

**DRAFT ENVIRONMENTAL IMPACT
ASSESSMENT
&
ENVIRONMENTAL MANAGEMENT PLAN
REPORT**

Executive Summary

**Ordinary Stone Quarry
Total Cluster Area- 5.53 Ha**

S.No.	Project Proponent	Khasra No.	Area	Production/year
1.	M/s Virat Minerals Proponent- Ramesh Kumar Surana	157	1.53 Ha	86,346 Tonne/year
2.	M/s Virat Minerals Proponent- Ramesh Kumar Surana	796	4.00 Ha	1 85,367 Tonnes/Year

**At Village- Bade Kameli, Tehsil- Dantewada,
District- South Baster Dantewada,
State – Chhattisgarh**

Environment Consultant



COGNIZANCE RESEARCH INDIA PVT. LTD.

(Accredited by QCI/NABET)
Suite B 02, H-61, Sector-63 Noida, U.P
Email: cripl.info@gmail.com



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1.0 INTRODUCTION OF PROJECT & PROPONENT

Ordinary Stone Quarry Project located at Village- Bade Kameli, Tehsil-Dantewada District- South Baster Dantewada, State-Chhattisgarh, is being proposed by, M/s Virat Minerals, Proponent Shri Ramesh Kumar Surana, R/o Indira Gandhi Ward, Geedam, South Baster Dantewada, Chhattisgarh.

Bade Kameli Ordinary Stone Quarry Project – A1

Project Name	Ordinary Stone Quarry Project – A1 located at Khasra No. 796, Village- Bade Kameli, Tehsil-Dantewada District- South Baster Dantewada, State-Chhattisgarh (Area- 4.00 Ha)
Khasra No.	796
Lease Deed	09-4/Khanij/Up/2021-22 Dated 09/04/2021, for a period of 30 years
DEIAA EC	1042/DEIAA/EC/2016 Dated On 09.04.2021
Previous Production according to DEIAA EC	40,000 Tonnes/year
Proposed Production	1,85,367 Tonne/year
TOR Letter No.	936/SEAC.CG/Mine/2999 Dated 22/08/2024.
Details of 200m certificate	175/Khanij/ U.P/2023-24, Dantewada Dated 11/05/2023
Details of 500 m certificate	174/Khanij/ U.P/2023-24, Dantewada Dated 11/05/2023

Bade Kameli Ordinary Stone Quarry Project – A2

Project Name	Ordinary Stone Quarry Project – A2 located at Khasra No. 157, Village- Bade Kameli, Tehsil-Dantewada District- South Baster Dantewada, State-Chhattisgarh (Area- 1.53 Ha)
Khasra No.	157
Lease Deed	09-3/Khanij/Up/2021-22 Dated 09/04/2021, for a period of 30 years
DEIAA EC	1040/DEIAA/EC/2016 Dated On Dated 09.04.2021
Previous Production according to DEIAA EC	25,000 Tonnes/year
Proposed Production	86,346 Tonne/year
TOR Letter No.	939/SEAC.CG/Mine/2998 Dated 22/08/2024.
Details of 200m certificate	173/Khanij/ U.P/2023-24, Dantewada Dated 11/05/2023
Details of 500 m certificate	172/Khanij/ U.P/2023-24, Dantewada Dated 11/05/2023



The EIA-EMP report has been prepared as per the TOR granted under the EIA Notification. Further to assess the impact on environment due to proposed mining, it is necessary to ascertain present status of environment prevailing at the project site and proposed operation including identification and Assessment of impact on the environment & socio-economic condition of human beings.

1.1 LOCATION

The mine lease area is located at Village- Bade Kameli, Tehsil-Dantewada District- South Baster Dantewada, and State-Chhattisgarh.

Bade Kameli Ordinary Stone Quarry Project – A1

Pillars	Latitude(N)	Longitude(E)
A	18°46'00.97"N	81°17'48.26"E
B	18°45'59.53"N	81°17'52.33"E
C	18°45'51.82"N	81°17'52.28"E
D	18° 45'51.41"N	81°17'47.76"E
E	18° 45'55.64"N	81°17'46.08"E
F	18° 45'57.94"N	81°17'45.55"E

Bade Kameli Ordinary Stone Quarry Project – A2

Pillars	Latitude(N)	Longitude(E)
A	18°45'44.85"N	81°17'34.14"E
B	18°45'43.98"N	81°17'37.97"E
C	18°45'42.31"N	81°17'38.07"E
D	18° 45'42.38"N	81°17'36.79"E
E	18° 45'40.83"N	81°17'37.30"E
F	18° 45'40.42"N	81°17'34.81"E
G	18°45'41.95"N	81°17'32.79"E

Table 1.1- Site & Surrounding in the Study Area

		Quarry A1	Quarry A2
Nearest Settlements	Bade Kameli	340 m in S direction	450 m in SW direction
Nearest Road	Village Road	0.08 km in W direction	0.13 km in S direction
	ODR Road (Metalled Road)	1.26 km in SW direction	0.73 km in SW direction



	SH- 05	6.97 km in NE direction	7.65 km in NE direction
Nearest Airport	Maa Danteshwari Airport, Jagdalpur, Chhattisgarh	100.0 km in NE direction	85.69 km in NE direction
Nearest Railway Station	Bhansi Railway Station	7.5 km in NW direction	3.33 km in NW direction
Nearest National Park/Wildlife Sanctuary within 10 km	There is no National Park/Wildlife Sanctuary within 10 km of the project area.	-	-
Water body	Sankani River	0.52 km in E direction	1.07 km in E direction
	Koyar Nadi	2.45 km in E direction	3.40 km in E direction
Nearest School/ College/ Hospital	Govt School, Bhansi Chhattisgarh	1.93 km in W direction	1.68 km in NW direction
	Govt Primary School, Nerli	5.60 km in SW direction	5.17 km in SW direction
	Primary School, Pujari para Dhurli	4.86 km in NW direction	5.12 km in NW direction
	Primary Health Center, Badegudra	22.61 km in SE direction	22.89 km in SE direction
Temple	Swayambhu Shiv Temple	5.47 km in SW direction	5.02 km in SW direction
	Ganesh Mandir	7.98 km in SW direction	7.45 km in SW direction
Reserve/ Protected Forest	Bailadila Reserve Forest	3.75 km in W direction	3.67 km in W direction

Table 1.2 Project Salient Features

1.	On-line proposal No.	SIA/CG/MIN/457272/2024	SIA/CG/MIN/457360/2024
2.	Name of Project	Bade Kameli Ordinary Stone Quarry Project – A1 (Expansion Case)	Bade Kameli Ordinary Stone Quarry Project – A2 (Expansion Case)
3.	Project location	Khasra No. 796	Khasra No. 571
4.	Name of Minor Mineral	Ordinary Stone	Ordinary Stone
5.	Sanctioned Lease Area	4.00 Ha	1.53 Ha
6.	Max & Min mRL within lease area	475 - 501 m	461 - 456 m
7.	Toposheet No.	65F/5	65F/5
8.	Total Geological Reserves	1262014 Ton	789464 Ton
9.	Total Mineable Reserves	814235.5 Ton	401349 Ton



10.	Total Proposed Production	857064 Ton	401336 Ton																
11.	Average Rate of Production per year in five years plan	80267.2 Ton	80267.2 Ton																
12.	Maximum Proposed Production	185367 Ton	86346 Ton																
13.	Sanctioned Period of Mine lease	30 Years (valid 30.01.2004 to 29.01.2034)	30 Years (valid 30.01.2004 to 29.01.2034)																
14.	Method of Mining	Semi Mechanized Open Cast Quarrying	Semi Mechanized Open Cast Quarrying																
15.	No. of workers	37	23																
16.	Type of Land	Government Land	Government Land																
17.	Ultimate Depth	26 m	23 m																
18.	Water Requirement	7.34 KLD <table border="1" style="margin-left: 20px;"> <tr> <td>Drinking</td> <td>0.37</td> </tr> <tr> <td>Toilet</td> <td>0.37</td> </tr> <tr> <td>Plantation</td> <td>1.60</td> </tr> <tr> <td>Dust Suppression</td> <td>5.00</td> </tr> </table>	Drinking	0.37	Toilet	0.37	Plantation	1.60	Dust Suppression	5.00	6.56 KLD <table border="1" style="margin-left: 20px;"> <tr> <td>Drinking</td> <td>0.23</td> </tr> <tr> <td>Toilet</td> <td>0.23</td> </tr> <tr> <td>Plantation</td> <td>1.10</td> </tr> <tr> <td>Dust Suppression</td> <td>5.00</td> </tr> </table>	Drinking	0.23	Toilet	0.23	Plantation	1.10	Dust Suppression	5.00
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19.	Proposed Project cost	45 Lakhs	30 Lakhs																
20.	No. of Trees to be Planted	800 Saplings	550 Saplings																

1.2 RESERVES

Summary of Geological Reserve

Reserves	Quarry A1 4.00 Ha (40,000 sqm)	Quarry A2 1.53 Ha (15,300 sqm)
	The maximum RL of hillock is 501m and general surface level RL is 475m.	The maximum RL of hillock is 461m and general surface level RL is 456m.
Ultimate Depth	26m	18m
Geological Resource	1262014	789464 T
Blockage reserves in 7.5 mts barrier zone	194116	176527
Blockage reserves in the benches	210808	211588
Total blockage reserves	404924	388115 T
Mineable Reserves	857090	401349 T

Note: - The quarrying loss has been considered as 5 % of the Total ROM.



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1.3 MINING PROCESS

I. Existing Method of mining:

At Present no mining activities is going on in sanctioned mining lease area. Mining activities will be started after the grant of environmental clearance of the project. Hence, the method of mining is discussed under the proposed method of mining as below.

II. Proposed method of mining:

This production plan has made for 5 years, lease is valid up to 18.02.2034. Open cast method of quarrying is carried out by semi mechanized method. No top soil present in the lease area. The pit slope of 45 shall be maintained during working in the pit. The height of the each bench will be developed 3.0 m. The method of quarrying is open-cast method by using jack hammer for drilling, excavator/shovel-dumper combination for loading and transportation. The mined-out ROM will be reduced to loadable size transported by shovel/dumper combination. The recovery of graded stone has been taken as 95% of ROM. Plate No. VI & VII Five year's development and production plan.

Table 1.3 Proposed productions in mining plan period – 05 years

Year	Total Production in year (T)	Total Production in year (T)
	Quarry A1 4.00 Ha (40,000 sqm)	Quarry A2 1.53 Ha (15,300 sqm)
1st year	169923	83525
2nd year	169533	82797
3rd year	185367	82407
4th year	157482	86346
5th year	174759	66261
	857064 T	401336 T

1.5 BASE LINE DATA

This section contains the description of baseline studies of the 10 km radius of the area surrounding Khasra No. 571 & Khasra No. 796, Village- Bade Kameli, Tehsil-Dantewada District- South Baster Dantewada, and State-Chhattisgarh. Since the Leases are in cluster therefore monitoring is common for both of the projects. The data collected has been used to



understand the existing environment scenario around the proposed mining project against which the potential impacts of the project can be assessed.

Monitoring Period – 1st March 2024 to 31st May 2024

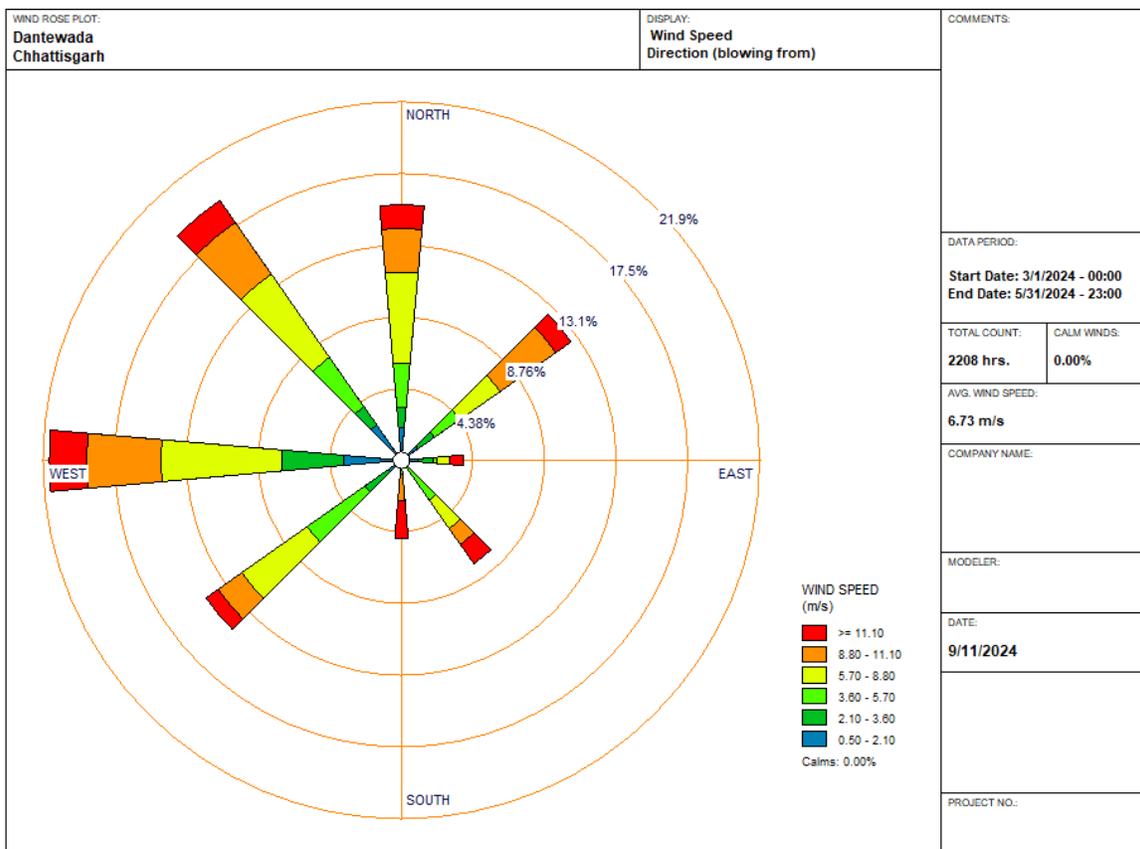


Table 1.6: Baseline Environmental Status

Attribute	Baseline status
Ambient Air Quality	<ul style="list-style-type: none"> The minimum and maximum level of PM2.5 recorded within the study area was in the range of 25.12µg/m³ to 49.5µg/m³ with the 98th percentile 39.9 µg/m³ to 49.26µg/m³ at. The minimum and maximum level of PM10 recorded within the study area was in the range of 59.70µg/m³ to 93.20µg/m³ with the 98th percentile 79.13µg/m³ to 92.92µg/m³. The minimum and maximum concentration of SO2 recorded within the study area was in the range of was 4.12 µg/m³ to 13.56µg/m³ with the 98th percentile 7.15µg/m³ to 13.23 µg/m³. The minimum and maximum level of NO2 recorded within the study area was in the range of was 6.14µg/m³ to 16.54µg/m³ with the 98th percentile 12.02µg/m³ to 16.52µg/m³. <p>The results thus obtained indicate that the concentrations of PM10, PM2.5, SO2 and NO2 in the Ambient Air are well within the National Ambient Air Quality (NAAQ)</p>



	standards for Industrial, Residential, Rural and other areas.
Noise Levels	<p>Noise monitoring was carried out at 4 locations. The results of the monitoring program indicated that both the daytime and night time levels of noise were well within the prescribed limits of NAAQS, at all the four locations monitored.</p> <ul style="list-style-type: none"> • Noise monitoring reveals that the maximum & minimum noise levels at day time were recorded as 56.7dB (A) to 51.3 dB (A). • The maximum & minimum noise levels at night time were found to be 43.9dB (A) to 36.4 respectively.
Water Quality	<p>Analysis results of ground water in the study area reveal the following: -</p> <ul style="list-style-type: none"> • pH varies from 7.43 to 7.93. • Total hardness varies from 338 to 362 mg/l. • Total dissolved solids vary from 559 mg/l to 694 mg/l. <p>The ground water from all sources remains suitable for drinking purposes as all the constituents are within the limits prescribed by drinking water standards promulgated by Indian Standards IS: 10500-2012.</p> <p>Analysis results of Surface water in the study area reveal the following: -</p> <ul style="list-style-type: none"> • The analysis results indicate that the pH ranges between 7.49 and 7.66. • Dissolved Oxygen (DO) was observed in the range of 6.3 to 7.8 mg/l • BOD values were observed to be in the range of 2.4-6.9 mg/l. • The chlorides were found to be in the range of 24-41 mg/l and • The Sulphates were found to be in the range 17-35 mg/l respectively. • The presence of total coliform in range of 562 MPN/100 ml to 1548 MPN/100 ml against the limit of 5000 MPN/100 ml. <p>From the surface water analysis it is evident that most of the parameters of the samples comply with 'Category B' standards of CPCB Drinking water source with conventional treatment followed by disinfection.</p>
Soil Quality	<p>Samples collected from identified locations indicate the soil is sandy type and the pH value ranging from 7.11 to 7.69, which shows that the soil is alkaline in nature. Potassium is found to be from 0.21meq/100 gm to 0.28meq/100 gm. The water holding capacity is found in between 24.9% to 29.8 %.</p>

1.6 BIOLOGICAL ENVIRONMENT

Flora of the region- Core Zone

The core zone comprises of barren stony waste land, where mining operation is proposed. The trees on the mining site are naturally occurring but are very few in number. Most among them are weeds. No ecologically sensitive plant species has been reported from this area. The faunal variety is rather poor. Mammalian fauna is almost restricted to domestic species like cattle, dogs,



cats etc. Bird species also do not exhibit much diversity. Local birds are noticed crossing over the banks in search of food. No fixed pattern in migratory behavior is noticed.

Flora of the Buffer Zone

The flora of buffer zone comprises of plants growing on the edges of agricultural land, village woodlots and trees planted along the roads. Many tree species are planted in the area because of their usefulness, economic and aesthetic values. Many important species such as Neem (*Azadirachtaindica*), Sisam (*Dalbergiasissoo*), *Terminaliatomentosa* (*T. elliptica*), are very common.

Agricultural Crops

Buffer zone comes within 10km radius of the mine-lease area and it is within Bailadila Reserve Forest and within Dantewada Taluk, Dantewada district of Chhattisgarh. Buffer zone is mostly covered with undulated hilly terrain within 180m-1200m altitude. More than one third of the Buffer zone is within Bailadila RF. But within 10km radius there is no notified Wildlife Sanctuary and National Park. There are few nallahs and stream within the buffer area.

Fauna of the region

During the faunal survey in the area no wildlife corridor or movement of animals was recorded from proposed project area. No established habitats of any mammals or birds are noticed in river bed and along the banks. No bird's habitats like nesting, breeding and forging patterns are noticed in the core zone. Local birds are noticed crossing over the banks in search of food. No fixed pattern in migratory behavior is noticed.

Many domesticated mammal species are reported from buffer zone during the field survey. Common domestic animals like Buffalo, cow, goat etc. can be noticed in open grass fields while grazing. Small mammals like Indian palm squirrel (*Funambulus palmarum*) and field mouse (*Apodemussylvaticus*) are noticed in vicinity of the village. Inquiry from village people regarding wild animals reveals that monkey (*Macacamulata*), Indian hare (*Lepusnigricollis*), fruits bat (*Pteropusconspicillatus*), mongoose (*Herpestesedwardsii*), jackal (*Canisaureus*), etc. are often seen in the area.

The bird population consists of House sparrow (*Passer domesticus*), Common hill Myna (*Graculareligiosa*), are of common occurrence.



The reptilians species commonly reported are Garden lizard (*Calotesversicolor*) and *Eutropismacularia* along shady places in agricultural field or where growth of bushes is noticed.

Mitigation Measures

There is a requirement to establish a stable ecosystem with both ecological and economic returns. Minimization of soil erosion and dust pollution enhances the aesthetic value of the core and the buffer zone. To achieve this, it is planned to increase the area of green cover of plantation and green belts activities. The basic objectives of plantations are as follows:

- Improvement of Soil quality,
- Quick vegetative cover to check soil erosion,
- Improvement in mining site stability,
- Conservation of biological diversity of plants, birds and animals,
- As dust receptor and dust filter, this is likely to be produced during mining.
- If birds are noticed crossing the core zone, they will not be disturbed at all;
- Labors will not be allowed to discards food, plastic etc., which can attract animals/birds near the core site;
- Only low polluting vehicles having PUC will be allowed for carrying mining materials.
- Noise level will be maintained within permissible limit (silent zone-50dB (A) during day time or residential zone 55dB (A)) as per noise pollution (regulation and control), rules, 2000, CPCB norms.

1.7 AIR ENVIRONMENT

Anticipated impacts and evaluation

There is no source of air pollution as no boiler, DG Set or furnace is there. Only source of air pollution is re-suspension dust from drilling, blasting, mechanized loading and the movement of dumpers/trucks to and from the mining site.

Emission of fugitive dust is envisaged due to:

- i. Mining Activities includes excavation and lifting of minerals, drilling, blasting, mechanized loading etc.



- ii. Transportation of minerals will be done by road using trucks. Fugitive dust emission is expected from the transportation of trucks on the haul roads. Evaluation of fugitive dust emission has been done by using line source model as given below:

As the distance inside the mine lease area is minimal and path being boulder laid, no such problem is witnessed.

Mitigation measures

The mitigation measures like the following will be resorted:

- Water sprinkling will be done on the haul roads twice in a day. This will reduce dust emission further by 74% (Ref. Haul road dust control by WR REED & JA Organiscak).
- Speed limits will be enforced to reduce airborne fugitive dust from vehicular traffic.
- Spillage from the trucks will be prevented by covering tarpaulin over the trucks.
- Deploying PUC certified vehicles to reduce their emissions.
- Proper tuning of vehicles to keep the gas emissions under check.
- Monitoring to ensure compliance with emission limits would be carried out during operation.
- Plantation activities will be done along the barrier zone and which will reduce the impact of dust in the nearby villages.

1.8 WATER ENVIRONMENT

Anticipated impacts and evaluation

To find out the effect on ground water an extensive study has been conducted and from the study it can be safely concluded that there is no noticeable effect on surrounding ground water resource due to mining.

Mining of stone does not have any significant impact on the water quality and parameters as the mining does not intercept with the ground water level.

In this project, it is not proposed to divert or truncate any stream. No proposal is envisaged for pumping of water from the river. There will not be any adverse impact on surface hydrology and ground water regime due to this project. The contractor will adhere to all guidelines and rules for proper and scientific method of mining during the period of extracting the stone. Thus, the project activities shall not have any adverse effect on the physical components of the environment and therefore may not have any effect on the recharge of ground waters or affect the water quality.



1.9 NOISE ENVIRONMENT

Anticipated impacts and evaluation

Noise generated at the mine is due to semi-mechanized mining operations and truck transportation activities. The noise generated by the mining activity dissipates within the mine. There is no major impact of the mining activity on the nearby villages. However, pronounced effect of above noise levels is felt only near the active working area.

Noise at lower levels (sound pressure) is quite acceptable and does not have any bad effect on human beings, but when it is abnormally high- it incurs some maleficent effects.

In this case the impact of noise on the nearby settlements is negligible as they are far located from the mine workings.

Mitigation measures

On-site

- a) **Blasting** only if required will be done by a licensed blaster.
- b) **Maintenance of Machinery:** Regular maintenance of machinery will keep the generated noise level below the minimum prescribed limit i.e. not exceeding 90 dB (A) at a distance of 2 m from the machine. All machines will be as per stipulated standards and will be used at their optimum capacity.
- c) **Trained Operators:** Only trained operators will be allowed to operate machines during mining to reduce any chance of safety failures.
- d) **Vegetation:** Plantation will be carried in the outer portion of the lease area.
- e) **Hearing Protection:** All the miners will be provided with Personal Protective equipment's such as ear-muffs.
- f) **Phasing out** the old and worn out trucks.

1.10 TRAFFIC ANALYSIS

Traffic analysis is carried out by understanding the existing carrying capacity of the roads near to the project site and the connecting main roads in the area.

During Mine operation	Quarry A1 4.00 Ha (40,000 sqm)	Quarry A2 1.53 Ha (15,300 sqm)	Total
Total Capacity of mine	185367 T	86346 T	271713 T
No. of working days	275 days	275 days	275 days



Per Day Production	674.07 T	313.98 T	988.05 T
Tripper Capacity	20 T	20 T	-
No. of trucks deployed per day	33.8~34 trucks	15.6~16 trucks	49.5~50 trucks
No of Trips/day to &fro	68 trucks	32 trucks	100
Increase in PCU/day will be	204	96	300

Road	Existing Traffic Scenario		Modified Traffic Scenario	
	Village Road	MDR Road	Village Road	MDR Road
Volume in PCU's/hr	88	355	388	655
Capacity in PCU's/hr	2000	6000	2000	6000
	0.044	0.0591	0.194	0.1091
LOS	A	A	A	A

From the above analysis it can be seen that the V/C ratio for both the mines w.r.t Village road is likely to change from 0.044 to 0.194 with LOS being same "A" which is 'Excellent as per classification LOS stated above & also for MDR road is likely to change from 0.0591 to 0.1091 with LOS being same "A" which is 'Excellent as per classification LOS stated above.

The minerals excavated will be loaded directly into trucks and transported to the concerned market.

1.11 ENVIRONMENTAL MANAGEMENT PLAN IMPLEMENTATION

Environmental Management Plan serves no purpose if it is not implemented with true spirit.

Some loopholes in the EMP can also be detected afterwards when it is implanted and monitored.

Thus, an implementation and monitoring programme has to be prepared.

Table 1.7: Budget allotted for Environmental Management Plan

Annual EMP Cost					
		Quarry A1 4.00 Ha (40,000 sqm)		Quarry A2 1.53 Ha (15,300 sqm)	
S.No.	Particulars	Budget Provisions (Rs.)		Budget Provisions (Rs.)	
		Capital	Recurring	Capital	Recurring



1 (a)	Water sprinkling through tanker sprinkling system both on haul road and transportation road.	-		-	
1 (b)	Water requirement-5.0 KLD, Cost of water (@ 0.15 paisa/liter) Assuming 275 working days.		2,06,250		2,06,250
2.	Approach Road Maintenance, Speed breakers, Sign Boards, Reflectors, Development of T-Point etc (500m in length × 5m in width)	75,000	7,500	75,000	7,500
3.	Grazing Land development	30,000	10,000	30,000	10,000
4.	Plantation and Post Plantation care (per plant 500rs cost)	4,00,000	46,000	2,75,000	46,000
5.	Monitoring twice a year (Air, Water & Noise twice a year)	-	1,00,000	-	1,00,000
6.	Wire Fencing	1,66,200	17,000	1,02,400	10,000
Labour Welfare					
7.	Occupational health survey	-	37,000	-	23,000
8.	First Aid kits, number of kits 4	20,000	5000	20,000	5000
9.	Fire safety (1 Nos.) @ 30000	20,000	2000	20,000	2000
Solid waste management					
10.	Two dustbins & development of solid waste management system	10000		10000	
11.	Vehicle maintenance and PUC certification	Nil	25000	Nil	25000
12.	Signage and Caution Board	5000	1000	5000	1000
Total		7,36,200/-	4,56,750/-	5,37,400/-	4,35,750/-
Project Cost		45 Lakhs		30 Lakhs	
Total Capital Cost (Quarry A1+A2)		Rs. 12,73,600/-			
Total Recurring Cost (Quarry A1+A2)		Rs. 8,92,500/-			
Total Cost of CER (2% of the Project A1 + A2)		60,000 + 90,000 = 1,50,000/-			

1.12 BENEFIT OF MINING

➤ Physical benefits



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The opening of the proposed project will enhance the following physical infrastructure facilities in the adjoining areas.

- Improved road communication and maintenance
- Generating useful economic resource for construction.
- Enhancement of green cover (As a part of reclamation plan)
- Creation of community assets (infrastructure)

➤ **Social Benefits**

- Increase in Employment Potential
- Contribution to the Exchequer as the saleable minerals will be given royalty.
- Increased Health related activities: Health camps, medical aids, family welfare programs, immunization camp sports will be arranged.
- Strengthening of existing community facilities through the Community Development Programme.

ENVIRONMENTAL BENEFITS

➤ **Enhancement of green cover**

Plantation/afforestation will be done as per program Post plantation, the area will be regularly monitored in every season for evaluation of success rate. For selection of plant species local people will also be involved. The management will provide free saplings of fruit and other trees, etc. to local during rain for plantation.

	Quarry A1 4.00 Ha (40,000 sqm)	Quarry A2 1.53 Ha (15,300 sqm)
Total No. of Plants to be planted	800	550
Place for Plantation Programme	Plantation program in Gram Panchayat- Bade Kameli, Tehsil- Bade Bacheli, Dist.- Dantewada, Khasra No. 754, area -3.370 Ha	Plantation program in Gram Panchayat- Bade Kameli, Tehsil- Bade Bacheli, Dist.- Dantewada, Khasra No. 723, area -0.810 Ha

1.14 CONCLUSIONS

The mining operations will meet the compliance requirements of MoEF & CC;



Community impacts will be beneficial, as the project will generate significant economic benefits for the region;

Adoption of Best Available Technology and Best Management Practices with more environmentally friendly process

With the effective implementation of the Environment Management Plan (EMP) during the mining activities, the proposed project can proceed without any significant negative impact on environment.



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