.5 m strip around the quarry. In a mine having lease area 5 Ha. safety zone measures 0.6 Ha. to 0.8 Ha.

Taking safety zone as 0.8 Ha.

Number of plants in 0.8 Ha. will be 1600×0.8 i.e. 1280 Plants.

Norms for water demand for raising greenbelt in safety zone may be taken as 5 KLD per Ha.

Thus, water demand for raising greenbelt works out to 4 KLD.

Water demand raising for avenue plantation on link road may be taken as 1 KLD.

So, water demand for greenbelt would be 5 KLD.

Total Water Demand works out as;

Potable	: 1.5 KLD
Dust Suppression	: 6.0 KLD
Greenbelt Development	: 5.0 KLD
Total	: 12.5 KLD

This water will be sourced from surface water source.



Lohardaga District Survey Report for Stone

7.5 Ground Water Resources

The Ground Water Resource assessment has been carried based on the recommendations of Ground Water Estimation Committee report 1997 (GEC-1997). Block wise ground water resources, gross draft and stage of ground water development have been worked out for the year 2009 for five blocks and presented in table -6. The net ground water availability has been assessed to be 9375.93 ham and the existing ground water draft for all uses has been assessed as 3717.75 ham. The net ground availability for future irrigation has been assessed as 5421.14 ham.

The stage of ground water development in Lohardaga district is found to 1be very low. It ranges from 17.69% in Kisko block to 67 % in Lohardaga block with an average of 39.65%. Minimum ground water development is found in Kisko block located in the northern part of the district.

7.6 Ground Water Quality

To evaluate the quality of ground water, 6 Nos. of water samples have been collected from the district and analyzed in Chemical Laboratory CGWB, MER, Patna. The analyzed results are given in the Table-6. The constituents are under permissible limit as per the Indian Standard of Drinking Water (BIS- 10500-91) and hence the ground water is suitable for irrigation as well domestic purpose. The pH value of ground water indicates its.



Lohardaga District Survey Report for Stone

Table 5 Assessment of Dynamic Ground Water Resource of Lohardaga District (2009) (in ham)

Sl. No	Assessment Unit/District	Net Annual Ground water Availability	Existing Gross Ground Water Draft for Irrigation	Existing Gross Ground water Draft for Domestic and Industrial Water Supply	Existing Gross Ground Water Draft For all Uses (10+11)	Allocation for Domestic and Industrial Requirement supply upto next 25 years	Net Ground Water Availability for future irrigation development	Stage of Ground Water Development (%)
DISTRICT: LOHARDAGA								
1	Bhandara	1657.80	745.65	87.45	833.10	131.96	780.19	50.25
2	Kisko	2593.54	354.96	90.97	445.93	137.28	2101.30	17.19
3	Kuru	1848.52	695.77	132.13	827.90	199.39	953.35	44.79
4	Lohardaga	1210.04	683.94	126.83	810.77	191.39	334.72	67.00
5	Senha	2066.04	662.59	137.46	800.05	151.87	1251.58	38.72
	TOTAL	9375.93	3142.90	574.85	3717.75	811.89	5421.14	39.65

Table 6 Chemical Analysis Result of Water Samples from NHS of Lohardaga District

Sl. No	Location	E.C.micro Siemens/cm at 25°C	pH	CO ₃ mg/l	HCO ₃ mg/l	Cl mg/l	Ca mg/l	Mg mg/l	TH as CaCO ₃ mg/l	Na mg/l	K mg/l
1.	Lohardaga	1260	8.79	48	390	160	96	53	460	79	10
2.	Kuru	1098	8.43	12	299	131	64	57	395	43	13
3.	Hinjila	365	8.28	0	177	14	24	7.3	90	38	5.1
4.	Bhandara	116	8.47	18	24	7.1	10	2.4	35	10	1.2
5.	Rudh	207	8.27	ND	48	35	20	2.4	60	17	5.1
6.	Senha	498	8.81	36	134	57	58	9.7	185	25	4.5



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Lohardaga District Survey Report for Stone

7.7 Status of Ground Water Development

Although ground water development in Lohardaga district is on low scale but almost the entire rural water supply is dependent on ground water. Besides, the role of ground water for irrigation is also increasing day by day. As evident from the stage of ground water development, which ranges from 17.19 % to 67% (Block wise) for the district, there is vast scope for further development of this precious natural resource. The ground water is mainly confined within weathered residuum and in narrow valley fills along the rivers. Besides, CGWB exploration reveals, considerable amount of ground water occurs within the secondary porosity at deeper fracture zones. The joints and fractures are not uniformly distributed, thus locating them is the main requisite for deeper ground water development. Identification of lineaments from satellite Imageries and subsequent confirmation through resistivity survey can help to a greater extent for ground water development from deeper water bearing zones. The eastern parts of the district are not feasible for high yield production well.

Construction of dug cum bore well is also suitable for enhancing the yield of dug wells, which will be cost effective. The ground water development varies in different places depending on the availability of favourable potential zones / aquifer. For the construction of ground water structures, knowledge of the local as well as regional hydrogeological condition of the area is necessary.

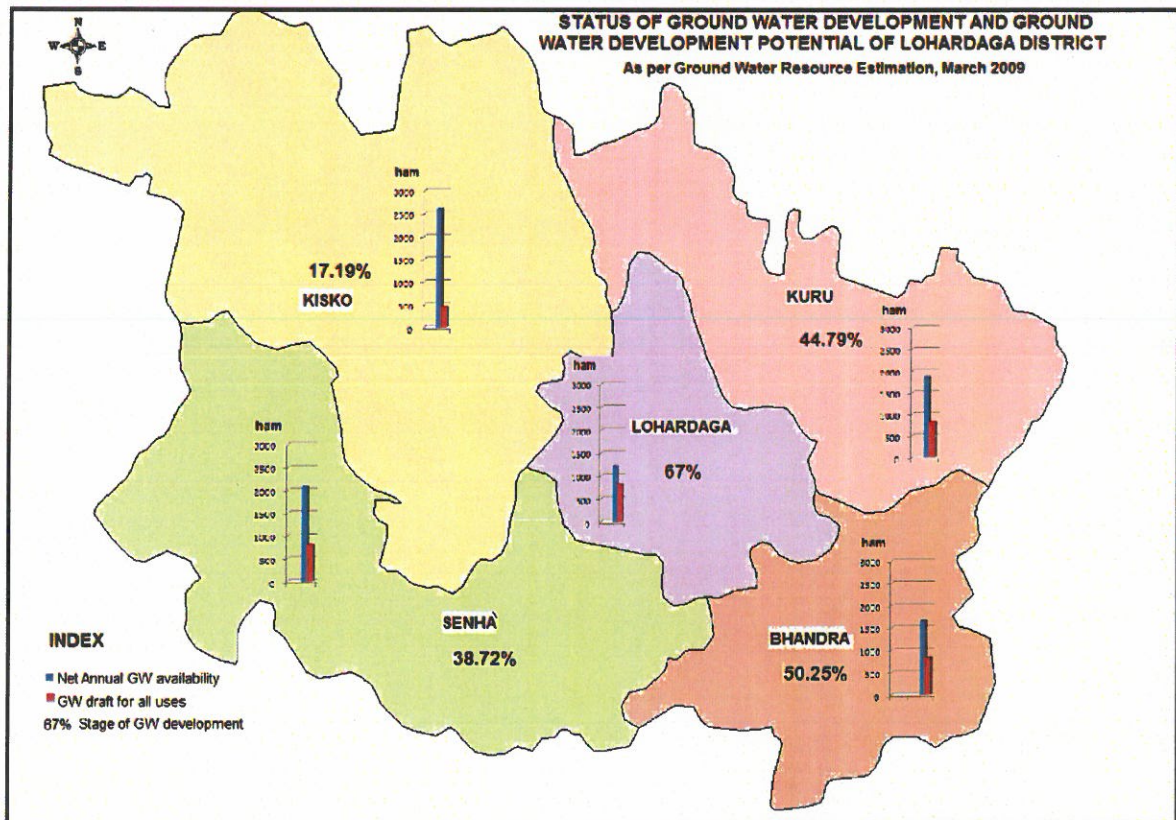


Figure 7 Stage of Ground Water development of Lohardaga district (Source-CGWB)



Lohardaga District Survey Report for Stone

Chapter - VIII Rainfall of the district and climatic condition;

Table 7 Monthly Rainfall in the District of Lohardaga (Unit - mm)

Year/Month	Jan.	Feb.	March	April	May	June	July	Agust	Sept.	Oct.	Nov.	Dec.	Total
2001	0.0	11.7	72.0	19.0	42.3	337.7	282.7	139.2	95.2	75.0	0.0	0.0	1074.8
2002	1.9	3.3	2.6	0.0	6.3	242.4	255.4	249.1	139.3	64.2	0.0	1.3	965.8
2003	1.2	44.5	39.9	13.0	9.8	224.4	222.1	206.7	256.3	535.4	2.3	18.8	1574.4
2004	21.2	10.9	0.7	48.1	22.8	190.9	237.9	304.4	229.6	193.5	0.0	5.0	1265.0
2005	36.1	39.1	1.8	3.5	17.9	220.2	212.8	163.8	169.0	34.4	0.0	5.7	904.3
2006	0.0	0.0	20.1	19.5	162.2	206.3	505.5	371.1	158.5	32.0	7.2	0.0	1482.4
2007	0.0	86.5	39.6	20.4	41.0	140.7	292.1	358.0	254.0	14.6	0.0	0.0	1246.9
2008	15.9	2.6	35.1	26.9	46.9	137.0	394.5	309.1	124.0	21.0	1.2	0.0	1114.2
2009	0.0	0.0	3.4	0.0	119.6	82.3	223.1	196.2	317.0	96.3	18.7	0.0	1056.6
2010	3.2	8.6	2.5	18.1	20.9	137.5	182.8	245.5	150.0	97.7	12.7	0.0	911.5
2011	8.0	8.2	2.2	31.0	62.4	509.5	218.8	477.2	371.1	25.0	0.0	0.0	1713.4
2012	61.7	21.1	3.7	0.0	0.8	169.1	249.2	184.9	171.2	12.6	69.0	12.0	955.3
2013	1.0	28.3	5.8	41.8	3.3	166.6	240.3	290.4	105.2	-	0.0	0.0	882.7
2014	17.7	60.1	0.0	0.0	119.6	166.6	249.2	196.2	317.0	97.7	0.0	0.0	1224.1
2015	33.5	0.8	18.0	57.0	37.0	161.0	445.7	237.5	52.4	47.0	0.0	0.0	1089.9
2016	8.9	7.8	20.7	0.0	87.0	74.2	311.0	443.6	254.9	70.6	0.0	0.0	1278.7
2017	8.4	0.0	0.9	0.0	17.2	147.8	595.4	201.1	150.6	74.7	6.3	0.0	1202.4
2018	0.0	9.2	0.0	44.7	48.8	135.1	379.3	233.3	142.5	10.8	0.0	26.9	1030.6
2019	3.7	22.0	39.5	56.8	5.9	129.9	282.1	250.8	152.3	39.5	0.0	21.9	1004.4
2020	42.9	13.1	102.4	46.0	60.0	160.0	358.8	38.8	118.7	137.8	14.7	0.0	1093.2
Total	42.9	13.1	102.4	46.0	60.0	160.0	358.8	38.8	118.7	137.8	14.7	0.0	1093.2
Average	1.8	0.5	4.3	1.9	2.5	6.7	15.0	1.6	4.9	5.7	0.6	0.0	45.6

Source: - Approved DSR (SAND)



Lohardaga District Survey Report for Stone

Climatic Conditions in the District

The climate of this district is characterized by dry hot summer, mild humid in post monsoon season and well distributed rainfall in the southwest monsoon season. The year may be divided into four seasons. The summer season is from March to first week of June. The period from June to September is of southwest monsoon season. October is a transitional month between monsoon and winter conditions. The winter season is from the end of November to February.

RAINFALL

Records of rainfall in the district are available for five raingauge stations for period ranging from 12 to 41 years. The details of rainfall at these stations and for the district as a whole are given in Tables 1 and 2. The average rainfall in the district as a whole is 1181.6 mm. During the southwest monsoon season June to September the district receives 84% of the annual normal rainfall. July is the rainiest month with an average rainfall of 320.4 mm. The variation in the rainfall from year to year is not much large. In the fifty year period from 1951 to 2000, the highest annual rainfall amounting to 140% of the normal occurred in 1978, while the lowest annual rainfall which was only 63% of the normal occurred in 1992. In this fifty year period there were five years in which the rainfall in the district was less than 80% of the normal and none of them were consecutive years. It is seen from Table 2 that the rainfall was between 901 mm and 1400 mm in 32 years out of 43. On an average there are 67 rainy days (i.e. days with rainfall of 2.5 mm or more) in a year in the district. This number varies from 65 at Bhandara and Kuru to 70 at Lohardaga.

The heaviest rainfall recorded in 24 hours at any station in the district was 251.5 mm at Kuru on 18 July 1975.

TEMPERATURE

There is no meteorological observatory in the district. So the description which follows is based on the data of observatory in the neighbouring district viz. Ranchi. Temperature begins to drop rapidly from mid November. January is the coldest month with the mean maximum temperature at about 23°C and the mean minimum temperature at about 10°C. In association with cold waves which affect the district in winter months, in the wake of western disturbances which move across north India and the minimum temperature may go down upto 5°C on individual days. After February temperatures rise steadily till first week of June. May is the hottest month with the mean maximum temperature at about 37°C and mean minimum temperature at about 23.0°C. On some days in April, May and early part of June the maximum temperature may sometimes rise upto about 40°C. The weather cools down with the advance of the southwest monsoon into the district by about second week of June. Temperatures begin to drop appreciably with the withdrawal of the monsoon by first week of October.

HUMIDITY

In the southwest monsoon season air is generally humid with value of relative humidity generally above 80%. The air is generally dry in winter and summer season. The summer months are the driest part of the year with value of relative humidity especially in the afternoon of the order of 30%.



Lohardaga District Survey Report for Stone

CLOUDINESS

During the southwest monsoon months skies are heavily clouded to overcast. From October the cloudiness decreases. In winter and early part of summer skies are generally clear or lightly clouded. In winter on some days when western disturbances affect the district skies are heavily clouded. Cloudiness increases in latter part of summer especially in the afternoon.

WINDS

Winds are generally light to moderate in later part of summer and southwest monsoon season and light in the rest of the year. In winter months winds are mainly from northwesterly direction. In April south-westerlies winds begin to appear and become predominant with the advance of the monsoon season. In southwest monsoon season though winds blow from southwesterly or westerly direction, on some days in the afternoon winds blow from directions southeasterly or easterly. In October, northerly and northwesterly winds appear and strengthen in winter season.

SPECIAL WEATHER PHENOMENA

Depressions originating in the Bay of Bengal during the southwest monsoon season affect the district and its neighbourhood during their westward or northwestward movement after crossing the coast. This causes gusty winds and widespread heavy rain. Thunderstorms occur throughout the year. Its frequency is more in latter part of summer and southwest monsoon season. Thunderstorms during the period February to June are sometimes accompanied by squally weather, less frequently with hail and dust storm. Fog occurs occasionally in winter months.

Source : Climate of Jharkhand, issued by Climatological Publication Section of Indian Meteorological Department, Government of Jharkhand.



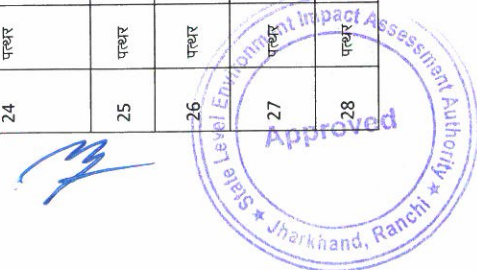
Chapter - IX Details of the mining leases in the District

Sl. No.	Name of the Mineral	Name of the Lessee	Address & Contact No. of Lessee	Mining lease Grant Order No. & date	Area of Mining lease (Ha.)	Period of Mining lease (Initial)		Period of Mining lease (1st/2nd... renewal)		Date of commencement of Mining Operation	Status (Working / Non Working / Temp. Working for dispatch etc.)	Captive/ Non-Captive	Obtained Environmental Clearance of grant of EC. (Yes/No), If Yes Letter No with date of	Location of the Mining lease (Latitude & Longitude)	Method of Mining (Opencast / Underground)
						From	To	From	To						
1	पत्थर	स्व0पूपा लोहरा वल्द शिव शंकर लोहरा	बेजार किस्को, लोहरदगा	NA	4.00	13/10/2001	12/10/2021	NA	NA	NA	Non-Working	Non-Captive	NA	15	16
2	पत्थर	स्व0इन्द्र लोहरा वल्द स्व0शिवकिशोर लोहरा प्राधिकृत श्रीमति सुमति देवी	किस्को, लोहरदगा	NA	4.00	23/02/2001	22/02/2021	NA	NA	NA	Non-Working	Non-Captive	NA	15	16
3	पत्थर	श्री अब्दुल नेवाल अख्तर, वल्द स्व0 अब्दुल कासीम	पावरगंज, लोहरदगा	NA	2.05	18/11/2003	17/11/2008	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/705 DT. 04.07.17	N- 23°28'17.5" - 23°28'21.7" E - 84°40'44.4" - 84°40'48.0"	Opencast
4	पत्थर	श्री छेदी लोहरा, वल्द स्व0 मोखार लोहरा	ग्राम-टाटी, लोहरदगा	NA	2.75	27/10/2001	26/10/2021	NA	NA	NA	Non-Working	Non-Captive	NA	N- 23°28'3.69" - 23°28'3.71" E - 84°40'9.12" - 84°40'9.25"	Opencast
5	पत्थर	स्व0 मनोरंजनी अंसारी वल्द अजमत अली अंसारी	अमला टोली, लोहरदगा	NA	0.43	23/05/2006	22/05/2026	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
6	पत्थर	श्री सत्यजीत सिंह, श्री मुनेश्वर प्रसाद सिंह	ग्राम अरकोसा, नवाटोली, लोहरदगा	NA	1.50	02/03/2010	01/03/2020	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1251 DT. 14.11.17	N- 23°25'51.40" - 23°25'55.55" E - 84°44'53.74" - 84°44'57.51"	Opencast
7	पत्थर	श्री इन्वियाह टोमो, वल्द श्री पुरन टोमो	ग्राम-अरकोसा महार टोली, लोहरदगा	NA	1.20	21/06/2010	20/06/2020	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1247 DT. 14.11.17	N- 23°25'50.61" - 23°25'53.31" E - 84°44'53.20" - 84°44'56.3"	Opencast
8	पत्थर	श्री इन्वियाह टोमो, वल्द श्री पुरन टोमो	ग्राम-नवाटोली, लोहरदगा	NA	1.08	30/04/2011	29/04/2021	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1248 DT. 14.11.17	N- 23°25'50.49" - 23°25'53.61" E - 84°44'53.20" - 84°44'54.97"	Opencast
9	पत्थर	श्री उदय कुंवर, वल्द श्री सुधीर बन्ध कुंवर	ग्राम-पौड मन्दिखरी लोहरदगा	NA	1.50	13/05/2012	12/05/2022	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1248 DT. 14.11.17	N- 23°25'46.61" - 23°25'49.78" E - 84°44'57.74" - 84°44'55.52"	Opencast
10	पत्थर	श्री सुजीत सिंह, वल्द श्री रमेश्वर प्रसाद	ग्राम-नवाटोली, अरकोसा, लोहरदगा	NA	1.20	12/05/2011	11/05/2021	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
11	पत्थर	श्री उदय सिंह, वल्द श्री चन्द्रपाल सिंह	ग्राम-नवाटोली, अरकोसा, लोहरदगा	NA	2.00	30/04/2011	29/04/2021	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1950 DT. 14.11.17	N- 23°25'52.00" - 23°25'57.72" E - 84°44'51.73" - 84°44'57.22"	Opencast
12	पत्थर	श्री अजय कुंठ सिंह, वल्द स्व0 चन्द्रपाल सिंह	ग्राम-अरकोसा नवाटोली, लोहरदगा	NA	0.60	20/03/2012	19/03/2022	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
13	पत्थर	श्री अल्लाउद्दीन अंसारी, वल्द श्री तेजु अंसारी	ग्राम-पौड, अरकोसा,	NA	2.55	07/03/2006	06/03/2016	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast



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14	पत्थर	सर्वश्री अरकोसा स्टोन वर्क्स, पीठो श्री ममान अंसारी	शाना-जिला, लोहरदगा ग्राम-पीठो, अरकोसा, शाना-जिला, लोहरदगा।	NA	0.50	12/03/2010	11/03/2020	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/707DT.04.07.2017	N- 23°25'51.9" - 23°25'49.25" E - 84°44'58.04" - 84°44'59.62"	Opencast
15	पत्थर	श्री मटेवर उर्वर्य	ग्राम-अरकोसा नवाटोली, लोहरदगा।	NA	0.75	06/06/2011	05/06/2021	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
16	पत्थर	1.श्री नेजाम अंसारी पिता अमीरुद्दीन अंसारी 2. सफीउल्लाह अंसारी पिता अमीरुद्दीन अंसारी 3. सिद्धिक अंसारी पिता मुस्तकीम अंसारी	ग्राम-रामपुर पीठो रामपुर शाना+जिला-लोहरदगा	NA	3.39	02/05/2016	01/05/2026	NA	NA	NA	Working	Non-Captive	EC/SEIAA/2014-15/611/2014/883 DT. 01.05.2015	N- 23°26'32.35" - 23°26'38.0" E - 84°44'52.22" - 84°44'56.05"	Opencast
17	पत्थर	श्री अशोक कुं सिंह, वल्ल स्वयंभूजकिहारी सिंह	ग्राम-छत्तर बनीचा, लोहरदगा।	NA	1.00	03/03/2012	02/03/2022	NA	NA	NA	Non-Working	Non-Captive	EC/SEIAA/2015-16/1148/2015/1749 DT. 26.10.15	N- 23°26'57.20" - 23°26'59.81" E - 84°44'31.31" - 84°44'34.09"	Opencast
18	पत्थर	श्री अतनोल टोप्पो, वल्ल श्री मररा टोप्पो	ग्राम-रघुदोली, लोहरदगा।	NA	1.00	31/12/2010	30/12/2014	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
19	पत्थर	श्री पवन कुं सिंह, वल्ल श्री सुरेश कुं सिंह	ग्राम-अरकोसा नवाटोली, लोहरदगा।	NA	1.00	01/06/2009	31/05/2019	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1245/M DT. 14.11.17	N- 23°26'54.76" - 23°26'58.06" E - 84°44'35.13" - 84°44'37.01"	Opencast
20	पत्थर	श्री अजय कुं सिंह, वल्ल श्री चन्दपाल सिंह	ग्राम-अरकोसा नवाटोली, लोहरदगा।	NA	1.50	05/05/2009	04/05/2019	NA	NA	NA	Non-Working	Non-Captive	EC/SEIAA/2015-16/1147/2015/1750 DT. 26.10.15	N- 23°26'51.20" - 23°26'54.55" E - 84°44'35.21" - 84°44'37.99"	Opencast
21	पत्थर	श्री सोमनाथ उर्वर्य एवं श्री युजीत सिंह	ग्राम-अरकोसा नवाटोली, लोहरदगा।	NA	2.70	15/06/2011	14/06/2021	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1252 DT. NA	N- 23°26'33.13" - 23°26'39.21" E - 84°44'33.03" - 84°44'38.24"	Opencast
22	पत्थर	श्री सुरेश उर्वर्य, वल्ल श्री मंगल उर्वर्य	ग्राम-बन्डुडिहा पोनिमानी, शाना एवं जिला लोहरदगा।	NA	0.98	07/10/2005	06/10/2015	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
23	पत्थर	श्री मदन साहू वल्ल श्री मोला साहू	ग्राम-पीठो जिला-लोहरदगा	NA	3.13	08/06/2000	07/06/2010	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
24	पत्थर	1-श्री लव कुं सिंह, वल्ल श्री प्रवेश सिंह 2-श्री प्रहलाद गोप वल्ल नागेंद्र गोप,	ग्राम-पीठो नारा, शानाएलजिला लोहरदगा। ग्राम-दतरी, पीठो सिद्धियों शाना-सेन्का, जिला-लोहरदगा।	NA	2.00	29/04/2008	28/04/2018	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2017-18/283 DT. 05.04.2018	N- 23°21'23.6" - 23°21'25.7" E - 84°42'22.7" - 84°42'27.6"	Opencast
25	पत्थर	मेतर्स एण्डपीठो स्टोन वर्क्स पीठो श्री आरोफ इमाम एवं दीपक कुमार	पावरजंज, लोहरदगा।	NA	1.00	25/11/2010	24/11/2020	NA	NA	NA	Non-Working	Non-Captive	NA	N- 23°21'23.83" - 23°21'25.55" E - 84°42'26.86" - 84°42'30.54"	Opencast
26	पत्थर	श्री लालचंवर शंकर एवं मममोहन गोप	झालझनीरा पीठो गंगोया लोहरदगा।	NA	2.00	12/10/2010	11/10/2020	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/294 DT.28.03.2017	N- 23°21'22.33" - 23°21'25.9" E - 84°42'35.79" - 84°42'41.01"	Opencast
27	पत्थर	सर्वश्री लिमपलेक्स इन्फ्रक्वर लि, प्रोजेक्ट मनेजर श्री सुधीर कुमार गोस्वामी	ग्राम चकला बानो पीठो चन्दवा लातहार।	NA	5.50	11/03/2011	10/03/2021	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
28	पत्थर	सर्वश्री स्वर इंटर प्राइजंज, पीठो श्री शैयाद शाहिन अख्तर	पावरजंज लोहरदगा।	NA	1.00	29/03/2011	28/03/2021	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/295	N- 23°21'21.9" - 23°21'23.9" E - 84°42'34.8" - 84°42'37.2"	Opencast



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29	पत्थर	श्री लकील अंसारी, वल्द हवीय अंसारी	ग्राम- मुजिनियां लोहरदगा।	NA	1.50	23/05/2011	23/05/2021	NA	NA	NA	Non-Working	Non-Captive	EC/ DEIAA/2016-17/704 DT. 04.07.17	N- 23°21'26.5" - 23°21'28.32" E - 84°42'25.50" - 84°42'29.83"	Opencast
30	पत्थर	सर्वश्री एडरसो इन्टर प्राइजेज पाटो श्री अशोक कुमार यादव एवं शकाल अहमद	संगला रोड लोहरदगा।	NA	4.10	01/03/2012	28/02/2022	NA	NA	NA	Non-Working	Non-Captive	EC/ DEIAA/2016-17/265 DT. 31.03.18	N- 23°21'23.7" - 23°21'26.4" E - 84°42'22.6" - 84°42'38.1"	Opencast
31	पत्थर	श्री रोहन साहु, वल्द स्वो रंजीत कुं. साहु	मेन रोड लोहरदगा।	NA	1.67	15/11/2003	14/11/2013	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
32	पत्थर	श्री रोहन साहु, वल्द स्वो रंजीत कुं. साहु	मेन रोड लोहरदगा।	NA	1.00	23/09/2006	22/09/2016	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
33	पत्थर	सर्वश्री मेघनाथ साहु, वल्द स्टेन वर्क, प्रो श्री जयनाथ साहु, वल्द स्वो जालेश्वर साहु	ग्राम-पो-थाना-सेन्हा, जिला-लोहरदगा	NA	3.00	13/06/2009	12/06/2019	NA	NA	NA	Non-Working	Non-Captive	EC/ DEIAA/2016-17/702 DT. 04.07.17	N- 23°19'23.20" - 23°19'28.65" E - 84°38'38.69" - 84°38'44.7"	Opencast
34	पत्थर	श्री स्मीर उर्वार, पिता स्वो सुखराम उर्वार	ग्राम-पोस्टो कण्डरा, थाना-सेन्हा, लोहरदगा	NA	1.00	27/03/2006	26/03/2016	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
35	पत्थर	श्रीमति रीता देवी, वल्द श्री रतनू भाता	ग्राम-कुट्टर, पो निानी थाना-जिला-लोहरदगा।	NA	0.50	15/02/2004	14/02/2014	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
36	पत्थर	(1) श्री अमीरुद्दीन अंसारी वल्द, श्री जहरुद्दीन अंसारी, (2) श्री सफरुद्दीन अंसारी, वल्द श्री सुखिया अंसारी (3) श्री हुसैन अंसारी वल्द तेजावत अंसार	ग्राम-सेरगाहा, पो एवं थाना-सेन्हा जिला-लोहरदगा	NA	0.68	11/01/2010	10/01/2020	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
37	पत्थर	श्री अजय प्रसाद, वल्द श्री दयानन्द प्रसाद,	ग्राम-बरवाडेली, लोहरदगा।	NA	2.00	05/08/2009	04/08/2019	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/701 DT. 04.07.2017	N- 23°22'04.61" - 23°22'7.54" E - 84°40'24.37" - 84°40'26.76"	Opencast
38	पत्थर	श्री शैयद शाहिद अख्तर, वल्द श्री शैयद मुनिजुद्दीन	बु रोड पावरगंज लोहरदगा।	NA	1.00	13/03/2009	12/03/2019	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/295 DT. 28.03.2017	N- 23°21'23.06" - 23°21'25.07" E - 84°42'22.07" - 84°42'27.06"	Opencast
39	पत्थर	सर्वश्री पुनारीली महिला मंडल, अध्यक्ष श्रीमति बिरसमनी उर्वार	ग्राम-कण्डर पो बुटी लोहरदगा।	NA	1.00	16/06/2011	15/06/2021	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
40	पत्थर	श्री रविन्द्र कुं. साहु, वल्द श्री मारवाडी साहु	ग्राम एवं पो सेन्हा, जिला-लोहरदगा	NA	1.04	23/12/2008	22/12/2018	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
41	पत्थर	सर्वश्री बेली महिला मंडल पत्नी अध्यक्ष श्रीमति नीमा लक्ष्मी लोहरदगा।	ग्राम-पाली, पो-गंगो, जिला-लोहरदगा	NA	1.00	16/09/2010	15/09/2020	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
42	पत्थर	श्री रवि कुमार अग्रवाल, पिता श्री प्रदीप कुमार अग्रवाल	मेनरोड चन्दा, पो-चन्दा, लातेहार	NA	1.04	11/04/2012	10/12/2018	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
43	पत्थर	श्री शाहिद खी, वल्द श्री इस्माइल खी	ग्राम जतरपुडा पो ककडाड, कुडू, लोहरदगा।	NA	1.00	21/09/2011	20/09/2021	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1243 DT. 14.11.17	N- 23°30'22.60" - 23°30'23.97" E - 84°54'08.00" - 84°54'11.54"	Opencast
44	पत्थर	श्री अबुल्ला अंसारी वल्द श्री समसुल हक	ग्रामपो ककराड थाना-कुडू, जिला-लोहरदगा	NA	1.00	21/05/2009	20/05/2019	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast



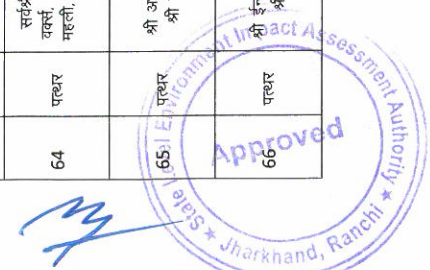
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45	पथर	श्री शाहिद खॉ. वल्ड श्री ईसाईल खॉ.	ग्राम जलपुराडा पो-जकरावा थाना-कुडू जिला-लोहरदगा।	NA	2.00	07/03/2006	06/03/2016	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/SEIAA/2015-16/1397/2015/213 2 DT. 15.12.2015	N-23°30'0.08" - 23°30'03.02" E-84°54'05.08" - 84°54'07.04"	Opencast
46	पथर	सर्वश्री झारखण्ड स्टोन वर्क्स प्रो. श्री मुकुंर हुसेन एवं अन्य वल्ड स्को करमात डुरेन।	ग्राम-घाघरा पो हाडु घाघरा थाना-कुडू जिला-लोहरदगा	NA	1.00	23/12/2008	22/12/2018	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/706 DT. 04.07.17	N-23°30'13.62" - 23°30'16.01" E-84°54'54.14" - 84°54'16.20"	Opencast
47	पथर	श्रीमति तसोमा खातुन, पति शाहिद खॉ.	ग्राम जलपुराडा, पोस्ट-ककरावा, थाना-कुडू लोहरदगा।	NA	2.00	30/03/2016	29/03/2021	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/SEIAA/2015-16/1397/2015/2132 DT. 15.12.15	N-23°30'0.8" - 23°30'03.2" E-84°54'05.8" - 84°54'09.4"	Opencast
48	पथर	1. श्री सुनील उरांव, वल्ड श्री मकड उरांव 2. श्री सुरेश महतो वल्ड श्री जेरका महला	दोनो का पता ग्राम तुलसुरी कुडू जिला-लोहरदगा	NA	1.00	22/04/2008	21/04/2018	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
49	पथर	श्री अनिसुर रहमान, वल्ड श्री स्रो हाजी आलमीन	ग्राम-मकाडु पो जिरी कुडू लोहरदगा।	NA	1.00	06/01/2010	05/01/2020	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1242 DT. 14.11.17	N-23°30'44.53" - 23°30'46.37" E-84°52'05.3" - 84°52'09.57"	Opencast
50	पथर	श्री जुंवर गौहार वल्ड स्को समी अहमद	पो कुडू थाना-कुडू जिला-लोहरदगा	NA	1.85	07/10/2005	06/10/2015	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/241 DT. 14.11.2017	N-23°30'07.30" - 23°30'10.77" E-84°51'53.41" - 84°52'00.58"	Opencast
51	पथर	श्री जुंवर गौहार, वल्ड स्को समी अहमद	ग्राम-पाडरा पो-कुडू थाना-कुडू जिला-लोहरदगा	NA	1.50	21/05/2009	20/05/2019	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2017-18/264 DT. 31.03.2018	N-23°30'32.84" - 23°30'35.70" E-84°51'53.41" - 84°52'00.58"	Opencast
52	पथर	श्री अनिसुर रहमान, पिता स्रो हाजी पो आलमीन	ग्राम-मकाडु, पो/जिरी, थाना-कुडू, लोहरदगा	NA	3.00	29/03/2016	28/03/2021	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/SEIAA/2014-15/620/2015/895 DT. 01.05.15	N-23°30'45.40" N-23°30'45.82" N-23°30'41.90" N-23°30'40.90" E-84°52'05.20" E-84°52'10.44" E-84°52'11.46" E-84°52'04.40"	Opencast
53	पथर	श्री संजय साहु, वल्ड श्री रामरसाद साहु	पो कुडू थाना-कुडू जिला-लोहरदगा	NA	1.40	17/10/2010	16/10/2015	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1291 DT. 24.11.17	N-23°29'35.66" - 23°29'37.12" E-84°51'24.48" - 84°51'28.64"	Opencast
54	पथर	श्री महावीर मात	ग्राम-बडुमा टोला इतरा पो कुडू लोहरदगा	NA	2.00	29/03/2011	28/03/2021	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17	N-23°29'22.01" - 23°29'24.92" E-84°53'35.15" - 84°53'39.31"	Opencast
55	पथर	श्री शशि कुमार प्रसाद, वल्ड श्री शिव नारायण साहु	ग्राम-पो, जीमा थाना-कुडू जिला-लोहरदगा	NA	0.56	21/02/2012	20/02/2022	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
56	पथर	1. श्री सुरेश साहु वल्ड श्री मिलखु साहु 2. श्री शंकर उरांव वल्ड स्को धीना उरांव	ग्राम कुहरैया पो-कुडू थाना-कुडू लोहरदगा। ग्राम-बाघी पो-ईगाव, जिला-लोहरदगा	NA	1.00	08/07/2008	07/07/2018	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
57	पथर	श्री नन्द किशोर साहु	ग्राम-कुहरैया	NA	1.00	16/09/2000	15/09/2010	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast



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58	पत्थर	वल्द श्री कुचराम साह श्री विजेवर साहु, वल्द श्री कुचराम साहु	पो-आकासी थाना-मण्डरा जिला-लोहरदगा	NA	1.00	03/02/2009	02/02/2019	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
59	पत्थर	1. श्री शिव सहाय साहु, वल्द श्री गुलाब साहु 2. श्री खुगनमदन साहु, वल्द श्री लखन साहु 3. श्री राजकिशोर साहु, वल्द श्री जगन्नाथ साहु	ग्राम-कुहरीया पो-आकासी थाना-मण्डरा जिला-लोहरदगा	NA	2.00	16/07/2009	15/07/2019	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	N-23°23'35.90" - 23°23'38.86" E-84°48'26.28" - 84°48'34.98"	Opencast
60	पत्थर	1. श्री हीरा लाल साहु, वल्द श्री दिलीवर साहु 2. श्री हीरामन साहु 3. श्री शकुन साहु, वल्द श्री सोना साहु	रीतों का पता ग्राम-कुहरीया पो-आकासी थाना-मण्डरा जिला-लोहरदगा	NA	1.00	03/02/2009	02/02/2019	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1249 DT. 14.11.17	N-23°23'35.20" - 23°23'37.62" E-84°48'25.96" - 84°48'29.42"	Opencast
61	पत्थर	3. श्री चैतु उरॉय, पिता स्व० भीना उरॉय 4. श्री सुन्दर साहु, पिता श्री मितलु साहु	ग्राम एवं पो-ईरगांव जिला-लोहरदगा	NA	1.00	02/12/2005	01/12/2015	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
62	पत्थर	1. श्री सुन्दर उरॉय, वल्द श्री होसे उरॉय 2. श्री अलीत उरॉय, वल्द श्री दुबराज उरॉय 3. श्री इस्माकिल अंसारी, वल्द श्री जमरुद्दीन अंसारी 4. श्री शाहजहाँ अंसारी, वल्द स्व० महमद आलम	समी का पता ग्राम एवं पोस्ट-बडगाई थाना-मण्डरा जिला-लोहरदगा	NA	2.00	11/08/2009	10/08/2019	NA	NA	NA	NA	NA	Non-Working	Non-Captive	EC/DEIAA/2016-17/1265 DT. 18.11.17	N-23°20'56.66" - 23°20'58.32" E-84°53'05.80" - 84°53'09.47"	Opencast
63	पत्थर	श्री देवा उरॉय, वल्द स्व० महली उरॉय	ग्राम-आमदरी पो-सेमरा थाना-मण्डरा जिला-लोहरदगा	NA	1.00	21/05/2009	20/05/2019	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
64	पत्थर	सर्वश्री शीतल स्तोत्र वर्मा, प्र० श्री परमेश्वर महली, वल्द श्री खदिया महली	ग्राम-पलसी पो-सेमरा थाना-मण्डरा जिला-लोहरदगा	NA	1.00	06/01/2010	05/01/2020	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
65	पत्थर	श्री जमय कुमार, पिता श्री जयपाल महली	ग्राम-मण्डरा पोस्ट एवं थाना-मण्डरा जिला-लोहरदगा	NA	1.00	03/05/2006	02/05/2016	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
66	पत्थर	श्री इन्दर उरॉय, पिता श्री बन्ने उरॉय	ग्राम एवं पोस्ट-मण्डरा थाना-मण्डरा जिला-लोहरदगा	NA	1.00	21/05/2009	20/05/2019	NA	NA	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast



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67	पथर	श्री ओम प्रकाश कुमार	ग्राम एवं पोस्ट-भाडरा, जिला-लोहरदगा	NA	1.00	17/03/2012	16/03/2022	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
68	पथर	श्री सोहन उराँव, पिता श्री सोमेश्वर उराँव	ग्राम एवं पोस्ट-कासपुर, थाना-भाडरा, जिला-लोहरदगा	NA	1.00	30/08/2006	29/08/2016	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
69	पथर	श्री हकिम अंसारी एवं सोम उराँव	ग्राम-बैमारी, पो-उदरंगी थाना-भाडरा जिला-लोहरदगा	NA	1.50	10/03/2012	09/03/2022	NA	NA	NA	Non-Working	Non-Captive	NA	NA	Opencast
70	पथर	श्री विकास चन्द्र सिंह पिता स्वो महल मोहन प्रसाद सिंह	पातराज लोहरदगा	NA	2.60	29/11/2021	28/11/2031	NA	NA	NA	Working	Non-Captive	EC/SEIAA/2020-21/2332020/46 DATE-15/07/2021	N- 23°23'53.55" - 23°23'59.62" E - 84°44'30.82" - 84°44'34.96"	Opencast
71	पथर	सर्वश्री बालाजी स्वोिन डेविग एजेन्सी पार्ट श्री अनन्त प्रसाद एवं अन्य	जानकी बीला फॉरेस्ट कोलानी हजारीबाग।	NA	9.00	19/10/2015	18/10/2025	NA	NA	NA	Working	Non-Captive	EC/SEIAA/2015-16/712/2015/1100 DATE 21/07/2015	N- 23°30'35.37" - 23°20'41.24" E - 85°52'03.85" - 85°52'17.71"	Opencast
72	पथर	श्री शरत कुमार विद्यार्थी	ग्राम एवं पोस्ट-कैरी थाना-कैरी, जिला-लोहरदगा	NA	3.00	19/03/2015	18/03/2025	NA	NA	NA	Working	Non-Captive	EC/SEIAA/2014-15/419/2014/2426 DATE-30/12/2015	N- 23°29'41.02" - 23°29'47.03" E - 84°49'03.03" - 84°49'06.01"	Opencast
73	पथर	श्री मनोज कुमार साहु, पिता स्वो किशोर प्रसाद साहु	राज्जी चौक, भेन रोड, लोहरदगा।	NA	3.50	22/12/2016	21/12/2026	NA	NA	NA	Working	Non-Captive	EC/SEIAA/2015-16/1015/2015/156 8 DATE - 09/09/2015	N- 23°26'55.03" - 23°27'0.05" E - 84°37'15.01" - 84°37'22.05"	Opencast
74	पथर	श्री मकसूद आलम एवं श्री लीहिद अंसारी	ग्राम-पारडीह, पो- गजनी, थाना-भाडरा, जिला-लोहरदगा	NA	2.50	19/03/2015	18/03/2025	NA	NA	NA	Working	Non-Captive	EC/SEIAA/2014-15/417/2014/606 DATE-28/11/2014	N- 23°24'23.92" - 23°24'21.30" E - 84°52'54.78" - 84°52'54.87" N- 23°24'20.06" - 23°24'22.74" E - 84°52'50.68" - 84°52'50.38"	Opencast



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Table 8 List of Proposed Stone Potential Area in the District on Raiyat Land

Sl. NO.	Applicant & Address	Mauza (Thana)	Plot No.	Area (Acres)	Bounding Co-ordinate
1	आवेदक अनिसुर रहमान पिता हाजी मो० आलमीन ग्राम मकान्दू कुडू लोहरदगा	मकान्दू (कुडू)	1255, 1256, 1257, 1253, 1254, 1258 , 1251	2.77	23°30'33.28"N to 23°30'40.22" N 84°52'4.6"E to 84°52'9.16"E
2	आवेदक हीरालाल एण्ड कंपनी पार्ट शिवकुमार पिता स्व० हीरालाल पता F14 City Centre club Road Ranchi	मकान्दू (कुडू)	1200(P) 1202 1225, 1226, 1227(P) 1224	3.90	23°30'35.21" N to 23°30'46.41"N 84°52'10.9"E to 84°52'15.35"E
3	आवेदक श्री जसीम अंसारी पिता करीम अंसारी ग्राम अरकोसा गम्हारटोली, पोस्ट अरकोसा थाना जिला लोहरदगा	भठखिजरी (लोहरदगा)	176	0.60	23°25'36.04"N to 23°25'38.39"N 84°45'2.88"E to 84°45'5.55"E
4	आवेदक पार्ट 1 सुकेन्द्र उरॉव पिता चुन्दा उरॉव 2 विलगु उरॉव पिता स्व० पिंजा उरॉव 3 अमित कुमार सिंह पिता नरेन्द्र सिंह 4 श्री अशोक कुमार सिंह पिता स्व० ब्रज बिहारी सिंह	भठखिजरी लोहरदगा	177, 186	1.06	23°25'32.57"N to 23°25'36.71"N 84°45'2"E to 84°45'5.69"E
5	1 बन्धन उरॉव पिता स्व० जतरू उरॉव, ग्राम- अरकोसा नवाटोली, पोस्ट-अरकोसा, थाना-जिला-लोहरदगा, 2. करमा उरॉव, पिता स्व० धारो उरॉव, ग्राम-शशिकान्त गली रातु रोड मधुकम हेहल जिला रांची, 3. उदय सिंह पिता स्व० चन्द्रपाल सिंह ग्राम हरमू रोड नदिया थाना लोहरदगा 4. श्री अशोक कुमार सिंह पिता स्व० ब्रज बिहारी सिंह ग्राम बी०आई०डी० गुमला रोड लोहरदगा 5. श्री अमित कुमार सिंह पिता नरेन्द्र सिंह ग्राम+पोस्ट-रामपुर, थाना+जिला-लोहरदगा	अरकोसा	1021, 1015, 1017 1018	1.00	23°25'48.55"N to 23°25'54.15"N 84°44'58.65"E to 84°45'3.74"E



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6	<p>1. मनोज भगत पिता सत्यदेव भगत, ग्राम- भक्सो बडकाटोली, पोस्ट-अरकोसा, थाना+जिला-लोहरदगा,</p> <p>2. उदय सिंह, पिता स्व० चन्द्रपाल सिंह, ग्राम-हरमु रोड नदिया, पोस्ट हरमु, थाना+जिला-लोहरदगा,</p> <p>3. श्री अमित कुमार सिंह पिता नरेन्द्र सिंह ग्राम+पोस्ट-रामपुर, थाना+जिला-लोहरदगा</p> <p>4. श्री अशोक कुमार सिंह पिता स्व० ब्रज बिहारी सिंह ग्राम बी०आई०डी० गुमला रोड लोहरदगा</p>	भक्सो	1033	1.50	23°26'40.08"N to 23°26'47.24"N 84°44'27.38"E to 84°44'34.53"E
7	<p>नेजाम अंसारी स्टोन माईन्स प्रो० नेजाम अंसारी पिता अमीरुद्दीन अंसारी</p> <p>ग्राम रामपुर लोहरदगा</p>	आरकोसा	189, 187	1.28	23°26'30.00"N to 23°26'38.00"N 84°44'45.00"E to 84°45'0.20"E
8	<p>सुजीत कुमार सिंह पिता स्व० मुनेश्वर सिंह पता कोर्ट रोड़, लोहरदगा 2. कृष्णा उरॉव पिता स्व० झाबो उरॉव ग्राम अरकोसा नवाटोली, थाना+जिला लोहरदगा</p>	अरकोसा	278, 279, 1008, 1009	2.53	23°25'52.14" to 23°26'0.01" N 84°44'53.68" to 84°44'57.82" E



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Table 9 List of Stone Block Proposed by Department of Geology, Lohardaga

SL No.	Block	District	Block	Mauza	Area	Plot No.	Khata No.	Limiting Coordinates
1	Korambe-I Minor Mineral (General Stone)	Lohardaga	Senha	Korambe	4.2Ha	1564	350	23°19'14.60"N to 23°19'23.40"N and 84°38'48.30"E to 84°38'56.30"E
2	Korambe-II Minor Mineral (General Stone)	Lohardaga	Senha	Korambe	4.3Ha.	1564, 353, 354, 355	350, 63	23°19'26.59"N to 23°19'38.79"N and 84°38'46.20"E to 84°38'59.02"E
3	Pali (Patlo II) Minor Mineral (General Stone)	Lohardaga	Senha	Pali	4.5Ha	452	103	23°18'35.10" N to 23°18'42.00" and 84°42'09.40"E to 84°42'17.68"E
4	Patlo Minor Mineral (General Stone)	Lohardaga	Senha	Patlo	3.14Ha	1097	103	23°18'45.1"N to 23°18'54.0"N and 84°42'27.9"E to 84°42'35.2"E
5	Khwashhijri Minor Mineral (General)	Lohardaga	Bhandra	Khwashhijri	3.1Ha	19	100	23°22'31.24" N to 23°22'31.39" N and 84°52'30.05" E to



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Stone)								84°54'59.95" E
6	Jhiko I Minor	Lohardaga	Bhandra	Jhiko	12.70Ha	2880	177	Latitude 23°19'01.15"N to 23°18'47.07"N and Longitude 84°52'13.98"E to 84°52'20.32"E

NOTE : क्रमांक 01 से 06 तक प्रस्तावित 06 भूखण्ड वन सीमा, मानव बसाहट, जल स्रोत से दूर है, परन्तु इसकी आकृति पहाड नुमा है। अतः पर्यावरणीय सहमति के समय इस पर ध्यान आकृष्ट किया जाना चाहिये।

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Chapter -X Details of Royalty or Revenue received in last three years;

Table 10 Details of Royalty received in last three years UNIT INR

Minor Mineral	2020-2021	2021-2022	2022-2023
Sand	--	--	--
Stone	8117476	6813025	13355285
Soil / Brick	4601500	4720783	7588834

Source: District Mining Office, Lohardaga



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Chapter - XI Details of Production of Minor Mineral in last three years;

Table 11 Production of Minor Mineral in last three years

Minor Mineral	2020-2021	2021-2022	2022-2023
Sand	--	--	--
Stone	1443627 CFT	1923185 CFT	2765905 CFT
Soil / Brick	60547 CUM	62116 CUM	99854 CUM

Source: District Mining Office, Lohardaga



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Chapter - XIII List of Letter of Intent (LOI) Holders in the District along with its validity as per the following format

Sl. No	Name of the Mineral	Name of the Lesse	Address & Contact no of Letter of Intent Holder	Letter of Intent Grant Order No. & date	Area of Mining lease to be allotted (ha.)	Validity of LoI	Use (Captive / Non - Captive)	Location of the Mining lease (Latitude & Longitude)
1	Stone	Hiralal Sahu	Vill.- Kumhariya Post - Akasi Ps. - Bhandra, Lohardaga	Kha ni (Nilami) - 06/2022 1475/M Ranchi 15.07.2022	0.81		Non - Captive	23°21'23.33" to 23°21'25.09" N 84°42'35.79" to 84°42'42.01" E
2	Stone	Hiralal Sahu	Vill.- Kumhariya Post - Akasi Ps. - Bhandra, Lohardaga	Kha ni (Nilami) - 08/2022 1478/M Ranchi 15.07.2022	0.40		Non - Captive	23°21'23.83" to 23°21'25.55" N 84°42'26.86" to 84°42'30.54" E
3	Stone	Hiralal Sahu	Vill.- Kumhariya Post - Akasi Ps. - Bhandra, Lohardaga	Kha ni (Nilami) - 09/2022 1494/M Ranchi 20.09.2022	1.21		Non - Captive	23°19'23.20" to 23°19'28.65" N 84°38'38.69" to 84°38'44.47" E



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4	Stone	M/s F.D.Enterprises and Construction Pvt. Ltd.	Thanantoli Lohardaga	Kha ni (Nilami) - 12/2022 1945/M Ranchi 20.09.2022	0.81	Non - Captive	23°29'22.01" to 23°29'24.92"N 84°53'35.15" to 84°59'39.31"E
5	Stone	Anisur Rahman Prop M/s Safari Stone Works	Vill.- Makandu Post. - Jingi Ps.- Kuru Lohardaga	Kha ni (Nilami) - 10/2022 1947/M Ranchi 14.09.2022	1.21	Non - Captive	23°30'40.90" to 23°30'45.82"N 84°52'04.40" to 84°52'11.46"E
6	Stone	Anisur Rahman Prop M/s Safari Stone Works	Vill.- Makandu Post. - Jingi Ps.- Kuru Lohardaga	Kha ni (Nilami) - 13/2022 1948/M Ranchi 14.09.2022	0.61	Non - Captive	23°30'42.78" to 23°30'46.37"N 84°52'05.03" to 84°52'09.57"E

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Chapter - XIV Total Mineral Reserve available in the District;
This will be finalized at the time of Preparation of Mining Plan for each block.



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Chapter - XV Quality /Grade of Mineral available in the District;

Mineral	Quality / Grade
Sand	Medium Size Sand
Stone	Granite/Gneiss Rock
Soil	Silty Clay



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Chapter - XVI Use of Mineral;

Projected growth in infrastructure sector in the district will need essential inputs. One of such critical input is availability of stone chips of required size & quality.

For this, it is essential that stone bearing areas, complying to conditions for environmentally safe mining are identified and included in the DSR.



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Chapter - XVII Demand and Supply of the Mineral in the last three years;
Demand for the stone and brick was fulfilled by the operational mines in the district.

Table 12 LAST THREE YEARS PRODUCTION

Minor Mineral	2020-2021	2021-2022	2022-2023
Sand	--	--	--
Stone	1443627 CFT	1923185 CFT	2765905 CFT
Soil / Brick	60547 CUM	62116 CUM	99854 CUM

Source: District Mining Office, Lohardaga

Demand Forecast for Stone

Major consumes of stone chips are road projects such as National Highway, State Highway, Express ways, Pradhan Mantri Gram Sadar Yojna, Pradhan Mantri Awas Yojna and other infrastructure projects.

Estimated demand for various government sponsored projects are enclosed in Annexure - I.

All these infrastructural projects of public importance would need stone chips for successful completion.

Average demand for the district during last three years works out to 2044239 CFT.

Estimated demand of stone in future may be 3 to 4 times of the current average demand.



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Chapter – XVIII Mining leases marked on the map of the district; Jharkhand Geo Portal

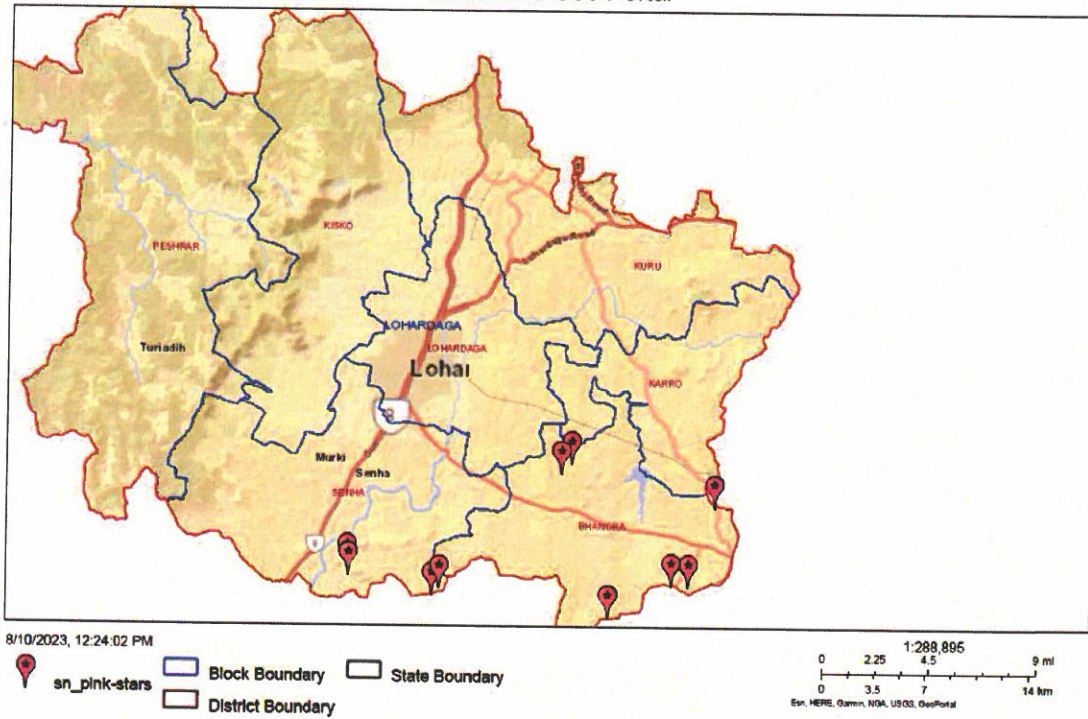


Figure 8 Stone Block Proposed by Department of Geology, Lohardaga

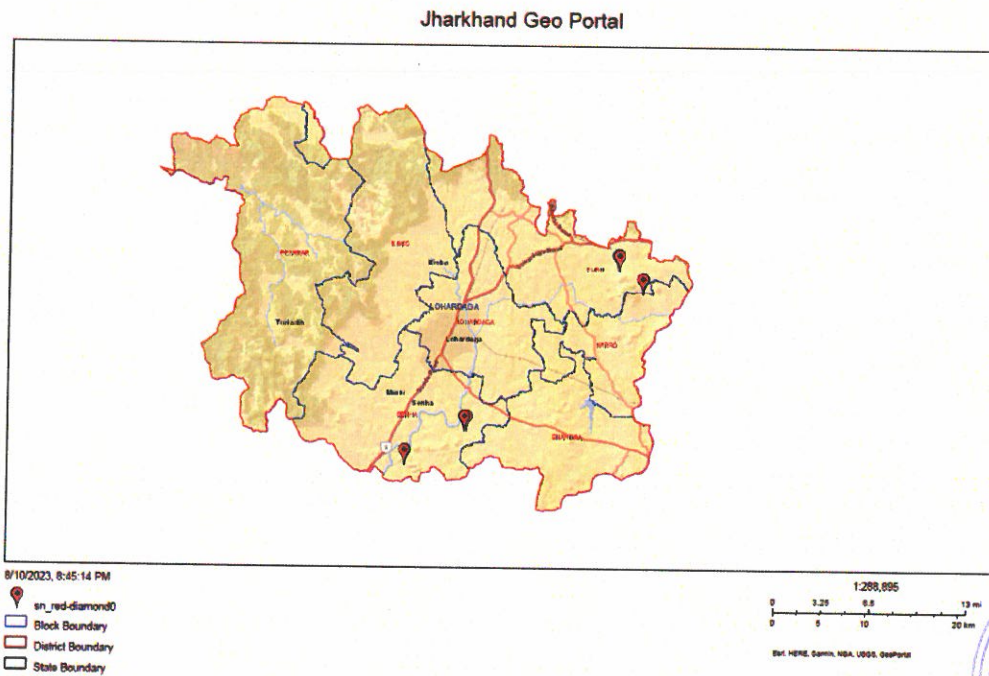


Figure 9 LOI Holders in the District



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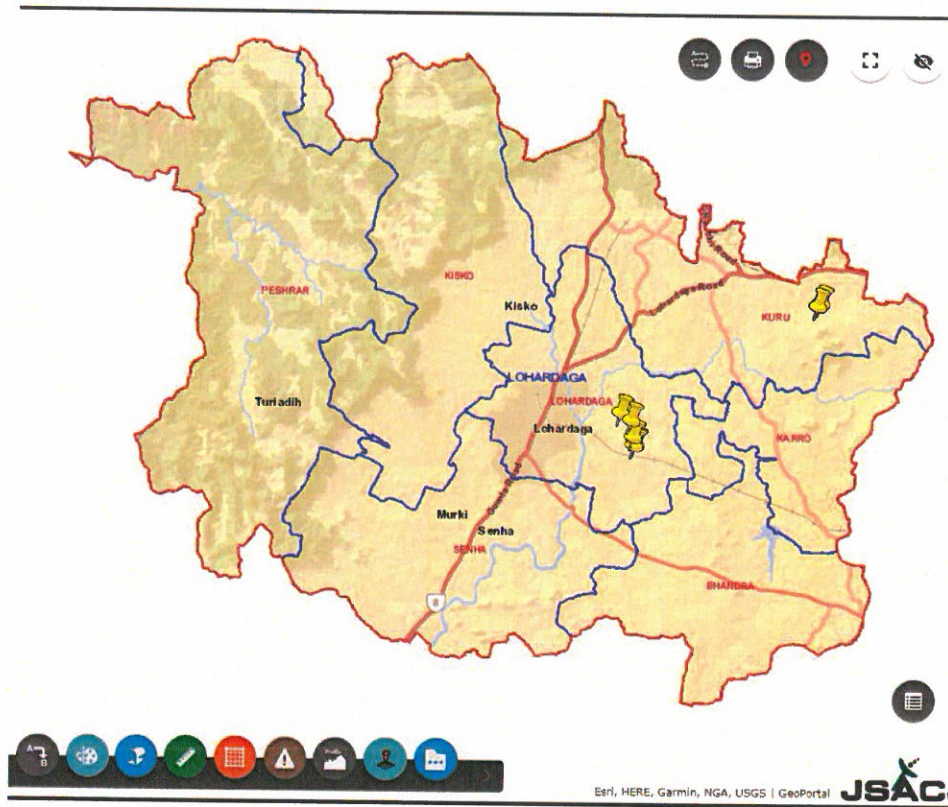
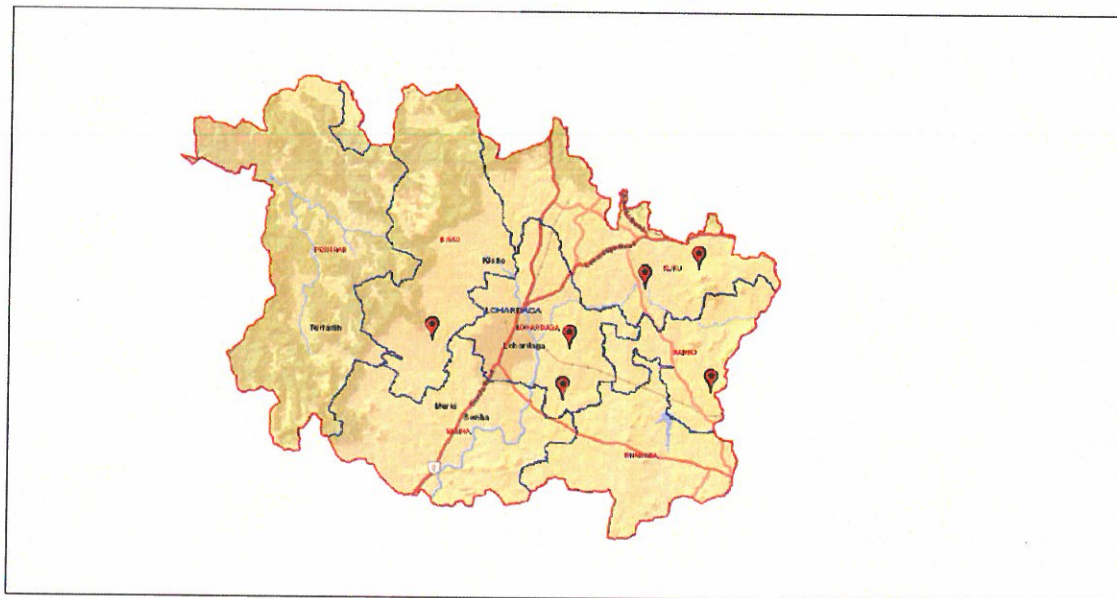


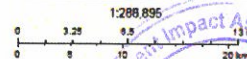
Figure 10 Proposal Stone Block in the District on Raiyat Land

Jharkhand Geo Portal



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- s_yta-pushpin
- Block Boundary
- District Boundary
- State Boundary



Esri, HERE, Garmin, NGA, USGS, GeoPortal



Figure 11 Operational Mine in the District

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Chapter - XIX Details of the area of where there is a cluster of mining leases viz. number of mining leases, location (latitude and longitude);

Cluster of mining lease will be declared by District Mining Officer before Environment Clearance.



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Chapter - XX Details of Eco-Sensitive Area, if any, in the District;
No eco-sensitive area in the district.



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Chapter – XXI Impact on the Environment (Air, Water, Noise, Soil, Flora & Fauna, land use, agriculture, forest etc.) due to mining activity;

21.1 General

Project activities relating to stone mining projects result into impact on various environmental attributes including land, soil, ambient air, water quality, noise, bio-environment including flora & fauna & socio-economic profile in the area. For stone mining project to be sustainable, on long term basis, these impacts need to be assessed & be mitigated. Extent of impact on environmental attributes in a project would depend on base line environmental quality profile & planned capacity of the mine, method of mining etc. This being so, project environmental impact specific to every project needs to be assessed for their proper mitigation. In this section of the Report effort has been made to identify environmental impacts due to project related activities & mitigation measures to minimise their impact.

21.2 Activities Likely to affect Ambient Air Quality

21.2.1 Site Preparation

In most of cases first project activity is site preparation which involves clearing the site of vegetation including shrubs, trees etc, grading & levelling the site. These activities generate dust & noxious gases on account of use of diesel for operating diesel generated earth moving equipments.

21.2.2 Removal of Overburden

In case there is overburden in form of soil or weathered stone, over the stone deposit, it needs to be removed before mining of stone activity are initiated. In such cases where overburden is soft material, it would be removed by grader without blasting. But if O.B is hard, it would require blasting with use of explosives. Removal of O.B & its transportation & storage would generate dust & noxious gases.

21.2.3 Removal & Storage of Top Soil

Area within the lease over which top soil occurs will be identified. Before the lease area is graded & levelled top soil would be removed and stored for future use. They would be properly stored. This activity of removal, transportation & storage of top soil would generate dust & noxious gases.

(A) Stone Mining

(B) Drilling of blast Holes

Mining of stone would require blasting using explosive. For this purpose Blast holes need to be drilled using Drill machine. Drilling operation would generate dust & noxious gases if Drill is diesel operated.

(C) Blasting

Blasting operation would generate dust & noxious gases.

Handling of Blasted Material

Blasted Material would need to be loaded into Tipper & its Transportation then to crusher for proper sizing.



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Unreclaimed Over burden dump

Storage of O.B External dump, till it is reclaimed, constitutes a source for dust generation.

Crushing & Screening

Crushing & screening of Run-of-Mine boulders constitute a majors.

Air Environment

Sl. No.	Particular	Activity	Pollutant	Impact
1.	O.B. Removal A. If soft O.B.	Removal by using HEMM	<ul style="list-style-type: none"> • Dust • Noxious Gases 	Rise in Level of air pollution
2.	B. Hard Material	1. Drilling Blast holes 2. Blasting	<ul style="list-style-type: none"> • Dust • Noxious Gases 	
3.	O.B. transport by Road to Dump yard	<ul style="list-style-type: none"> • Dust • Noxious Gases • OB Handling 	<ul style="list-style-type: none"> • Dust • Noxious Gases 	
4.1.	Mining of stone	<ul style="list-style-type: none"> • Drilling Blast Holes • Dust • Noxious Gases 	Rise in level of particulate Matters	<ul style="list-style-type: none"> • Properly designed geometry of Blast holes
4.2.	Blasting	<ul style="list-style-type: none"> • Blasting • Dust • Noxious Gases 	Do	
4.3	Handling of Run of Mine store			
4.4	Loading Blasted Material on Tippers	• Material on Tippers	Do	
4.5	Transport of Blast Material to crusher cum screening plant		Do	
5.	Sizing of ROM stone	A. CRUSHING B. SCREENING	<ul style="list-style-type: none"> • Dust • Noxious Gases 	Rise in level of particulate Matter in Ambient Air



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21.3 Anticipated Environment Impact on Air Environment

Proposed mining of stone by opencast method, their handling i.e., crushing, screening & transportation finished product will result into impact on environmental attributes in the area. Anticipated impact would be on land, ambient air, water, noise level & soil.

However, assessment of these anticipated impact at this stage is constrained by the fact that capacity of individual mine in identified lease is not available.

In this scenario an attempt has been made to identify sources of environment pollution & their impact.

Sources of the air pollution & their emission factor are tabulated below: -

Emission Factor have been taken from AP42 & IPA;

Sl. No.	Activity	Emission Factor
1	Drilling	0.11 Kg/Hole
2	Blasting	0.52 Kg/Blast
3	Loading	1.4 X 10 ^{-0.4} Kg/t
4	Transportation	0.4 kg/VKT
5	Crushing	0.056 Kg/t

Impact of above activities on ambient air quality will mostly be confined to release of particulate matter. Release of SO₂ due to use of diesel for haulage vehicles & mining equipment's are likely to below prescribed limit generation of SO₂ may be estimated by following expression;

$$\text{Emission rate of SO}_2 \text{ (gm / day)} = Q \times C / 100 \times M_w / E_w$$

Where;

Q = Fuel use per hour (Litre)

C = Concentration of Pollutant Fuel percent (%)

M_w = Molecular weight of emitted pollutant (Kg/Kg-mol)

E_w = Elemental weight of emitted pollutant in fuel (Kg/Kg-mol)

comparing data relating to prevailing level of PM₁₀ PM_{2.5} SO₂ & Nox of the air pollution with level prescribed by MOEF & CC, it appears that atmosphere has sufficient supporting capacity in term of PM₁₀, PM_{2.5}, SO₂ & NO_x. As such, the new mines are opened with air pollution mitigation measured recommended level of air pollution are likely to remain wither prescribed level.



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21.4 Impact on Water Environment

In opencast mines there is no generation of effluent.

Divines are not likely to intersect ground water table. As such there is no seepage of groundwater into query.

In most cases generation of overburden will be minimal.

However, sources of generation of polluted water will include;

- a) water collected in quarry during monsoon will be pumped out to facilitate mining this water make contain suspended solid. Discharge of pump out water to natural water body will degrade quality of water on choke the natural water courses.
- b) run-off from external over burden dump. Surface run-off generated from external dumps are likely to contain high amount of suspended solid.

Water Environment

Sl. No.	Particular	Activity	Pollutant	Impact
1.	Mining of stone by opencast method of mining	Collection of water in Quarry due to seepage of ground water & its pumping out • Collection of rain water in Quarry • Collection of surface	Suspended solid	High level of suspended solid in water
2.	Mining of stone by opencast method	Provision of wash rooms	Generation of sewage having high level of BOD & other pollutants	Discharge of sewage untreated impact quality of surface & ground water
3.	Mining of stone by opencast method & allied activities	Surface Run-off from lease area during rainy season	Generation of surface Run-off with high level of suspended solid & flowing to	Quality of surface deteriorate of water



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			surface water source near lease area	
--	--	--	--	--

21.5 Impact on Noise Environment

Operation of mining equipment and haulage of stone by road are major source for noise generation.

21.6 Anticipated Impact on Bio-Diversity

Potential sites for mining project have been identified on keeping in consideration guideline prescribed by State Environment Impact Assessment Authority, Jharkhand (JSEIAA) & Jharkhand State Pollution Control Board (JSPCB).

All of them have been located outside forest land and also, they are located 250m away from notified forest. If any mining project will propose inside forest, then it will be regulated through Forest Conservation Act.

Potential sites have been identified away from river & water body.

Compliance to above criteria will minimise Impact on flora & Fauna in the area. However, in some of cases, there might be some tree or shrubs in identified project area. Such trees falling in the lease area may required to be cut. Efforts will be made to minimize such tree cutting. Required permission will be obtained from concerned DFO.

21.7 Impact on Agriculture Land

Care has been taken to identify potential site for mining projects avoiding forest land and agriculture land particularly prime agriculture land (Dhan 1 & Dhan 2). Such anticipated impact on agricultural land will be minimal.

21.7 Impact on Landuse

Project activities including quarry, external overburden dumping, stockyard, development of haul road are likely to after land use pattern in the lease area. As stated, earlier care has been taken in identification of potential mining lease area to avoid forest land, prime agriculture land, etc. In view of this, anticipated impact on land environment would not be substantial.



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Table 13 Year-Wise & Block-Wise Ambient Air Quality Data of the District

BLOCK	2020				2021			
	PM10	PM2.5	NOx	SO2	PM10	PM2.5	NOx	SO2
Bhandra					82.00		11.85	9.81
Kairo					67.18		14.13	12.73
Kisko					76.72	43.23	28.79	20.51
Kuru					66.20	29.47	21.67	11.10
Lohardaga					86.67		20.89	13.16
Peshrar								
Senha	84.90	43.00	38.87	15.77				

BLOCK	2022				2023			
	PM10	PM2.5	NOx	SO2	PM10	PM2.5	NOx	SO2
Bhandra								
Kairo								
Kisko	78.33	48.56	20.46	7.01				
Kuru					85.60	39.80	34.93	24.40
Lohardaga	76.07	35.73	25.72	16.17	67.17	27.83	19.08	12.60
Peshrar								
Senha	87.82	47.02	26.14	10.72	68.02		8.50	



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Table 14 Summarized Block-wise Ambient Air Quality Data of the District

BLOCK	Average			
	PM10	PM2.5	NO _x	SO ₂
Bhandra	82.00		11.85	9.81
Kairo	67.18		14.13	12.73
Kisko	77.52	45.90	24.63	13.76
Kuru	75.90	34.63	28.30	17.75
Lohardaga	76.64	31.78	21.90	13.98
Peshrar				
Senha	80.25	45.01	24.50	13.24
Overall District Average	76.58	39.33	20.88	13.55

Present environment scenario prevailing in the district has been drawn on basis of environmental monitoring data submitted to JSPCB by mine owners in the district. They are enclosed at Annexure – II most of ambient air quality data have been collected at location close to working mines.

Conclusion

Level of PM₁₀ Nere the lease area have been found to vary from 66.20 μ/m^3 to 87.82 μ/m^3 level of SO₂ has been found to vary from 7.01 μ/m^3 to 24.40 μ/m^3 level of NO_x has been found to vary from 8.50 μ/m^3 to 38.87 μ/m^3 .

Present Ambient Air Quality Scenario

Present ambient air quality status in the district has been assessed based on measurement of ambient air quality through Air Sampling at each block of the district. The parameters included in the testing programme covers PM₁₀, PM_{2.5}, NO_x & SO₂. These tests have been carried out by M/s Crystal Consultants (NABET Accredited Environment Organization) through JSPCB accredited Laboratories named Vision Earth Consultancy.

A table given below gives the test result in respect of ambient air quality;

It may be seen from above table the level of air pollutants in the atmosphere are below the level prescribed by CPCB / MoEF & CC.

Base on the above data air quality index have been calculated by the prescribed method of CPCB are enclosed in Annexure – III.

This means that the atmosphere has assimilative / supporting capacity to absorbed air pollutants generated by proposed projects in the study area without exceeding the prescribed limits.

However, at the time of the appraisal of the project for grant of EC the effect of project activities on ambient air quality need to be assessed.



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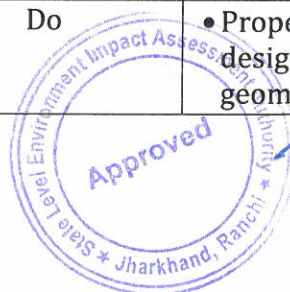
Chapter - XXII Remedial Measures to mitigate the impact of mining on the Environment;

22.1 Mitigation Measures on Air Environment

- ✓ It is suggested to adopt a wet drilling system this will reduce dust generation during drilling process
- ✓ Practice controlled blasting to minimise generation of dust.
- ✓ Regular water sprinkling on haul road.
- ✓ Install wet dust suppression system in crushing and screening plant.
- ✓ Raise Green Belt in safety zone.
- ✓ Avenue plantation along a both sides of Link Road

Air Environment

Sl. No.	Particular	Activity	Pollutant	Impact	Mitigation Measures
1.	O.B. Removal A. If soft O.B.	Removal by using HEMM	<ul style="list-style-type: none"> • Dust • Noxious Gases 	Rise in Level of air pollution	<ul style="list-style-type: none"> • Water sprinkling on area from where OB is to be removed • Proper maintenance of HEMM
2.	B. Hard Material	1. Drilling Blast holes 2. Blasting	<ul style="list-style-type: none"> • Dust • Noxious Gases 		<ul style="list-style-type: none"> • Water sprinkling on area identified for Drilling, Blasting • Proper, regular maintenance of HEMM
3.	O.B. transport by Road to Dump yard	<ul style="list-style-type: none"> • Dust • Noxious Gases • OB Handling 	<ul style="list-style-type: none"> • Dust • Noxious Gases 		<ul style="list-style-type: none"> • Water sprinkling on Haul Road • Proper maintenance of transport vehicles
4. 4.1.	Mining of stone	<ul style="list-style-type: none"> • Drilling Blast Holes • Dust • Noxious Gases 		Rise in level of particulate Matters	Water sprinkling on area identified for Drilling
4.2.	Blasting	<ul style="list-style-type: none"> • Blasting • Dust • Noxious Gases 	Do	<ul style="list-style-type: none"> • Properly designed geometr 	<ul style="list-style-type: none"> • Use of optimum quantity of



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				y of Blast holes	explosives (Powder Factor) • Blasting during noon time
4.3	Loading Blasted Material on Tippers	• Material on Tippers	Do		Water sprinkling on Blast Material
4.3	Transport of Blast Material to crusher cum screening plant		Do		<ul style="list-style-type: none"> • Water sprinkling on Haul Road • Water to be mixed with chemical developed by CMRI for effective dust control
5.	Sizing of ROM stone	C. CRUSHING D. SCREENING	<ul style="list-style-type: none"> • Dust • Noxious Gases 	Rise in level of particulate Matter in Ambient Air	<p>Provide wet type control system. This will have two components</p> <ul style="list-style-type: none"> ❖ Dust Containment Enclosures <ul style="list-style-type: none"> • For crusher discharge area • For vibratory / rotary system ❖ Dust Suppression System <ul style="list-style-type: none"> • Spraying water at Key dust generation location



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22.2 Mitigation Measures on Water Environment

- ✓ Provide garland drains around quarry to intercept surface runoff from high elevation to quarry and divert it to collection cum desilting pond.
- ✓ Water pump out from quarry will need to be diverted to storage cum desilting pond for treatment.

Provide foot drain along toe of external dump. Foot drain will collect run of from external dump and divert to storage cum desilting pond for proper treatment.

Water Environment

Sl. No.	Particular	Activity	Pollutant	Impact	Mitigation Measures
1.	Mining of stone by opencast method of mining	Collection of water in Quarry due to seepage of ground water & its pumping out <ul style="list-style-type: none"> • Collection of rain water in Quarry • Collection of surface 	Suspended solid	High level of suspended solid in water	Store pumped out water in Desilting pond for removal of suspended solid.
2.	Mining of stone by opencast method	Provision of wash rooms	Generation of sewage having high level of BOD & other pollutants	Discharge of sewage untreated impact quality of surface & ground water	Provision of septic tank & cess pool
3.	Mining of stone by opencast method & allied activities	Surface Run-off from lease area during rainy season	Generation of surface Run-off with high level of suspended solid & flowing to surface water source near lease area	Quality of surface deterioration of water	Network of open drain in the lease area to intercept surface Run-off & divert it to Desalting pond before discharge to outside lease area



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22.3 Mitigation Measures on Noise Environment

- I) mining operation to be confined to day shift only
- An machineries to be repaired and maintain regularly.
- Green Belt in safety zone.

22.4 Mitigation Measures on Bio-Diversity

- a) Mixed plantation would be raised in the safety zone with 1600 trees in per hectare. They would be native species. This will mitigate impact on bio-diversity.
- b) Every lease area will have a waste water management plan consisting of garland drains and desilting pond. This will prevent pollution of natural water course & impact on aqua fauna.

22.5 Mitigation Measures on Agriculture Land

However, in all cases care would be taken to remove & conserve topsoil from mining area before project activities are started.

For proper conservation of topsoil following steps would be taken;

- a) Area for storage of topsoil would be identified.
- b) Edge of topsoil dump would be protected with brick lining.
- c) Grass would be raised on topsoil dump to arrest erosion and to conserve nutrients.

22.6 Mitigation Measures on Landuse

In most of opencast stone mine generation of overburden will be minimal. Hence land degradation on account of storage of overburden will be minimal.

In this scenario it is recommended that;

- ✓ As much as possible at the end of mining operation O.B material stored in external dump will be liquidated and backfilled into quarry void.
- ✓ Quarry void should be reclaimed with water to create a water body with fencing and gates this could be used for agriculture or source of water for local people and it may facilitate in groundwater recharge.



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Chapter – XXIII Reclamation of Mined out area (best practice already implemented in the district, requirement as per rules and regulation, proposed reclamation plan);

23.1 General

In most of cases stone is mined out by opencast method of mining which creates. a quarry pit. It constitutes loss of value of a Land Resource. also a potential risk to human being & animal. with this consideration, mine pit must be Reclaimed after resource is exhausted & mining operations are closed.

23.2 Options for Remediation

Scenario A

In this scenario, stone reserve is over Lain by A of layer overburden assisting of soil /weathered rock. Mining of stone should be preceded. by removal of 6. B & their storage is non-mining area. At the end of mining operation, this 0.B. Dump would be liquidated & material would be back filed into the pit or they would be left as such but reclaimed biologically. Quarry will be reclaimed after it is backfilled.

Scenario B

There is no over burden. In this case, quarry would be reclaimed immediately after mining operations are over.

In both scenario as desorbed above at the end mining operation, to avoid Left mine pit is huge. Even if part of it is particly filled with overburden materials. he avoid created by mining of stone constitutes loss of land Resource a safety hazard & A scan on earth surface in view of above plan for remediation of minded out area. has broadly two objectives;

- Mined out area should be reclaimed for Eco-friendly productive use. On sustainable basis they may converted to a water body. This has number of advantages which includes.
 - This will facilitate in ground water Recharge in this area.
 - This water body may be used for pisci culture.
 - Water may be used for irrigation in nearby area.
- Benches above water level be used for raising plantation.

23.3 Safety measures

Mine pil- filled with water after mining operation are over & mine is closed is a major Source for drowning of people & animals.

Measures must be taken to restrict free access to water body. One quarry must be fenced & wicket gate with locking arrangement must be provided.



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Chapter – XXIV Risk Assessment & Disaster Management Plan

24.1 General

Mining activities are associated with risk that can turn into hazard to life & health if not addressed in time & adequately. This need to be identified & mitigation measures are to be provided to prevent it on measures to be taken to minimise its effects.

24.2 Categorisation of Risks

Risk associated with mining projects may be, broadly, categorised into two categories namely on site & off site Risk. They are described below.

24.3 On Site Risks

On site risks that need to be addressed are described, below in brief.

24.3.1 Natural

Risk in mining project may arise due to natural phenomena

- a) Flooding of opencast / underground working due to heavy rains ingress of water from nearby water body i.e. river, reservoir etc.
- b) Earthquake: - Earthquake in the area may cause damage to life & property.
- c) Land slide:- There might be Land slide in external dump or high wall of opencast mine

24.3.2 Mechanical

Operation of mine involves use of a number of Heavy earth moving Machines including Drills, Backhoe, Shovel, dumper etc. Operation of these equipment's may cause accident leading to loss of life or equipment's similarly material including raw material, waste material & product are to be transported by road using dumper, tipper.

Unregulated transportation may Lead to road accident

24.3.3 Electrical

Project operation required operation of electrical equipment. They operated on high voltage & use cables. Use of electrical equipment may cause fire or electrocution

24.3.4 Fire

Operation of mine required use of electrical power & diesel oil use of electrical power & oil may cause Fire

24.3.5 Blasting

Operation of mine needs blasting using explosives. Unattended & unplanned blasting may cause accident.

24.3.6 Risk Due to Environmental Pollution

Mining activities may cause health risks for workmen they may be due to exposure to high level of dust or noise in work area.



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24.3.7 Offsite Risks

Mining and allied activities may also cause offsite risk. They are briefed below.

24.3.8 Road Accident

Mining operation & allied activities need Transportation of raw material & furnished product on public road. Movement of heavy vehicles may cause road accident.

24.3.9 Ground Vibration

Ill planned blasting may cause ground vibration outside the lease area that may affect stability of structures located in close vicinity

24.3.10 Blasting

Ill planned blasting may produce fly rocks that may cause injury to people/animal in vicinity of lease area.

24.3.11 Environmental Pollution

Project activities may generate environmental pollution that may attest health of people living in vicinity of lease area

24.3.12 Risk and Disaster Management

Kipping above in consideration, proper risk and disaster management plan need to be developed along with mining plan for all mining project. Operated strictly following DGMS rules. D.M.P. Will have following components. All mines should be planned

24.3.13 Flooding

The drainage plan of the mine has to be prepared consideration the maximum rainfall in the area corresponding to maximum quantity of water accumulated in quarry, sufficient capacity of pump need to be prodded for preventing flooding.

24.3.14 Earthquake

If the mine is in zone iii & above of impact of earthquake must be integrated with planning & design of the project.

24.3.15 Land Slide

To prevent land slide in the mine following measures need to be taken nature of rock corresponding to

- i. Proper slope to be provided to advancing bench of the mine
- ii. Proper slope (45° - 50°) to be provided for terminal slope to the quarry
- iii. External dump has to be properly planned with proper side slope to prevent slope failure.

External dump should be located on a stable ground with load bearing capacity to support load of external dump.

External dump should be proper drainage plan to prevent building up of internal hydraulic pressure.



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24.3.16 Mechanical

- i. Regular training to equipment operator
- ii. Regular repair & maintenance of equipment

24.3.17 Electrical

- Electrical system need to be designed following relevant prevailing rules as per Act.
- Regular maintenance and upkeep of cables, switches etc.

24.3.18 Road Accident

- Proper lay out of internal roads within the lease area.
- Ensure speed limits within lease area.

24.3.19 Vibration and Blasting

- Proper design of Blasting pattern to ensure ground vibration within limit
- Use of optimal quantity of explosives
- Hooter should be used to inform & warn workman before blasting in done.

24.3.20 Environmental Pollution

- All workmen to be provided with ear mutt & mask
- Pollution control measures to minimise environmental pollution
- Regular health check-up of workman as per DGMS Rules.
- Trucks with Pollution under control certificate to be allowed

24.3.21 Disaster Management Plan

- **Provision of Siren:-** Arrangement to be made to provide siren to inform workman about occurrence of accident and instruction that on hearing siren mining activities to be stopped & assemble at pre - determined area
- **First Aid centre:** - A first aid centre to be provided next to mine office.
- **Arrangement for Medical Aid:** - Arrangement shown be in place so that services ambulance can be available for rescue of injured workmen Provided medical attendance to them. For this purpose, Hospital/Nursing homes with ambulance facility need to be identified.
- Arrangement to be made for information to police and local administration
- An executive to be nominated who is responsible for handling disaster situation.
- Mine office should serve as control room with telephone facility phone number of hospital, police station, local administration should be readily available.



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24.4 Risk & their Probability

RISK IDENTIFIED	PROBABILITY
<p>Fire in diesel stored for operation of equipments. In most of places electrical power is not available.</p>	<p>LOW</p> <p>As proponents procure diesel on daily basis in absence of proper storage.</p>
<p>Blasting for mining of stone. On an average a stone mine would produce 250 T / Day in small stone mines. This will use approx. 35 Kg of explosives.</p> <p>This produces ground vibration and fly rock. Vibration may affect stability of structure & fly rock may injure people.</p>	<p>LOW</p> <p>Since mines are located 500m away from habitated area problem of ground vibration & fly rock are of low risk.</p>
<p>Road Accident</p> <p>This may be due to movement of vehicles on road carrying minerals.</p>	<p>LOW</p> <p>As number of vehicles per day in small mine may be 25-30 trips per day.</p> <p>Advice vehicles operator to control speed near habitation area.</p>
<p>Electrocution</p> <p>In case of mines which operated on electrical power. Power cables are used. There is risk of electrocution.</p>	<p>LOW</p>
<p>Environmental Pollution</p> <p>Due to;</p> <ul style="list-style-type: none"> ✓ Blasting ✓ Drilling ✓ Handling ✓ Transporting 	<p>MEDIUM</p> <p>Environmental Pollution can be controlled by suitable mitigative measures including;</p> <ul style="list-style-type: none"> ✓ Using optimal quantity of explosive. ✓ Water Sprinkling on drilling site. ✓ Trucks carrying product stone to be covered. ✓ Regular water sprinkling on haul road. ✓ Vehicles with pollution under control certificate. ✓ Plantation in safety zone. ✓ Avenue plantation along link road.



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Natural Risk		
Earthquake	LOW As district fall in Zone II which is low risk zone.	
Flood	LOW ✓ All identified potential areas are away from river. ✓ Proper arrangement for dewatering of quarry during the monsoon period.	
Slope Failure	LOW Mineral resource is massive deposit having no shear planes. Hence land slide risk is low. Moreover, running slope will be maintain at 75° to avoid slope failure.	
LOW	MEDIUM	HIGH
0% to 30%	30% to 60%	60% to 100%



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Chapter - XXV Details of the Occupational Health issues in the District. (Last five-year data of number of patients of Silicosis & Tuberculosis is also needs to be submitted);

Year	No. of patient of Silicosis	No. of patient of Tuberculosis
2019	0	579
2020	0	539
2021	0	617
2022	0	511
2023 (upto March 2023)	0	144



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District TB Officer,
District TB Centre, Lohardaga

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Chapter – XXVI Plantation and Green Belt development in respect of leases already granted in the District;

26.1 Status of Plantation & Greenbelt Development in respect of lease already granted in the District

Plantation were raised in safety zone as prescribed in Environment Clearance (EC) & Consent to Operate (CTO) conditions. Average survival rate was 40% - 50%. However, on closure of mine the project site was abandoned. In such circumstances, the tree covers were decreases due to lack of maintenance and absence of security. Only in a few cases some of trees planted in safety zone are available.



26.2 Propose Plantation and green belt within the lease area and around it serve different purposes including

- Mitigate air pollution
- Minimise the carbon foot print as it serves as sink & sequester carbon di – oxide produce oxygen
- Control soil erosion & helps in maintaining soil moisture
- It has aesthetic function as it screens the sight of the mine
- It also abets noise

26.3 Location

- Plantation / green belt in mining project should be developed at following location



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- Safety zone: - 7.5m wide strip aEdge of lease area they should be planted @ 2.5m c/c.
- Backfield area of part of quarry is proposed to be backfield with overburden material removed in course of mining of stone then plantation has to be raised over this area.
- Upper Benches of Mine - in lease it is proposed to use the quarry for water storage, then at post closure stage upper benches of quarry should be used for raising plantation.
- Unused Area - in those caser remains, unused then that area has to be used for development of green belt
- External dump
External dumps, if not liquidated at closure of mine has to be used for raising plantation.
- Strip Plantation along. Both sides of link road

26.4 Species

Green belt/plantation should be developed using tree & shrubs. Species should be selected on following consideration.

- Native species
- Require less maintenance
- Are resistant to pollution

Species should be selected in consultation with local forest officials.

26.5 Protection & Care

Arrangement for protection of plantation against grazing by animals & other anthropogenic pressure should be made.

Arrangement for proper watering has to be provided.

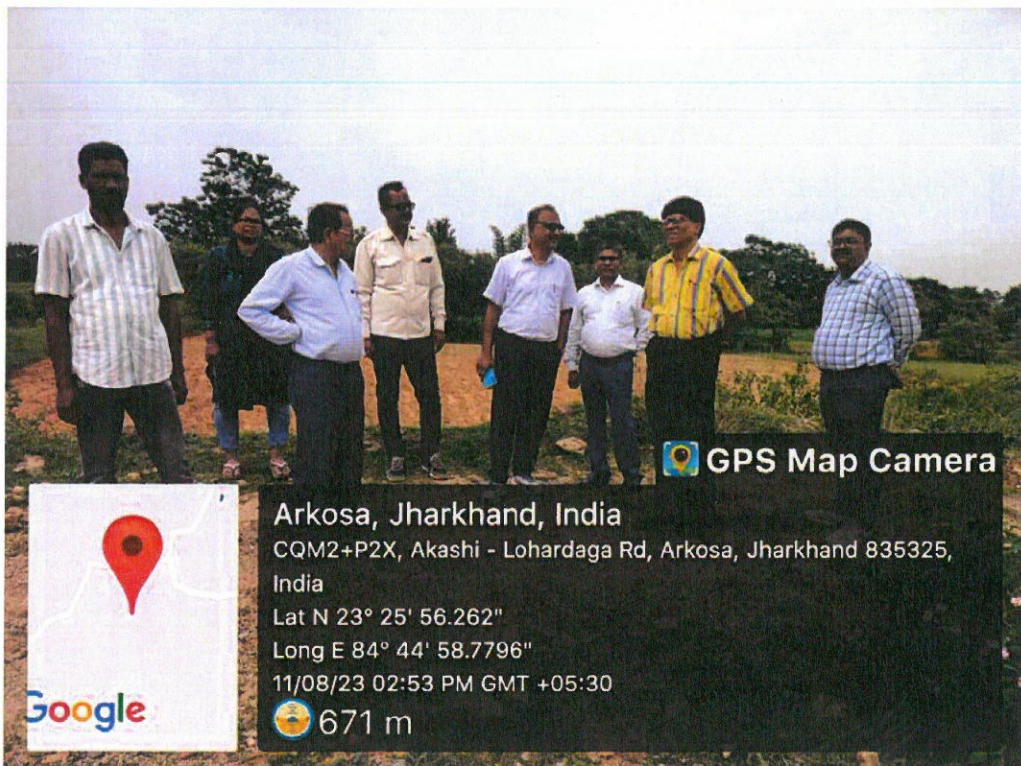
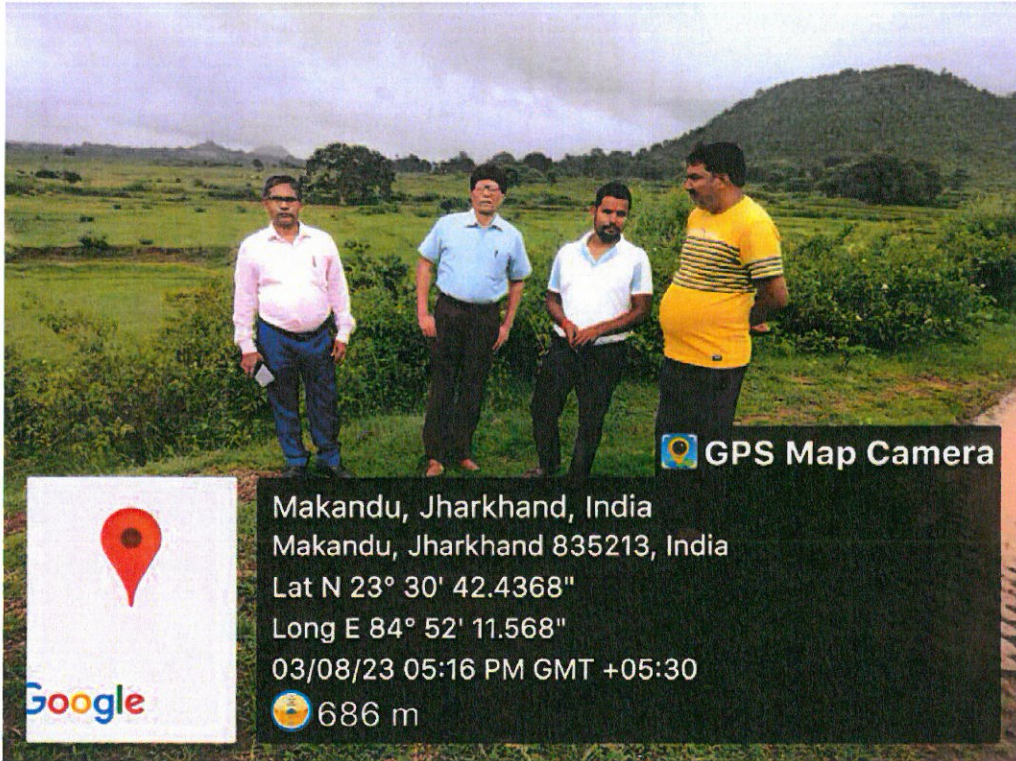
Plantation needs protection & care for at lease 3 years.



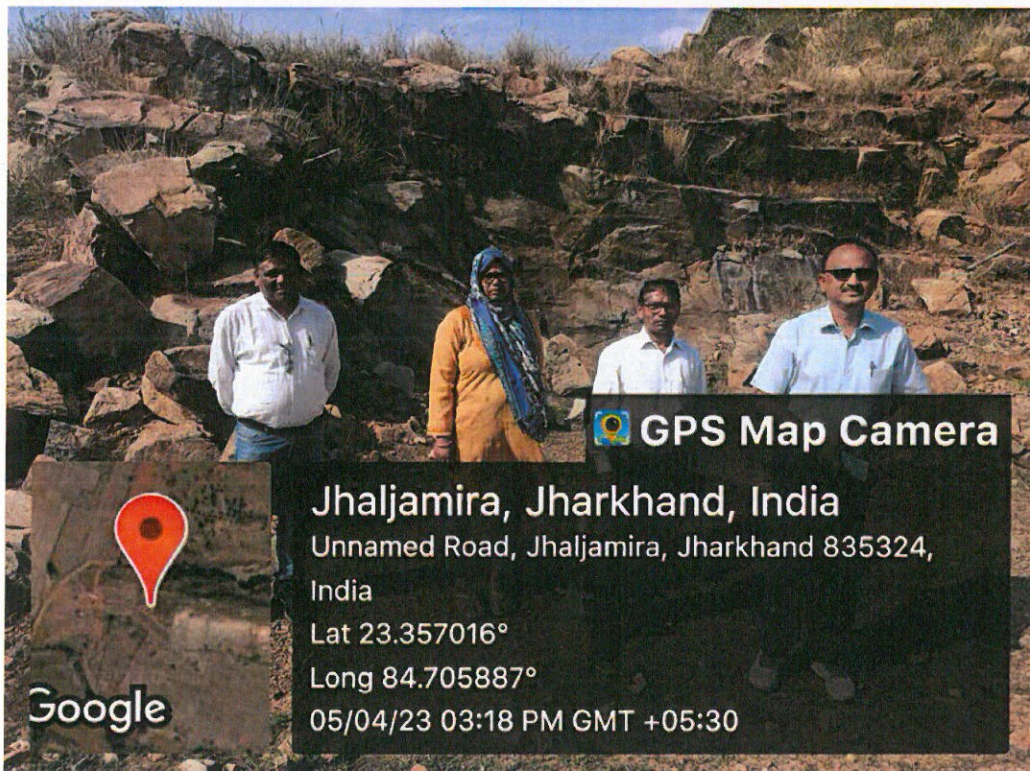
Lohardaga District Survey Report for Stone

Chapter – XXVII Other Information

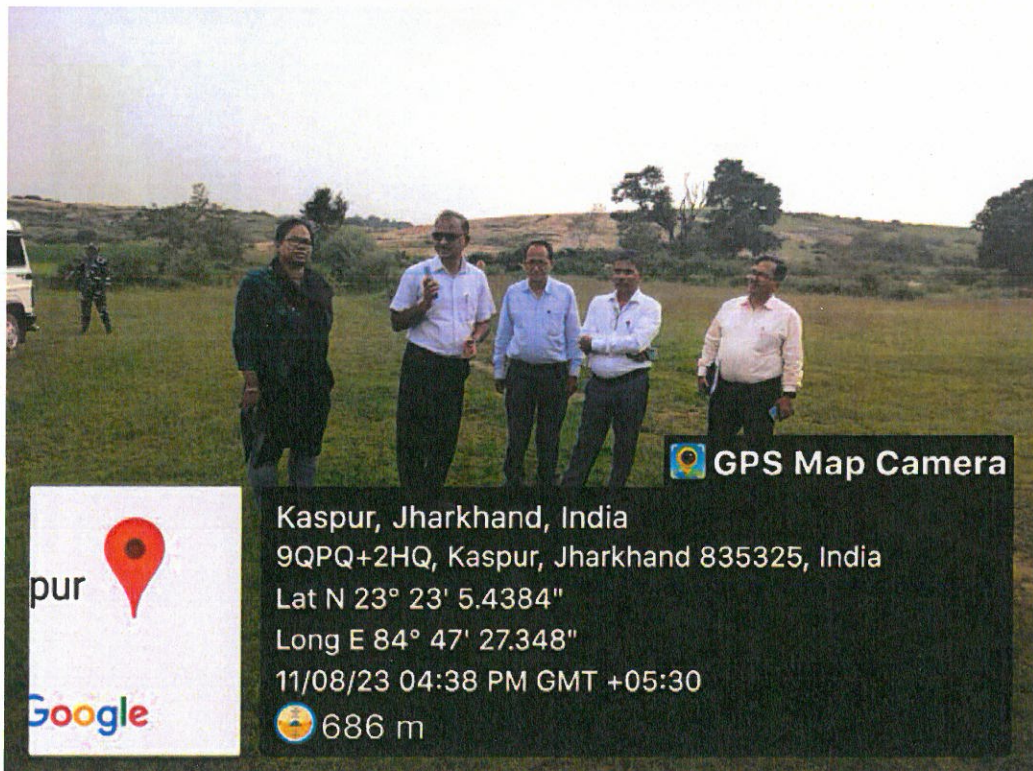
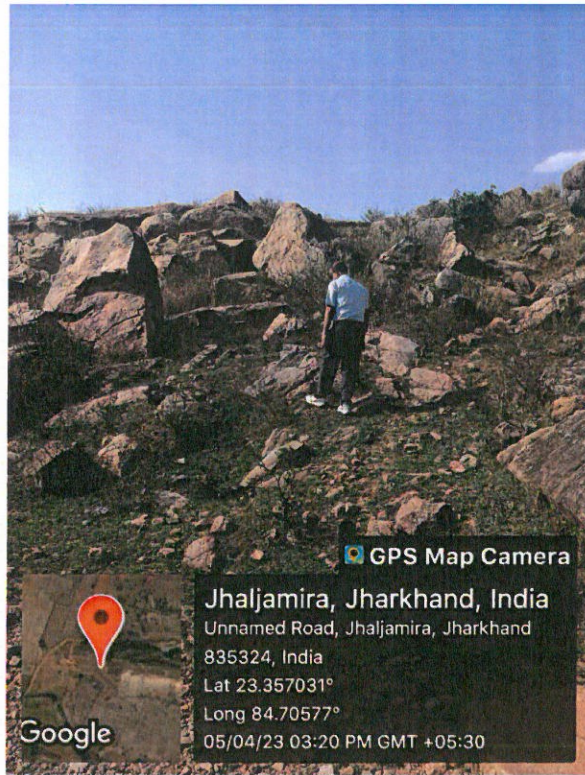
27.1 Photography during site visit by sub-divisional committee



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27.2 Reference

CONTENT as per Notification No.- S.O.3611 (E), dated : 25th July, 2018,	Status	Reference
(1) Introduction;	Complied In Chapter - I	Sub-Divisional Committee
(2) Overview of Mining Activity in the District;	Complied In Chapter - II	District Mining Office
(3) General Profile of the District;	Complied In Chapter - III	1. Census Report, 2011 2. District Statistical Handbook 3. Report on slope, aspect and altitude of Lohardaga District published by JSAC
(4) Geology of the District;	Complied In Chapter - IV	Department of Mines & Geology
(5) Drainage of Irrigation pattern;	Complied In Chapter - V	Ground Water Information Booklet Lohardaga District, Jharkhand State Published by CGWB
(6) Land Utilisation Pattern in the District: Forest, Agricultural, Horticultural, Mining etc.	Complied In Chapter - VI	District Statistical Handbook
(7) Surface Water and Ground Water scenario of the district	Complied In Chapter - VII	1. Ground Water Information Booklet Lohardaga District, Jharkhand State Published by CGWB 2. Water Resources Information System
(8) Rainfall of the district and climatic condition;	Complied In Chapter - VIII	Approved DSR (sand) & Climate of Jharkhand, issued by Climatological



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		<i>Publication Section of Indian Meteorological Department, Government of Jharkhand.</i>
(9) Details of the mining leases in the District as per the following format	Complied In Chapter – IX	District Mining Office
(10) Details of Royalty or Revenue received in last three years;	Complied In Chapter – X	District Mining Office
(11) Details of Production of Minor Mineral in last three years;	Complied In Chapter – XI	District Mining Office
(12) Mineral Map of the District;	Complied In Chapter – XII	Department of Mines & Geology
(13) List of Letter of Intent (LOI) Holders in the District along with its validity as per the following format:-	Complied In Chapter – XIII	District Mining Office
(14) Total Mineral Reserve available in the District;	Complied In Chapter – XIV	District Mining Office
(15) Quality /Grade of Mineral available in the District;	Complied In Chapter – XV	Department of Mines & Geology
(16) Use of Mineral;	Complied In Chapter – XVI	Sub-Divisional Committee
(17) Demand and Supply of the Mineral in the last three years;	Complied In Chapter – XVII	Department of Mines & Geology
(18) Mining leases marked on the map of the district;	Complied In Chapter – XVIII	Department of Mines & Geology
(19) details of the area of where there is a cluster of mining leases viz. number of mining leases, location (latitude and longitude);	Complied In Chapter – XIX	Department of Mines & Geology
(20) Details of Eco-Sensitive Area, if any, in the District;	Complied In Chapter – XX	Sub-Divisional Committee



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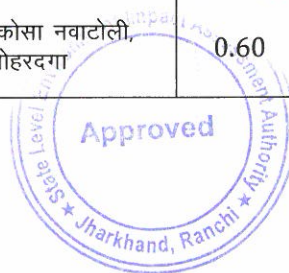
(21) Impact on the Environment (Air, Water, Noise, Soil, Flora & Fauna, land use, agriculture, forest etc.) due to mining activity;	Complied In Chapter – XXI	Sub-Divisional Committee
(22) Remedial Measures to mitigate the impact of mining on the Environment;	Complied In Chapter – XXII	Sub-Divisional Committee
(23) Reclamation of Mined out area (best practice already implemented in the district, requirement as per rules and regulation, proposed reclamation plan);	Complied In Chapter – XXIII	Sub-Divisional Committee
(24) Risk Assessment & Disaster Management Plan;	Complied In Chapter – XXIV	Sub-Divisional Committee
(25) Details of the Occupational Health issues in the District. (Last five-year data of number of patients of Silicosis & Tuberculosis is also needs to be submitted);	Complied In Chapter – XXV	District TB Officer, Lohardaga
(26) Plantation and Green Belt development in respect of leases already granted in the District;	Complied In Chapter – XXVI	Sub-Divisional Committee
(27) Any other information.	Complied In Chapter - XXVII	



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27.3 Other Details on Mining Lease in the District

Sl. No.	Name of Mineral	Name of the Lessee	Address & Contact No. of Lessee	Area of Mining lease (ha)	Mauza	Thana / Block	Plot No.
1	2	3	4	6	7	8	9
1	पत्थर	स्व०गुणा लोहरा वल्द शिव शंकर लोहरा	वेन्जार किस्को, लोहरदगा	4.00	ओयना	लोहरदगा	42(अंष)
2	पत्थर	स्व०इन्द्र लोहरा, वल्द स्व०शिवशंकर लोहरा, प्राधिकृत श्रीमति सुमति देवी,	किस्को, लोहरदगा	4.00	ओयना	लोहरदगा	42(अंष)
3	पत्थर	श्री अब्दुल नेहाल अख्तर, वल्द स्व० अब्दुल कासीम	पावरगंज, लोहरदगा	2.05	ओयना	लोहरदगा	42(अंष)
4	पत्थर	श्री छेदी लोहरा, वल्द स्व० मोख्तार लोहरा	ग्राम-टाटी, लोहरदगा	2.75	ओयना	लोहरदगा	42(अंष)
5	पत्थर	स्व० मनीरउद्दीन अंसारी वल्द अजमत अली अंसारी	अमला टोली लोहरदगा	0.43	ओयना	लोहरदगा	40, 841(अंष)
6	पत्थर	श्री सत्यजीत सिंह, श्री भुनेश्वर प्रसाद सिंह	ग्राम अरकोसा, नवाटोली, लोहरदगा	1.50	अरकोसा	लोहरदगा	898 (अंष)
7	पत्थर	मो०जसीम अंसारी, वल्द श्री शोख करीम	ग्राम-अरकोसा गम्हार टोली, लोहरदगा	1.20	अरकोसा	लोहरदगा	898 (अंष)
8	पत्थर	श्री इरमियाह टोप्पो, वल्द श्री पुरन टोप्पो	ग्राम-नवाटोली, लोहरदगा	1.08	अरकोसा	लोहरदगा	(1007) 898 (अंष)
9	पत्थर	श्री उदय कुँवर, वल्द श्री सुधीर चन्द्र कुँवर	ग्राम-पो० भटखिजरी लोहरदगा	1.50	अरकोसा	लोहरदगा	
10	पत्थर	श्री सुजीत सिंह, वल्द श्री भुनेश्वर प्रसाद	ग्राम-नवाटोली, अरकोसा, लोहरदगा	1.20	अरकोसा	लोहरदगा	987, 993 (अंष)
11	पत्थर	श्री उदय सिंह, वल्द श्री चन्द्रपाल सिंह	ग्राम-नवाटोली, अरकोसा, लोहरदगा	2.00	अरकोसा	लोहरदगा	1007, 993 (अंष)
12	पत्थर	श्री अजय कु० सिंह, वल्द स्व०चन्द्रपाल	ग्राम-अरकोसा नवाटोली, लोहरदगा	0.60	अरकोसा	लोहरदगा	570 (अंष)



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		सिंह					
13	पत्थर	श्री अल्लाउद्दीन अंसारी, वल्द श्री तेजू अंसारी	ग्राम-पो0, अरकोसा, थाना-जिला, लोहरदगा	2.55	अरकोसा	लोहरदगा	1 पुराना 4 अंष एवं 5 अंष नया
14	पत्थर	सर्वश्री अरकोसा स्टोन वर्क्स, प्रो0 श्री मनान अंसारी	ग्राम-पो0, अरकोसा, थाना-जिला, लोहरदगा।	0.50	अरकोसा	लोहरदगा	898 (अंष)
15	पत्थर	श्री मटेश्वर उरॉव	ग्राम-अरकोसा नवाटोली, लोहरदगा।	0.75	अरकोसा	लोहरदगा	898 पुराना 1007 (अंष)
16	पत्थर	1.श्री नेजाम अंसारी पिता अमीरुद्दीन अंसारी 2. सफीउल्लाह अंसारी पिता जमीरुद्दीन अंसारी 3. सिद्धिक अंसारी पिता मुस्तकीम अंसारी	ग्राम-रामपुर,पो0 रामपुर थाना+जिला- लोहरदगा	3.39	अरकोसा	लोहरदगा	159
17	पत्थर	श्री अशोक कु0 सिंह, वल्द स्व0बृजबिहारी सिंह	ग्राम-छत्तर बगीचा, लोहरदगा।	1.00	भक्सो	लोहरदगा	905 (अंष)
18	पत्थर	श्री अनमोल टोप्पो, वल्द श्री मदरा टोप्पो	ग्राम-रघुटोली, लोहरदगा।	1.00	भक्सो	लोहरदगा	2148
19	पत्थर	श्री पवन कु0 सिंह, वल्द श्री सुरेश कु0 सिंह	पो0 रामपुर,जिला-लोहरदगा	1.00	भक्सो	लोहरदगा	905 (अंष)
20	पत्थर	श्री अजय कु0सिंह, वल्द श्री चन्दपाल सिंह	ग्राम-अरकोसा नवाटोली, लोहरदगा।	1.50	भक्सो	लोहरदगा	905 (अंष)
21	पत्थर	श्री सोमनाथ उरॉव एवं श्री सुजीत सिंह	ग्राम-अरकोसा नवाटोली, लोहरदगा।	2.70	भक्सो	लोहरदगा	1150 पुराना 1046 नया
22	पत्थर	श्री सुरेश उरॉव, वल्द श्री मंगरू उरॉव	ग्राम-बम्हडीहा पो0निगनी, थाना एवं जिला लोहरदगा।	0.98	बम्हडीहा	लोहरदगा	119, 120
23	पत्थर	श्री मदन साहु,वल्द श्री भोला साहु	ग्राम-पो0 जिला- लोहरदगा	3.13	बरही	सेन्हा	235 (अंष)



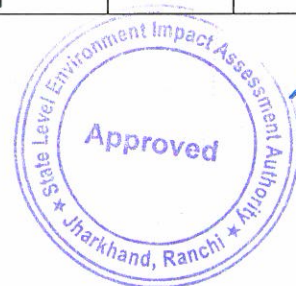
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24	पत्थर	1-श्री लव कु० सिंह, वल्द श्री प्रवेश सिंह 2-श्री प्रहलाद गोप वल्द नागेन्द्र गोप,	ग्राम-पो० नगरा, थानाएवंजिला लोहरदगा। ग्राम-दतरी, पो० सिठियों थाना-सेन्हा, जिला-लोहरदगा।	2.00	झालजमीरा	सेन्हा	2539 (अंष)
25	पत्थर	मेसर्स ए०डी० स्टोन वर्क्स, पार्ट० श्री आरीफ इमाम एवं दीपक कुमार	पावरगंज, लोहरदगा।	1.00	झालजमीरा	सेन्हा	2539 (अंष)
26	पत्थर	श्री ताकशेवर शेखर एवं मनमोहन गोप	झालझमीरा पो० गगेया लोहरदगा।	2.00	झालजमीरा	सेन्हा	2539 (अंष)
27	पत्थर	सर्वश्री लिमपेलेक्स इन्फक्चर लि०, प्रोजेक्ट मनेजर श्री सुबीर कुमार गोस्वामी	ग्राम चकला बानो पो० चन्दवा लातेहार।	5.50	झालजमीरा	सेन्हा	2539 (अंष)
28	पत्थर	सर्वश्री स्टार इन्टर प्राइजेज, प्रो० श्री शैयाद शाहिद अख्तर	पावरगंज लोहरदगा।	1.00	झालजमीरा	सेन्हा	2539 (अंष)
29	पत्थर	श्री वकील अंसारी, वल्द हबीब अंसारी	ग्राम- भुजनियों लोहरदगा।	1.50	झालजमीरा	सेन्हा	2539 (अंष)
30	पत्थर	सर्वश्री ए०एस० इन्टर प्राइजेज पार्ट० श्री अशोक कुमार यादव एवं शकील अहमद	बंगला रोड़ लोहरदगा।	4.10	झालजमीरा	सेन्हा	2539 (अंष)
31	पत्थर	श्री रोहन साहु, वल्द स्व० रंजीत कु० साहु	मेन रोड़ लोहरदगा।	1.67	एकागुड़ी	सेन्हा	271
32	पत्थर	श्री रोहन साहु, वल्द स्व० रंजीत कु० साहु	मेन रोड़ लोहरदगा।	1.00	एकागुड़ी	सेन्हा	238 (अंष)
33	पत्थर	सर्वश्री मेघनाथ साहु स्टोन वर्क्स, प्रो० श्री जयनाथ साहु, वल्द स्व० जालेश्वर साहु	ग्राम-पो०-थाना-सेन्हा, जिला-लोहरदगा।	3.00	कोराम्बे	सेन्हा	810 (अंष)
34	पत्थर	श्री समीर उरॉव, पिता स्व० सुखराम उरॉव	ग्राम+पोस्ट० कण्डरा, थाना-सेन्हा, लोहरदगा	1.00	कोराम्बे	सेन्हा	109 (अंष)
35	पत्थर	श्रीमति रीता देवी, वल्द श्री रतनू भगत	ग्राम-कुटमू पो० निंगनी थाना-जिला-लोहरदगा।	0.50	सेरेंगहातु	सेन्हा	75(अंष)
36	पत्थर	(1) श्री अमीरउद्दीन	ग्राम-सेरेंगहातु, पो० एवं थाना-सेन्हा जिला-लोहरदगा।	0.68	सेरेंगहातु	सेन्हा	81(अंष)



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		अंसारी वल्द श्री जहरुद्दीन अंसारी, (2)श्री सफरुद्दीन अंसारी, वल्द श्री दुखिया अंसारी (3)श्री हुसैन अंसारी, वल्द तेजावत अंसार					
37	पत्थर	श्री अजय प्रसाद, वल्द श्री दयानन्द प्रसाद,	ग्राम-बरवाटोली, लोहरदगा।	2.00	मेढो	सेन्हा	792 (अंष)
38	पत्थर	श्री शैयद शाहिद अख्तर, वल्द श्री शैयद मुनिजउद्दीन	न्यु रोड पावरगंज लोहरदगा।	1.00	कण्डरा	सेन्हा	228 (अंष)
39	पत्थर	सर्वश्री पुनाबीली महिला मंडल, अध्यक्ष श्रीमति बिरसमनी उरॉव	ग्राम-कण्डरा पो0 बुटी लोहरदगा।	1.00	कण्डरा	सेन्हा	228 (अंष)
40	पत्थर	श्री रविन्द्र कु0 साहु, वल्द श्री मारवाडी साहु	ग्राम एवं पो0 सेन्हा, जिला-लोहरदगा।	1.04	डगरा	सेन्हा	197 एव 198(अंष)
41	पत्थर	सर्वश्री बेली महिला मंडल पाली अध्यक्ष श्रीमति नोमा लकडा	ग्राम-पाली, पो0-गगेया, लोहरदगा।	1.00	पली	सेन्हा	344(अंष)
42	पत्थर	श्री रवि कुमार अग्रवाल, पिता श्री प्रदीप कुमार अग्रवाल	मेनरोड चन्दवा, पो0-चन्दवा, लातेहार	1.04	डगरा	सेन्हा	197, 198(अंष)
43	पत्थर	श्री शाहिद खॉ, वल्द श्री ईस्माईल खॉ	ग्राम जजगुण्डा पो0 ककडगढ, कुडू, लोहरदगा।	1.00	जजगुण्डा	कुडू	200(अंष)
44	पत्थर	श्री अबुतलहा अंसारी वल्द श्री समसुल हक	ग्राम,पो0 ककरगढ थाना-कुडू जिला-लोहरदगा।	1.00	जजगुण्डा	कुडू	200 (अंष)
45	पत्थर	श्री शाहिद खॉ, वल्द श्री ईस्माईल खॉ,	ग्राम जजगुण्डा पो0-ककरगढ थाना-कुडू जिला,लोहरदगा।	2.00	जजगुण्डा	कुडू	200 (अंष)
46	पत्थर	सर्वश्री झारखण्ड स्टोन वर्क्स, प्रो0 श्री मुसुर हुसैन एवं अन्य वल्द स्व0 करामत हुसैन,	ग्राम-घाघरा पो0 हातु घाघरा थाना बेडों जिला-लोहरदगा।	1.00	जजगुण्डा	कुडू	267 (अंष)
47	पत्थर	श्रीमति नसीमा खातुन, पति शाहिद खॉ	ग्राम जजगुण्डा, पोस्ट-ककरगढ, थाना-कुडू, लोहरदगा।	2.00	जजगुण्डा	कुडू	293(अंष) एवं 406



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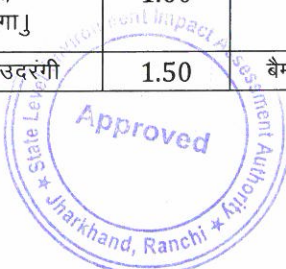
48	पत्थर	1. श्री सुनील उरॉव, वल्द श्री भक्कड़ उरॉव 2.श्री सुरेश महतो वल्द श्री जेरका महता	दोनो का पता ग्राम भुलसुरी कुडू जिला-लोहरदगा।	1.00	फुलसुरी	कुडू	637 (अंष)
49	पत्थर	श्री अनिसुर रहमानें, वल्द श्री स्व0 हाजी आलमीन	ग्राम-मकान्दु पो0 जिगी कुडू लोहरदगा।	1.00	मकान्दू	कुडू	1171 (अंष)
50	पत्थर	श्री जुवैर गौहार, वल्द स्व0 सम्मी अहमद	पो0 कुडू थाना-कुडू जिला-लोहरदगा	1.85	मकान्दू	कुडू	901 (अंष)
51	पत्थर	श्री जुवैर गौहार, वल्द स्व0 सम्मी अहमद	ग्राम-पण्डरा पो0-कुडू थाना-कुडू जिला-लोहरदगा।	1.50	मकान्दू	कुडू	1171 (अंष)
52	पत्थर	श्री अनिसुर रहमान, पिता स्व0 हाजी मो0 आलमीन	ग्राम-मकान्दू, पो0जिगी, थाना-कुडू, लोहरदगा	3.00	मकान्दू	कुडू	1171 (अंष)
53	पत्थर	श्री संजय साहु, वल्द श्री रामप्रसाद साहु	पो0 कुडू थाना-कुडू जिला-लोहरदगा।	1.40	जीगी	कुडू	2017 (अंष)
54	पत्थर	श्री महावीर भगत	ग्राम-बडमारा टोला इटरा पो0 कुडू लोहरदगा	2.00	बडमारा	कुडू	1339 (अंष)
55	पत्थर	श्री शशि कुमार प्रसाद, वल्द श्री शिव नरायण साहु	ग्राम-पो0, जीमा थाना-कुडू जिला-लोहरदगा।	0.56	जीमा	कुडू	2899 (अंष)
56	पत्थर	1. श्री भुनेश्वर साहु, वल्द श्री मिलखु साहु 2. श्री चैतु उरॉव वल्द स्व0 धीना उरॉव	ग्राम कुम्हरीया पो0-कुडू थाना-कुडू लोहरदगा। ग्राम-बाधी पो0-ईरगावें, जिला-लोहरदगा।	1.00	कुम्हरीया	भण्डरा	01(अंष)
57	पत्थर	श्री नन्द किशोर साहु, वल्द श्री बुधराम साह	ग्राम-कुम्हरीया पो0-आकासी थाना-भण्डरा, जिला-लोहरदगा।	1.00	कुम्हरीया	भण्डरा	01(अंष)
58	पत्थर	श्री विजेश्वर साहु, वल्द श्री बुधराम साहु	ग्राम-कुम्हरीया पो0-आकासी थाना-भण्डरा, जिला-लोहरदगा।	1.00	कुम्हरीया	भण्डरा	32 (अंष)
59	पत्थर	1.श्री शिव सहाय साहु, वल्द श्री गुलाब साहु, 2.श्री रधुनन्दन साहु, वल्द श्री रुचन साहु 3. श्री ब्रजकिशोर साहु, वल्द श्री जगरनाथ साहु,	ग्राम बेदाल डांड टोली पो0मसमानो ग्राम-उतका, पो0-कैरो, जिला-लोहरदगा।	2.00	कुम्हरीया	भण्डरा	01(अंष)



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Lohardaga District Survey Report for Stone

60	पत्थर	1. श्री हीरा लाल साहु, वल्द श्री दिलावर साहु, 2. श्री हीरामन साहु, 3. श्री शत्रुघन साहु, वल्द श्री सोभा साहु	तीनों का पता ग्राम-कुम्हरीया पो0-आकासी, थाना-भण्डरा, जिला-लोहरदगा।	1.00	कुम्हरीया	भण्डरा	01(अंश)
61	पत्थर	3. श्री चैतु उरॉव, पिता स्व0 धीना उरॉव, 4. श्री भुनेश्वर साहु पिता श्री मिलखु साहु,	ग्राम एवं पो0-ईरगॉव, जिला-लोहरदगा। ग्राम-कुम्हरीया, पो0-आकाशी, थाना-भण्डरा, जिला-लोहरदगा।	1.00	कुम्हरीया	भण्डरा	328 (अंश)
62	पत्थर	1.श्री बुद्धदेव उरॉव, वल्द श्री होसे उरॉव, 2.श्री अजीत उरॉव, वल्द श्री दुबराज उरॉव, 3. श्री इसराफिल अंसारी, वल्द श्री जमरुद्दीन अंसारी, 4. श्री शाहजहाँ अंसारी, वल्द स्व0 महमद आलम	सभी का पता ग्राम एवं पोस्ट- बड़ागाई थाना-भण्डरा जिला-लोहरदगा।	2.00	बड़ागाई	भण्डरा	1192 (अंश)
63	पत्थर	श्री देवा उरॉव, वल्द स्व0 महली उरॉव	ग्राम-आमदरी पो0-सेमरा, थाना-भण्डरा, जिला-लोहरदगा।	1.00	टामदरी	भण्डरा	456 एवं 341 (अंश)
64	पत्थर	सर्वश्री शीतल स्टोन वर्क्स, प्रो0 श्री परमेश्वर महली, वल्द श्री खदिया महली	ग्राम-पलमी, पो0-सेमरा, थाना-भण्डरा, जिला-लोहरदगा।	1.00	पलमी	भण्डरा	1274 (अंश)
65	पत्थर	श्री अभय कुमार, पिता श्री जयपाल महतो	ग्राम-भण्डरा, पोस्ट एवं थाना-भण्डरा, जिला-लोहरदगा।	1.00	भण्डरा	भण्डरा	335 (अंश)
66	पत्थर	श्री ईन्द्रदेव उरॉव, पिता श्री बन्दे उरॉव	ग्राम एवं पोस्ट-भण्डरा थाना-भण्डरा जिला-लोहरदगा।	1.00	भण्डरा	भण्डरा	819 (अंश)
67	पत्थर	श्री ओम प्रकाश कुमार	ग्राम एवं पोस्ट-भण्डरा, जिला-लोहरदगा।	1.00	भण्डरा	भण्डरा	1335 (अंश)
68	पत्थर	श्री सोहराय उरॉव, पिता श्री सोमेश्वर उरॉव	ग्राम एवं पोस्ट कसपूर, थाना-भण्डरा, जिला-लोहरदगा।	1.00	कसपूर	भण्डरा	310 (अंश)
69	पत्थर	श्री हाकिम	ग्राम-बैमारी, पो0 उदरंगी	1.50	बैमारी	भण्डरा	312



Lohardaga District Survey Report for Stone

		अंसारी एवं सोमे उराँव	थाना-भण्डरा जिला-लोहरदगा।				(अंश)
70	पत्थर	श्री विकास चन्द्र सिंह पिता स्व० मदन मोहन प्रसाद सिंह	पावरगंज लोहरदगा	2.60	भक्सो	लोहरदगा	815, 820
71	पत्थर	सर्वश्री बालाजी स्टोन ट्रेडिंग एजेन्सी, पार्ट श्री अनन्त प्रसाद एवं अन्य	जानकी बीला फारेस्ट कॉलोनी हजारीबाग।	9.00	मकान्दू	कुडू	1171 (अंश)
72	पत्थर	श्री शरत कुमार विद्यार्थी	ग्राम एवं पोस्ट कैरो थाना-कैरो, जिला-लोहरदगा	3.00	उमरी	कुडू	1323 (अंश)
73	पत्थर	श्री मनोज कुमार साहु, पिता स्व० किशोर प्रसाद साहु	शास्त्री चौक, मेन रोड, लोहरदगा।	3.50	पतरातु	किस्को	215, 218 (अंश)
74	पत्थर	श्री मकसूद आलम एवं श्री तौहिद अंसारी	ग्राम-गराडीह, पो० गजनी, थाना-भण्डरा, जिला-लोहरदगा।	2.50	गराडीह	कैरो	365 (अंश)

27.4 Public Consultation

The District Survey Report was prepared for Stone Minor Mineral in the District separately and its draft was placed in the public domain by keeping its copy in Collectorate and posting it on district's website for twenty-one days.

8 **दैनिक जागरण** रांची, 24 जुलाई, 2023

उपायुक्त -सह-जिला दण्डाधिकारी का कार्यालय, लोहरदगा।
(खनन शाखा)

आम सूचना

एतद् द्वारा सर्व साधारण को सूचित किया जाता है कि लोहरदगा जिला का लघु खनिज पत्थर, एवं मिट्टी का अलग-अलग District Survey Report (DSR) तैयार की गई है, जिसे लोहरदगा जिला के वेबसाईट <https://lohardaga.nic.in> पर आमजनों की सुझाव एवं मंतव्य के लिये प्रकाशित किया जाना है।

अतएव उक्त DSR में यदि कोई सुझाव एवं मंतव्य हो तो DSR प्रकाशित होने की तिथि से 21 दिनों के अन्दर अपनी सुझाव जिला खनन कार्यालय लोहरदगा अथवा E-mail ID :- dmo-lohardaga@jharkhandmail.gov.in पर प्रेषित किया जाय।

उपायुक्त, लोहरदगा।

PR 303028 (Lohardaga) 23-24 (D)



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Lohardaga District Survey Report for Stone

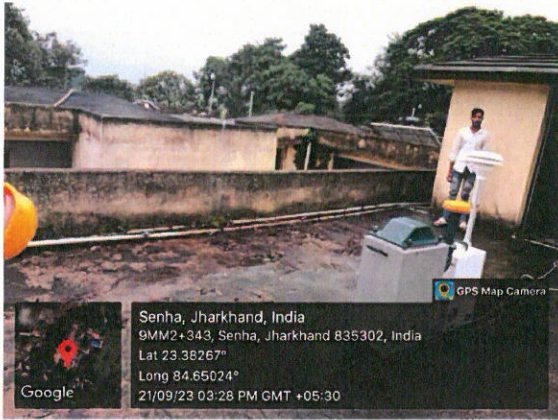
The screenshot shows the official website of the Lohardaga District Survey Report for Minor Mineral (Stone) Mining office. The page features a header with the Government of Jharkhand logo and the Lohardaga logo. A navigation menu includes Home, COVID-19, About District, Success Stories, Directory, Deo Portal, Departments, Tourism, Notices, and More. Below the menu is a banner with various images of the district. The main content area displays the title "District Survey report (DSR) FOR Minor Mineral (Stone)- Mining office" and a table with the following data:

Title	Description	Start Date	End Date	File
District Survey report (DSR) FOR Minor Mineral (Stone)- Mining office	District Survey report (DSR) FOR Minor Mineral (Stone)- Mining office	21/07/2023	20/08/2023	View (2 MB)



Lohardaga District Survey Report for Stone

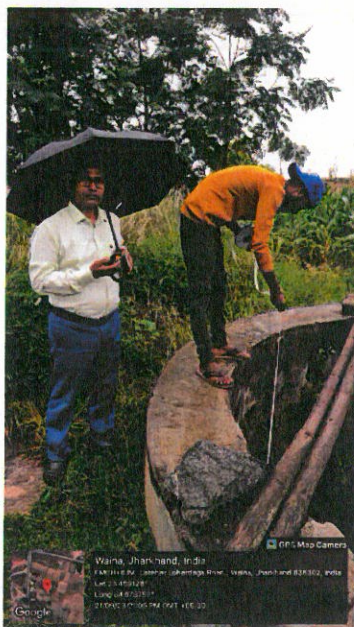
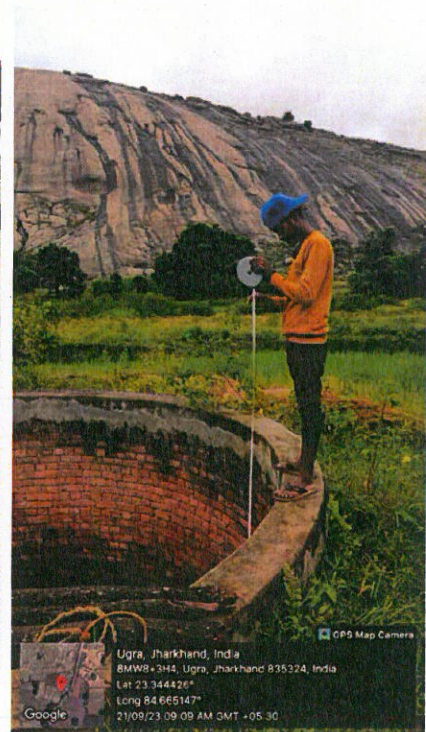
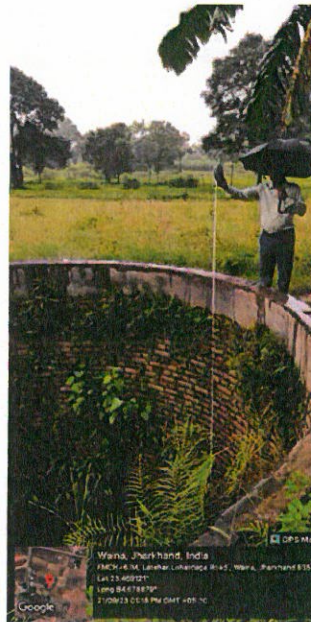
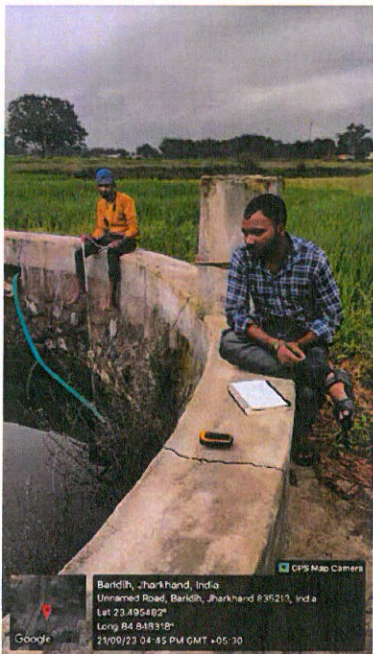
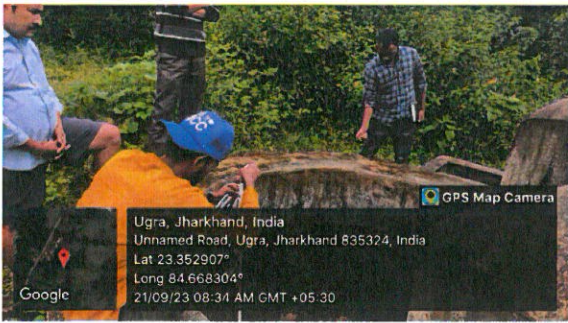
PHOTOGRAPHS



During Monitoring of Ambient Air Quality (Block Wise)



Lohardaga District Survey Report for Stone



During Monitoring of Ground Water Table (Zone Wise)



[Handwritten Signature]

कार्यपालक अभियंता का कार्यालय

ग्रामीण विकास विशेष प्रमंडल, लोहरदगा।

(E- Mail - ID - rdsd.lohardaga@rediffmail.com)

पत्रांक 11694/लोहरदगा
प्रेषक,

दिनांक 22.9.23...

कार्यपालक अभियंता,
ग्रामीण विकास विशेष प्रमंडल, लोहरदगा।

सेवा में,

जिला खनन पदाधिकारी,
लोहरदगा।

विषय:- आगामी पाँच वर्षों में संचालन किये जाने वाले योजनाओं एवं उसमें उपयोग होने वाले पत्थर खनिज की मात्रा उपलब्ध कराने के संबंध में।

प्रसंग:- आपका पत्रांक 1126 दिनांक 21.09.2023

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के संबंध में कहना है कि ग्रामीण विकास विशेष प्रमंडल, लोहरदगा अन्तर्गत आगामी पाँच वर्षों में संभावित योजनाओं में उपयोग होने वाले पत्थर खनिज की संभावित मात्रा इस प्रकार है:-

क्र०सं०	खनिज	मात्रा	अभ्युक्ति
1	Boulder	7500 M ³	
2	Chips	24000 M ³	

विश्वासभाजन

for  22/9/23

कार्यपालक अभियंता
ग्रामीण विकास विशेष प्रमंडल,
लोहरदगा।



कार्यपालक अभियंता का कार्यालय
लघु सिंचाई प्रमण्डल, लोहरदगा।

(E-MAIL ID - mldloh632@gmail.com)

पत्रांक795...../

लोहरदगा, दिनांक 22.09.23/

प्रेषक,

कार्यपालक अभियंता,
लघु सिंचाई प्रमण्डल, लोहरदगा।

सेवा में,

जिला खनन पदाधिकारी,
लोहरदगा।

विषय :- अगामी पाँच वर्षों में संचालन किये जाने वाले योजनाओं एवं उसमें उपयोग होने वाले पत्थर खनिज की मात्रा उपलब्ध करने के सम्बन्ध में।

प्रसंग :- आपका पत्रांक-1126 दिनांक-21.09.2023

महाशय,

उपर्युक्त विषयक एवं प्रासंगिक पत्र के सम्बन्ध में कहना है कि लघु सिंचाई प्रमण्डल, लोहरदगा अन्तर्गत आगामी पाँच वर्षों में सम्भावित योजनाओं में उपयोग होने वाले पत्थर खनिज की सम्भावित मात्रा इस प्रकार है।

क्र० सं०	खनिज	मात्रा	अभियुक्ति
1.	2.	3.	4.
1.	Boulder	200000 M ³	
2.	Chips	150000 M ³	
Total :-		350000 M ³	

सूचनार्थ समर्पित।

विश्वासभाजन

22.09.2023
कार्यपालक अभियंता,
लघु सिंचाई प्रमण्डल, लोहरदगा।



झारखण्ड सरकार
कार्यपालक अभियंता का कार्यालय,
पथ निर्माण विभाग, पथ प्रमण्डल, लोहरदगा।
E-Mail I.D. : eercd.loh-jhr@nic.in

पत्रांक : 563

दिनांक : 21.09.2023

प्रेषक,

कार्यपालक अभियंता,
पथ निर्माण विभाग,
पथ प्रमण्डल, लोहरदगा।

सेवा में,

जिला खनन पदाधिकारी,
लोहरदगा।

विषय :- विगत पाँच वर्षों में संचालन किये जाने वाले योजनाओं एवं उसमें उपयोग होने वाले पत्थर खनिज की मात्रा उपलब्ध कराने के संबंध में।

प्रसंग :- आपका पत्रांक-1126/एम. दिनांक 21.09.2023


महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के आलोक में सूचित करना है कि पथ निर्माण विभाग, पथ प्रमण्डल, लोहरदगा द्वारा क्रियान्वित चालू योजनाओं एवं आगामी पाँच वर्षों में संभावित नये योजनाओं को समेकित कर उसमें उपयोग होने वाले पत्थर खनिज की मात्रा से संबंधित आँकड़ा निम्नवत् है :-

Aggregate	-	745026.25 M ³
Sand	-	99840.00 M ³
Dust	-	172369.75 M ³

विदित हो कि कार्य प्रमण्डल अंतर्गत भविष्य में आने वाले परियोजनाओं पर खनिज की खपत निर्भर करती है। अतः यह एक अति संभावित ब्यौरा है जो आपके अनुरोध के आलोक में उपलब्ध कराया जा रहा है।

विश्वासभाजन,


21/09/23
कार्यपालक अभियंता,
पथ निर्माण विभाग,
पथ प्रमण्डल, लोहरदगा।
21/09/23



कार्यालय - एन0 आर0 ई0 पी0, लोहरदगा।

पत्रांक 269/

दिनांक 21.9.2023

प्रेषक,

कार्यपालक अभियन्ता,
एन0आर0ई0पी0, लोहरदगा।

सेवा में,

जिला खनन पदाधिकारी,
लोहरदगा।

विषय -

आगामी पाँच वर्षों में संचालन किये जाने वाले योजनाओं एवं उसमें उपयोग होने वाले पत्थर खनिज की मात्रा उपलब्ध कराने के संबंध में।

प्रसंग -

आपका पत्रांक 1126/एम0, दिनांक 21.09.2023

महाशय,

उपयुक्त विषयक प्रासंगिक पत्र के संबंध में कहना है कि आगामी पाँच वर्षों में संचालन किये जाने वाले योजनाओं एवं उसमें उपयोग होने वाले पत्थर खनिज की मात्रा एक वर्ष हेतु निम्न प्रकार है :-

क्रमांक	प्रक्षेत्र	पत्थर खनिज				बालु
		स्टोन चिप्स	बोलडर	स्टोन डस्ट	मेटल	
	पथ	218.148 M	-	226.787 M	-	218.148
	भवन	136.791 M	-	-	-	244.996 M
	गार्डवाल	86.432	441.15	-	-	499.476
	कुल	441.371	441.15	226.787		962.620

आगामी पाँच वर्षों में हेतु अनुमानित उपयोग किये जाने वाले पत्थर खनिज का आकलन

क्रमांक	प्रक्षेत्र	पत्थर खनिज				बालु
		स्टोन चिप्स	बोलडर	स्टोन डस्ट	मेटल	
	पथ	218.148 x5 = 1090.74 M	-	226.787 M = 1133.935 M	-	218.148x5 = 1090.74 M
	भवन	136.791 x5 = 683.955 M	-	-	-	244.996 x5 = 1224.98 M
	गार्डवाल	86.432 x5 +432.16 M	441.15 x5 = 2205.75 M	-	-	499.476x5 = 2497.38 M
	कुल	441.371x5 = 2206.855 M	441.15 x5 = 2205.75 M	226.787 M = 1133.935 M		962.620 x 5 = 4813.10 M

सूचनार्थ प्रेषित।

विश्वासभाजन,

कार्यपालक अभियन्ता,
एन0आर0ई0पी0, लोहरदगा।



(Handwritten signature)

कार्यपालक अभियंता का कार्यालय
भवन निर्माण विभाग
भवन प्रमण्डल, लोहरदगा।

ई-मेल :- eebcdlohardaga-jhr@nic.in

पत्रांक. 485

लोहरदगा, दिनांक. 22-09-2023

प्रेषक,

कार्यपालक अभियंता,
भवन निर्माण विभाग
भवन प्रमण्डल, लोहरदगा।

सेवा में,

जिला खनन पदाधिकारी,
लोहरदगा।

विषय :-

अगले पाँच वर्षों में संचालन किये जाने वाले योजनाओं एवं उसमें उपयोग होने वाले पत्थर खनिज की मात्रा के सम्बन्ध में।

प्रसंग-

आपका पत्रांक 1126/एम०, दिनांक 21/09/2023.

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के सम्बन्ध में आपके द्वारा माँगी गई, अगले पाँच वर्षों में भवन प्रमण्डल लोहरदगा अंतर्गत संचालन किये जाने वाले योजनाओं एवं उसमें उपयोग होने वाले पत्थर खनिज की मात्रा कि अनुमानित विवरणी निम्नवत है।

पत्थर खनिज सम्बन्धित अनुमानित मात्रा :-

क्र० सं०	वर्ष	अनुमानित मात्रा	अभियुक्ति
1	2	3	4
1	2023-24	1200.00 धनमीटर	मात्रा की गणना अनुमानित है। वास्तविक मात्रा प्रत्येक वर्ष क्रियान्वित योजनाओं पर निर्भर करेगी।
2	2024-25	800.00 धनमीटर	
3	2025-26	800.00 धनमीटर	
4	2026-27	500.00 धनमीटर	
5	2027-28	450.00 धनमीटर	

सूचनार्थ एवं अग्रतर कार्रवाई हेतु प्रेषित।

विश्वासभाजन

कार्यपालक अभियंता
भवन निर्माण विभाग,
भवन प्रमण्डल, लोहरदगा।



कार्यालय, जिला परिषद, लोहरदगा ।

Email ID - lohardagaZilaparisad@gmail.com

Mobile no - 06526-222064

पत्रांक.....756...../जि0प0

दिनांक...21/09/2023...

प्रेषक,

जिला अभियंता,
जिला परिषद, लोहरदगा ।

सेवा में,

जिला खनन पदाधिकारी,
लोहरदगा ।

विषय:-

आगामी पाँच वर्षों में संचालन किये जाने वाले योजनाओं एवं उसमें उपयोग होने वाले पत्थर खनिज की मात्रा का प्रेषण ।

प्रसंग :-

आपका पत्रांक 1126/एम0 दिनांक 02.09.2023


महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के आलोक में कहना है कि जिला परिषद, लोहरदगा द्वारा क्रियान्वित चालु योजनाओं एवं आगामी पाँच वर्षों में सम्भावित नये योजनाओं का समेकित कर उसमें उपयोग होने वाले पत्थर खनिज की मात्रा से संबंधित आँकड़ा निम्नवत है :-

Chips	-	300000.00 M3
Sand	-	100000.00 M3
Dust	-	100000.00 M3

विदित हो कि जिला परिषद, लोहरदगा अन्तर्गत भविष्य में आने वाली परियोजनाओं पर खनिज की खपत निर्भर करती है । अतः यह एक अति सम्भावित ब्यौरा है जो आपके अनुरोध के आलोक में उपलब्ध कराया जा रहा है ।

विश्वासभाजन,


21/9/23
जिला अभियंता,
जिला परिषद, लोहरदगा ।





ENVIRONMENTAL LABORATORIES & ENGINEERING SERVICES PVT. LTD.

PLOT NO-30, MANSAROVAR ENCLAVE, TUPUDANA
HATIA, RANCHI-834003 (JHARKHAND)
Email: info@elespl.com ; eles.ranchi@gmail.com

ISO 9001:2015 CERTIFIED, OHSAS 18001:2007 CERTIFIED
NABL Accredited & JSPCB Certified Lab. for
Environmental Pollution Monitoring & Analysis

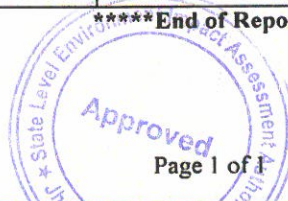
CIN: U74999JH2018PTC011125

GST NO:- 20AAECE9713D1Z4 ? : 0651-2290103, 9931289451

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Test Report No. : ELES/RNC/2021/0136		Report Release Date : 03.02.2021				
Application No. : 9884407		Work Order Date : 27.01.2021				
CUSTOMER DETAILS		SAMPLE DETAILS				
Customer Name	: Arkosha Stone Mine	Sampling Date	: 29.01.2021 to 30.01.2021			
Address	: Mauza- Arkosha, P.S-Arkosha, Dist.-Lohardaga	Sample Received Date	: 01.02.2021			
		Type of Sample	: Ambient Air			
		Sampling Procedure	: ELES/DOC/SMPL/02			
		Sample Drawn By	: ELES Pvt. Ltd.			
Plant Status	: Operational	Period of Analysis	: 01.02.2021 to 02.02.2021			
METEOROLOGICAL INFORMATION						
1	Average Temperature (°C) : 15	2	Barometric Pressure (mmHg) : 748			
3	Relative Humidity (%) : 67	4	Weather Condition : Clear			
Parameters		Particulate Matter (PM10)	Suspended Particulate Matter (SPM)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)	
Test Protocol		IS 5182 (P-23)	IS:5182 (P-4)	IS 5182 (P-2)	IS 5182 (P-6)	
Locations	Limits		100	500	80	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Near Entrance	09:40 – 13:45	92	371	13.8	25.5	
	13:45 – 17:40			15.3	32.6	
	17:46 – 21:40	80	319	12.2	35.7	
	21:40 – 01:42			9.3	21.4	
Sample ID ELES/RNC/PCB/AA/2217	01:49 – 05:44	78	337	<5.0	26.3	
	05:44 – 09:41			15.6	29.4	
Latitude:23°26'35.24"N		Average	83	342	11.8	28.5
Longitude :84°44'52.77"E						
Near Mining Area	09:52 – 13:51	96	411	16.3	33.7	
	13:51 – 17:49			14.8	39.0	
	17:56 – 21:53	87	346	15.1	36.7	
	21:53 – 01:50			8.8	24.5	
Sample ID ELES/RNC/PCB/AA/2218	01:56 – 05:50	94	370	13.5	28.2	
	05:50 – 09:50			17.7	34.6	
Latitude:23°26'35.10"N		Average	92	376	14.4	32.8
Longitude :84°44'56.51"E						
Near Stock Yard	10:13 – 14:10	88	365	11.6	37.7	
	14:10 – 18:12			10.4	41.0	
	18:12 – 22:12	85	324	15.8	31.3	
	22:12 – 02:12			14.6	24.8	
Sample ID ELES/RNC/PCB/AA/2219	02:18 – 06:11	98	382	9.3	29.2	
	06:11 – 10:11			15.5	36.6	
Latitude:23°26'35.35"N		Average	90	357	12.9	33.4
Longitude :84°44'54.69"E						

*****End of Report*****



[Signature]

[Signature]

Authorised Signatory
Dr. Deependra Kumar Sinha
Ph. D. Environmental Engg.
ELES Pvt. Ltd. Technical Manager



ENVIRONMENTAL LABORATORIES &

ENGINEERING SERVICES PVT. LTD.

PLOT NO-30, MANSAROVAR ENCLAVE, TUPUDANA
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Email: info@elespl.com ; eles.ranchi@gmail.com

GST NO:- 20AAECE9713D1Z4 Q : 0651-2290103, 9931289451



ISO 9001:2015 CERTIFIED, OHSAS 18001:2007 CERTIFIED

NABL Accredited & JSPCB Certified Lab. for
Environmental Pollution Monitoring & Analysis

TEST REPORT OF NOISE QUALITY MONITORING

Test Report No. : ELES/RNC/2021/0137	Report Release Date : 03.02.2021
Application No. : 9884407	Work Order Date : 27.01.2021
CUSTOMER DETAILS	
Customer Name : Arkosha Stone Mine	Sampling Date : 29.01.2021 to 30.01.2021
Address : Mauza- Arkosha, P.S-Arkosha, Dist.-Lohardaga	Sample Received Date : 01.02.2021
	Type of Sample : Ambient Noise
	Sampling Procedure : ELES/DOC/SMPL/03
	Sample Drawn By : ELES Pvt. Ltd.
Plant Status : Operational	Period of Analysis : 01.02.2021 to 02.02.2021

METEOROLOGICAL INFORMATION

1	Average Temperature (°C) : 15	2	Barometric Pressure (mmHg) : 748
3	Relative Humidity (%) : 67	4	Weather Condition : Clear

TEST REPORT

LOCATION	Units	TEST PROTOCOL	RESULTS		
			L _{Max}	L _{Min}	L _{eq}
Near Mining Area	dB(A)	IS 9989:1981,RA 2001			
Sample ID ELES/RNC/PCB/AN/2220			72.4	38.2	64
Latitude:23°26'35.10"N					
Longitude :84°44'56.51"E					

*****End of Report*****

Authorised Signatory

Dr. Deependra Kumar Sinha
Ph. D. Environmental Engg.
ELES Pvt. Ltd. Technical Manager





(A UNIT OF TECHNOLOGY SOLUTION CONSULTANTS LLP)

Mobile :- +91 9835781406, 8005716435, 9128726772

e-mail :- tsc.techno@gmail.com, Website:- www.tsclab.co.in

Lab address :- Vrindavan Colony, Opp. "KHABAR MANTRA" Plot No -4, Road no-2, Boreya, Ranchi-834006 (Jharkhand)

NABL Accredited Laboratory

AMBIENT AIR QUALITY REPORT

Report No: TSC/R/22-23/TR-No-1106/01

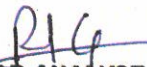
Issue Date: 06.03.2023

Issue To,	: Bhakso Stone Deposit, Plot No-815, 820, Thana No-209, Dist-Lohardaga		
Work Order no.	: JSPCB Application No-15608326	JSPCB Application Date:-16.02.2023	
Type of Industry	: STONE MINES		
Job Code No.	: TSC/LAB-2/EV/S-01	Sample Code	: TSC/PB/EV/22-23/01
Sampling Period	: 01.03.2023 - 02.03.2023	Sample Collected By:	: TSC Team
Sampling Protocol	: IS:5182 and CPCB Air Manual Volume-1(NAAQM/36/2012-13)		
Sampling Location	: Site 1 Lat-23.448918° Long-84.742337°	: Site 2 Lat-23.449288° Long-84.742196°	: Site 3 Lat-23.449356° Long-84.742892°
Meteorological Cond.	: W.C- Clear	Average Temp.- 32°	W.D.- East - West

TEST RESULTS

Parameters	Test Method	Units	Sampling Location			As per required NAAQS (2009)
			Site 1	Site 2	Site 3	
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006	µg/m ³	73.5	67.8	63.1	100
Particulate matter (PM _{2.5})	USEPA- 40 CFR (PART 50) (50.7)	µg/m ³	30.5	29.2	25.6	60
Sulphur Dioxide (SO ₂)	IS:5182 (P-2) 2001	µg/m ³	12.5	10.8	13.7	80
Nitrogen Dioxide (NO _x)	IS:5182 (P-6) 2006	µg/m ³	24.1	23.6	27.8	80

1. Samples Comply with the prescribed specification as per NAAQS 2009.
2. The results relate only to the items tested.
3. The test report shall not be reproduced without written approval of the laboratory.


LAB ANALYST



Page 1 of 1





(A UNIT OF TECHNOLOGY SOLUTION CONSULTANTS LLP)

Mobile :- +91 9835781406, 8005716435, 9128726772

e-mail :- tsc.techno@gmail.com, Website:- www.tsclab.co.in

Lab address :- Vrindavan Colony, Opp. "KHABAR MANTRA" Plot No -4, Road no-2, Boreya, Ranchi-834006 (Jharkhand)

NABL Accredited Laboratory

NOISE MONITORING REPORT

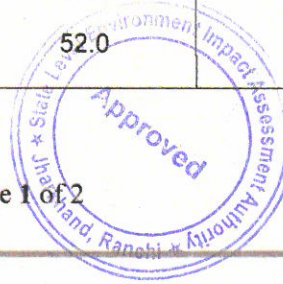
Report No: TSC/R/22-23/TR-No-1106/02

Issue Date: 06.03.2023

Issue To,	: Bhakso Stone Deposit, Plot No-815, 820, Thana No-209, Dist-Lohardaga		
Work Order no.	: JSPCB Application No-15608326	JSPCB Application Date:-16.02.2023	
Type of Industry	: STONE MINES		
Job Code No.	: TSC/LAB-2/NOISE/S-01	Sample Code	: TSC/PB/NOISE/22-23/01
Sampling Period	: 01.03.2023 - 02.03.2023	Sample Collected By:	: TSC Team
Sampling Protocol	: IS:9989 - 1981 (RA-2001)		
Sampling Location	: Site 1 Lat-23.449137° Long-84.742614°	Site 2 Lat-23.449322° Long-84.742544°	Site 3 Lat-23.449103° Long-84.742267°
Meteorological Cond.	: W.C- Clear	Average Temp.- 32°	W.D.- East - West

TEST RESULTS

Sampling Location	Site 1			
Lat-23.449137° Long-84.742614°	Day Time	Leq in dB	Night Time	Leq in dB
	12:10 PM	55.8	11:10 PM	37.4
	04:10 PM	61.2		
	7:05 AM	48.6	03:10 AM	33.6
	11:05 AM	53.2		
Maximum	61.2		37.4	
Average	54.7		35.5	
Sampling Location	Site 2			
Lat-23.449322° Long-84.742544°	Day Time	Leq in dB	Night Time	Leq in dB
	12:30 PM	52.8	11:30 PM	31.6
	04:30 PM	59.4		
	7:25 AM	46.7	03:30 AM	34.8
	11:25 AM	49.2		
Maximum	59.4		34.8	
Average	52.0		33.2	





(A UNIT OF TECHNOLOGY SOLUTION CONSULTANTS LLP)

Mobile :- +91 9835781406, 8005716435, 9128726772

e-mail :- tsc.techno@gmail.com, Website:- www.tsclab.co.in

Lab address :- Vrindavan Colony, Opp. "KHABAR MANTRA" Plot No -4, Road no-2, Boreya, Ranchi-834006 (Jharkhand)

NABL Accredited Laboratory

Report No: TSC/R/22-23/TR-No-1106/02

Issue Date: 06.03.2023

Sampling Location	Site 3			
	Day Time	Leq in dB	Night Time	Leq in dB
Lat-23.449103° Long-84.742267°	12:50 PM	58.6		
	04:50 PM	47.5		
	7:45 AM	49.1	11:50 PM	35.4
	11:45 AM	54.8	03:50 AM	32.5
Maximum		58.6		35.4
Average		52.5		34.0

Remarks : All values are observed well within the limit.

Note : 1. Day Time - From 6:00 Am to 10:00 Pm,

Night Time - From 10:00 Pm to 6:00 Am

2. The Noise Pollution (Regulation and Control) Rules, 2000, (CPCB)

Area / Zone

Day Time / Night Time

Industrial Area

75 / 70, Limits in dB(A)

3. The results relate only to the items tested.

4. The test report shall not be reproduced without written approval of the laboratory.

END OF RESULT


LAB ANALYST



AUTHORIZED SIGNATORY



BIOCRAT ENVIRONMENTAL SERVICES

Accredited by JSPCB

Certified by: ISO 9001:2015(QMS) & 45001:2018(OHSAS)

Sarveshwari Nagar, Itki Road, Bajra, P.O: Hehal, Dist: Ranchi. PIN: 834005 Email Id. - biocratenv@gmail.com

Mob.- 7369019812, 8340466751, 9608708172

Test Report (Ambient Air Quality Monitoring)

Unique Lab Report No : LAB-BES2300000024A
Application No : 15249111; dated: 07-01-2023 at 02:19
Report Issue Date : 27/01/2023

General Information

Name of Client & Address : Bhardwaj Technoinfra Private Limited
At – Bhargaon, Senha,
Dist – Lohardaga, Jharkhand
Type of Industry / Plant : Stone Crusher

Sample Description

Field Data Sheet Code : BES/JSPCB/AAQ/15249111
Type of Sample : Ambient Air
Plant Status : Non-Operational
Source of Emission : Surrounding Activities
Sampling Date : 17/01/2023 to 18/01/2023
Sample Receiving & Registration Date : 18/01/2023
Sampling Location : Senha Village
Sample Collected by : BES Team
Protocol : IS Methods & CPCB Guidelines

Metrological Information

Cloud Cover : Partial Cloudy
Avg. Temp (°C) : 18
Avg. Relative Humidity (%) : 62
Rain : No
Wind Approximate Direction : From WNW towards ESE
Wind Speed : 05 Km/h

Pollutants Analysis Result

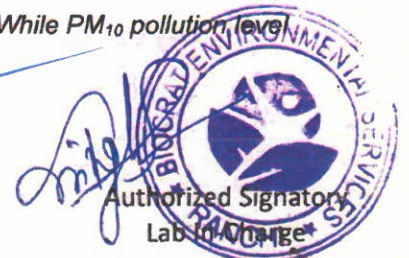
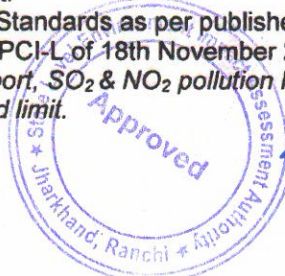
Pollutants		Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter (Size Less than 10 µm) µg/m ³
Time Weighted Average		24 Hours	24 Hours	24 Hours
Method No. & Name		IS 5182 (Part-2) Improved West & Gaeke Method	IS 5182 (Part-6) Jacob & Hochheiser Modified Method	IS 5182 (Part-23) Gravimetric Method
Sampling Point	Sampling Co-ordinate			
North East Side of Proposed Unit	23°22'13.63"N 84°38'36.68"E	BDL (DL-5.0 µg/m ³)	08.51	68.45
West Side of Proposed Unit	23°22'13.29"N 84°38'35.39"E	BDL (DL-5.0 µg/m ³)	09.32	73.90
South East Side of Proposed Unit	23°22'12.55"N 84°38'36.22"E	BDL (DL-5.0 µg/m ³)	07.68	61.70
Norms of NAAQS – 2009		80	80	100

—END OF REPORT—

BDL – Below Detection Limit, DL – Detection Limit.

Note: NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No. B.29016/20/90/PC-I of 18th November 2009)

Inference: - With reference to the testing report, SO₂ & NO₂ pollution level is low While PM₁₀ pollution level is high and within the prescribed limit.





JHARKHAND STATE POLLUTION CONTROL BOARD

Central Laboratory, Hatia, Ranchi, Phone: - 0651- 2291449

Ref. No.: 88(A)
Application No.-14665338
Date : 04.11.2022

Ranchi, Dated 17-11-22

R&D AMBIENT AIR QUALITY REPORT

Name of the Industry : Birsa Minerals and Chemicals, Riada,
Lohardaga, Dist.-Lohardaga
Date of Sampling : 16-17/11/2022
Weather Condition : Clear

No. of Sampling Points : 3
Sampling Position :
1. Near Office
2. Near Store Room
3. Near Security Camp

Time	SO ₂	NO _x	RSPM
Point 1			
11.00 A.M. to 3.00 P.M.	31.15	39.11	91.24
3.00 P.M. to 7.00 P.M.	32.98	40.15	
7.00 P.M. to 11.00 P.M.	30.24	34.24	88.18
11.00 P.M. to 3.00 AM.	27.15	30.41	
Maximum	32.98	40.15	91.24
Average	30.38	35.98	89.71
Point 2			
11.15 A.M. to 3.15 P.M.	33.10	38.17	90.15
3.15 P.M. to 7.15 P.M.	35.24	39.98	
7.15 P.M. to 11.15 P.M.	30.11	35.17	86.20
11.15 P.M. to 3.15 AM.	28.79	31.24	
Maximum	35.24	39.98	90.15
Average	31.81	36.14	88.18
Point 3			
11.30 A.M. to 3.30 P.M.	31.72	39.24	89.24
3.30 P.M. to 7.30 P.M.	33.29	41.17	
7.30 P.M. to 11.30 P.M.	28.17	34.24	87.18
11.30 P.M. to 3.30 AM.	24.15	31.41	
Maximum	33.29	41.17	89.24
Average	29.33	36.52	88.21

Note : All values are expressed in micro gram/cubic metre :

Remarks :- The Average value of RSPM (PM₁₀) at all points were found within the prescribed standard limit of 100 µg/m³.

(S.K. Singh)
ASO-Cum-Lab I/C

(R.N. Anjaan)
Board Analyst

Ambient Air Quality 2022/45





JHARKHAND STATE POLLUTION CONTROL BOARD
Central Laboratory, Mano Balram Bhawan, Hatia, Ranchi ,Phone: - 0651- 2291449

Lab. Ref. No.- 88M
Application No.- 14665338
Date : 04.11.2022


Ranchi, Dated17/11/22

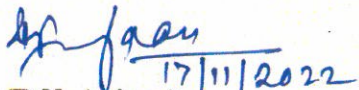
R&D

Ambient Noise Level monitoring report in LAeqdB(A) at various locations in premises Birsa Minerals and Chemicals, Riada, Lohardaga, Dist.-Lohardaga at day time on 16/11/2022

Sl. No.	Monitoring Location	Status of unit Operation/No n- Operation	Time Duration 10 Minute interval	Avg. Noise level LAeq/dB (A)	Prescribed limit in day time LAeqdb(A)
1	Near Office at distance of 5 feet	Operation	3.00 PM to 3.10 PM	69.1	75db(A)
2	Near Store Room at distance of 5 feet	Operation	3.15 PM to 3.25 PM	68.9	75db(A)
3	Near Security Camp at distance of 5 feet	Operation	3.30 PM to 3.40 PM	73.1	75db(A)

Remarks : Noise Level of all points were found within the prescribed limit.


(S.K. Singh)
ASO-Cum-Lab I/C


(R.N. Anjaan)
Board Analyst





ENVIRONMENTAL LABORATORIES &

ENGINEERING SERVICES PVT. LTD.

PLOT NO-30, MANSAROVAR ENCLAVE, TUPUDANA HATIA, RANCHI-834003 (JHARKHAND)

Email: info@elespl.co.in; eles.ranchi@gmail.com

Website : www.elespl.co.in

GST NO:- 20AAECE9713D1Z4 Q : 0651-2290103, 9931289451



ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 CERTIFIED

NABL Accredited & JSPCB Certified Lab. for

Environmental Pollution Monitoring & Analysis

CIN: U74999JH2018PTC011125

TEST REPORT

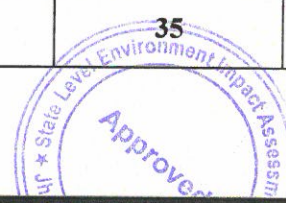
Test Report No. : ELES/RNC/2022/2207	Report Release Date : 09.11.2022
Application No. : 14675384	Application Date : 05.11.2022

CUSTOMER DETAILS		SAMPLE DETAILS	
Customer Name	: BKB Transport Private Limited	Sampling Date	: 07.11.2022 to 08.11.2022
Address	: Hesal And Kujji, Dist- Lohardaga	Sample Received Date	: 08.11.2022
		Type of Sample	: Ambient Air
		Sampling Procedure	: ELES/DOC/SMPL/02
		Sample Drawn By	: ELES Pvt. Ltd.
Plant Status	: Proposed	Period of Analysis	: 08.11.2022 to 09.11.2022

METEOROLOGICAL INFORMATION

1	Average Temperature (°C) : 27	2	Barometric Pressure (mmHg) : 741
3	Relative Humidity (%) : 62	4	Weather Condition : Clear

Parameters	Particulate Matter (PM10)		Fine Particulate Matter (PM2.5)		Sulphur Di-Oxide (SO ₂)		Nitrogen Di-Oxide (NO ₂)			
	Test Protocol	IS 5182 (P-23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)					
Locations	Limit	Unit	100	µg/m ³	60	µg/m ³	80	µg/m ³	80	µg/m ³
South Side of Proposed Side	09:22 – 13:28	66	31	7.8	23.2					
	13:28 – 17:18									
	17:25 – 21:31	50				5.9	17.8			
	21:31 – 01:22									
Latitude:23°19'19.52"N	01:29 – 05:32	61	<5.0	19.4						
Longitude:84°25'48.72"E	05:32 – 09:20									
Sample ID ELES/RNC/PCB/AA/5630	Average	59	31	6.2	19.7					
North Side of Proposed Side	09:32 – 13:38	68	35	9.2	20.5					
	13:38 – 17:27									
	17:33 – 21:38	57				8.1	22.1			
	21:38 – 01:30									
Latitude:23°32'19.81"N	01:37 – 05:43	60	<5.0	20.6						
Longitude :84°42'59.94"E	05:43 – 09:30									
Sample ID ELES/RNC/PCB/AA/5631	Average	62	35	7.3	21.6					



Page 1 of 2

The Document stated as Test Report, is issued by the Laboratory under General Terms and Conditions, only on Company letter head in pre-approved format. The results shown in the Test Report refer or relates only to the job/analysis done by the Laboratory only. The information stated on the Test Report reflects the findings done by the Laboratory at the time of involvement only and within the limits of client's instructions. The Laboratory is responsible for all the information or data provided on the report, except the information which is provided by the client. The Report cannot be reproduced except in full and any part of the report is not taken out of context, without prior written approval of the Laboratory. The Report in full or in part shall not be published, advertise, used for any legal actions unless prior permission has been secured from the Management of the Laboratory. Attention is drawn to the limitation of liability, compensation and jurisdiction issues. Any unauthorized alteration & falsification of the content or appearance of the Test Report is unlawful and offenders may be prosecuted to the fullest extent of the law. All the samples are retained for 30days from the Date of release/issue of the Test Report. The samples from Regulatory bodies are to be retained as specified. Any type of Observations or Complaints regarding the Reports shall be done within 15days from the Date of Test Report released/issued. After the time period stated before, no complaints will be accepted. The entire Time schedule mentioned in Test Report is in 24hours format. Abbreviation used: N/A (Not Applicable); BDL (Below Detection Limit); LDL (Lower Detection Limit).

"Save Environment, Save Future"



ENVIRONMENTAL LABORATORIES &

ENGINEERING SERVICES PVT. LTD.

PLOT NO-30, MANSAROVAR ENCLAVE, TUPUDANA
HATIA, RANCHI-834003 (JHARKHAND)
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Website : www.elespl.co.in

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 CERTIFIED
NABL Accredited & JSPCB Certified Lab. for
Environmental Pollution Monitoring & Analysis



CIN: U74999JH2018PTC011125

GST NO:- 20AAECE9713D1Z4 ☎ : 0651-2290103, 9931289451

TEST REPORT

Test Report No. : ELES/RNC/2022/2207	Report Release Date : 09.11.2022
Application No. : 14675384	Application Date : 05.11.2022

Parameters			Particulate Matter (PM10)		Fine Particulate Matter (PM2.5)		Sulphur Di-Oxide (SO ₂)		Nitrogen Di-Oxide (NO ₂)	
Test Protocol			IS 5182 (P-23)		IS 5182 (P-24)		IS 5182 (P-2)		IS 5182 (P-6)	
Locations	Limit	Unit	100	µg/m ³	60	µg/m ³	80	µg/m ³	80	µg/m ³
West Side of Proposed Side	09:44 – 13:50		63		30		11.2		21.0	
	13:50 – 17:39						8.8		19.2	
	17:45 – 21:49		50				5.7		25.1	
	21:49 – 01:40						<5.0		18.3	
Latitude:23°32'20.94"N	01:46 – 05:51		58				7.8		16.5	
Longitude :84°43'1.96"E	05:51 – 09:40						9.5		23.1	
Sample ID ELES/RNC/PCB/AA/5632	Average		57		30		8.0		20.5	

Rekha Saxena
Authorized Signatory

Rekha Saxena
B. Sc, M. Sc. (Botany)
Director
ELES Pvt. Ltd.

****End of Report****

Sandip Bera
Authorized Signatory

SANDIP BERA
SENIOR MANAGER
ELES PVT. LTD.



[Signature]

Page 2 of 2

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"Save Environment, Save Future"



Sun-Tech

40 P Tupudana Industrial Area, Ranchi-834003, Jharkhand

TEL.- 7808266661/2/3

Accredited as per ISO/IEC 17025: 2017 by NABL



TC-8432

TEST REPORT

Test Report No.	ST/TR/22/10/4555	ULR No.	TC543222000004655F	Job Code:	M0221022
Date of receipt	11-10-2022	Date of Issue of Test Report	14-10-2022		
Customer's Name & Address	DUTIKA SAVITIRI HOSPITAL DUTIKA SAVITIRI HOSPITAL, B.I.D LOHARDAGA, DIST- LOHARDAGA.				
Customer's Letter No.	LETTER REF. NO.:- NIL				

SAMPLE DETAILS:

Sample No.	A10257	Material/ Item:	APPROXIMATELY 5 LITRE WASTE WATER SAMPLE IN SEALED JAR
Material Condition	SAMPLE IN SEALED JAR	Environmental condition:	Laboratory Temperature at time Analysis : 27°C
Standard Applicable for testing	IS:3025 (ITS RELEVANT PARTS)	Deviation in testing from Standard	NO
Application No	14449999	Application Date & time	07/10/2022(08:56)
SAMPLING	Done by Laboratory		Done-by-Customer
IF, SAMPLING DONE BY LABORATORY	Sampling Location	N: 23°25'42"	E: 84°40'58"
	Sampling Method/ Sampling Plan	ST/SOP/SAMPLING/WATER/01	
	Environmental Condition	Temperature: 30°C	
	Sample Collected by	GOUTAM, DHEERAJ	
Sample analysis Start date:	11-10-2022	Sample analysis End date:	14-10-2022

TEST RESULTS

MATERIAL		WASTE WATER SOURCE:- ETP OUTLET		Discipline/ Group		CHEMICAL/WATER	
S. No.	Test Parameters	Unit of Measurement	Result	Method Reference	PERMISSIBLE LIMITS *	Conformity	
(1) Chemical Test							
1	pH Value	-	7.2	IS:3025 (Part 11)-1983 RA 2002	5.5-9.0	YES	
2	Total Dissolved Solid (TDS), Non- Filterable (mg/l)	mg/l	658	IS:3025 (Part 15)-1984	-	-	
3	Total Dissolved Solid (TDS), Filterable (mg/l)	mg/l	586	IS:3025 (Part 16)-1984 RA 1996	-	-	
4	Total Suspended Solids (TSS)	mg/l	72	IS:3025 (Part 17)-1984 RA 2002	100, Max.	YES	
5	Oils & Grease	mg/l	0.004	IS:3025 (Part 39)-1991 RA 2003	10, Max.	YES	
6	Biochemical Oxygen Demand (BOD) – 3 days at 27 deg C (mg/l)	mg/l	1.2	IS:3025 (Part 44)-1993	100, Max.	YES	
7	Chemical Oxygen Demand (COD) – Closed reflux method (mg/l)	mg/l	24	IS:3025 (Part 58)-2006	250, Max.	YES	

Done by:- Amrit, Pinky

*****END OF REPORT*****

Declarations: 1. Sample will be retained for three months from the testing. 2. The test results relates only to the sample as received or sampled for testing and as per applicable parameters. 3. The report can not be used as an evidence in the court of law without written approval of Laboratory can provide assurance that parts of a report are not taken out of context. 4. All disputes subject to Ranchi Jurisdiction only.



Reviewed By:

Deepa

Page No. 1 of 1



Doc. No.F01(7.8) Amnd, 08

Authorised Signatory

Authorised Signatory



JHARKHAND STATE POLLUTION CONTROL BOARD

Central Laboratory, Hatia, Ranchi, Phone: - 0651- 2291449

Ref. No.:152/21

Ranchi, Dated

R&D AMBIENT AIR QUALITY REPORT

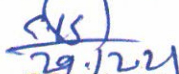
Name of the Industry : M/s Garadih Stone Mine, Vill.-Garadih,
PO-Gajni, PS-Kairo, Dist-Lohardaga
Date of Sampling : 27-28/12/2021
Weather Condition : Clear

No. of Sampling Points : 3
Sampling Position :
1. Near Road Side
2. Near North East Side
3. Near North West Side

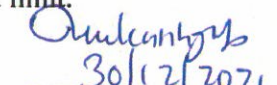
Time	SO ₂	NO _x	RSPM
Point 1			
1.00 P.M. to 5.00 P.M.	12.24	15.18	71.47
5.00 P.M. to 9.00 P.M.	13.28	14.71	
9.00 P.M. to 1.00 A.M.	12.09	13.88	60.27
1.00 A.M. to 5.00 AM.	11.24	13.71	
Maximum	13.28	15.18	71.47
Average	12.21	14.37	65.87
Point 2			
1.15 P.M. to 5.15 P.M.	13.18	15.82	72.74
5.15 P.M. to 9.15 P.M.	14.91	14.65	
9.15 P.M. to 1.15 A.M.	13.21	13.41	61.45
1.15 A.M. to 5.15 AM.	12.14	12.49	
Maximum	14.91	15.82	72.74
Average	13.36	14.09	67.10
Point 3			
1.30 P.M. to 5.30 P.M.	12.98	14.95	73.24
5.30 P.M. to 9.30 P.M.	13.34	14.82	
9.30 P.M. to 1.30 A.M.	12.37	13.61	63.89
1.30 A.M. to 5.30 AM.	11.78	12.37	
Maximum	13.34	14.95	73.24
Average	12.62	13.94	68.57

Note : All values are expressed in micro gram/cubic metre :

Remarks :- The value of all parameters were found within the prescribed limit.


(S.K. Singh)
ASO




30/12/2021
(R.N. Kashyap)
Board Analyst



JHARKHAND STATE POLLUTION CONTROL BOARD
Central Laboratory, Mano Balram Bhawan, Hatia, Ranchi ,Phone: - 0651- 2291449

Lab. Ref. No.- 152N /21


Ranchi, Dated

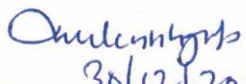
R&D

Ambient Noise Level monitoring report in LAeqdB(A) at various locations in premises of M/s. Garadih Stone Mine, Vill.-Garadih, PO-Gajni, PS-Kairo, Dist-Lohardaga at day time on 27/12/2021

Sl. No.	Monitoring Location	Status of unit Operation/No n- Operation	Time Duration 10 Minute interval	Avg. Noise level LAeq/dB (A)	Prescribed limit in day time LAeqdb(A)
1	Near Road Side	Operation	3.30 PM to 3.40 PM	68.1	75db(A)
2	Near North East Side	Operation	3.45 PM to 3.55 PM	70.2	75db(A)
3	Near North West Side	Operation	4.00 PM to 4.10 PM	72.7	75db(A)

Remarks : Noise Level of all points were found within the prescribed limit.


29/12/21
(S.K. Singh)
ASO


30/12/2021
(R.N. Kashyap)
Board Analyst





GEMS PROJECTS PVT.LTD.

(ENVIRONMENTAL LABORATORY DIVISION)

APPROVED BY JHARKHAND STATE POLLUTION CONTROL BOARD, GOVT OF JHARKHAND

TEST REPORT

Sample Description	Ambient Air Quality	Sampling Details		
Job Registration ID	G/JRN/210319/AR-02	Sampling Date	16th-17th Mar.2021	
UI.R Number	Sample collected by	Mukesh & Team	
Report Release Date	22-03-2021	Sample Code	IS 5182 Part(2,6 & 23)	
Issue to:		Industry Type	Bauxite Mine	
M/s Hisri New Bauxite Mines,HIL		Company Status	Operating	
At- Bagru Hill,Hindalco		Metrological Information		
Dist- Lohardaga(Jharkhand)		Average Temperature(°C)	36	
		Weather Condition	Clear	
		Relative Humidity %	75	

Test Method	IS 5182 (part-2)	IS 5182 (part-6)	IS 5182 (part-23)	CPCB (Gravimetric)
Time	SO2 µg/m3	Nox µg/m3	PM10 µg/m3	P.M 2.5 µg/m3

Sampling Location 1	Near Water Pump			
10:00 AM 02:00 PM	18	26		
02:00 PM 06:00 PM	21	28	89.45	
06:00 PM 10:00 PM	20	31		
10:00 PM 02:00 AM	19	29	60.17	
02:00 AM 06:00 AM	16	22		
06:00 AM 10:00 AM	14	20	77.25	55.98
Maximum	21	31	89.45	55.98
Average	18	26	75.62	55.98

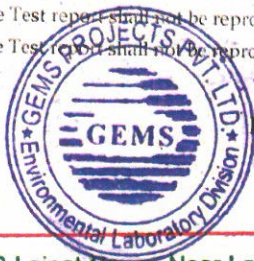
Sampling Location 2	Near Old Rest Shelter			
10:15 AM 02:15 PM	14	34		
02:15 PM 06:15 PM	16	31	95.21	
06:15 PM 10:15 PM	18	30		
10:15 PM 02:15 AM	20	28	64.39	
02:15 AM 06:15 AM	17	23		
06:15 AM 10:15 AM	12	21	84.27	52.69
Maximum	20	34	95.21	52.69
Average	16	28	81.29	52.69

Sampling Location 3	Near Old Plantation(North-West Corner)			
10:30 AM 02:30 PM	17	25		
02:30 PM 06:30 PM	20	32	98.65	
06:30 PM 10:30 PM	18	31		
10:30 PM 02:30 AM	17	29	65.23	
02:30 AM 06:30 AM	15	24		
06:30 AM 10:30 AM	13	22	80.14	49.25
Maximum	20	32	98.65	49.25
Average	17	27	81.34	49.25

***** End of Report*****

- Remarks
- 1) Test values are found Within the prescribed limit of NAAQ 2009.
 - 2) The Test Report is in accordance with sample received and the test parameters.
 - 3) Any dispute is subject to Ranchi Jurisdiction Only.
 - 4) The Test report shall not be reproduced partially or whole for advertising or Legal entity.
 - 5) The Test report shall not be reproduced without the written approval of laboratory In-charge.

Aril Barjo
22/03/2021
Aril Barjo
Tested By
(Analyst)



Rohit Kumar Deep
22/03/2021
Checked by
(Section In-charge)



Sanjeev Kumar Singh
22/03/2021
Issued By
(Lab In-charge)

Lab In-Charge
Gems Projects Pvt. Ltd

1236/2 Lajpat Nagar, Near Lala Lajpat Rai School, Pundag, Argora, Ranchi, Jharkhand- 834004
Mobile - +91-9431115961, +91-9934307900

E-mail: gems.projects@yahoo.in, md@gemsgroup.in, info@gemsgroup.in, gemslab17@gmail.com | Website - www.gemsgroup.in



GEMS PROJECTS PVT.LTD.

(ENVIRONMENTAL LABORATORY DIVISION)

APPROVED BY JHARKHAND STATE POLLUTION CONTROL BOARD, GOVT OF JHARKHAND

TEST REPORT

Sample Description	Ambient Air Quality	Sampling Details	
Job Registration ID	G/JRN/210319/AR-02	Sampling Date	16th-17th Mar.2021
ULR Number	Sample collected by	Mukesh & Team
Report Release Date	22-03-2021	Sample Code	IS 5182 Part(2,6 & 23)
Issue to:		Industry Type	Bauxite Mine
M/s Hisri New Bauxite Mines,HIL		Company Status	Operating
At- Bagru Hill,Hindalco		Metrological Information	
Dist- Lohardaga(Jharkhand)		Average Temperature(°C)	36
		Weather Condition	Clear
		Relative Humidity %	75

Test Method	IS 5182 (part-2)	IS 5182 (part-6)	IS 5182 (part-23)	CPCB (Gravimetric)
Time	SO2 µg/m3	Nox µg/m3	PM10 µg/m3	P.M 2.5 µg/m3
Sampling Location 1	Hisri New(Southern Area)			
10:45 AM 02:45 PM	15	28		
02:45 PM 06:45 PM	17	30	86.47	
06:45 PM 10:45 PM	19	31		
10:45 PM 02:45 AM	21	33	60.47	
02:45 AM 06:45 AM	18	35		
06:45 AM 10:45 AM	16	32	78.12	48.92
Maximum	21	35	86.47	48.92
Average	18	32	75.02	48.92

***** End of Report*****

- Remarks**
- 1) Test values are found Within the prescribed limit of NAAQ 2009.
 - 2) The Test Report is in accordance with sample received and the test parameters.
 - 3) Any dispute is subject to Ranchi Jurisdiction Only.
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 - 5) The Test report shall not be reproduced , without the written approval of laboratoty In-charge.

Aril Barjo
22/3/2021
Aril Barjo
Tested By
(Analyst)



Rohit Kumar Deep
22/03/2021
Rohit Kumar Deep
Checked by
(Section In-charge)

Sanjeev Kumar Singh
22/03/2021
Sanjeev Kumar Singh
Issued By
(Lab In-charge)
Gems Projects Pvt. Ltd





GEMS PROJECTS PVT.LTD.

(ENVIRONMENTAL LABORATORY DIVISION)
APPROVED BY JHARKHAND STATE POLLUTION CONTROL BOARD, GOVT OF JHARKHAND

TEST REPORT

Sample Description	Ambient Air Quality	Sampling Details	
Job Registration ID	G/JRN/210319/AR-02	Sampling Date	16th-17th Mar.2021
ULR Number	Sample collected by	Mukesh & Team
Report Release Date	22-03-2021	Sampling Protocol	CPCB & Indophenol Method
Issue to:		Industry Type	Bauxite Mine
M/s Hisri New Bauxite Mines,HIL At- Bagru Hill,Hindalco Dist- Lohardaga(Jharkhand)		Company Status	Operating
		Metrological Information	
		Average Temperature(°C)	36
		Weather Condition	Clear
		Relative Humidity %	75

Parameters	Test Method	Unit	Sampling Location				NAAQS (2009)
			Near Water Pump	Near Old Rest Shelter	Near Old Plantation (North-West Corner)	Hisri New (Southern Area)	
Ozone(O ³)	CPCB guideline	µg/m ³	7.4	8.0	6.2	9.1	180 µg/m ³
Carbon Monoxide (CO)	CPCB (Non Dispersive Infrared Method)	mg/m ³	0.16	0.06	0.05	0.18	2 mg/m ³
Ammonia (NH ³)	Indophenol Method	µg/m ³	6.2	3.9	4.3	5.7	400 µg/m ³

***** End of Report*****

- Remarks:
- 1) Test values are found Within the prescribed limit of NAAQ 2009.
 - 2) The Test Report is in accordance with sample received and the test parameters.
 - 3) Any dispute is subject to Ranchi Jurisdiction Only.
 - 4) The Test report shall not be reproduced partially or whole for advertising or Legal entity.
 - 5) The Test report shall not be reproduced , without the written approval of laboratory In-charge.

Aril Barjo
22/3/2021
Aril Barjo
Tested By
Analyst



Rohit Kumar Deep
22/03/2021
Rohit Kumar Deep
Checked by
(Section In-charge)



[Signature]

Sanjeev Kumar Singh
Issued By
(Lab In-Charge)
Gems Projects Pvt. Ltd
Page 3 of 3



YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



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 Certified by :- An ISO 9001:2015 & OHSAS 45001:2018

Certificate No. - TC 7813

ANALYTICAL TEST REPORT

Atmospheric Pollution Test Report		URL (Unique Lab Report) No.	TC78132120000466F
Report Release Date	28 th June, 2021	Report ID	YBAEEL- 210621-174831-A01
Sample Description	Ambient Air Quality	Job code/ Ref. no.	YBAEEL/WA/L/A/Jun.-21 /33
Type of Industry	Stock Yard	Work Order No./ Date	JSPCB Application No.- 10664705
Issue to	M/s K. S. Stock Yard Mauza- Salgi, PS – Kuru, Dist. – Lohardaga, Jharkhand.		
Sampling Period	23/06/2021 – 24/06/2021	Mode of sample collection	By YBAEEL Team
Sampling Protocol	IS:5182 and CPCB Air Manual Volume-1(NAAQM/36/2012-13)		
Sampling Locations	A. North Direction (23°34'33.47"N, 84°42'58.86"E)	B. South-West Direction (23°34'36.42"N, 84°42'49.50"E)	C. South-East Direction (23°34'36.34"N, 84°42'58.84"E)
Meteorological Cond.	W.C.- Cloudy	RH % - 66%	Temp. - 30°C
Sample receipt Date	25/06/2021	Analysis Started on	25/06/2021
		Analysis completed on	28/06/2021

Test Results

Parameters	Test Method	Units	Sampling Location			NAAQS (2009)
			Site A	Site B	Site C	
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006	µg/m ³	60.7	70.6	67.3	100
Particulate matter (PM _{2.5})	USEPA -40 CFR (PART 50) (50.7)	µg/m ³	27.4	31.8	29.2	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2) 2001 RA 2012	µg/m ³	10.4	13.7	9.2	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2012	µg/m ³	21.6	23.6	19.8	80

End of Report

Remarks	Samples Comply with the prescribed specification as per NAAQS 2009.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,
Note	The parameters marked with * are not accredited by NABL.
Specific contractual notes	All values are expressed in as unit. The results listed refer only to the tested sample and applicable parameter. This report, in full or in part, shall not be used for advertising or as evidence in any court of law This report cannot be reproduced, except when in full, without the written permission of the Lab In-charge The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise The liability of the laboratory is limited to the invoiced amount All disputes are subjected to the Ranchi Jurisdiction

Only **CONCERN** for
Jharkhand State Pollution Control Board
 Application No. **10664705**
 Allotted Date **20-06-2021**
 Submission Date **28-06-2021**



Tested by Amit Kumar Sinha Lab Analyst	Verified by Brij Nandan Kumar Section In-Charge	Issued by Umesh Das Authorized Signatory Atmospheric Pollution Technical Manager

Yugantar Bharati Analytical & Environmental Engineering Laboratory



Branch Office :- Jamshedpur | Dhanbad | Hazaribag | Pakur

Main Office : Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand
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Certificate No. - TC 7813

ANALYTICAL TEST REPORT

Atmospheric Pollution Test Report		URL (Unique Lab Report) No.	TC78132120000467F
Report Release Date	28 th June, 2021	Report ID	YBAEEL-210621-174831 -N01
Sample Description	Ambient Noise	Job code/ Ref. no.	YBAEEL/WA/LA/Jun. -21/33
Type of Industry	Stock Yard	Work Order No./ Date	JSPCB Application No.- 10664705
Issue to	M/s K. S. Stock Yard Mauza- Salgi, PS – Kuru, Dist. – Lohardaga, Jharkhand.		
Sampling Period	23/06/2021 – 24/06/2021	Mode of sample collection	By YBAEEL Team
Sampling Protocol	IS 9876:1981 (RA 2007) & CPCB Method S.O.50 (E) dated 11/01/2010		
Meteorological Cond.	Temp.- 30°C	RH % - 66%	W.C.-Cloudy
Sample receipt Date	25/06/2021	Analysis Started on	25/06/2021
		Analysis completed on	28/06/2021

Test Results

SI.NO.	Locations	Parameters	Units	Day Time	Night Time	Limits
1.	Near Main Gate	Leq	dB (A)	54.4	45.4	Day – 75 Night – 70

End of Report

- Day time shall mean from 6.00 a.m. to 10.00 p.m.
- Night time shall mean from 10.00 p.m. to 6.00 a.m.
- Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
- Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale(A) which is relatable to human hearing.

Remarks	Sample Complies with the prescribed specification as per the noise pollution (Regulation & Control) Rules, 2000.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,
Note	The parameters marked with * are not accredited by NABL.
Specific contractual notes	All values are expressed in as unit. The results listed refer only to the tested sample and applicable parameter. This report, in full or in part, shall not be used for advertising or as evidence in any court of law This report cannot be reproduced, except when in full, without the written permission of the Lab In-charge The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise The liability of the laboratory is limited to the invoiced amount All disputes are subjected to the Ranchi Jurisdiction

Only **CONCERN** for
 Jharkhand State Pollution Control Board
 Application No. 10664705
 Allotted Date 20-06-2021
 Submission Date 28-06-2021

Tested by	Verified by	Issued by
Amit Kumar Sinha	Brij Nandan Kumar	Umesh Das
Lab Analyst	Section In-Charge	Authorized Signatory Technical Manager

Atmospheric Pollution
 Yugantar Bharati Analytical &
 Environmental Engineering Laboratory



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Certificate No. - TC 7813

ANALYTICAL TEST REPORT

Atmospheric Pollution Test Report		URL(Unique Lab Report) No.	TC78132020000360F
Report Release Date	04 th November, 2020	Report ID	YBAEEL- 201021-101150-A01
Sample Description	Ambient Air Quality	Job code/ Ref. no.	YBAEEL/WA/LIA/Oct. -20/19
Type of Industry	Rice Mill	Work Order No./ Date	JSPCB Application No.- 9214496
Issue to	M/s Kamla Devi Rice Mill Pvt. Ltd. Senha, Mission Chowk, Lohardaga, Jharkhand.		
Sampling Period	30/10/2020 – 31/10/2020	Mode of sample collection	By YBAEEL Team
Sampling Protocol	IS:5182 and CPCB Air Manual Volume-1(NAAQM/36/2012-13)		
Sampling Locations	A. Near Main Gate (23°23'28.64"N, 84°39'19.93"E)	B. Near Transformer (23°23'28.07"N, 84°39'17.19"E)	C. Husk Loading Point (23°23'30.94"N, 84°39'15.85E)
Meteorological Cond.	W.C.- Clear	RH % - 50%	Temp. - 31°C
			W.D.-NW-SE
Sample receipt Date	31/10/2020	Analysis Started on	31/10/2020
		Analysis completed on	04/11/2020

Test Results

Parameters	Test Method	Units	Sampling Location			NAAQS (2009)
			Site A	Site B	Site C	
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006	µg/m ³	91.3	77.8	85.6	100
Particulate matter (PM _{2.5})	USEPA -40 CFR (PART 50) (50.7)	µg/m ³	44.5	41.3	43.2	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2) 2001 RA 2012	µg/m ³	17.1	14.4	15.8	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2012	µg/m ³	40.8	39.6	36.0	80

End of Report

Remarks	Samples Comply with the prescribed specification as per NAAQS 2009.		
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,		
Note	The parameters marked with * are not accredited by NABL.		
Specific contractual notes	All values are expressed in as unit.		
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	The liability of the laboratory is limited to the invoiced amount		
	All disputes are subjected to the Ranchi Jurisdiction		
	Tested by Amit Kumar Sinha Lab Analyst	Verified by Brij Nandan Kumar Section In-Charge	Issued by Umesh Das Technical Manager



Branch Office :- Jamshedpur | Dhanbad

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
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ANALYTICAL TEST REPORT

Atmospheric Pollution Test Report		URL(Unique Lab Report) No.	TC78132020000361F
Report Release Date	04 th November, 2020	Report ID	YBAEEL-201021-101150-N01
Sample Description	Ambient Noise	Job code/ Ref. no.	YBAEEL/WA/L/A/Oct. -20/19
Type of Industry	Rice Mill	Work Order No./ Date	JSPCB Application No.- 9214496
Issue to	M/s Kamla Devi Rice Mill Pvt. Ltd. Senha, Mission Chowk, Lohardaga, Jharkhand.		
Sampling Period	30/10/2020 - 31/10/2020	Mode of sample collection	By YBAEEL Team
Sampling Protocol	IS 9876:1981 (RA 2007) & CPCB Method S.O.50 (E) dated 11/01/2010		
Meteorological Cond.	Temp.- 31°C	RH % - 50%	W.C.-Clear
Sample receipt Date	31/10/2020	Analysis Started on	31/10/2020
		Analysis completed on	04/11/2020

Test Results

Sl.NO.	Locations	Parameters	Units	Day Time	Night Time	Limits
1.	Near Main Gate	Leq	dB (A)	61.2	52.6	Day - 75 Night - 70

End of Report

- Day time shall mean from 6.00 a.m. to 10.00 p.m.
- Night time shall mean from 10.00 p.m. to 6.00 a.m.
- Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
- Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale(A) which is relatable to human hearing.

Remarks	Sample Complies with the prescribed specification.	
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,	
Note	The parameters marked with * are not accredited by NABL	
Specific contractual notes	All values are expressed in as unit.	
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	All disputes are subjected to the Ranchi Jurisdiction	
	Tested by Amit Kumar Sinha Lab Analyst	Verified by Brij Nandan Kumar Section In-Charge
		Issued by Umesh Das Technical Manager



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ANALYTICAL TEST REPORT

Atmospheric Pollution Test Report		URL(Unique Lab Report) No.	TC78132020000362P
Report Release Date	04 th November, 2020	Report ID	YBAEEL-201021-101150 - S1
Sample Description	Stationary Source Emission	Job code/ Ref. no.	YBAEEL/WA/L/A/Oct.-20/19
Type of Industry	Rice Mill	Work Order No./ Date	JSPCB Application No.- 9214496
Issue to	M/s Kamla Devi Rice Mill Pvt. Ltd. Senha, Mission Chowk, Lohardaga, Jharkhand.		
Sampling Period	31 st October, 2020	Mode of sample collection	Sampling team of YBAEEL
Sampling Protocol	IS: 11255 & CPCB Guideline (Lats/80/2013-14)		
Meteorological Cond.	W.C.- Clear	RH % - 52%	Temp.-31°C
Sample receipt Date	31/10/2020	Analysis Started on	31/10/2020
		Analysis completed on	04/11/2020

General Information

As observed while sampling		As reported by customer	
Location	Sampling port hole	Type of fuel Used	Paddy Husk
Platform	Permanent	Quantity of Fuel Used	10 TPD
Stack Description (Shape & Material)	Heptagon/Bricks	Total production Capacity	31680MT/Annum
Sampling port	Available	Height of Stack from ground level	33.53mtr.
Stack Identification	Single - 01	Inner Diameter of Stack	1.27mtr.
Height of port hole from Ground level	15.24 mtr.	Pollution Controlling Device	Bag Filter

Test Results

Sl	Parameter s	Test Method	Units	Results	Limits
1.	Stack gas Temperature	IS 11255 (Part 3)2008	k	417.0	-
2.	Stack gas Velocity	IS 11255 (Part 3)2008	m/s	7.1	-
3.	Volumetric Flow Rate	IS 11255 (Part 3)2008	Nm ³ /hr	21465.0	-
3.	Particulate Matter (PM)	IS 11255 (Part 1)2009	mg/Nm ³	134.12	150
4.	Sulphure Dioxide (SO ₂)	IS 11255 (Part 2)2009	mg/Nm ³	52.1	-
5.	Oxide of Nitrogen (as NO _x)*	IS 11255 (Part 7)2005 RA 2012	mg/Nm ³	106.5	-

Emission Rate

1.	Particulate Matter (PM)	IS 11255 (Part 1)2009	Kg/hr	2.88	-
2.	Sulphure Dioxide (SO ₂)	IS 11255 (Part 2)2009	Kg/hr	1.12	-
3.	Oxide of Nitrogen (as NO _x)	IS 11255 (Part 7)2005 RA 2012	Kg/hr	2.29	-

End of Report

Remarks	Samples Comply with the prescribed specification.		
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,		
Note	The parameters marked with * are not accredited by NABL		
Specific contractual notes	All values are expressed in as unit.		
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	The liability of the laboratory is limited to the invoiced amount		
	All disputes are subjected to the Ranchi Jurisdiction		
	Tested by Amit Kr. Sinha Lab Analyst	Verified by Brij Nandan Kumar Section In-charge	Issued by Umesh Das Technical Manager



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Atmospheric Pollution

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Certificate No. - TC 7813

ANALYTICAL TEST REPORT

Water Test Report		URL(Unique Lab Report) No.	TC78132030000058P
Date of Issue	04 th November, 2020	Report ID	YBAEEL-201021-101150 -WW01
Sample Description	Waste Water	Job code / Ref. no.	YBAEEL/WA/LC/Oct.-20/10
Type of Industries	Rice Mill	Work Order No./ Date	JSPCB Application No.- 9214496
Issued to :-	M/s Kamla Devi Rice Mill Pvt. Ltd. Senha, Mission Chowk, Lohardaga, Jharkhand.		
Sampling date	31/10/2020	Mode of sample Collection	By YBAEEL Team
Sampling Protocol	IS : 3025 (Part-1) 1987, R-2003	Sample Code	201031 - WW - H01
Sampling Location	ETP Final Outlet	Sampling Source	Effluent Water
Sample pkg. Condition	Sealed Pack in PP Bottle	Sample Quantity	3000 ml
Meteorological cond.	W.C. - Clear	RH - 52 %	Temp. - 31°C
Work allotted date	31/10/2020	Test started on	31/10/2020
		Test completed on	04/11/2020

Test Result

Sl	Parameter	Test Method	Units	Results	Limits
1.	pH value	IS 3025 (P-11):2002	pH	7.13	5.5-9.0
2.	Temperature	IS 3025 (P-09):1984	°C	30.0	40
3.	Chloride (as Cl ⁻)	IS 3025 (P-32):2003	mg/l	83.5	1000
4.	Total suspended solids	IS 3025 (P-17):2012	mg/l	88.0	100
5.	Total dissolved solids	IS 3025 (P-16):2006	mg/l	456.0	2100
6.	BOD	IS 3025 (P-44):2009	mg/l	26.6	30
7.	COD	IS 3025 (P-58):2006	mg/l	184.0	250
8.	Oil and grease	IS 3025 (P-39):2003	mg/l	4.0	10
9.	Nitrate (as NO ₃ ⁻)	APHA 4500 NO ₃ ⁻ (B) 23 rd edition 2017	mg/l	7.9	--
10.	Sulphate (as SO ₄ ²⁻)	IS 3025 (P-24):2003	mg/l	15.3	1000

*****End of Test*****

Remarks :- Samples Comply with the prescribed Specification as per IS:2490:1974

Note : The parameters marked with * are not accredited by NABL.

Specific contractual notes :-

- ◆ The results listed refer only to the tested sample and applicable parameter.
- ◆ This report, in full or in part, shall not be used for advertising or as evidence in any court of law.
- ◆ This report cannot be reproduced, except when in full, without the written permission of the Lab In-charge
- ◆ The samples received shall be destroyed after two month from the date of issue of the certificate unless specified otherwise and sample for biological testing will be destroyed after one two week of testing.
- ◆ The liability of the laboratory is limited to the invoiced amount.
- ◆ All disputes are subjected to the Ranchi Jurisdiction.
- ◆ ND - not detected, DL - detectable limit



Tested by	Checked by	Issued by
Shivani Kumari Singh	Brij Nandan Kumar	Umesh Das
Lab Analyst	In-Charge Pollution & Environment	Technical Manager



Branch Office :- Jamshedpur | Dhanbad

Main Office : Namkum Post Office, Sidroul, Ranchi, Jharkhand
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Authorized Signatory

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Sun-Tech

40 P Tupudana Industrial Area, Ranchi-834003, Jharkhand

TEL.- 7808266661/2/3

Accredited as per ISO/IEC 17025: 2017 by NABL



TC-5432

TEST REPORT

Test Report No.	ST/TR/22/09/3950	ULR No.	TC543222000004050F	Job Code:	M0680922
Date of receipt	16-09-2022	Date of Issue of Test Report	19-09-2022		
Customer's Name & Address	M/S MANOJ KUMAR SAHU VILLAGE- PATRATU, THANA -KISKO, DIST- LOHARDAGGA.				
Customer's Letter No.	LETTER REF. NO.:- NIL	DATE:-16/09/2022			

SAMPLE DETAILS:

Sample No.	A10015, A10016, A10017, A10018	Material/ Item:	ABSORBED POLLUTANT IN GFA & IMPINGER FROM SITE
Material Condition	GOOD	Environmental condition:	Laboratory Temperature at time Analysis : 27°C
Standard Applicable for testing	IS: 5182(P-23):2006 , IS: 5182 (P-2): 2001, IS: 5182 (P-6): 2006, IS: 5182 (P-24):2019	Deviation in testing from Standard	NO
Application No	14268821	Application Date & time	14/09/2022(01:12)
Nature of Industry	STONE MINES	Date of Sampling	15/09/2022 - 16/09/2022
SAMPLING	Done by Laboratory	Done by Customer	
IF, SAMPLING DONE BY LAB:ORATORY	Sampling Location	N: 23°26'59"	E: 84°37'17"
	Sampling Method/ Sampling Plan	ST/SOP/AAQ/01	
	Environmental Condition	Temperature: 31°C	
	Sample Collected by	TANMAY, GOUTAM	
Sample analysis Start date:	16-09-2022	Sample analysis End date:	19-09-2022

TEST RESULTS

MATERIAL		AMBIENT AIR		Discipline/ Group		CHEMICAL / ATMOSPHERIC POLLUTION		
SAMPLE NO	Test Parameters	OUTLET				Method Reference	REQUIREMENT (ACCEPTABLE LIMITS)	Conformity
		NORTH SIDE	EAST SIDE	EAST - SOUTH SIDE	AVERAGE			
A10015	Particulate Matter (PM ₁₀), µg/m ³	76.27	81.26	78.95	78.83	IS: 5182 (P-23):2006	100 µg/m ³ , Max.	YES
A10016	Sulphur Dioxide (SO ₂), µg/m ³	6.85	6.94	7.25	7.01	IS: 5182 (P-2): 2001	80 µg/m ³ , Max.	YES
A10017	Nitrogen Dioxide (NO ₂), µg/m ³	19.72	19.98	21.67	20.46	IS: 5182 (P-6): 2006	80 µg/m ³ , Max.	YES
A10018	Particulate Matter (PM _{2.5}), µg/m ³	46.75	51.93	46.99	48.56	IS: 5182 (P-24):2019	60 µg/m ³ , Max.	YES

Note:- *As per National Ambient Air Quality Standards by Central Pollution Control Board (CPCB) Notification, New Delhi 18/11/2009

REMARK (if any) :- OK

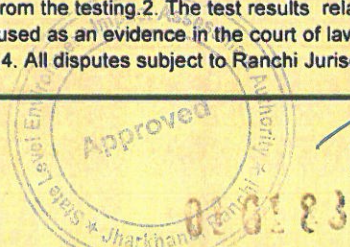
*****END OF REPORT*****

Done By:-Tanmay, Goutam

SR. SCIENTIST:-TANMAY DUTTA

SR. SCIENTIST ASST.: GOUTAM MAHATO

Declarations: 1. Sample will be retained for three months from the testing. 2. The test results relates only to the sample as received or sampled for testing and as per applicable parameters. 3. The report can not be used as an evidence in the court of law, without written approval of Laboratory can provide assurance that parts of a report are not taken out of context. 4. All disputes subject to Ranchi Jurisdiction only.



Reviewed By: *[Signature]*

Authorised Signatory *[Signature]*



Sun-Tech

40 P Tupudana Industrial Area, Ranchi-834003, Jharkhand

TEL.- 7808266661/2/3

Accredited as per ISO/IEC 17025: 2017 by NABL



TC-5432

TEST REPORT

Test Report No.	ST/TR/22/09/3951	ULR No.	TC54322200004051F	Job Code:	M0680922
Date of receipt	16-09-2022	Date of Issue of Test Report	19-09-2022		
Customer's Name & Address	M/S MANOJ KUMAR SAHU VILLAGE- PATRATU, THANA-KISKO, DIST- LOHARDAGGA.				
Customer's Letter No.	LETTER REF. NO.: - NIL			DATE: 16/09/2022	

SAMPLE DETAILS:

Sample No.	A10019	Material/ Item:	NOISE QUALITY RECORDED IN SOUND LEVEL METER AT SITE
Material Condition	GOOD	Environmental condition:	Laboratory Temperature at time Analysis : 27°C
Standard Applicable for testing	IS: 9989 - 1981.	Deviation in testing from Standard	NO
Application No	14268821	Application Date & time	14/09/2022(1:12)
Operational Status	YES	Types OF Noise (Indoor/Outdoor)	OUTDOOR
Date of Monitoring	15-09-2022 - 16-09-2022	Weather Condition During Observation	SUNNY
Time of Observation	DAY & NIGHT		
SAMPLING	Done by Laboratory		Done-by-Customer
IF, SAMPLING DONE BY LABORATORY	Sampling Location	N: 23°26'59" E: 84°37'17"	
	Sampling Method/ Sampling Plan	ST/SOP/NQ/01	
	Environmental Condition	Temperature: 31°C	
	Sample Collected by	TANMAY, GOUTAM	
Sample analysis Start date:	16-09-2022	Sample analysis End date:	19-09-2022

TEST RESULTS

MATERIAL	NOISE	Discipline/ Group	CHEMICAL / ATMOSPHERIC POLLUTION			
S. No.	Test Parameters	Unit of Measurement	Result	Method Reference	Requirement (Acceptable Limits) As Per IS: 9989 - 1981.	Conformity
1	Ambient Noise Level in Leq (DAY)	dB (A) Leq	Ranchi 60	IS: 9989 - 1981.	75 dB (A)Leq Day/Time & 70dB (A)Leq Night/Time	YES
2	Ambient Noise Level in Leq (NIGHT)	dB (A) Leq	49			YES

*****END OF REPORT*****

Done By:-Tanmay, Goutam

SR. SCIENTIST:-TANMAY DUTTA

SR. SCIENTIST ASST.: GOUTAM MAHATO

Declarations: 1. Sample will be retained for three months from the testing. 2. The test results relates only to the sample as received or sampled for testing and as per applicable parameters. 3. The report can not be used as an evidence in the court of law, without written approval of Laboratory can provide assurance that parts of a report are not taken out of context. 4. All disputes subject to Ranchi Jurisdiction only.

Doc. No.F01(7.8) Amnd. 08



Reviewed By:

Page No.1 of 1

Authorised Signatory



A Unit of Technology Solution Consultants LLP

Mobile: - +91 9835781406, 9031655783, 9128726772

E-mail: - tsc.techno@gmail.com, Website: - www.tsclab.co.in

Lab Address: - Vrindavan Colony, Opp. "KHABAR MANTRA" Plot no - 4,
Road no - 2, Boreya, Ranchi - 834006 (Jharkhand)

Certified by ISO 9001:2015, ISO 14001:2015 & ISO45001:2018



AMBIENT AIR QUALITY REPORT

Report No: TSC/R/23-24/TR-No-0120/02

Issue Date: 20.05.2023

Issue To,	:	MATRITAW BHAWANI SERVICES PVT. LTD. AT-PANDRA Dist-LOHARDAGA		
Work Order no.	:	JSPCB Application No-15865320	JSPCB Application Date:- 03.04.2023	
Type of Industry	:	Stone Crusher		
Job Code No.	:	TSC/LAB-2/EV/S - 43	Sample Code	: TSC/PB/EV/23-24/43
Sampling Period	:	10.05.2023 - 11.05.2023	Sample Collected By:	: TSC Team
Sampling Protocol	:	IS:5182 and CPCB Air Manual Volume-1(NAAQM/36/2012-13)		
Sampling Location	:	Site 1 Lat - 23.508215° Long - 84.853045°	Site 2 Lat - 23.508709° Long - 84.85312°	Site 3 Lat - 23.508347° Long - 84.85423°
Meteorological Cond.	:	W.C - Sunny	Avg. Temp.(°C) - 36.3	RH(%) - 26

TEST RESULTS

Parameters	Test Method	Units	Sampling Location			As per required NAAQS (2009)
			Site 1	Site 2	Site 3	
Particulate Matter (PM ₁₀)	IS:5182 (P-23) 2006	µg/m ³	83.5	87.7	85.6	100
Particulate Matter (PM _{2.5})	USEPA- 40 CFR (PART 50) (50.7)	µg/m ³	39.4	41.2	38.8	60
Sulphur Dioxide (SO ₂)	IS:5182 (P-2) 2001	µg/m ³	24.6	25.9	22.7	80
Nitrogen Dioxide (NO _x)	IS:5182 (P-6) 2006	µg/m ³	34.1	37.5	33.2	80

1. Samples Comply with the prescribed specification as per NAAQS 2009.
2. The results relate only to the items tested.
3. The test report shall not be reproduced without written approval of the laboratory.

LAB ANALYST



20/05/2023
AUTHORIZED SIGNATORY



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Mobile: - +91 9835781406, 9031655783, 9128726772

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Certified by ISO 9001:2015, ISO 14001:2015 & ISO45001:2018



NOISE MONITORING REPORT

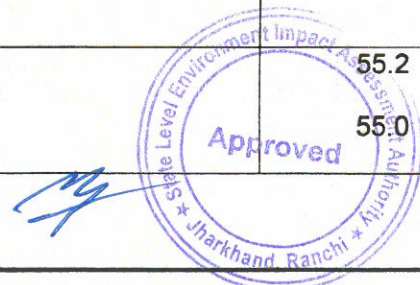
Report No: TSC/R/23-24/TR-No- 0120/03

Issue Date: 20.05.2023

Issue To,	: MATRITAW BHAWANI SERVICES PVT. LTD. AT-PANDRA Dist-LOHARDAGA		
Work Order no.	: JSPCB Application No-15865320	JSPCB Application Date:- 03.04.2023	
Type of Industry	: Stone Crusher		
Job Code No.	: TSC/LAB-2/NOISE/S-26	Sample Code	: TSC/PB/NOISE/ 23-24/26
Sampling Period	: 10.05.2023 - 11.05.2023	Sample Collected By:	: TSC Team
Sampling Protocol	: IS:9989 - 1981 (RA-2001)		
Sampling Location	: Site 1 Lat - 23.508478° Long - 84.852985°	Site 2 Lat - 23.508556° Long - 84.854088°	Site 3 Lat - 23.508041° Long - 84.854182°
Meteorological Cond.	: W.C - Sunny	Avg. Temp.(°C) - 36.3	RH(%) - 26

TEST RESULTS

Sampling Location	Site 1			
	Day Time	Leq in dB(A)	Night Time	Leq in dB(A)
Site 1 Lat - 23.508478° Long - 84.852985°	10.10 AM	66.7		
	02.10 PM	68.6		
	03.20 PM	63.2	11.15 PM	53.7
	07.20 PM	67.1	03.15 AM	51.3
Maximum		68.6		53.7
Average		66.4		52.5
Sampling Location	Site 2			
	Day Time	Leq in dB(A)	Night Time	Leq in dB(A)
Site 2 Lat - 23.508556° Long - 84.854088°	10.20 AM	62.6		
	02.20 PM	65.4		
	03.30 PM	68.7	11.25 PM	55.2
	07.30 PM	64.3	03.20 AM	54.8
Maximum		68.7		55.2
Average		65.2		55.0





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Report No: TSC/R/23-24/TR-No- 0120 /03

Issue Date: 20.05.2023

Sampling Location	Site 3			
	Day Time	Leq in dB(A)	Night Time	Leq in dB(A)
Site 3 Lat – 23.508041° Long – 84.854182°	10.30 AM	64.7	11.40 PM 03.40 AM	53.4 52.3
	02.30 PM	67.6		
	03.40 PM	64.1		
	07.40 PM	63.6		
Maximum		67.6		53.4
Average		65.0		52.8

END OF RESULT

Remarks : All values are observed well within the limit.

Note : 1. Day Time - From 6:00 AM to 10:00 PM,

Night Time - From 10:00 PM to 6:00 AM

2. The Noise Pollution (Regulation and Control) Rules, 2000, (CPCB)

Area / Zone	Day Time dB(A)	Night Time dB(A)
A. Industrial Area	75.0	70.0
B. Commercial Area	65.0	55.0
C. Residential Area	55.0	45.0
D. Silence Zone	50.0	40.0

3. The results relate only to the items tested.

4. The test report shall not be reproduced without written approval of the laboratory.

LAB ANALYST



AUTHORIZED SIGNATORY



YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Accredited by :- Jharkhand State Pollution Control Board (JSPCB)
 Certified by :- ISO 9001:2015 & ISO 45001:2018

TC-4032

Test Certificate



ULR (Unique Lab Report) No.		T C 4 0 3 2 2 3 0 0 0 0 0 0 7 3 F													
Discipline	Chemical	Group	Atmospheric Pollution		Sample Description	Ambient Air Quality									
Report Release Date	13 th January, 2023			Report ID	YBAEEL-230106-160812-A01										
W. Order/ JSPCB App. No.	15230286			Work Order Date	05.01.2023										
Type of Industry (If any)	Bricks Manufacturer			Job code/ Ref. no.	YBAEEL/WA/LA/Jan-23/19										
Report Issue to	M/s Mayur Bricks Old Suk Bazar, New Road, Dist.- Lohardaga, Jharkhand.														
Sampling Period	10/01/2023- 11/01/2023			Mode of sample collection	By YBAEEL Team										
Sampling Protocol	IS:5182 and CPCB Air Manual Volume-1(NAAQM/36/2012-13)														
Sampling Locations	A. Near Office			23°24'27"N, 84°40'57"E											
	B. East Side			23°24'29"N, 84°40'58"E											
	C. West Side			23°24'29"N, 84°40'56"E											
Meteorological Cond. of Field	W.C.- Clear		RH % - 45		Temp. - 25°C		W.D.- West-East								
Sample receipt Date	11/01/2023	Analysis Started on	11/01/2023	Analysis completed on	13/01/2023										

*****Test Results*****

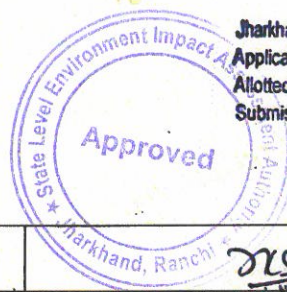
Parameters	Test Methods	Units	MU %	Sampling Location			Limits
				Site A	Site B	Site C	
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006, RA 2017	µg/m ³	2.68	65.9	63.3	69.4	100
Particulate matter (PM _{2.5})	IS:5182 (P-24) 2019	µg/m ³	2.80	23.5	28.2	30.0	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2) 2001 RA 2017	µg/m ³	7.84	12.8	11.8	14.0	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2017	µg/m ³	4.17	13.0	14.1	11.9	80

*****End of Report*****

Note:- Plant was temporary closed during sampling.

Limit is specified as	Environmental (Protection) Rule - 1986.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility.
	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.
	This report cannot be reproduced, except when in full, without the written permission of the CEO.
	The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise
	The liability of the laboratory is limited to the invoiced amount.
Remarks	All disputes are subjected to the Ranchi Jurisdiction. Samples comply with prescribed limits.

Sample Drawn By - Angad Munda
 Tested By - Akash Khalkho (Lab Analyst)



Only CONCERN for
 Jharkhand State Pollution Control Board
 Application No. 15230286
 Allotted Date 05-01-23
 Submission Date 12-01-23

Verified by Sumit Kant Srivastava (Sr. Lab Analyst)	Issued by Sanjeev Kumar Singh (Technical Manager)
---	---



Branch Office :- Jamshedpur | Dhanbad | Hazaribag

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ISO 9001:2015
 ISO 45001:2018



YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Accredited by: - Jharkhand State Pollution Control Board (JSPCB)

Certified by: - ISO 9001:2015 & ISO 45001:2018

TC-4032

Test Certificate

ULR (Unique Lab Report) No.		T C 4 0 3 2 2 3 0 0 0 0 0 0 7 4 F									
Discipline	Chemical	Group	Atmospheric Pollution			Sample Description			Ambient Noise		
Report Release Date	13 th January, 2023			Report ID			YBAEEL-230106-160812-N01				
W. Order/ JSPCB App. No.	15230286			Work Order Date			05.01.2023				
Type of Industry (If any)	Bricks Manufacturer			Job code/ Ref. no.			YBAEEL/WA/LJA/Jan-23/19				
Report Issue to	M/s Mayur Bricks Old Suk Bazar, New Road, Dist.- Lohardaga, Jharkhand.										
Sampling Period	10/01/2023- 11/01/2023			Mode of sample collection			By YBAEEL Team				
Sampling Protocol	IS 9989:1981 (RA 2020)										
Meteorological Cond. of Field	W.C.- Clear			RH % - 45			Temp. - 25°C				
Sample receipt Date	11/01/2023		Analysis Started on		11/01/2023		Analysis completed on		13/01/2023		

*****Test Results*****

Sl	Locations	Parameters	Units	MU %	Day Time (6.00 a.m. to 10.00 p.m.)	Night Time (10.00 p.m. to 6.00 a.m.)	Limits
1.	Near Office	Leq	dB (A)	3.32	47.4	39.4	Day - 75 Night - 70
2.	East Direction	Leq	dB (A)	3.32	44.7	41.3	
3.	West Direction	Leq	dB (A)	3.32	49.4	39.1	

*****End of Report*****

Note:- Plant was temporary closed during sampling.

<ul style="list-style-type: none"> Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale(A) which is relatable to human hearing. 	Area		Unit	Day Time	Night time
	A	Industrial Area	dB (A)	75.0	70.0
	B	Commercial Area	dB (A)	65.0	55.0
	C	Residential Area	dB (A)	55.0	45.0
	D	Silence Zone	dB (A)	50.0	40.0

Limit is specified as	Noise pollution (Regulation & Control) Rules, 2000.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility. This report, in full or in part, shall not be used for advertising or as evidence in any court of law. This report cannot be reproduced, except when in full, without the written permission of the CEO. The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise. The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Samples comply with prescribed limit.

Sample Drawn By - Angad Munda
Tested By - Akash Khalkho (Lab Analyst)



Only CONCERN for
Jharkhand State Pollution Control Board
Application No. 15230286
Allotted Date 05-01-23
Submission Date 13-01-23

Verified by Sumit Kant Srivastava (Sr. Lab Analyst)	Issued by Sanjeev Kumar Singh (Technical Manager)
---	---

Authorized Signatory
Atmospheric Pollution

Branch Office: - Jamshedpur | Dhanbad | Hazaribag | Yugantar Bharati Analytical & Environmental Engineering Laboratory

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ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

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Certified by :- An ISO 9001:2015 & ISO 45001:2018



Test Certificate

INSPECTION REPORT OF THE STACK (It Produce When the Stack was not In Operation)

1.	Report Issue Date	13/01/2023		
2.	Name of Industry	M/s Mayur Bricks Old Suk Bazar, New Road, Dist.- Lohardaga, Jharkhand.		
3.	Inspection Date	11/01/2023		
4.	Product Manufactured	Bricks Manufacturer		
5.	Description	Report Id	YBAEEL-230106-160812	Application No. JSPCB - 15230286
6.	Stack Description	Location	Port Hole	Type of fuel Used Coal
		Platform	Temporary	Quantity of Fuel Used 200 ton/year
		Stack Description (Shape & Material)	Circular/Bricks	Total production Capacity 6 lakh/year
		Sampling port	Available	Height of Stack from ground level 39.5 m
		Stack Identification	Stack - 01	Inner Diameter of Stack 2.65 m
		Height of port hole from Ground level	12.2 m	Pollution Controlling Device N/A
7.	Remarks	Our inspection team was observed that stack was not in operation during inspection/ sampling.		
		S.K.S. 13/01/23		
		Sanjeev Kr. Singh 13/01/23		
Assessment by : Sumit Kant Srivastava, Incharge, Atmospheric Pollution		Issued by : - Sanjeev Kr. Singh, Technical Manager Authorized Signatory Atmospheric Pollution Yugantar Bharati Analytical & Environmental Engineering Laboratory		

Only CONCERN for
Jharkhand State Pollution Control Board
Application No. 15230286
Allotted Date 08.01.23
Submission Date 12.01.23



Branch Office :- Jamshedpur | Dhanbad | Hazaribag | Pakur

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ENVIRONMENTAL LABORATORIES & ENGINEERING SERVICES PVT. LTD.



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 Website : www.elespl.co.in

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 CERTIFIED
NABL Accredited & JSPCB Certified Lab. for Environmental Pollution Monitoring & Analysis

CIN: U74999JH2018PTC011125 GST NO:- 20AAECE9713D1Z4 ☎ : 0651-2290103, 9931289451

TEST REPORT

Test Report No. : ELES/RNC/2022/2889	Report Release Date : 22.12.2022
Application No. : 15038265	Application Date : 16.12.2022

CUSTOMER DETAILS		SAMPLE DETAILS	
Customer Name	: M/s Nejam Ansari Crusher	Sampling Date	: 19.12.2022 to 20.12.2022
Address	: At + Mauza- Rampur, PO- Rampur, Dist- Lohardaga	Sample Received Date	: 20.12.2022
Plant Status	: Operational	Type of Sample	: Ambient Air
		Sampling Procedure	: ELES/DOC/SMPL/02
		Sample Drawn By	: ELES Pvt. Ltd.
		Period of Analysis	: 20.12.2022 to 22.12.2022

METEOROLOGICAL INFORMATION

1 Average Temperature (°C) : 22	2 Barometric Pressure (mmHg) : 717
3 Relative Humidity (%) : 59	4 Weather Condition : Clear

Parameters	Particulate Matter (PM10)		Fine Particulate Matter (PM2.5)		Sulphur Di-Oxide (SO ₂)		Nitrogen Di-Oxide (NO ₂)									
	IS 5182 (P-23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)	IS 5182 (P-2)	IS 5182 (P-6)										
Test Protocol	100	60	80	80	80	80										
Locations	Limit	Unit	100	µg/m ³	60	µg/m ³	80	µg/m ³								
Near Entrance Area	11:21 – 15:26	90	47	µg/m ³	47	µg/m ³	16.9	28.5								
	15:26 – 19:14								68	13.9	33.2					
	19:20 – 23:25	79										8.9	26.4			
	23:25 – 03:12													79	6.8	22.3
	03:18 – 07:19	79														
	07:19 – 11:09								Average					79		
Near Labour Room	11:35 – 15:40	77	41	µg/m ³	41	µg/m ³	14.3	26.1								
	15:40 – 19:27								66	12.1	23.4					
	19:33 – 23:38	71										16.8	26.4			
	23:38 – 03:25													71	11.2	20.1
	03:27 – 07:30	71														
	07:30 – 11:18								Average					71		
Sample ID ELES/RNC/PCB/AA/6060	Average	79	47	13.7	28.3											
Sample ID ELES/RNC/PCB/AA/6061	Average	71	41	12.5	24.1											



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CIN: U74999JH2018PTC011125

ENVIRONMENTAL LABORATORIES &

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Email: info@elespl.co.in; eles.ranchi@gmail.com

Website : www.elespl.co.in

GST NO:- 20AAECE9713D1Z4 ☎ : 0651-2290103, 9931289451



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NABL Accredited & JSPCB Certified Lab. for

Environmental Pollution Monitoring & Analysis

TEST REPORT

Test Report No. : ELES/RNC/2022/2889	Report Release Date : 22.12.2022
Application No. : 15038265	Application Date : 16.12.2022

Parameters			Particulate Matter (PM10)		Fine Particulate Matter (PM2.5)		Sulphur Di-Oxide (SO ₂)		Nitrogen Di-Oxide (NO ₂)	
Test Protocol			IS 5182 (P-23)		IS 5182 (P-24)		IS 5182 (P-2)		IS 5182 (P-6)	
Locations	Limit	Unit	100	µg/m ³	60	µg/m ³	80	µg/m ³	80	µg/m ³
Near Stock Yard	11:47 – 15:52		93		45		16.8		31.3	
	15:52 – 19:40						19.2		29.6	
	19:46 – 23:51		71				16.4		32.8	
	23:51 – 03:38						11.7		25.6	
	03:44 – 07:49		80				8.9		22.8	
	07:49 – 11:32						13.6		27.9	
Sample ID ELES/RNC/PCB/AA/6062	Average		81		45		14.4		28.3	

Rekha Saxena

Authorized Signatory

Rekha Saxena

B. Sc, M. Sc. (Botany)

Director

ELES Pvt. Ltd.

****End of Report****

Sandip Bera

Authorized Signatory

SANDIP BERA

SENIOR MANAGER

ELES PVT. LTD.



Page 2 of 2

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"Save Environment, Save Future"



ENVIRONMENTAL LABORATORIES &

ENGINEERING SERVICES PVT. LTD.

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HATIA, RANCHI-834003 (JHARKHAND)

Email: info@elespl.co.in; eles.ranchi@gmail.com

Website : www.elespl.co.in

GST NO:- 20AAECE9713D1Z4 ☎ : 0651-2290103, 9931289451



ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 CERTIFIED

NABL Accredited & JSPCB Certified Lab. for

Environmental Pollution Monitoring & Analysis

CIN: U74999JH2018PTC011125

TEST REPORT

Test Report No. : ELES/RNC/2022/2890	Report Release Date : 22.12.2022
Application No. : 15038265	Application Date : 16.12.2022

CUSTOMER DETAILS		SAMPLE DETAILS	
Customer Name	: M/s Nejam Ansari Crusher	Sampling Date	: 19.12.2022 to 20.12.2022
Address	: At + Mauza- Rampur, PO- Rampur, Dist- Lohardaga	Sampling Received Date	: 20.12.2022
		Type of Sample	: Ambient Noise
		Sampling procedure	: ELES/DOC/SMPL/03
		Sample Drawn By	: ELES Pvt. Ltd.
Plant Status	: Operational	Period of Analysis	: 20.12.2022 to 22.12.2022

METEOROLOGICAL INFORMATION

1	Average Temperature (°C) : 22	2	Barometric Pressure (mmHg) : 717
3	Relative Humidity (%) : 59	4	Weather Condition : Clear

Location	Unit	Test Protocol	Result			Regulatory Limit
			L _{Max}	L _{Min}	L _{Eq}	
Near Entrance Area	dB(A)	IS 9989:1981, RA 2020	L _{Max}	L _{Min}	L _{Eq}	75 dB(A) Day Time & 70 dB(A) Night Time
Sample ID: ELES/RNC/PCB/AN/6063			72.6	41.8	61	
Near Labour Room	dB(A)	IS 9989:1981, RA 2020	L _{Max}	L _{Min}	L _{Eq}	
Sample ID: ELES/RNC/PCB/AN/6064			73.5	39.5	60	
Near Stock Yard	dB(A)	IS 9989:1981, RA 2020	L _{Max}	L _{Min}	L _{Eq}	
Sample ID: ELES/RNC/PCB/AN/6065			73.4	38.5	63	

Rekha Saxena

Authorized Signatory

Rekha Saxena

B. Sc, M. Sc. (Botany)

Director

ELES Pvt. Ltd.

****End of Report****

Sandip Bera

Authorized Signatory

SANDIP BERA

SENIOR MANAGER

ELES PVT. LTD.



Page 1 of 1

The Document stated as Test Report, is issued by the Laboratory under General Terms and Conditions, only on Company letter head in pre-approved format. The results shown in the Test Report refer or relates only to the job/analysis done by the Laboratory only. The information stated on the Test Report reflects the findings done by the Laboratory at the time of involvement only and within the limits of client's instructions. The Laboratory is responsible for all the information or data provided on the report, except the information which is provided by the client. The Report cannot be reproduced except in full and any part of the report is not taken out of context, without prior written approval of the Laboratory. The Report in full or in part shall not be published, advertise, used for any legal actions unless prior permission has been secured from the Management of the Laboratory. Attention is drawn to the limitation of liability, compensation and jurisdiction issues. Any unauthorized alteration & falsification of the content or appearance of the Test Report is unlawful and offenders may be prosecuted to the fullest extent of the law. All the samples are retained for 30days from the Date of release/issue of the Test Report. The samples from Regulatory bodies are to be retained as specified. Any type of Observations or Complaints regarding the Reports shall be done within 15days from the Date of Test Report released/issued. After the time period stated before, no complaints will be accepted. The entire Time schedule mentioned in Test Report is in 24hours format. Abbreviation used: N/A (Not Applicable); BDL (Below Detection Limit); LDL (Lower Detection Limit).

"Save Environment, Save Future"



JHARKHAND STATE POLLUTION CONTROL BOARD

Central Laboratory, Hatia, Ranchi, Phone: - 0651- 2291449

Ref. No.:107/21

Ranchi, Dated

R&D AMBIENT AIR QUALITY REPORT

Name of the Industry : M/s Pakhar Bauxite Mines (15.58 Hect)
M&M, at-Pakhar,PO-Kisko, Dist-Lohardaga
Date of Sampling : 30/06/2021 to 01/07/2021
Weather Condition : Clear

No. of Sampling Points : 3
Sampling Position :
1. Near Main Office
2. Near Electric Weigh Bridge
3. Near Main Quarry No.-M1
4. Near Main Quarry No.-M4

Time	SO ₂	NO _x	RSPM
Point 1			
11.00 A.M. to 3.00 P.M.	40.18	41.91	80.17
3.00 P.M. to 7.00 P.M.	34.24	36.15	
7.00 P.M. to 11.00 P.M.	30.18	31.82	71.24
11.00 P.M. to 3.00 AM.	22.24	24.07	
Maximum	40.18	41.91	80.17
Average	31.71	33.49	75.71
Point 2			
11.15 A.M. to 3.15 P.M.	38.16	40.24	81.15
3.15 P.M. to 7.15 P.M.	32.61	33.98	
7.15 P.M. to 11.15 P.M.	28.15	29.02	73.24
11.15 P.M. to 3.15 AM.	23.67	24.18	
Maximum	38.16	40.24	81.15
Average	30.65	31.86	77.20
Point 3			
11.30 A.M. to 3.30 P.M.	37.20	41.07	82.24
3.30 P.M. to 7.30 P.M.	33.15	35.18	
7.30 P.M. to 11.30 P.M.	29.21	31.24	80.10
11.30 P.M. to 3.30 AM.	24.68	26.07	
Maximum	37.20	41.07	82.24
Average	31.06	33.39	81.17

aw

Ambient Air Quality 2021/48

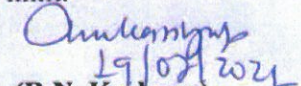


Point 4			
11.45 A.M. to 3.45 P.M.	40.15	41.28	81.24
3.45 P.M. to 7.45 P.M.	31.24	35.18	
7.45 P.M. to 11.45 P.M.	26.15	30.81	72.71
11.45 P.M. to 3.45 AM.	20.24	22.07	
Maximum	40.15	41.28	81.24
Average	29.45	32.34	76.98

Note : All values are expressed in micro gram/cubic metre :

Remarks :- The value of all parameters were found within the prescribed limit.


(S.K. Singh)
ASO


19/07/2021
(R.N. Kashyap)
Board Analyst





ENVIRONMENTAL LABORATORIES & ENGINEERING SERVICES PVT. LTD.



PLOT NO-30, MANSAROVAR ENCLAVE, TUPUDANA HATIA, RANCHI-834003 (JHARKHAND)
 Email: info@elespl.com ; eles.ranchi@gmail.com
 GST NO:- 20AAECE9713D1Z4 ☎ : 0651-2290103, 9931289451

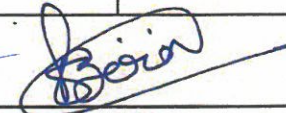
ISO 9001:2015 CERTIFIED, OHSAS 18001:2007 CERTIFIED
 NABL Accredited & JSPCB Certified Lab. for
 Environmental Pollution Monitoring & Analysis

TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Test Report No. : ELES/RNC/2021/0640		Report Release Date : 21.04.2021			
Application No. : 10215506		Work Order Date : 11.03.2021			
CUSTOMER DETAILS		SAMPLE DETAILS			
Customer Name	: Pakhar Bauxite Mines (115.13 hect.) HIL	Sampling Date	: 17.04.2021 to 18.04.2021		
Address	: At.-Pakhar, P.O-Kisko, Dist. Lohardaga	Sample Received Date	: 19.04.2021		
		Type of Sample	: Ambient Air		
		Sampling Procedure	: ELES/DOC/SMPL/02		
		Sample Drawn By	: ELES Pvt. Ltd.		
Plant Status	: Operational	Period of Analysis	: 19.04.2021 to 21.04.2021		
METEOROLOGICAL INFORMATION					
1	Average Temperature (°C) : 29	2	Barometric Pressure (mmHg) : 740		
3	Relative Humidity (%) : 59	4	Weather Condition : Clear		
Parameters		Particulate Matter (PM10)	Suspended Particulate Matter (SPM)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)
Test Protocol		IS 5182 (P-23)	IS:5182 (P-4)	IS.5182 (P-2)	IS 5182 (P-6)
Locations		Limits	100	500	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³
Near Mines Block-B (Quarry No.-03)	09:45 – 13:46		89	344	15.1
	13:45 – 17:37				13.2
	17:43 – 21:44		69	222	13.9
	21:44 – 01:38				12.2
Sample ID ELES/RNC/PCB/AA/2636	01:44 – 05:33		83	293	9.7
	05:33 – 09:38				12.6
Latitude:23°32'26.58"N		Average	80	286	12.8
Longitude :84°36'06.85"E					31.7
Near Mines Block-B (Quarry No.-04)	09:55 – 13:52		96	372	13.6
	13:52 – 17:48				12.5
	17:54 – 21:49		81	251	10.2
	21:49 – 01:44				11.8
Sample ID ELES/RNC/PCB/AA/2637	14:49 – 05:44		90	313	9.8
	05:44 – 09:49				13.1
Latitude:23°32'04.36"N		Average	89	312	11.8
Longitude :84°35'56.03"E					30.6
Near Mines Block-B (Quarry No.-06)	10:05 – 14:04		88	326	12.8
	14:04 – 18:06				13.5
	18:11 – 22:03		73	193	11.4
	22:03 – 02:06				12.3
Sample ID ELES/RNC/PCB/AA/2638	02:11 -06:02		85	287	10.8
	06:02 – 10:04				13.1
Latitude:23°32'59.14"N		Average	82	269	12.3
Longitude :84°36'55.57"E					32.0

*****End of Report*****

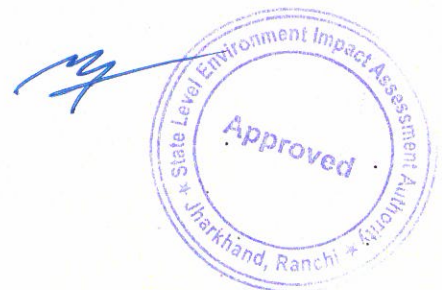



Authorised Signatory
SANDIP BERA
SENIOR MANAGER
ELES PVT. LTD.

Note

- *Any observations or complaints regarding the reports shall be done within 15 days from the date of report received.*
- *After 15 days no complaints will be accepted.*
- *The test report should not be reproduced without the written approval of the laboratory.*
- *All time mentioned are in 24 hours format.*
- *Abbreviation :*
 - N/A (Not Applicable)*
 - BDL (Below Detection Limit)*
 - D.L (Detection Limit)*

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YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Accredited by :- National Accreditation Board for Testing Laboratory (NABL) & Jharkhand State Pollution Control Board (JSPCB)
 Certified by :- An ISO 9001:2015 & BS OHSAS 18001 : 2007

Certificate No. - TC 7813

ANALYTICAL TEST REPORT

Atmospheric Pollution Test Report		URL(Unique Lab Report) No.	
Report Release Date	03 rd April, 2021	Report ID	TC78132120000306P
Sample Description	Ambient Air Quality	Job code/ Ref. no.	YBAEEL- 210312 - 105823-A01
Type of Industry	Bauxite Mines	Work Order No/ Date	YBAEEL/WA/LI/Mar. -21/42
Issue to	M/s Pakhar Bauxite Mines (109.507 hect.)M&M At. - Pakhar, PO - Kisko, Dist. - Lohardaga, Jharkhand.		
Sampling Period	22/03/2021 - 23/03/2021	Mode of sample collection	By YBAEEL Team
Sampling Protocol	IS:5182 and CPCB Air Manual Volume-1(NAAQM/36/2012-13)		
Sampling Locations	A. Near Mine Quarry No. - K - 7 (23°33'29.12"N, 84°36'43.86"E)	B. Near Mine Quarry No. - K - 9 (23°33'30.72"N, 84°37'07.83"E)	
	C. Near Mine Quarry No. - K - 10 (23°33'14.59"N, 84°37'21.94"E)	D. Pakhar Loading Area (23°33'15.01"N, 84°36'53.77"E)	
Meteorological Cond.	W.C.- Clear	RH % - 43%	Temp. - 28°C
Sample receipt Date	23/03/2021	Analysis Started on	23/03/2021
		Analysis completed on	02/04/2021

Test Results

Parameters	Test Method	Units	Sampling Location				NAAQS (2009)
			Site A	Site B	Site C	Site D	
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006	µg/m ³	70.2	84.4	76.8	64.9	100
Particulate matter (PM _{2.5})	USEPA -40 CFR (PART 50) (50.7)	µg/m ³	34.1	38.8	35.7	30.4	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2) 2001 RA 2012	µg/m ³	15.3	13.0	14.2	11.8	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2012	µg/m ³	28.2	24.4	26.3	22.5	80
Carbon Monoxide (CO)*	IS:5182 (P-10) 1999 RA 2003	mg/m ³	BDL (MDL 1.8)	BDL (MDL 1.8)	BDL (MDL 1.8)	BDL (MDL 1.8)	04

End of Report

Remarks	Samples Comply with the prescribed specification as per NAAQS 2009.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,
Note	The parameters marked with * are not accredited by NABL.
Specific contractual notes	All values are expressed in as unit.
	The results listed refer only to the tested sample and applicable parameter.
	This report, in full or in part, shall not be used for advertising or as evidence in any court of law
	This report cannot be reproduced, except when in full, without the written permission of the Lab In-charge
	The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise
	The liability of the laboratory is limited to the invoiced amount
	All disputes are subjected to the Ranchi Jurisdiction

Tested by Amit Kumar Sinha Lab Analyst	Verified by Brij Nandan Kumar Section In-Charge	Issued by Umesh Das Authorized Signatory Atmospheric Pollution Technical Manager
--	---	---

Branch Office :- Jamshedpur | Dhanbad | Hazaribagh | Pakur

Main Office : Namkum Post Office, Sidroul, Ranchi-834001, Jharkhand
 Ph : 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in





JHARKHAND STATE POLLUTION CONTROL BOARD

Central Laboratory, Hatia, Ranchi, Phone: - 0651- 2291449

Ref. No.: 4
Application No- 12960901
Date - 07.04.2022

Ranchi, Dated

AMBIENT AIR QUALITY REPORT

Name of the Industry : M/S PSG Mineral, Plot No - 552, 553, 661
662, Dist- Lohardaga
Date of Sampling : 27-28.04.2022
Weather Condition : Clear

No. of Sampling Points : 3
Sampling Position :
1. Near Main Gate
2. Near West North Side
3. Near West South Side

Time Point	SO ₂	NO _x	RSPM
11.00 A.M. to 3.00 P.M.	18.52	23.24	87.52
3.00 P.M. to 7.00 P.M.	19.91	24.78	
7.00 P.M. to 11.00 P.M.	18.01	20.12	69.12
11.00 P.M. to 3.00 AM.	16.02	19.31	
Maximum	19.91	24.78	87.52
Average	18.12	19.36	78.32
Point 2			
11.15 A.M. to 3.15 P.M.	16.26	22.02	95.16
3.15 P.M. to 7.15 P.M.	18.71	23.98	
7.15 P.M. to 11.15 P.M.	15.02	20.06	81.22
11.15 P.M. to 3.15 AM.	14.16	18.73	
Maximum	18.71	23.98	95.16
Average	16.04	21.20	88.19
Point 3			
11.30 A.M. to 3.30 P.M.	17.26	22.91	97.12
3.30 P.M. to 7.30 P.M.	18.65	20.98	
7.30 P.M. to 11.30 P.M.	15.11	15.51	83.02
11.30 P.M. to 3.30 AM.	14.98	16.97	
Maximum	18.65	22.91	97.12
Average	16.50	19.59	90.07

Note : All values are expressed in micro gram/cubic metre :

Remarks :- Average RSPM values were found within prescribed limit.

(S.K. Singh)

Ambient Air Quality 20162



(R.N. Anjaan)
Board Analyst



JHARKHAND STATE POLLUTION CONTROL BOARD
Central Laboratory, Mano Balram Bhawan, Hatia, Ranchi ,Phone: - 0651- 2291449

Lab. Ref. No.- 97
Application No.-12960901
Date : 07.04.2022


Ranchi, Dated

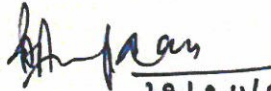
R&D

Ambient Noise Level monitoring report in LAeqdB(A) at various locations in premises of M/s. PSG Mineral Plot No- 552, 553, 661, 662, Dist -Lohardga at day time on 28/04/2022

Sl. No.	Monitoring Location	Status of unit Operation/No n- Operation	Time Duration 10 Minute interval	Avg. Noise level LAeq/dB (A)	Prescribed limit in day time LAeqdb(A)
1	Near Main Gate at distance of 5 feet	Operation	2.30 PM to 2.40 PM	61.9	75db(A)
2	Near Office at distance of 5 feet	Operation	2.45 PM to 2.55 PM	69.8	75db(A)
3	Near West South Side	Operation	3.00 PM to 3.10 PM	73.0	75db(A)

Remarks : Noise Level of all points were found within the prescribed limit.


29/4/22
(S.K. Singh)
ASO-Cum-Lab I/C


29/04/2022
(R.N. Anjaan)
Board Analyst





YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Accredited by :- NABL accredited testing laboratory vide certificate Number TC-4032
 Jharkhand State Pollution Control Board (JSPCB)
 Certified by :- ISO 9001:2015 & ISO 45001:2018

TC-4032

Test Certificate

ULR (Unique Lab Report) No.		T C 4 0 3 2 2 2 0 0 0 0 0 3 7 6 F													
Discipline	Chemical	Group	Atmospheric Pollution				Sample Description				Ambient Air Quality				
Report Release Date	24 th March, 2022				Report ID				YBAEEL-220310-124310-A01						
W. Order/ JSPCB App. No.	12730755				Work Order Date				08.03.2022						
Type of Industry (if any)	Stone Crusher				Job code/ Ref. no.				YBAEEL/WA/L/A/Mar-22/32						
Report Issue to	M/s S.A. STONE CRUSHER Arkosa, Dist.-Lohardaga, Jharkhand.														
Sampling Period	15/03/2022- 16/03/2022				Mode of sample collection				By YBAEEL Team						
Sampling Protocol	IS:5182 and CPCB Air Manual Volume-1(NAAQM/36/2012-13)														
Sampling Locations	A. South-East Direction				23°25'38.97"N, 84°45'21.08"E										
	B. North-West Direction				23°25'39.68"N, 84°45'21.04"E										
	C. South-West Direction				23°25'39.02"N, 84°45'22.01"E										
Meteorological Cond. of Field	W.C.- Clear				RH % - 47				Temp. - 31°C				W.D.- SE-NW		
Sample receipt Date	17/03/2022		Analysis Started on		17/03/2022		Analysis completed on		23/03/2022						

*****Test Results*****

Parameters	Test Methods	Units	MU %	Sampling Location			Limits
				Site A	Site B	Site C	
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006, RA 2017	µg/m ³	2.68	74.5	66.0	68.9	100
Particulate matter (PM _{2.5})	IS:5182 (P-24) 2019	µg/m ³	2.60	33.7	28.5	30.4	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2) 2001 RA 2017	µg/m ³	7.84	12.9	11.2	14.2	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2017	µg/m ³	4.17	25.8	23.5	25.2	80

*****End of Report*****

Note:- Plant was not in Operation during sampling.

Limit is specified as	Environmental (Protection) Rule - 1986.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility. This report, in full or in part, shall not be used for advertising or as evidence in any court of law. This report cannot be reproduced, except when in full, without the written permission of the CEO. The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Samples comply with prescribed limits.

Sample Drawn By - Mukesh Kumar
 Tested By - Amit Kumar Sinha (Lab Analyst)

Only CONCERN for
 Jharkhand State Pollution Control Board
 Application No. 12730755
 Allotted Date 08.03.2022
 Submission Date 25.03.2022

Verified by Brij Nandan Kumar Section In-Charge		Issued by Umesh Das Technical Manager	

Authorized Signatory
 Atmospheric Pollution
 Yugantar Bharati Analytical &
 Environmental Engineering Laboratory

Technical Manager
 Yugantar Bharati Analytical &
 Environmental Engineering Laboratory



Branch Office :- Jamshedpur | Dhanbad | Hazaribag | Pakur

Main Office : Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand
 Ph : 09835-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in



ISO 9001:2015
 ISO 45001:2018



YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Accredited by: - NABL accredited testing laboratory vide certificate Number TC-4032
 Jharkhand State Pollution Control Board (JSPCB)
 Certified by: - ISO 9001:2015 & ISO 45001:2018

TC-4032

Test Certificate

ULR (Unique Lab Report) No.	T C 4 0 3 2 2 2 0 0 0 0 0 3 7 9 F													
Discipline	Chemical	Group	Atmospheric Pollution				Sample Description				Ambient Noise			
Report Release Date	25 th March, 2022				Report ID				YBAEEL-220310-124310-N01					
W. Order / JSPCB App. No.	12730755				Work Order Date				08.03.2022					
Type of Industry (If any)	Stone Crusher				Job code/ Ref. no.				YBAEEL/WA/LJA/Mar-22/32					
Report Issue to	M/s S.A. STONE CRUSHER Arkosa, Dist.-Lohardaga, Jharkhand.													
Sampling Period	15/03/2022- 16/03/2022				Mode of sample collection				By YBAEEL Team					
Sampling Protocol	IS 9989:1981 (RA 2020)													
Meteorological Cond. of Field	W.C.- Clear				RH % - 47				Temp. - 31°C					
Sample receipt Date	17/03/2022	Analysis Started on		17/03/2022	Analysis completed on		23/03/2022							

*****Test Results*****

Sl	Locations	Parameters	Units	MU %	Day Time (6.00 a.m. to 10.00 p.m.)	Night Time (10.00 p.m. to 6.00 a.m.)	Limits
1.	South-East Direction	Leq	dB (A)	3.32	53.2	45.0	Day - 75 Night - 70
2.	North-West Direction	Leq	dB (A)	3.32	54.4	44.8	
3.	South-West Direction	Leq	dB (A)	3.32	53.0	44.9	

*****End of Report*****

Note:- Plant was not in Operation during sampling.

	Area	Unit	Day Time	Night time	
					A
	B	Commercial Area	dB (A)	65.0	55.0
	C	Residential Area	dB (A)	55.0	45.0
	D	Silence Zone	dB (A)	50.0	40.0

Limit is specified as	Noise pollution (Regulation & Control) Rules, 2000.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C)
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility This report, in full or in part, shall not be used for advertising or as evidence in any court of law. This report cannot be reproduced, except when in full, without the written permission of the CEO. The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Samples comply with prescribed limit.

Sample Drawn By - Mukesh Kumar
 Tested By - Amit Kumar Sinha (Lab Analyst)

Only CONCERN for
 Jharkhand State Pollution Control Board
 Application No. 12730755
 Allotted Date 08.03.2022
 Submission Date 25.03.2022

Verified by Brij Nandan Kumar Section In-Charge	Issued by Umesh Das Technical Manager
---	---

Authorized Signatory
 Atmospheric Pollution
 Yugantar Bharati Analytical &
 Environmental Engineering Laboratory

Technical Manager
 Yugantar Bharati Analytical &
 Environmental Engineering Laboratory

Branch Office :- Jamshedpur | Dhanbad | Hazaribag | Pakur

Main Office : Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand
 Ph : 09835-97960, 098357-86677, Email - ybaeel@gmail.com; Web - https://ybaeel.in



ISO 9001:2015
 ISO 45001:2018



INSTITUTE FOR ENVIRONMENTAL MANAGEMENT ECO ENVIRO LAB

ISO 9001:2015 (QMS), ISO 45001:2018 (OHSAS); NABL & JSPCB Accreditation

2208/A, Jagannath Nagar, Pundag Road, Near Anand Gas Godown, Argora, Ranchi, Jharkhand – 834012.

Email ID – iem2012@Rediffmail.com, Mob. No. – 8407804253.

Test Report Ambient Air Quality

Client Name & Address: M/S Sharat Kumar Vidyarthi Stone mines, At- Umri, PO- Shingo, Dist- Lohardaga	Sample Details: Type of Industry: Stone Mines Sample Description: Ambient Air Sampling Date: 22/12/2021-23/12/2021 Sample Registration Date: 23/12/2021
Test Report No: IEM/EEL/RAN/AAQ/0519A Application No: 11915490, Date: 20.12.2021, Time: 02:37 Report Issue Date: 27/12/2021 Protocol: IS Method & CPCB Guideline	Customer Rept.: Sri Sharat Kumar Vidyarthi Sample Drawn by: Rajiv Kumar Singh & team

METEROLOGICAL INFORMATION

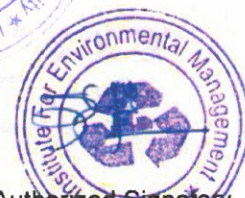
Average Temp(°C)	Average Relative Humidity (%)	Average Barometric Pressure (mm of Hg)	Weather Condition	Wind Direction
16	68	761.3	Sunny	NW

Concentration in Ambient Air (Industrial, Residential, Rural and Other Area)

Time Weighted Average- 24 Hours

Parameters	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	
Method Name	Improved West & Gaeke method	Jackob & Hochheiser Modified Method	Gravimetric Method	
NAAQMS/36/2012-13	IS 5182 (Part-02)	IS 5182 (Part-06)	IS 5182 (Part-23)	
Location (Inside the Plant Premises)	Concentration in Ambient Air as per NAAQS- 2009 For 24 Hours			
Sampling Point Coordinates	80	80	100	
Near South Corner	23°29'41.35"N 84°49'4.11"E	9.52	12.56	82
Near East Corner	23°29'45.04"N 84°49'6.58"E	10.25	13.47	85
Near West Corner	23°29'44.38"N 84°49'3.26"E	10.89	13.85	88

----End of Report----



Shreyansh

Tested by
Analyst

(Signature)

Checked By
(Sunil Kumar Singh)
(Lab In charge cum Technical Manager)

(Signature)

Authorized Signatory
(Dr. S. C. Jain)
(Director & QC Manager)

Note: -1. The results refer only to the tested sample of applicable parameters. 2. The sample will be preserved for a maximum of 7 days on request from the date of issue of the certificate. 3. The certificate shall not be reproduced in part or full and can't be used as evidence or in court of law without prior permission in writing. 4. All disputes are subjected to the Ranchi jurisdiction.



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Email ID – iem2012@rediffmail.com, Mob. No. – 8407804253

Monitoring Report Ambient Noise levels

Client Name & Address: <p style="text-align: center;">M/S Sharat Kumar Vidyarthi Stone mines, At- Umri, PO- Shingo, Dist- Lohardaga</p>	Sample Details: Type of Industry: Stone Mines Sample Description: Ambient Noise Sampling Date: 22/12/2021-23/12/2021 Sample Registration Date: 23/12/2021
Test Report No: IEM/EEL/RAN/AAQ/0519B Application No: 11915490, Date: 20.12.2021, Time: 02:37 Report Issue Date: 27/12/2021 Protocol: IS Method & CPCB Guideline	Customer Rept.: Sri Sharat Kumar Vidyarthi Sample Drawn by: Rajiv Kumar Singh & team

METEROLOGICAL INFORMATION				Location & Co-ordinate	
Average Temp (°C)	Average Relative Humidity (%)	Average Barometric Pressure (mm of Hg)	Weather Condition:	N ₁	Near South Corner of Plant 23°29'41.27" N 84°49'3.43" E
16	68	761.3	Sunny	N ₂	Near East Corner of Plant 23°29'44.66" N 84°49'6.57" E
				N ₃	Near West Corner of Plant 23°29'44.78" N 84°49'3.42" E

CPCB Limit in dB(A)			
Area Code	Category of Area Zone	Day Time	Night Time
		(6 AM to 10 PM)	(10 PM to 6 AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

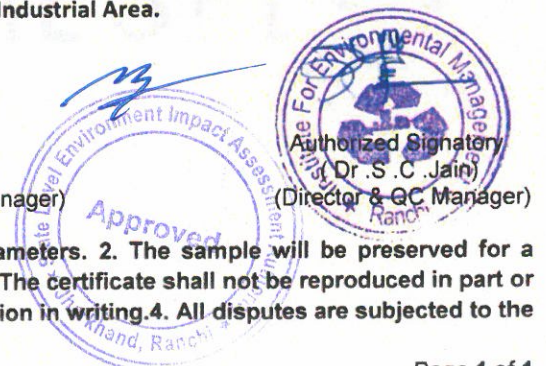
Result (4 hours Interval) L _{eq}								
Equivalent Continuous Sound Level (L _{eq}) in dB								
Time Weighted Average 'A' of the level of Sound in decibels on scale A								
Sound Level-L _{eq} dB(A)								
Day Time (6 AM to 10PM)						Night Time (10 PM to 6 AM)		
Sampling Points	(06 AM-10 AM)	(10 AM-02 PM)	(02 PM-06 PM)	(06 PM-10 PM)	Avg.	(10 PM-02 AM)	(02 AM-06 AM)	Avg.
N ₁	64.36	70.39	67.45	61.37	65.89	56.54	50.45	53.49
N ₂	67.82	73.61	70.64	64.66	69.18	59.69	53.72	56.70
N ₃	66.54	72.27	69.39	63.25	67.86	58.86	52.64	55.75

----End of Reports----

Remarks: - Average values are observed well within the prescribed limit for Industrial Area.

Shreyansh
Tested by
Analyst

(Signature)
Checked By
Sunil Kumar Singh
(Lab In charge cum Technical Manager)



Note: -1. The results refer only to the tested sample of applicable parameters. 2. The sample will be preserved for a maximum of 7 days on request from the date of issue of the certificate. 3. The certificate shall not be reproduced in part or full and can't be used as evidence or in court of law without prior permission in writing. 4. All disputes are subjected to the Ranchi jurisdiction



Sun-Tech

40 P Tupudana Industrial Area, Ranchi-834003, Jharkhand

TEL.- 7808266661/2/3



TEST REPORT

Test Report No.	ST/TR/22/02/28	Date of Receipt of Test Item	24-02-2022
Job Code	M1320222	Page	1 of 1
Report Date	25-02-2022	Date of Completion of Test	25-02-2022
Application No	12572475	Application Date	17-02--2022 (3:05)
ULR	T C 5 4 3 2 2 2 0 0 0 0		0 4 2 2 8 F
Customer's Name & Address	M/S SHRI GANPATI BRICKS AT- KANDRA, P.S SENHA, DIST- LOHARDAGA.	 Certificate no. TC-5132	
Reference & date	NIL		
Discipline	CHEMICAL	Group	ATMOSPHERIC POLLUTION
Material/ Item	ABSORBED POLLUTANT IN GFA & IMPINGER FROM SITE		
Sampling Location	NORTH:- 23°19'23.2"	EAST:- 84°36' 45.5"	
Nature of Sample	AMBIENT AIR		
Nature of Industry	BRICKS		
Date of Sampling	22-02-2022		

CHEMICAL ANALYSIS OF AMBIENT AIR QUALITY

S. NO.	SAMPLE NO.	PARAMETERS	TEST METHOD	OUTLET				LIMIT*
				Near Main Gate	Near Office Room	Back Side	AVERAGE	
1	99372	Particulate Matter (PM ₁₀), µg/m ³	IS: 5182 (P-23):2006	74.76	74.92	77.41	75.70	100 µg/m ³ , Max.
2	99373	Sulphur Dioxide (SO ₂), µg/m ³	IS: 5182 (P-2): 2001	9.19	9.19	9.18	9.19	80 µg/m ³ , Max.
3	99374	Nitrogen Dioxide (NO ₂), µg/m ³	IS: 5182 (P-6): 2006	30.01	30.00	29.99	30.00	80 µg/m ³ , Max.
4	99375	Particulate Matter (PM _{2.5}), µg/m ³	IS: 5182 (P-24):2019	47.19	46.94	46.92	47.02	60 µg/m ³ , Max.

Note:- *As per National Ambient Air Quality Standards by Central Pollution Control Board (CPCB) Notification, New Delhi 18/11/2009

REMARK (if any) :- OK

*****END OF REPORT*****

Done By:- Goutam Mahato, Sanup.kr.Mahto

SR. SCIENTIST:- GOUTAM MAHATO

Sanup K.R. Mahto
SR. SCIENTIST SANUP.KR.MAHTO



Preeti Varma
Authorized Signatory

DECLARATION:

- Sample will be retained for three months
- The test results relates only to the sample submitted for testing and as per applicable parameters. Product endorsement is neither inferred nor implied
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- Statement of conformity (eg Pass/Fail) to Specification are made in this report without taking measurement uncertainty into account except when requested by the customer Where statement of conformity are made in this report the following decision rules are applied * PASS - Result within limits/ specification * FAIL - Result exceed limit/specification

Doc. No.F01(7.8) Amnd.05




Sun-Tech

40 P Tupudana Industrial Area, Ranchi-834003, Jharkhand

TEL.- 7808266661/2/3



TEST REPORT

Test Report No.	ST/TR/22/02/ 4229	Date of Receipt of Test Item	24-02-2022	
Job Code	M1320222	Page	1 of 1	
Report Date	25-02-2022	Date of Completion of Test	25-02-2022	
Application No	12572475	Application Date	17-02--2022 (3:05)	
ULR	T C 5 4 3 2 2 2 0 0 0 0		0 4 2 2 9 F	
Customer's Name & Address	M/S SHRI GANPATI BRICKS AT- KANDRA, P.S SENHA, DIST- LOHARDAGA.	 Certificate. no. TC-5432		
Reference & date	NIL			
Discipline	CHEMICAL	Group	ATMOSPHERIC POLLUTION	
Material/ Item	NOISE QUALITY RECORDED IN SOUND LEVEL METER AT SITE			
Sampling Location	NORTH:- 23°19'23.2"	EAST:- 84°36' 45.5"		
Operational Status	YES	Types OF Noise (Indoor/Outdoor)	OUTDOOR	
Date of Monitoring	22-02-2022	Weather Condition During Observation	CLEAR	
Time of Observation	DAY & NIGHT			
RESULT OF NOISE QUALITY		SAMPLE No.:- 99376		
S.No.	PARAMETERS	UNIT	NOISE LEVEL	REMARKS
1	Ambient Noise Level in Leq (DAY)	db (A)	64	OK
2	Ambient Noise Level in Leq (NIGHT)	Ranchi db (A)	52	OK
Note :- Limit:-75 dB, as per IS: 9989 - 1981.				
*****END OF REPORT*****				

Done By:- Goutam Mahato, Sanup.kr.Mahto

Goutam Mahato

SR. SCIENTIST:- GOUTAM MAHATO



Sanup kr. Mahto

SR. SCIENTIST SANUP.KR.MAHTO



Preeti Varma

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Doc. No.F01(7.8) Amnd.05



Sun-Tech

40 P Tupudana Industrial Area, Ranchi-834003, Jharkhand
TEL.- 7808266661/2/3



TEST REPORT

Test Report No.	ST/TR/22/02/ 4230	Date of Receipt of Test Item	24-02-2022															
Job Code	M1320222	Page	1 of 1															
Report Date	25-02-2022	Date of Completion of Test	25-02-2022															
Application No	12572475	Application Date	17-02--2022 (3:05)															
ULR	T	C	5	4	3	2	2	2	0	0	0	0						
Customer's Name & Address	M/S SHRI GANPATI BRICKS AT- KANDRA, P.S SENHA, DIST- LOHARDAGA.																	
Reference & date	NIL																	
Material/ Item	STACK EMISSION MONITORING																	
Stack Name	CHIMNEY						Total Number of Oven						135					
Stack Height from ground level	41.15 M	Stack Height from roof level	26 M	PRODUCTION CAPACITY	6 LAKHS BRICKS	Stack Temp.	112° C											
Average Velocity (m/sec.)	5.38	Fuel Used	COAL 180 TONN	Flow rate (Nm ³ /Min.)	17	Stack Dia	1.2 M											
Nature of Industry	BRICKS																	
Date of Sampling	22-02-2022																	
CHEMICAL ANALYSIS OF STACK EMISSION																		
S. NO.	SAMPLE No.	PARAMETERS				TEST METHOD				UNIT	RESULT							
1	99377	PM (Particulate Matter)				IS: 11255 (Part-1): 1985				mg/Nm ³	99.94							
2	99378	SO ₂ (Sulphur Dioxide)				IS: 11255 (Part-2): 1985				mg/Nm ³	12.24							
3	99379	NO ₂ (Oxide of Nitrogen)				IS: 11255 (Part-7): 2005				mg/Nm ³	22.28							
REMARK (if any) :- OK																		
*****END OF REPORT*****																		

Done By:- Goutam Mahato, Sanup.kr.Mahto

Goutam Mahato

SR. SCIENTIST:- GOUTAM MAHATO



SR. SCIENTIST SANUP.KR.MAHTO

Sanup Kr. Mahto

Preeti Varma
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Doc. No.F01(7.8) Amnd.05



BIOCRAT ENVIRONMENTAL SERVICES

Accredited by JSPCB

Certified by: ISO 9001:2015(QMS) & 45001:2018(OHSAS)

Sarveshwari Nagar, Itki Road, Bajra, P.O: Hehal, Dist: Ranchi. PIN: 834005 Email Id. - biocratenv@gmail.com,
Mob.- 7369019812, 8340466751, 9608708172

Test Reports (Effluent Water)

Test Report No : BES/JSPCB/EW/AUG/2022-23/033A
Application No : 14013566; dated: 16-08-2022 at 05:54
Report Issue Date : 20/08/2022

General Information

Name of Client & Address : St. Ursula Hospital Lohardaga
College Road, Lohardaga
Dist – Lohardaga
Type of Plant / Industry : Hospital

Sample Description

Field Data Sheet Code : BES/JSPCB/EW/14013566
Type of Sample : ETP Water (Treated)
Capacity of ETP : 35 KLD
Sampling Date : 17/08/2022
Sample Receiving & Registration Date : 17/08/2022
Sampling Location : Garden Area (Before Municipal Drain)
Sampling Point : ETP Outlet
Sample Collected by : BES Team
Protocol : IS Methods

Sl.No.	Tested Parameter	Unit	Method No.	Acceptable Limit * (Inland Surface Water)	Results
1.	pH	...	IS 3025 (Part-11)	5.5-9.0	7.37
2.	Total Suspended Solids	mg/L	IS 3025 (Part-17)	100	52.0
3.	COD	mg/L	IS 3025 (Part-58)	250	118
4.	BOD (3Days incubation 27°C)	mg/L	IS 3025 (Part-44)	30	9.2
5.	Oil & Grease	mg/L	IS 3025 (Part-39)	10	<4.0

-End of Report-

Results are nearest to round figure accordance with IS 2:1960.

Note:- 1. * Acceptable Limit = GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART-A : EFFLUENTS, Environment (Protection) Second Amendment Rules, 1993 notified vide G.S.R. 422(E) dated 19.05.1993, published in the Gazette No. 174 dated 19.05.1993.



Authorized Signatory
In-Charge



INSTITUTE FOR ENVIRONMENTAL MANAGEMENT ECO ENVIRO LAB

ISO 9001:2015 (QMS), ISO 45001:2018 (OHSAS); NABL & JSPCB Accreditation

2208/A, Jagarnath Nagar, Pundag Road, Near Anand Gas Godown, Argora, Ranchi, Jharkhand – 834012.

Email ID – iem2012@Rediffmail.com, Mob. No. – 8407804253.

Test Report Ambient Air Quality

Client Name & Address: Tarkeshwar Prasad Shikhar, At- Masmano, Mauza- Masmano, PS- Bhandra, Dist- Lohardaga	Sample Details: Type of Industry: Stone Crusher Sample Description: Ambient Air Sampling Date: 20/12/2021-21/12/2021 Sample Registration Date: 21/12/2021
Test Report No: IEM/EEL/RAN/AAQ/0517A Application No: 11872127, Date: 17.12.2021, Time: 02:15 Report Issue Date: 05/01/2022 Protocol: IS Method & CPCB Guideline	Customer Rept.: Sri Tarkeshwar Prasad Sample Drawn by: Rajiv Kumar Singh & team

METEROLOGICAL INFORMATION				
Average Temp(°C)	Average Relative Humidity (%)	Average Barometric Pressure (mm of Hg)	Weather Condition	Wind Direction
18	52	706.8	Sunny	NNW
Concentration in Ambient Air (Industrial, Residential, Rural and Other Area) Time Weighted Average- 24 Hours				
Parameters	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	
Method Name	Improved West & Gaeke method	Jackob & Hochheiser Modified Method	Gravimetric Method	
NAAQMS/36/2012-13	IS 5182 (Part-02)	IS 5182 (Part-06)	IS 5182 (Part-23)	
Location (Inside the Plant Premises)	Sampling Point Coordinates	Concentration in Ambient Air as per NAAQS- 2009 For 24 Hours		
		80	80	100
Near South East Corner	23°20'31.94"N 84°44'40.58"E	10.32	12.41	86
Near North East Corner	23°20'32.74"N 84°44'40.55"E	9.25	11.34	78
Near North West Corner	23°20'32.95"N 84°44'39.64"E	9.87	11.79	82

----End of Report----



Shyamsundar

Tested by
Analyst

(Signature)
Checked By
(Sunil Kumar Singh)

(Lab In charge cum Technical Manager)

(Signature)

(Signature)
Authorized Signatory
(Dr. S. C. Jain)
(Director & QC Manager)

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Email ID – iem2012@Rediffmail.com, Mob. No. – 8407804253

Monitoring Report Ambient Noise levels

Client Name & Address: <p style="text-align: center;">Tarkeshwar Prasad Shikhar, At- Masmano, Mauza- Masmano, PS- Bhandra, Dist- Lohardaga</p>	Sample Details: Type of Industry: Stone Crusher Sample Description: Ambient Noise Sampling Date: 20/12/2021-21/12/2021 Sample Registration Date: 21/12/2021
Test Report No: IEM/EEL/RAN/NOISE/0517A Application No: 11872127, Date: 17.12.2021, Time: 02:15 Report Issue Date: 05/01/2022 Protocol: IS Method & CPCB Guideline	Customer Rept.: Sri Tarkeshwar Prasad Sample Drawn by: Rajiv Kumar Singh & team

METEROLOGICAL INFORMATION				Location & Co-ordinate	
Average Temp (°C)	Average Relative Humidity (%)	Average Barometric Pressure (mm of Hg)	Weather Condition:	N ₁	Near South East Corner of Plant 23°20'31.75" N 84°44'40.59" E
18	52	706.8	Sunny	N ₂	Near North East Corner of Plant 23°20'32.65" N 84°44'40.69" E
				N ₃	Near North West Corner of Plant 23°20'33.18" N 84°44'39.78" E

CPCB Limit in dB(A)			
Area Code	Category of Area Zone	Day Time	Night Time
		(6 AM to 10 PM)	(10 PM to 6 AM)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

Result (4 hours Interval) L _{eq}								
Equivalent Continuous Sound Level (L _{eq}) in dB								
Time Weighted Average 'A' of the level of Sound in decibels on scale A								
Sound Level-L _{eq} dB(A)								
Sampling Points	Day Time (6 AM to 10PM)					Night Time (10 PM to 6 AM)		
	(06 AM-10 AM)	(10 AM-02 PM)	(02 PM-06 PM)	(06 PM-10 PM)	Avg.	(10 PM-02 AM)	(02 AM-06 AM)	Avg.
N ₁	66.36	73.72	70.51	63.37	68.49	49.35	45.69	47.52
N ₂	63.52	70.69	67.64	60.28	65.53	46.64	42.47	44.55
N ₃	64.48	71.24	68.18	61.54	66.36	48.28	44.25	46.26

----End of Reports----

Remarks: - Average values are observed well within the prescribed limit for Industrial Area.

Tested by
Analyst

Checked By
(Sunil Kumar Singh)
(Lab In charge cum Technical Manager)

Authorized Signatory
(Dr. S. C. Jain)
(Director & QC Manager)

Note: -1. The results refer only to the tested sample of applicable parameters. -2. The sample will be preserved for a maximum of 7 days on request from the date of issue of the certificate. 3. The certificate shall not be reproduced in part or full and can't be used as evidence or in court of law without prior permission in writing. 4. All disputes are subjected to the Ranchi jurisdiction

Calculation of AQI

Date 23-Sep-23		Station City State		Air Quality Index
		BHANDRA		
Pollutants	concentration in $\mu\text{g}/\text{m}^3$ (except for CO)	Sub-Index	check	Air Quality Index
	PM10 24-hr avg	56	1	
	PM2.5 24-hr avg	58	1	58
	SO2 24-hr avg	10	1	
	NOx 24-hr avg	28	1	AQI =
	*CO (mg/m3) max 8-hr	0	0	
	O3 max 8-hr	0	0	58
	NH3 24-hr avg	0	0	
* Concentrations of minimum three pollutants are required; one of them should be PM10 or PM2.5				
* The check displays "1" when a non-zero value is entered				
Good (0-50)	Minimal Impact	Poor (201-300)	Breathing discomfort to people on prolonged exposure	
Satisfactory (51-100)	Minor breathing discomfort to sensitive people	Very Poor (301-400)	Respiratory illness to the people on prolonged exposure	
Moderate (101-200)	Breathing discomfort to the people with lung, heart disease, children and older adults	Severe (>401)	Respiratory effects even on healthy people	



Calculation of AQI

Date 23-Sep-23	Station City State	KAIRO	
Pollutants	concentration in $\mu\text{g}/\text{m}^3$ (except for CO)	Sub-Index	Air Quality Index
PM10	24-hr avg 53.00	53	62
PM2.5	24-hr avg 37.00	62	
SO2	24-hr avg 6.70	8	
NOx	24-hr avg 23.50	29	
*CO (mg/m3)	max 8-hr 0.00	0	
O3	max 8-hr 0.00	0	
NH3	24-hr avg 0.00	0	
* Concentrations of minimum three pollutants are required; one of them should be PM10 or PM2.5			
* The check displays "1" when a non-zero value is entered			
Good (0-50)	Minimal Impact	Poor (201-300)	Breathing discomfort to people on prolonged exposure
Satisfactory (51-100)	Minor breathing discomfort to sensitive people	Very Poor (301-400)	Respiratory illness to the people on prolonged exposure
Moderate (101-200)	Breathing discomfort to the people with lung, heart disease, children and older adults	Severe (>401)	Respiratory effects even on healthy people



Calculation of AQI

Date 23-Sep-23	Station City State KISKO	Air Quality Index	
Pollutants	concentration in µg/m3 (except for CO)	Sub-Index	Air Quality Index 55
PM10	24-hr avg 55.00	55	
PM2.5	24-hr avg 33.00	55	
SO2	24-hr avg 8.30	10	
NOx	24-hr avg 21.70	27	
*CO (mg/m3)	max 8-hr 0.00	0	
O3	max 8-hr 0.00	0	
NH3	24-hr avg 0.00	0	
* Concentrations of minimum three pollutants are required; one of them should be PM10 or PM2.5			
* The check displays "1" when a non-zero value is entered			
check			
			AQI =
			55
Good (0-50)	Minimal Impact	Poor (201-300)	Breathing discomfort to people on prolonged exposure
Satisfactory (51-100)	Minor breathing discomfort to sensitive people	Very Poor (301-400)	Respiratory illness to the people on prolonged exposure
Moderate (101-200)	Breathing discomfort to the people with lung, heart disease, children and older adults	Severe (>401)	Respiratory effects even on healthy people



Calculation of AQI

Date 23-Sep-23		Station City State		KURU	
Pollutants		concentration in µg/m3 (except for CO)	Sub-Index	Air Quality Index	
PM10	24-hr avg	54.00	54	1	
PM2.5	24-hr avg	38.00	63	1	
SO2	24-hr avg	7.50	9	1	
NOx	24-hr avg	21.50	27	1	
*CO (mg/m3)	max 8-hr	0.00	0	0	
O3	max 8-hr	0.00	0	0	
NH3	24-hr avg	0.00	0	0	
* Concentrations of minimum three pollutants are required; one of them should be PM10 or PM2.5					
* The check displays "1" when a non-zero value is entered					
Good (0-50)	Minimal Impact	Poor (201-300)		Breathing discomfort to people on prolonged exposure	
Satisfactory (51-100)	Minor breathing discomfort to sensitive people	Very Poor (301-400)		Respiratory illness to the people on prolonged exposure	
Moderate (101-200)	Breathing discomfort to the people with lung, heart disease, children and older adults	Severe (>401)		Respiratory effects even on healthy people	

AQI = 63



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Calculation of AQI

Date 23-Sep-23		Station City State LOHARDAGA		Air Quality Index	
Pollutants		concentration in µg/m3 (except for CO)	Sub-Index	check	
PM10	24-hr avg	51.00	51	1	<div style="background-color: green; color: white; text-align: center; padding: 20px; font-size: 24px; font-weight: bold;">65</div>
PM2.5	24-hr avg	39.00	65	1	
SO2	24-hr avg	6.80	9	1	
NOx	24-hr avg	25.00	31	1	
*CO (mg/m3)	max 8-hr	0.00	0	0	
O3	max 8-hr	0.00	0	0	
NH3	24-hr avg	0.00	0	0	
<p>* Concentrations of minimum three pollutants are required; one of them should be PM10 or PM2.5</p> <p>* The check displays "1" when a non-zero value is entered</p>					
Good (0-50)		Minimal Impact		Poor (201-300)	
Satisfactory (51-100)		Minor breathing discomfort to sensitive people		Very Poor (301-400)	
Moderate (101-200)		Breathing discomfort to the people with lung, heart disease, children and older adults		Severe (>401)	
				Breathing discomfort to people on prolonged exposure	
				Respiratory illness to the people on prolonged exposure	
				Respiratory effects even on healthy people	



Calculation of AQI

Date 23-Sep-23	Station City State PESHRAR	Air Quality Index	
Pollutants	concentration in $\mu\text{g}/\text{m}^3$ (except for CO)	Sub-index	check
PM10	24-hr avg 58.00	58	1
PM2.5	24-hr avg 31.00	52	1
SO2	24-hr avg 8.90	11	1
NOx	24-hr avg 27.00	34	1
*CO (mg/m3)	max 8-hr 0.00	0	0
O3	max 8-hr 0.00	0	0
NH3	24-hr avg 0.00	0	0
* Concentrations of minimum three pollutants are required; one of them should be PM10 or PM2.5			
* The check displays "1" when a non-zero value is entered			
Good (0-50)	Minimal Impact	Poor (201-300)	Breathing discomfort to people on prolonged exposure
Satisfactory (51-100)	Minor breathing discomfort to sensitive people	Very Poor (301-400)	Respiratory illness to the people on prolonged exposure
Moderate (101-200)	Breathing discomfort to the people with lung, heart disease, children and older adults	Severe (>401)	Respiratory effects even on healthy people

AQI =

58



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Calculation of AQI

Date 23-Sep-23		Station City State		SENHA		Air Quality Index	
Pollutants		concentration in $\mu\text{g}/\text{m}^3$ (except for CO)		Sub-Index		check	
PM10	24-hr avg	50.00	50	1			
PM2.5	24-hr avg	32.00	53	1			
SO2	24-hr avg	6.50	8	1			
NOx	24-hr avg	25.50	32	1			
*CO (mg/m3)	max 8-hr	0.00	0	0			
O3	max 8-hr	0.00	0	0			
NH3	24-hr avg	0.00	0	0			
* Concentrations of minimum three pollutants are required; one of them should be PM10 or PM2.5							
* The check displays "1" when a non-zero value is entered							
Good (0-50)	Minimal Impact		Poor (201-300)		Breathing discomfort to people on prolonged exposure		
Satisfactory (51-100)	Minor breathing discomfort to sensitive people		Very Poor (301-400)		Respiratory illness to the people on prolonged exposure		
Moderate (101-200)	Breathing discomfort to the people with lung, heart disease, children and older adults		Severe (>401)		Respiratory effects even on healthy people		

53

AQI =



[Handwritten Signature]



VISION EARTH CONSULTANCY (VEC)

(ENVIRONMENTAL LABORATORY DIVISION)

Accredited By: - Jharkhand State Pollution
Control Board (JSPCB) B-2062
Certified By: - ISO 14001: 2015, ISO 45001: 2018,



TEST REPORT OF AMBIENT AIR QUALITY MONITORING

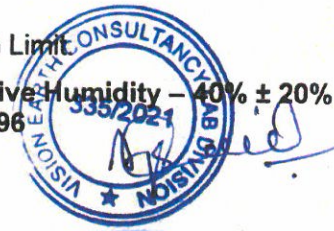
Test Report No. : VEC/RNC/23-24/96		Report Release Date : 23.09.2023				
Work Order No. : ----		Work Order Date : 20.09.2023				
CUSTOMER DETAILS		SAMPLE DETAILS				
Customer Name	BHANDRA	Sampling Date	: 21.09.2023			
Address		Sample Received Date	: 22.09.2023			
		Type of Sample	: Ambient Air			
		Sampling Procedure	: VEC/DOC/SMPL/01			
		Sample Drawn By	: VEC			
Plant Status	Operational	Period of Analysis	: 22.09.2023 to 23.09.2023			
METEOROLOGICAL INFORMATION						
1	Average Temperature (°C) : 26°C	2	Barometric Pressure (mmHg) : 753 mmHg			
3	Relative Humidity (%) : 58%	4	Weather Condition : Clear			
Parameters		Particulate Matter (PM10)	Particulate Matter (PM2.5)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)	
Test Protocol		IS 5182 (P23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)	
Locations	Limits		100	60	80	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³
BHANDRA	10:09AM-02:10PM	57	35	9.7	26.1	
	02:10PM-06:11PM			9.1	20.6	
	06:16PM-10:18PM	55		8.4	21.6	
	10:18PM-02:19AM			7.3	23.8	
	02:24AM-06:25AM	56		6.2	22.7	
	06:25AM-10:26AM			5.7	21.3	
Latitude: 23°21'46.66"N	Average		56	35	7.7	22.7
Longitude: 84°46'59.16"E						

*****End of Report*****

1. **Remarks:** - All values are observed will within the limit.
2. **Abbreviation:-** MDL: Minimum Detection Limit, BDL: Below Detection Limit
3. **Environmental Condition of the Lab:** Temperature: 25 ± 2°C, Relative Humidity - 40% ± 20% in all testing areas as per IS 196:1996

Krishna Kumar
Quality Manager

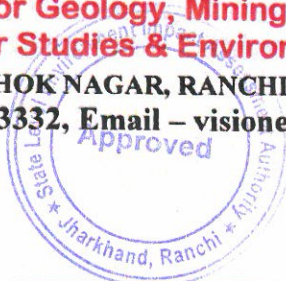
KRISHNA KUMAR
(Quality Manager)



AJAY KUMAR SINGH
Issued By

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VISION EARTH CONSULTANCY (VEC)

(ENVIRONMENTAL LABORATORY DIVISION)

Accredited By: - Jharkhand State Pollution
Control Board (JSPCB) B-2062
Certified By: - ISO 14001: 2015, ISO 45001: 2018,



TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Test Report No. : VEC/RNC/23-24/97		Report Release Date : 23.09.2023				
Work Order No. : ---		Work Order Date : 20.09.2023				
CUSTOMER DETAILS		SAMPLE DETAILS				
Customer Name	KAIRO	Sampling Date	: 21.09.2023			
Address		Sample Received Date	: 22.09.2023			
		Type of Sample	: Ambient Air			
		Sampling Procedure	: VEC/DOC/SMPL/01			
		Sample Drawn By	: VEC			
Plant Status	Operational	Period of Analysis	: 22.09.2023 to 23.09.2023			
METEOROLOGICAL INFORMATION						
1	Average Temperature (°C) : 28 °C	2	Barometric Pressure (mmHg) : 752 mmHg			
3	Relative Humidity (%) : 57%	4	Weather Condition : Clear			
Parameters		Particulate Matter (PM10)	Particulate Matter (PM2.5)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)	
Test Protocol		IS 5182 (P23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)	
Locations	Limits		100	60	80	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³
KAIRO	10:15AM-02:14PM	51	37	8.1	24.5	
	02:14 PM-06:16PM			8.9	23.7	
	06:22PM-10:23PM	55		7.3	22.6	
	10:23PM-02:25AM	52		6.8	23.5	
	02:30AM-06:31AM	52		5.3	24.9	
	06:31AM-10:33AM	52		4.1	21.8	
Latitude: 23°26'27.32"N	Average	53	37	6.7	23.5	
Longitude : 84°50'31.68"E						

*****End of Report*****

- Remarks:** - All values are observed will within the limit.
- Abbreviation:-** MDL: Minimum Detection Limit, BDL: Below Detection Limit.
- Environmental Condition of the Lab:** Temperature: 25 ± 2°C, Relative Humidity - 40% ± 20% in all testing areas as per IS 196:1996

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Certified By: - ISO 14001: 2015, ISO 45001: 2018,



TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Test Report No. : VEC/RNC/23-24/98		Report Release Date : 23.09.2023				
Work Order No. : ---		Work Order Date : 20.09.2023				
CUSTOMER DETAILS		SAMPLE DETAILS				
Customer Name	KISKO	Sampling Date	: 21.09.2023			
Address		Sample Received Date	: 22.09.2023			
		Type of Sample	: Ambient Air			
		Sampling Procedure	: VEC/DOC/SMPL/01			
		Sample Drawn By	: VEC			
Plant Status	Operational	Period of Analysis	: 22.09.2023 to 23.09.2023			
METEOROLOGICAL INFORMATION						
1	Average Temperature (°C) : 26 °C	2	Barometric Pressure (mmHg) : 753 mmHg			
3	Relative Humidity (%) : 60%	4	Weather Condition : Clear			
Parameters		Particulate Matter (PM10)	Particulate Matter (PM2.5)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)	
Test Protocol		IS 5182 (P23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)	
Locations	Limits		100	60	80	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³
KISKO	10:11AM-02:12PM	57	33	10.8	20.7	
	02:12PM-06:14PM			9.6	23.5	
	06:19PM-10:20PM	55		8.2	20.3	
	10:20PM-02:22AM			7.6	21.7	
	02:27AM-06:28AM	54		7.1	22.3	
	06:28AM-10:29AM			6.5	21.8	
Latitude: 23°31'3.03"N	Average	55	33	8.3	21.7	
Longitude : 84°39'53.43"E						

*****End of Report*****

1. **Remarks:** - All values are observed will within the limit.
2. **Abbreviation:-** MDL: Minimum Detection Limit, BDL: Below Detection Limit.
3. **Environmental Condition of the Lab:** Temperature: 25 ± 2°C, Relative Humidity – 40% ± 20% in all testing areas as per IS 196:1996

Krishna Kumar

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TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Test Report No. : VEC/RNC/23-24/99		Report Release Date : 23.09.2023				
Work Order No : ---		Work Order Date : 20.09.2023				
CUSTOMER DETAILS		SAMPLE DETAILS				
Customer Name	KURU	Sampling Date	: 21.09.2023			
Address		Sample Received Date	: 22.09.2023			
		Type of Sample	: Ambient Air			
		Sampling Procedure	: VEC/DOC/SMPL/01			
	Sample Drawn By	: VEC				
Plant Status	Operational	Period of Analysis	: 22.09.2023 to 23.09.2023			
METEOROLOGICAL INFORMATION						
1	Average Temperature (°C) : 26°C	2	Barometric Pressure (mmHg) : 754 mmHg			
3	Relative Humidity (%) : 62%	4	Weather Condition : Clear			
Parameters		Particulate Matter (PM10)	Particulate Matter (PM2.5)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)	
Test Protocol		IS 5182 (P-23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)	
Locations	Limits		100	60	80	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³
KURU	10:14AM-02:15PM	53	38	8.4	23.9	
	02:15PM-06:20PM			9.6	23.4	
	06:25PM-10:15PM	59		8.3	22.3	
	10:15PM-02:15AM	51		7.1	20.9	
	02:20AM-06:10AM			6.3	19.7	
	06:10AM-10:15AM			5.7	18.9	
Latitude: 23°32'20.11"N	Average	54	38	7.5	21.5	
Longitude : 84°48'42.79"E						

*****End of Report*****

1. **Remarks:** - All values are observed will within the limit.
2. **Abbreviation:-** MDL: Minimum Detection Limit, BDL: Below Detection Limit.
3. **Environmental Condition of the Lab:** Temperature: 25 ± 2°C, Relative Humidity 40% ± 20% in all testing areas as per IS 196:1996



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TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Test Report No. : VEC/RNC/23-24/100		Report Release Date : 23.09.2023				
Work Order No. : ---		Work Order Date : 20.09.2023				
CUSTOMER DETAILS		SAMPLE DETAILS				
Customer Name	LOHARDAGA	Sampling Date	: 21.09.2023			
Address		Sample Received Date	: 22.09.2023			
		Type of Sample	: Ambient Air			
		Sampling Procedure	: VEC/DOC/SMPL/01			
		Sample Drawn By	: VEC			
Plant Status	Operational	Period of Analysis	: 22.09.2023 to 23.09.2023			
METEOROLOGICAL INFORMATION						
1	Average Temperature (°C) : 25 °C	2	Barometric Pressure (mmHg) : 753 mmHg			
3	Relative Humidity (%) : 56%	4	Weather Condition : Clear			
Parameters		Particulate Matter (PM10)	Particulate Matter (PM2.5)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)	
Test Protocol		IS 5182 (P23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)	
Locations	Limits		100	60	80	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³
LOHARDAGA	11:00AM-3:00PM	52	39	7.8	26.9	
	3:05PM-7:05PM			9.6	26.7	
	7:15PM-11:15PM	50		7.3	25.8	
	11:20PM-3:20AM			6.4	24.7	
	3:25AM-3:25AM	51		5.2	22.6	
	3:30AM-11:30AM			4.9	23.6	
Latitude: 23°27'7.58"N	Average	51	39	6.8	25.0	
Longitude : 84°41'23.58"E						

*****End of Report*****

1. **Remarks:** - All values are observed will within the limit.
2. **Abbreviation:-** MDL: Minimum Detection Limit, BDL: Below Detection Limit.
3. **Environmental Condition of the Lab:** Temperature: 25 ± 2°C, Relative Humidity: 40% ± 20% in all testing areas as per IS 196:1996

Krishna Kumar

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[Signature]





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Certified By: - ISO 14001: 2015, ISO 45001: 2018,



TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Test Report No. : VEC/RNC/23-24/101		Report Release Date : 23.09.2023				
Work Order No : ----		Work Order Date : 20.09.2023				
CUSTOMER DETAILS		SAMPLE DETAILS				
Customer Name	PESHRAR	Sampling Date	: 21.09.2023			
Address		Sample Received Date	: 22.09.2023			
		Type of Sample	: Ambient Air			
		Sampling Procedure	: VEC/DOC/SMPL/01			
		Sample Drawn By	: VEC			
Plant Status	Operational	Period of Analysis	: 22.09.2023to 23.09.2023			
METEOROLOGICAL INFORMATION						
1	Average Temperature (°C) : 26 °C	2	Barometric Pressure (mmHg) : 754 mmHg			
3	Relative Humidity (%) : 57%	4	Weather Condition : Clear			
Parameters		Particulate Matter (PM10)	Particulate Matter (PM2.5)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)	
Test Protocol		IS 5182 (P23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)	
Locations	Limits		100	60	80	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³
PESHRAR	11:10AM-3:10PM		55	31	11.9	29.4
	3:15PM-7:15PM				10.4	28.5
	7:20PM-11:20PM		60		9.5	27.7
	11:25PM-3:25AM				8.3	26.4
	3:30AM-7:30AM		58		7.4	24.8
	7:35AM-11:35AM				6.2	25.6
Latitude: 23°33'11.81"N		Average	58	31	8.9	27.0
Longitude : 84°32'14.68"E						

*****End of Report*****

1. **Remarks:** - All values are observed will within the limit.
2. **Abbreviation:-** MDL: Minimum Detection Limit, BDL: Below Detection Limit
3. **Environmental Condition of the Lab:** Temperature: 25 ± 2°C, Relative Humidity: 40% ± 20% in all testing areas as per IS 196:1996

Krishna Kumar

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Certified By: - ISO 14001: 2015, ISO 45001: 2018,



TEST REPORT OF AMBIENT AIR QUALITY MONITORING

Test Report No. : VEC/RNC/23-24/102		Report Release Date : 23.09.2023				
Work Order No. : ---		Work Order Date : 20.09.2023				
CUSTOMER DETAILS		SAMPLE DETAILS				
Customer Name	SENHA	Sampling Date	: 21.09.2023			
Address		Sample Received Date	: 22.09.2023			
		Type of Sample	: Ambient Air			
		Sampling Procedure	: VEC/DOC/SMPL/01			
		Sample Drawn By	: VEC			
Plant Status	Operational	Period of Analysis	: 22.09.2023 to 23.09.2023			
METEOROLOGICAL INFORMATION						
1	Average Temperature (°C) : 28°C	2	Barometric Pressure (mmHg) : 752 mmHg			
3	Relative Humidity (%) : 59%	4	Weather Condition : Clear			
Parameters		Particulate Matter (PM10)	Particulate Matter (PM2.5)	Sulphur Di-Oxide (SO₂)	Nitrogen Di-Oxide (NO₂)	
Test Protocol		IS 5182 (P23)	IS 5182 (P-24)	IS 5182 (P-2)	IS 5182 (P-6)	
Locations	Limits		100	60	80	80
	Time	Unit	µg/m ³	µg/m ³	µg/m ³	µg/m ³
SENHA	11:00AM-3:00PM	49	32	7.6	27.7	
	3:05PM-7:05PM			5.3	26.4	
	7:15PM-11:15PM	52		7.3	25.3	
	11:20PM-3:20AM			6.8	24.6	
	3:25AM-3:25AM	50		5.9	23.7	
	3:30AM-11:30AM			6.1	25.8	
Latitude: 23°22'57.49"N	Average	50	32	6.5	25.5	
Longitude : 84°39'0.81"E						

*****End of Report*****

1. **Remarks:** - All values are observed will within the limit.
2. **Abbreviation:-** MDL: Minimum Detection Limit, BDL: Below Detection Limit
3. **Environmental Condition of the Lab:** Temperature: 25 ± 2°C, Relative Humidity: 40% ± 20% in all testing areas as per IS 196:1996

Krishna Kumar
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(Quality Manager)
Krishna Kumar
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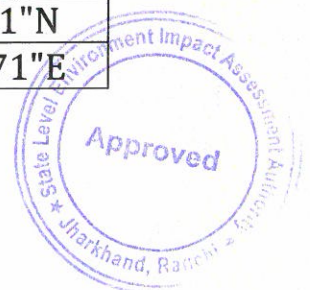
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ZONE MAP

ZONE	LIMITING COORDINATES	
Zone 1	Latitude	23°18'22.98"N to 23°21'15.20"N
	Longitude	84°35'43.74"E to 84°40'23.47"E
Zone 2	Latitude	23°18'22.67"N to 23°19'6.73"N
	Longitude	84°41'13.58"E to 84°42'37.21"E
Zone 3	Latitude	23°17'23.80"N to 23°19'53.40"N
	Longitude	84°45'17.40"E to 84°53'39.31"E
Zone 4	Latitude	23°20'43.43"N to 23°22'1.05"N
	Longitude	84°52'18.40"E to 84°54'2.60"E
Zone 5	Latitude	23°21'20.36"N to 23°24'45.54"N
	Longitude	84°46'57.00"E to 84°49'21.21"E
Zone 6	Latitude	23°21'11.63"N to 23°21'53.46"N
	Longitude	84°42'0.67"E to 84°43'10.75"E
Zone 7	Latitude	23°21'57.11"N to 23°23'4.98"N
	Longitude	84°39'50.51"E to 84°41'0.31"E
Zone 8	Latitude	23°23'30.24"N to 23°24'46.68"N
	Longitude	84°52'41.49"E to 84°53'45.32"E
Zone 9	Latitude	23°29'9.65"N to 23°31'39.69"N
	Longitude	84°50'45.58"E to 84°54'57.06"E
Zone 10	Latitude	23°29'9.74"N to 23°30'14.31"N
	Longitude	84°48'24.53"E to 84°49'45.27"E
Zone 11	Latitude	23°25'22.77"N to 23°27'20.87"N
	Longitude	84°44'1.95"E to 84°45'58.74"E
Zone 12	Latitude	23°27'54.73"N to 23°28'50.46"N
	Longitude	84°40'20.80"E to 84°41'16.64"E
Zone 13	Latitude	23°26'49.40"N to 23°27'5.51"N
	Longitude	84°37'10.71"E to 84°37'30.71"E



ZONE 1

Latitude : 23°29'30.24"N to 23°24'46.68"N
Longitude : 84°52'41.49"E to 84°53'45.32"E

Legend



2 km

Google Earth

Image © 2023 Maxar Technologies
Image © 2023 CNES / Airbus



Legend
PRA



900 m



ZONE 2
Latitude : 23°18'22.67"N to 23°19'6.73"N
Longitude : 84°41'13.58"E to 84°42'37.21"E

Google Earth

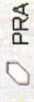
Image © 2023 Maxar Technologies
Map data © 2023 CNES/Airbus



ZONE 3

Latitude : 23°17'23.80"N to 23°19'53.40"N
Longitude : 84°45'17.40"E to 84°53'39.31"E

Legend



PRA



Google Earth

Image © 2023 Maxar Technologies
Image © 2023 CNES / Airbus
Image © 2023 Earthstar

4 km



ZONE 4

Latitude : 23°20'43.43"N to 23°22'1.05"N
Longitude : 84°52'18.40"E to 84°54'2.60"E

Legend
PRA



1 km

Google Earth

Image © 2013 Earth*



[Handwritten signature]

ZONE 5

Latitude : 23°21'20.36"N to 23°24'45.54"N
Longitude : 84°46'57.00"E to 84°49'21.21"E

Legend
PRA



Google Earth

Image © 2023 Maxar Technologies
Image © 2023 CNES / Airbus
Image © 2023 Airbus

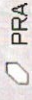


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ZONE 6

Latitude : 23°21'11.83"N to 23°21'53.46"N
Longitude : 84°42'0.67"E to 84°43'10.75"E

Legend

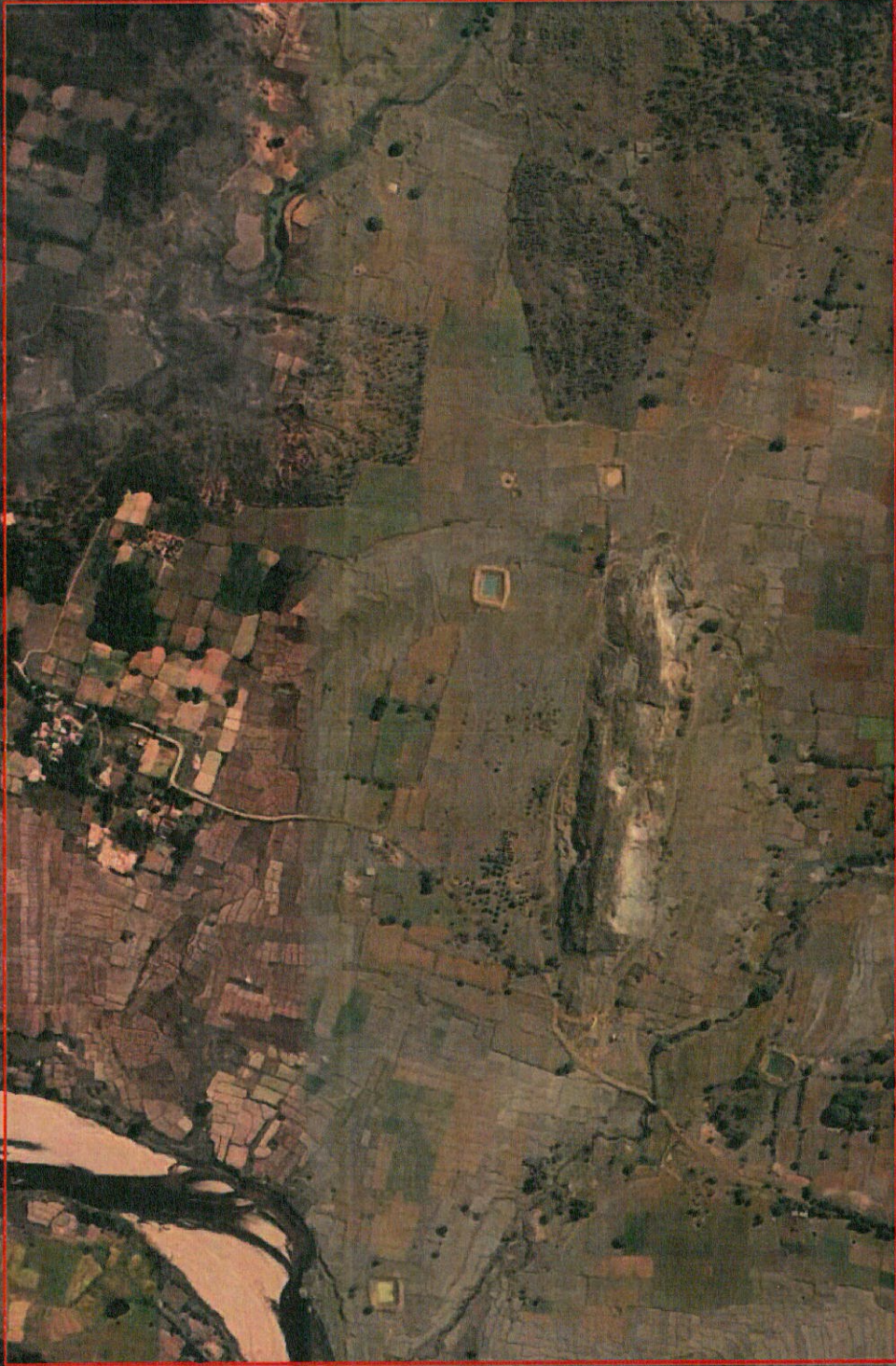


PRA

Google Earth

Image © 2023 Maxar Technologies
Map © 2023 CNES / Airbus

600 m



Impact Assessment Approved
Ranchi

ZONE 7

Latitude : 23°21'57.11"N to 23°23'4.98"N
Longitude : 84°39'50.51"E to 84°41'0.31"E

Legend
○ PRA

1 km



Google Earth

Image © 2013 Maxar Technologies



Legend
PRA



1 km

ZONE 8
Latitude : 23°23'30.24"N to 23°24'46.68"N
Longitude : 84°52'41.49"E to 84°53'45.32"E



Google Earth

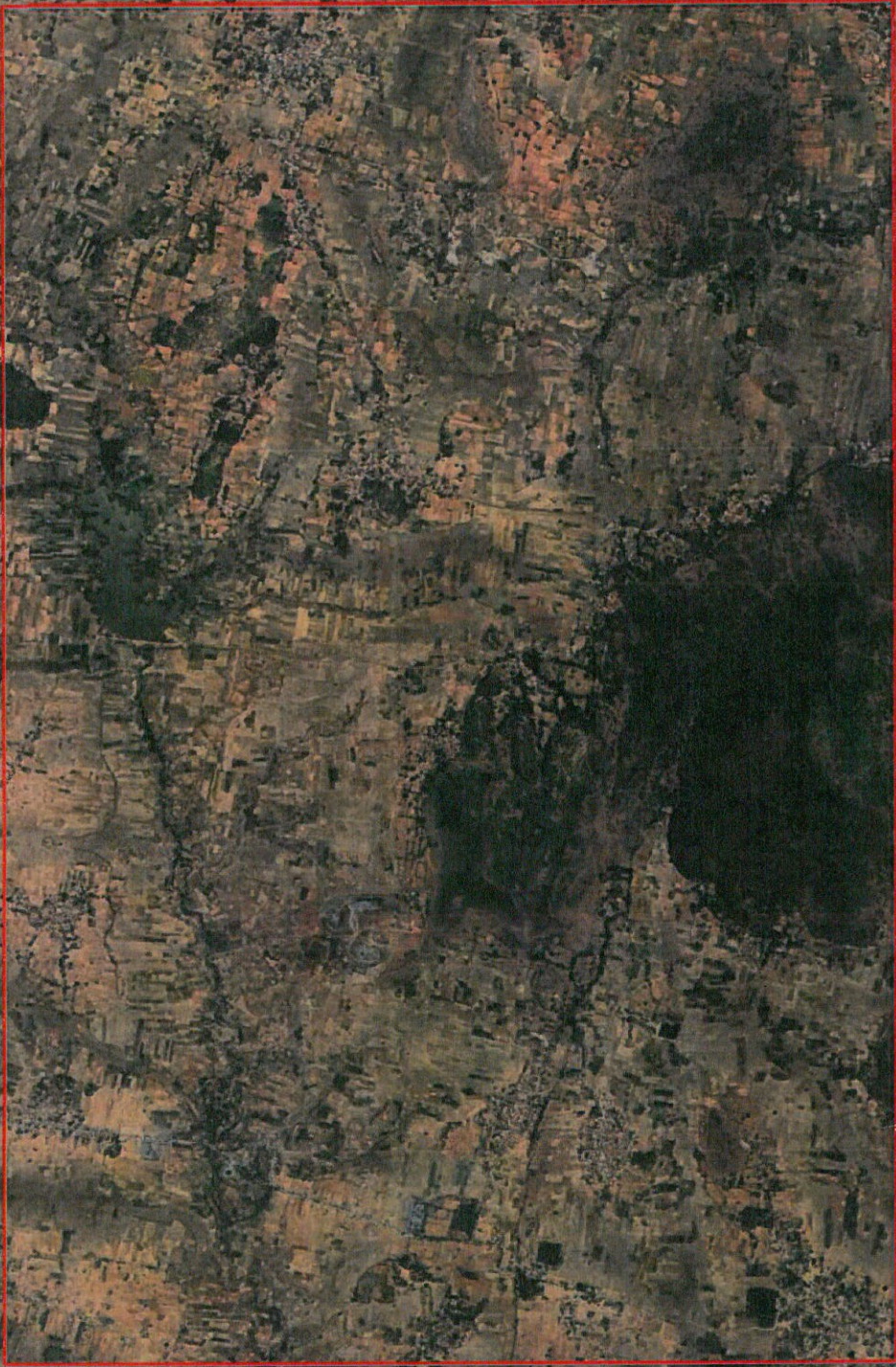
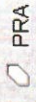
Image © 2012 Earth*

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Ranchi

ZONE 9

Latitude : 23°29'9.66"N to 23°31'39.69"N
Longitude : 84°50'45.58"E to 84°54'57.06"E

Legend
PRA



2 km

Google Earth

Image © 2025 Airbus



[Handwritten signature]

Legend
PRA



1 km



ZONE 10
Latitude : 23°29'9.74"N to 23°30'14.31"N
Longitude : 84°48'24.53"E to 84°49'45.27"E

Google Earth

Image © 2023 Airbus

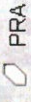
Project Assessment Authority
Ranchi

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ZONE 11

Latitude : 23°25'22.77"N to 23°27'20.87"N
Longitude : 84°44'1.95"E to 84°45'58.74"E

Legend
PRA



1 km

Google Earth

Images © 2025 Maxar Technologies
Map data © 2025 AirGIS



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ZONE 12

Latitude : 23°27'54.73"N to 23°28'50.46"N
Longitude : 84°40'20.80"E to 84°41'18.64"E

Legend

PRA

Google Earth

Image © 2023

9000 m

Authority

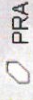
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ZONE 13

Latitude : 23°26'49.40"N to 23°27'5.51"N
Longitude : 84°37'10.71"E to 84°37'30.71"E

Legend



PRA

300 m



Google Earth
Imagery © 2013 Maxar Technologies
Map data © 2013 Airbus



डॉ० वाघमारे प्रसाद कृष्ण, भा०प्र०से०, उपायुक्त, लोहरदगा की अध्यक्षता में दिनांक 11.08.2023 को आयोजित Sub-Divisional Committee की बैठक की कार्यवाही।

उपस्थिति:-

1. उपायुक्त, लोहरदगा।
2. वन प्रमण्डल पदाधिकारी, लोहरदगा।
3. अनुमण्डल पदाधिकारी, लोहरदगा।
4. क्षेत्रीय पदाधिकारी, झारखण्ड राज्य प्रदूषण नियंत्रण पर्षद, रांची।
5. कार्यपालक अभियंता, लघु सिंचाई प्रमण्डल, लोहरदगा
6. जिला खनन पदाधिकारी, लोहरदगा।
7. सहायक निदेशक, भूतत्व, जिला भूतात्विक कार्यालय, लोहरदगा

कार्यवाही :-

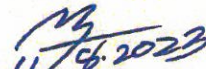
बैठक में उपस्थित सभी पदाधिकारियों के स्वागत के साथ बैठक की कार्यवाही प्रारम्भ की गई।


- बैठक के दौरान Sub-Divisional Committee द्वारा तैयार किये गए DSR को सभी सदस्यों द्वारा अवलोकन किया गया। समीक्षा के क्रम में पूछे जाने पर जिला खनन पदाधिकारी द्वारा बताया गया कि वन, पर्यावरण एवं जलवायु परिवर्तन मंत्रालय, नई दिल्ली के अधिसूचना संख्या S.O. 3611 (E) दिनांक 25.07.2018 के पारा-11 के आलोक में मिट्टी एवं पत्थर खनिज के लिए अलग-अलग जिला सर्वेक्षण प्रतिवेदन (DSR) तैयार किये गए हैं, जिसे जिला के वेबसाइट पर दिनांक 21.07.2023 को आमजनों के सुझाव/मंतव्य के लिए अपलोड किया गया था एवं इसकी सूचना स्थानीय दैनिक समाचार पत्र में प्रकाशित की गई थी, जिसकी अवधि पूरी हो चुकी है, इस दौरान किसी प्रकार की कोई सुझाव/मंतव्य/आपत्ति प्राप्त नहीं हुए हैं।
- पत्थर खनिज के जिला सर्वेक्षण रिपोर्ट (DSR) में पूर्व में स्वीकृत/LOI प्राप्त/कार्यरत कुल 74 परियोजनाओं सहित 08 नये प्रस्तावित परियोजना तथा जिला भूतात्विक, कार्यालय, लोहरदगा से प्राप्त कुल 12 प्रस्तावित परियोजनाओं को शामिल किया गया है तथा मिट्टी खनिज के जिला सर्वेक्षण रिपोर्ट (DSR) में कुल 61 परियोजनाओं को शामिल किया गया है।




- निदेशानुसारं Sub-Divisional Committee के सदस्य पत्थर खनिज के नये प्रस्तावित परियोजनाओं का संयुक्त रूप से स्थलीय जांच कर स-मंतव्य प्रतिवेदन समर्पित किये।
- Sub-Divisional Committee के सदस्यों द्वारा समर्पित संयुक्त जांच प्रतिवेदानुसार जिला भूतात्विक कार्यालय, लोहरदगा से प्राप्त प्रस्तावित कुल 12 परियोजनाओं में से क्रमांक 8, 9, 10, 11 एवं 12 पर अंकित कुल 05 परियोजनाओं को DSR से हटाने की अनुशंसा की गई। शेष क्रमांक 01 से 07 तक अंकित प्रस्तावित भूखण्ड वन सीमा, मानव बसाहट, जल स्रोत से दूर है, परन्तु इसकी आकृति पहाड नुमा है। अतः पर्यावरणीय सहमति के समय इस पर ध्यान आकृष्ट किया जाना चाहिये, की अनुशंसा के साथ मिट्टी एवं पत्थर खनिज के लिए तैयार किये गए जिला सर्वेक्षण रिपोर्ट (DSR) को अनुमोदन हेतु SEIAA, झारखण्ड को भेजे जाने की अनुशंसा सर्वसम्मति से की गई।

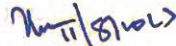
सधन्यवाद बैठक की कार्यवाही समाप्त की गई।

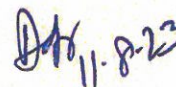

11/08/2023
जिला खनिज पदाधिकारी,
लोहरदगा।

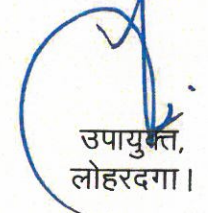

11/08/23
सहायक निदेशक भूतत्व,
जिला भूतात्विक कार्यालय,
लोहरदगा


11/08/2023
कार्यपालक अभियंता,
लघु सिंचाई प्रमण्डल,
लोहरदगा।

क्षेत्रीय पदाधिकारी,
झारखण्ड राज्य
प्रदूषण नियंत्रण
परषद, रांची

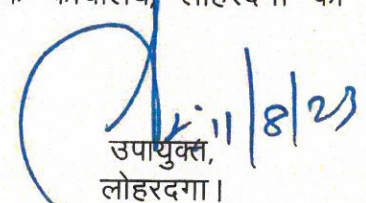

11/08/2023
अनुमण्डल पदाधिकारी,
लोहरदगा।


11-8-23
वन प्रमण्डल पदाधिकारी,
लोहरदगा।


उपायुक्त,
लोहरदगा।

ज्ञापांक 1013.../एम0 दिनांक 11/08/2023
प्रतिलिपि :-

वन प्रमण्डल पदाधिकारी, लोहरदगा / अनुमण्डल पदाधिकारी, लोहरदगा / कार्यपालक अभियंता, लघु सिंचाई प्रमण्डल, लोहरदगा / क्षेत्रीय पदाधिकारी, झारखण्ड राज्य प्रदूषण नियंत्रण परषद, रांची / सहायक निदेशक, जिला भूतात्विक कार्यालय, लोहरदगा को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।


11/8/23
उपायुक्त,
लोहरदगा।



संयुक्त जांच प्रतिवेदन

उपायुक्त, महोदय की अध्यक्षता में दिनांक 11.08.2023 को आहुत लोहरदगा जिला का लघु खनिजों पत्थर एवं गिट्टी से संबंधित Sub-Divisional Committee की बैठक में उपायुक्त, महोदय द्वारा दिये गए निदेश के आलोक में Sub-Divisional Committee के सदस्यों द्वारा DSR में अनुशंसित किये जाने वाले नये परियोजनाओं की संयुक्त स्थलीय निरीक्षण किया गया, तत्संबंधी जांच प्रतिवेदन निम्न प्रकार है :-

1. रैयती भूमि पर पत्थर उत्खनन हेतु प्रस्तावित 08 परियोजनाओं यथा

लोहरदगा जिलान्तर्गत पत्थर खनन पट्टा स्वीकृति हेतु आवेदित क्षेत्रों की विवरणी				
क्रम	आवेदक	मौजा थाना	प्लॉट	रकबा एकड में
1	आवेदक अनिसुर रहमान पिता हाजी मो० आलमीन ग्राम मकान्दू कुडू लोहरदगा	मकान्दू (कुडू)	1255, 1256, 1257, 1253, 1254, 1258, एवं 1251	2.77
2	आवेदक हीरालाल एण्ड कंपनी पार्ट शिवकुमार पिता स्व० हीरालाल पता F14 City Centre club road ranchi	मकान्दू (कुडू)	1200(P) 1202 1225, 1226, 1227(P) 1224	3.90
3	आवेदक श्री जसीम अंसारी पिता करीम अंसारी ग्राम अरकोसा गम्हारटोली, पोस्ट अरकोसा थाना जिला लोहरदगा	भठखिजरी (लोहरदगा)	176	0.60
4	आवेदक पार्ट सुकेन्द्र उरॉव पिता चुन्दा उरॉव विलगु उरॉव पिता स्व० पिंजा उरॉव 3 अमित कुमार सिंह पिता नरेन्द्र सिंह 4 श्री अशोक कुमार सिंह पिता स्व० ब्रज बिहारी सिंह	भठखिजरी लोहरदगा	177, 186	1.06
5	1 बन्धन उरॉव पिता स्व० जतरू उरॉव, ग्राम- अरकोसा नवाटोली, पोस्ट-अरकोसा, थाना+जिला-लोहरदगा, 2. करमा उरॉव, पिता स्व० धारो उरॉव, ग्राम-शशिकान्त गली रातु रोड मधुकम हेहल जिला रांची, 3. उदय सिंह पिता स्व० चन्द्रपाल सिंह ग्राम हरमू रोड नदिया थाना लोहरदगा 4. श्री अशोक कुमार सिंह पिता स्व० ब्रज बिहारी सिंह ग्राम बी०आई०डी० गुमला रोड लोहरदगा 5. श्री अमित कुमार सिंह पिता नरेन्द्र सिंह ग्राम+पोस्ट-रामपुर, थाना+जिला-लोहरदगा	अरकोसा	1021, 1015, 1017 1018	1.00
6	1. मनोज भगत पिता सत्यदेव भगत, ग्राम- भक्सो यडकाटोली, पोस्ट-अरकोसा, थाना+जिला-लोहरदगा, 2. उदय सिंह, पिता स्व० चन्द्रपाल सिंह, ग्राम-हरमू रोड नदिया, पोस्ट हरमू, थाना+जिला-लोहरदगा, 3. श्री अमित कुमार सिंह पिता नरेन्द्र सिंह ग्राम+पोस्ट-रामपुर, थाना+जिला-लोहरदगा 4. श्री अशोक कुमार सिंह पिता स्व० ब्रज बिहारी सिंह ग्राम बी०आई०डी० गुमला रोड लोहरदगा	भक्सो	1033	1.50
7	नेजाम अंसारी स्टोन माईन्स प्रो० नेजाम अंसारी पिता अमीरुद्दीन अंसारी ग्राम रामपुर लोहरदगा	आरकोसा	189, 187	1.28
8	सुजीत कुमार सिंह पिता स्व० गुनेश्वर सिंह पता कोर्ट रोड, लोहरदगा 2. कृष्णा उरॉव पिता स्व० झाबो उरॉव ग्राम अरकोसा नवाटोली, थाना+जिला लोहरदगा	अरकोसा	278, 279, 1008, 1009	2.53

सभी उपरोक्त प्रस्तावित 08 क्षेत्र पूर्व संचालित खदानों के नजदीक है, तथा इन क्षेत्रों की दूरी वन, जलीय निकाय, मानव यसाहट इत्यादि पर्यावरण संवेदनशीलता क्षेत्र से दूर है।

13

Approved
Jharkhand, Ranchi

13

2. जिला भूतात्विक कार्यालय, लोहरदगा द्वारा प्रस्तावित 12 परियोजनाएँ यथा

SL No.	Block	District	Block	Mauzu	Area	Plot No.	Khata No.	Limiting Coordinates
1	Korambe-I Minor Mineral (General Stone)	Lohardaga	Senha	Korambe	4.21Ha	1564	350	23°19'14.60"N to 23°19'23.40"N and 84°38'48.30"E to 84°38'56.30"E
2	Korambe-II Minor Mineral (General Stone)	Lohardaga	Senha	Korambe	4.31Ha.	1564, 353, 354, 355	350, 63	23°19'26.59"N to 23°19'38.79"N and 84°38'46.20"E to 84°38'59.02"E
4	Pali (Patlo II) Minor Mineral (General Stone)	Lohardaga	Senha	Pali	4.51Ha	452	103	23°18'35.10" N to 23°18'42.00" and 84°42'09.40"E to 84°42'17.68"E
5	Patlo Minor Mineral (General Stone)	Lohardaga	Senha	Patlo	3.14Ha	1097	103	23°18'45.1"N to 23°18'54.0"N and 84°42'27.9"E to 84°42'35.2"E
6	Jamgain I Minor Mineral (Decorative Stone)	Lohardaga	Bhandra	Jamgain	5.751Ha	502 (P)	177	N 23°18'56.14" to N 23°19'02.66" and Longitude E 84°51'34.93" to E 84°51'53.77"
7	Jamgain II Minor Mineral (Decorative Stone)	Lohardaga	Bhandra	jamgain	6.581Ha	502 (P)	177	N 23°18'47.49" to N 23°18'58.54" and Longitude E 84°51'54.64" to E 84°52'07.98"
8	Khwashhijri Minor Mineral (General Stone)	Lohardaga	Bhandra	Khwashhijri	3.11Ha	19	100	23°22'31.24" N to 23°22'31.39" N and 84°52'30.05" E to 84°54'59.95" E
9	Jhiko I Minor Mineral (General Stone)	Lohardaga	Bhandra	Jhiko	12.70Ha	2880	177	Latitude 23°19'01.15"N to 23°18'47.07"N and Longitude 84°52'13.98"E to 84°52'20.32"E
10	Palmi Minor Mineral (General Stone)	Lohardaga	Bhandra	Palmi	21.751Ha	218, 1465, 1481	160, 220	latitude 23°17'47.43"N to 23°17'34.70"N and longitude 84°49'08.71"E to 84°49'21.76"E
11	Kaspur I Minor Mineral (General Stone)	Lohardaga	Bhandra	Kaspur	13.491Ha	640	277	latitude 23°23'26.78"N to 23°23'13.20"N and longitude 84°47'36.77"E to 84°47'47.80"E.



12	Kaspu II Minor Mineral (General Stone)	Lohardaga	Bhandra	Kaspu	5.211ha	469, 1046	277	latitude 23°23'05.13"N to 23°22'57.24"N and 84°47'11.64"E to 84°47'11.88"E
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उक्त परियोजनाओं के क्रमांक 10 पर अंकित अंचल भण्डरा अन्तर्गत मौजा पलमी के रकवा 21.75 हे० क्षेत्र का भूखण्ड ऊँचा पहाड नुमा है एवं इसका स्थानीय नाम हाथी पहाड है। देखने से यह भूखण्ड भूमीगत जल स्रोत प्रतीत होता है। क्रमांक 11 एवं 12 में अंकित अंचल भण्डरा अन्तर्गत मौजा कसपुर-1 एवं कसपुर-2 के भूखण्ड पर एकलव्य आवासीय मॉडल विद्यालय एवं सोलर पावर प्लांट प्रोजेक्ट प्रस्तावित है। अतः DSR से हटाया जाना चाहिये।

क्रमांक 01 से 09 तक प्रस्तावित 09 भूखण्ड वन सीमा, मानव बसाहट, जल स्रोत से दूर है, परन्तु इसकी आकृति पहाड नुमा है। अतः पर्यावरणीय सहमति के समय इस पर ध्यान आकृष्ट किया जाना चाहिये।

सादर समर्पित।

11/8/2023
जिला खनन पदाधिकारी,
लोहरदगा।

11/8/2023
सहायक निदेशक, भूतत्व,
जिला भूतात्विक कार्यालय,
लोहरदगा

11/8/2023
कार्यपालक अभियंता,
लघु सिंचाई प्रमण्डल,
लोहरदगा।

11/8/2023
क्षेत्रीय पदाधिकारी,
झारखण्ड राज्य प्रदूषण नियंत्रण
पर्वद, रांची

11/8/2023
अनुमण्डल पदाधिकारी,
लोहरदगा।

11-8-23
वन प्रमण्डल पदाधिकारी,
लोहरदगा।



DRAINAGE MAP OF LOHARDAGA DISTRICT

