

MINUTES OF THE 92ND MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 20TH, 21ST, 22ND and 23RD OCTOBER, 2021

The 92nd meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 20th, 21st, 22nd and 23rd October, 2021 under the Chairmanship of Shri Ashok Kumar Singh, IFS (Retd.) in the Conference Room at SEAC, Ranchi.

The following members were present:

1. Shri Ashok Kumar Singh, IFS (Retd.) - Chairman
2. Dr. Karti Avishek - Member
3. Shri Niranjan Lal Agarwalla - Member
4. Dr. Raja Kumar - Member
5. Dr. Ajay Govind Bhatt - Member
6. Shri Ashok Kumar Dubey, IFS - Secretary

SEAC forwarded various projects to the SEAC for the technical appraisal after the last SEAC meeting held on 06th, 07th and 08th October, 2021. These projects have been put up for discussion. Besides, these Projects, wherein PP's were asked to provide requisite information & clarifications in the earlier meeting of SEAC, were also considered for appraisal. The Project Proponents have been asked to make technical presentation for the appraisal of their projects before the committee.

The following observations / recommendations were made during the presentation (Project - wise) as under:

Day 1 : October 20, 2021 [Wednesday]

Consideration of Proposals

1. Sidpahari Stone Mine of M/s Lutfal Stone and Granite, Village : Sidpahari, Thana no. : 5th, Anchal : Hiranpur, Dist. : Pakur, Jharkhand (1.66 Ha).

(Proposal No. : SIA/JH/MIN /68025 /2021).

Project Category: B1 – Application for TOR

EL Application for: Boulder Stone: 30652 Cum Per Annum / 85826 Ton Per Annum

Name of the consultant: Rian Enviro Private Limited, Patna, Bihar

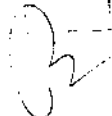
This is a new project which has been taken for appraisal on 20.10.2021.

PROJECT and LOCATION Details:

Sr	Parameter	Details
1	Project Name	Sidpahari Stone Mine
2	Lessee:	Prop- Sri Lutfal Haque
3	Lease Address	Mouza – Sidpahari ; Anchal – Hiranpur District – Pakur; State, Jharkhand
4	Lease Area	Ha: 1.66 ha Acres: 4.11 Acres
5	Type of Land	Non Forest – Rayati Land














6	Project Cost	45.0 Lakhs	
7	EMP Budget	Capital: 4.78 Lakhs	Recurring: 1.9 Lakh / year
8	CSR / CER Budget	Rs. 90,000	
9	New or Expansion	New Project	
10	Mineable Reserves	Cu.M.: 306412 Cu. M.	Tonnes: 857954 Tonnes
11	Mine Life	10 years	
12	Man power	19	
13	Water Requirement	8.07 KLD=0.57 KLD (Drinking & Domestic Uses) + 4 (Plantation) KLD + 3.5 KLD (Dust Suppression).	
14	Water Source	From Nearby villages by tankers	
15	DG Set / power	60 KVA	
16	Crusher	Not Present	
17	Nearest Water Body	Ganga River, Approx. 20.0 Km	
18	Nearest Habitation	Hiranpur Village: Appox.6.2 KM;	
19	Nearest Rail Station	Kotalpukur Railway Station, 7.0 KM	
20	Nearest Air Port	Kolkatta: 246 KM	
21	Nearest Forest	NIL	
22	Road & Highways	NH 80 – 12.7 KM; NH-34 – 15.70 KM	

CO-ORDINATES

1	Latitude	From 24°43'29.1" N	To 24°43'33.6" N
2	Longitude	From 87°45'40.6" E	To 87°45'46.1" E

LAND DETAILS :

Mouza	J.B. No.	Plot no.
Sidpahari	41	718/P
	25	721/P, 722, 723/P, 727, 728/P, 729/P, 730
	43	726, 731, 732/P
	24	737/P, 738/P, 774, 775 & 776

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STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LOI) has been issued by District Mining Office, Pakur, vide letter no. 1090/M dated 08.07.2021.
2	CO	:	The CO, Hiranpur vide letter no. 374, dated 04.09.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register I.
3	DMO	:	DMO, Pakur vide memo no. 1244/M, dated 23.07.2021 certified that five lease (43.26 Acres/ 17.51 Ha) exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribag Division vide letter no. 1213 dated 26.07.2021 certified that the National Park, Bio Diversity & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 510 dated 10.03.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Pakur vide letter no. 1412/M, dated 12.08.2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Letter No.-838/vi On dated 19.10.2020
8	Mine Plan Approval	:	Letter No. 1503/M, Pakur dated 27.08.2021

Working Details :

1	Mining Method	:	Opencast Method, Mechanized Mine, Wagon Drilling & Control Blasting will be deploy	
2	Quarry Area	:	5 years – 0.84ha.	Life of Mine – 1.10 ha.
3	Waste Generation	:	3 years–6600 cum	Life of Mine – 6600 cum
4	Stripping Ratio	:	1:0.01	
5	Working Days	:	300	
6	Bench: size & No	:	6m x 6m	
7	Elevation of Mine	:	In 58m AMSL	
8	Ground Level	:	In 57m AMSL	

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
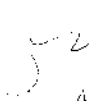



	Elevation	
9	Ultimate Working Depth	39 m AMSL
10	Water Table	28 m AMSL
11	Topography of Mine	Unven Land
12	Explosive Requirement	50 Kg/Day
13	Diesel/Fuel requirement	294 Litres/day

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Generation of Waste/O.B in cum	Bench PL in Meters
1 st	30624	85747	3900	57-51
2 nd	30622	85742	2700	57-51
3 rd	30636	85781	00	57-51
4 th	30622	85742	00	51-45
5 th	30652	85826	00	51-39
Total	153156	428838	6600	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Use at Conceptual Stage
1	Mining Area	0.00	0.84	1.10	Water Reservoir
2	Office /Store	0.00	0.00	0.00	Not Proposed
3	Crusher	0.00	0.00	0.00	Not Proposed
4	Road	0.00	0.02	0.01	Haul Road
5	Dump with Parapet wall & Garland drain	0.00	0.19	0.00	Back filling
6	Green belt in Safety Barrier	0.00	0.45	0.45	Plantation in 7.5mtr Safety Zone
8	Unutilized	1.66	0.16	0.00	
	TOTAL	1.66	1.66	1.66	

ENVIRONMENT MANAGEMENT
Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.45 ha	720 trees @ 1600 trees per ha
	Other	NIL	NIL
2	Reclaimed Area		
3	Haul /Approach Road	260 mtr one side i.e 520 mtr both side	208 trees – 2.5m distance

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3 x 3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

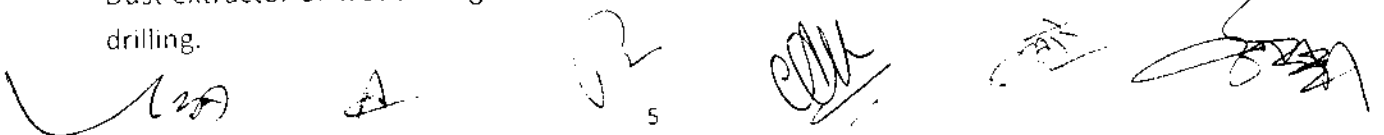
- There is 6600 cum of OB waste which will be stacked over an area of 0.19 ha. This will be utilized for back filling before end of mine.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be used for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- it shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.



- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc. shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

As per CO, Hiranpur vide letter no. 374, dated 04.09.2020, 18 houses are existing within 500 m. The Committee verified the fact with help of Google Imagery which shown that some habitation is existing at the distance of 430 m from the mine lease area. Since, this is case of ToR and detailed EIA / EMP studies & Public Consultation will be carried out. The effect of mining activities on habitation will be cleared during the EC presentation.

Baseline Monitoring data generation in 16th October, 2021 to 15th January, 2022.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

2. Sidpahari and Manjhladih Stone Mine of M/s Lutfal Stone and Granite, Village : Sidpahari & Manjhladih, Thana no. : 59 & 60, Anchal : Hiranpur, Dist. : Pakur, Jharkhand (2.696 Ha).
(Proposal No. : SIA/JH/MIN /68021 /2021).

Project Category: B1 – Application for TOR

EC Application for: Boulder Stone : 46388 Cum Per Annum/129886 Ton Per Annum

Name of the consultant: Rian Enviro Private Limited, Patna, Bihar

This is a new project which has been taken for appraisal on 20.10.2021.

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Sidpahari and Manjhladih Stone Mine
2	Lessee:	Partner's- Sri Lutfal Haque, Smt. Mahamoda Bibi and Smt. Mursida Bibi
3	Lease Address	Mauza- Sidpahari and Manjhladih, Thana No.-59 & 60, Anchal- Hiranpur, District- Pakur, Jharkhand
4	Lease Area	Ha: 2.696 ha Acres: 6.66 Acres
5	Type of Land	Non Forest – Rayati Land
6	Project Cost	55 Lakhs
7	EMP Budget	Capital: 7.51 Lakhs Recurring: 2.8 Lakh / year
8	CSR / CER Budget	Rs. 1.10 Lakhs
9	New or Expansion	New Project
10	Mineable Reserves	Cu.M.: 463287Cu. M. Tonnes: 1297204 Tonnes
11	Mine Life	10 years
12	Man power	22
13	Water Requirement	9.16 KLD=0.66 KLD (Drinking & Domestic Uses) + 4 (Plantation) KLD + 4.5 KLD (Dust Suppression).
14	Water Source	From Nearby villages by tankers
15	DG Set / power	60 KVA
16	Crusher	Not Present
17	Nearest Water Body	Ganga River, Approx. 18.9 Km towards E Direction
18	Nearest Habitation	Hiranpur Village: Appox.5.8 KM;
19	Nearest Rail Station	Kotalpukur Railway Station, 6.8 KM and Guman Railway Station, 9.2 KM
20	Nearest Air Port	Kolkatta: 246 KM
21	Nearest Forest	NIL

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22	Road & Highways	NH 80 – 12.9 KM; NH-34 – 19.5 KM
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CO-ORDINATES :

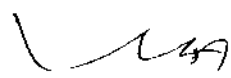
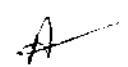
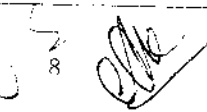

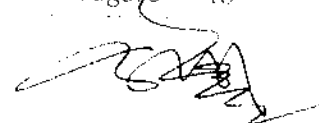
1	Latitude	From 24°43' 33.29" N	To 24°43' 32.06" N
2	Longitude	From 87°45' 39.59" E	To 87°45' 38.03" E

LAND DETAILS :

Mouza	J.B. NO.	PLOT NO.
Manjhladih	45	419, 420, 421, 422
	14	607, 625, 627/P
	24	609, 610
	28	611/P, 624
	20	614
	37	615, 616/P, 617/P, 618, 619/P, 620, 621, 622, 623,
	43	608
Sidpahari	06	771
	24	772/P and 773

STATUTORY CLEARANCES :

1	LOI/Lease docs	The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 507/M dated 27.03.2021.
2	CO	The CO, Hiranpur, Pakur vide letter no. 375 dated 04.09.2020 has mentioned the plot nos. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register.
3	DMO	DMO, Pakur vide memo no. 519/M, dated 31.03.2021 certified that four lease (39.15 Acres / 15.84 ha) exists within 500 m radius from proposed project site.
4	DFO Wild Life	DFO, Wildlife Division, Hazaribag, vide letter no. 733 dated 10.04.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	DFO, Pakur Forest Division vide letter no. 368, dated 24.02.2021 certified that the distance of reserved / protected forest from the Project site is more than 250 m.
6	DSR	The DC-cum-District Magistrate, Pakur vide letter no. 1412 / M, dated 12.08.2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to

		Environmental Clearance can be taken.
7	Gram Sabha	Letter No.-839/V, On Dated-19.10.2020
8	Mine Plan Approval	Letter No. 1504/M, Pakur dated 27.08.2021

Working Details :


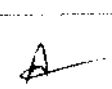
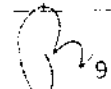



1	Mining Method	: Opencast Method, Mechanized Mine, Wagon Drilling & Control Blasting will be deploy
2	Quarry Area	: 5 years – 1.26 ha. Life of Mine – 1.79 ha.
3	Waste Generation	: 3 years–12486 cum Life of Mine – 12486 cum.
4	Stripping Ratio	: 1:0.01
5	Working Days	: 300
6	Bench: size & No	: 6m x 6m
7	Elevation of Mine	: In 59m AMSL
8	Ground Level Elevation	: In 58m AMSL
9	Ultimate Working Depth	: 39 m AMSL
10	Water Table	: 30 m AMSL
11	Topography of Mine	: Uneven Land
12	Explosive Requirement	: 75 Kg/Day
13	Diesel/Fuel requirement	: 386 Litres/day

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	Generation of Waste/O.B in cum	Bench RL in Meters
1 st	46280	129584	4500	57-51
2 nd	46368	129830	4282	57-51
3 rd	46294	129623	3704	51-45
4 th	46294	129623	00	57-45
5 th	46388	129886	00	45-39
Total	231624	648546	12486	

Land Use

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	1.26	1.79	Water Reservoir
2	Office /Store	0.00	0.00	0.00	Not Proposed
3	Crusher	0.00	0.00	0.00	Not Proposed
4	Road	0.00	0.03	0.02	Approach Road

5	Dump with Parapet wall & Garland drain	0.00	0.22	0.00	Backfilling
6	Green belt in Safety Barrier	0.00	0.78	0.78	Plantation in 7.5mtr safety zone
8	Unutilized	2.696	0.41	0.00	
	TOTAL	2.696	2.696	2.696	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.78 ha	1248 trees @ 1600 trees per ha
2	Other Reclaimed Area	NIL	NIL
3	Haul /Approach Road	320 one side i.e 640 m both side	256 trees – 2.5m distance

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3 x 3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- There is no waste to be generated.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be used for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended

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particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside

- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good. sanitation system shall be made available.


Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months.

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Baseline Monitoring data generation in 16th October, 2021 to 15th January, 2022.



Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

3. Dongodih Stone Deposit of Sri Sharwan Yadav, Village : Dongodih, Tehsil : Jamua, Dist. : Giridih, Jharkhand (0.931 Ha).

(Proposal No. : SIA/JH/MIN /233810 /2021).

Project Category : B2 – Application for Environment Clearance

EC Application for: Boulder Stone : 7020.37 Cu.M. / year i.e. 18955 TPA
Mobile Crusher

Name of the consultant : Rian Enviro Pvt. Ltd., Patna, Bihar

This is a new project which has been taken for appraisal on 20.10.2021

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Dongodih Stone Deposit
2	Lessee:	Shri Sharwan Yadav, Vill-Chhaknadih, Post-Kharagdiha, Dist- Giridih
3	Lease Address	Mouza – Dongodih; Thana – Jamua District – Giridih; State Jharkhand
4	Lease Area	Ha: 0.931 ha Acres: 2.30 Acres
5	Type of Land	Non Forest – Raiyati Land
6	Project Cost	29.37 Lakhs
7	EMP Budget	Capital: 4.12 Lakhs Recurring: 6.45 Lakh / year
8	CSR / CER Budget	Rs. 5.75 Lakhs
9	New or Expansion	New Project
10	Mineable Reserves	Cu.M.: 70425.40 Cu. Tonnes: 190148.59 M. Tonnes
11	Mine Life	10 years
12	Man power	16
13	Water Requirement	5.74 KLD (Drinking:0.24 KLD, Dust Suppression:2.0 KLD, Plantation:3.5 KLD
14	Water Source	Water for drinking purpose will be taken out by dug wells/ bore wells. For sprinkling & plantation water.

			will be taken from private tanker
15	DG Set / power	:	10 KVA
16	Crusher	:	No
17	Nearest Water Body	:	Irga River 7.50 KM
18	Nearest Habitation	:	Dongodih Village: 0.6 KM; Jamua 9 KM
19	Nearest Rail Station	:	Rajdhanwar 15.5 KM
20	Nearest Air Port	:	Dhanbad: 74 KM
21	Nearest Forest	:	NIL
22	Road & Highways	:	SH 13 – 4.0 KM; NH-31 – 52.5 KM, Gawan-Jamua Road-2.1 KM

CO-ORDINATES :

1	Latitude	From 24°26' 35.41" N	To 24°26'39.34" N
2	Longitude	From 86°7' 2.04" E	To 86°7'6.84" E

LAND DETAILS :

	Mouza	Khata No.	Plot no.
		3	221, 222, 223, 225, 312 & 313
1	Dongodih	11	226 & 227
		13	318 & 319

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Giridih vide letter no. 691/M dated 03.08.2021
2	CO	:	The CO, Jamua vide letter no. 166, dated 25.02.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Giridih vide memo no. 693/M, dated 04.03.2021 certified that no lease exists within 500 m radius from proposed project site & Total lease area is less than 1 Ha.
4	DFO Wild Life	:	Divisional Forest Officer Wildlife Hazaribagh vide letter no. 1220, dated 27.07.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

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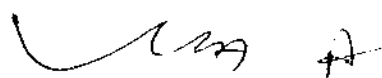
5	DFO Forest Distance	DFO, Giridih West Division vide letter no. 828, dated 28.07.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	The DC-cum-District Magistrate, Giridih vide letter no. 880 / M, dated 30.09.21 has informed that this project is part of District Survey Report (DSR) at Giridih district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	On 17.05.2021
8	Mine Plan Approval	Letter No. 547/G dated 24.05.2021

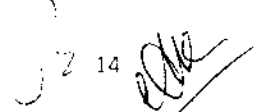
Working Details :

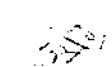
1	Mining Method	Semi Mechanized. Jack Hammer, Drilling & Blasting to be used	
2	Quarry Area	5 years – 0.931 ha	Life of Mine – 0.931 ha
3	Waste Generation	5 years–1840.90 Cu.M	Life of Mine – Morum
		Morum–NIL	NIL
4	Stripping Ratio	0:0	
5	Working Days	295	
6	Bench: size & No	3m x 3m	
7	Elevation of Mine	363 AMSL	
8	Ground Level Elevation	361 AMSL	
9	Ultimate Working Depth	358.3 AMSL	
10	Water Table	355 AMSL & 6-8 m bgl	
11	Topography of Mine	Undulating Topography	
12	Explosive Requirement	26.55 Tons/year	
13	Diesel/Fuel requirement	30.00 KL/year (100 Litres/day)	

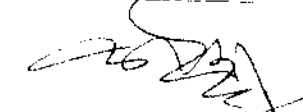
Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	Production Morum (CuM)	Bottom Bench RL in Meters
1 st	7021	18955.35	0	360.85
2 nd	7013	18934.83	0	360.2
3 rd	6991	18875.84	0	359.5
4 th	6983	18855.32	0	359.0



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5 th	6969	18816.84	0	358.3
Total	34977	94438.18	0	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.000	0.490	0.490	Water Reservoir
2	Office /Store	0.000	0.000	0.000	
3	Crusher	0.000	0.000	0.000	
4	Road	0.000	0.001	0.001	Approach Road
5	Garland Drain	0.000	0.000	0.000	
6	Safety Zone	0.000	0.440	0.440	Plantation
7	Settling Tank	0.000	0.000	0.000	
8	Unutilized	0.931	0.000	0.000	
	TOTAL	0.931	0.931	0.931	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.440 ha	705 trees @ 1600 trees per ha
2	Other Reclaimed Area	:	NIL	NIL
3	Haul /Approach Road	:	9.38 KM	705 trees on both sides – 3 m distance



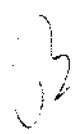



- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as n/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste Generation will be 1840.90 Cu.M. during the Plan period. No dump area is proposed for waste. The waste generated during the plan period will be use for haul road dressing.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.

- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided. discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

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- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. The ultimate working depth will be restricted to 4.7 m.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Dongodih Stone Deposit of Sri Sharwan Yadav, Village : Dongodih, Tehsil : Jamua, Dist. : Giridih, Jharkhand (0.931 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

4. Matari Stone Mine of M/s Ganesh Enterprises, Village : Matari, Tehsil : Topchanchi, Dist. : Dhanbad, Jharkhand (2.06 Ha).

(Proposal No. : SIA/JH/MIN /215161 /2021).

Project Category: B2 – Application for Environment Clearance

EC Application for: Boulder Stone: 37985 Cu.M. / year i.e. 102560 TPA
Mobile Crusher- None

Name of the consultant: Rian Enviro Pvt. Ltd., Patna, Bihar

This is a new project which has been taken for appraisal on 20.10.2021

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Matari Stone Mine
2	Lessee:	Sri Ganesh Enterprise, Partners- Sri Pranab Kumar Ghoshal & Others, At- R II-231, Bidhan Nagar Housing Colony, ABL Township, P.S.-New Township, Durgapur, Dist.- Paschim Burdwan, State- West Bengal-713206
3	Lease Address	Mouza – Matari; Thana – Topchanchi District – Dhanbad; State Jharkhand
4	Lease Area	Ha: 2.06 ha Acres: 5.09 Acres
5	Type of Land	Non Forest – Raiyati Land
6	Project Cost	27.20 Lakhs
7	EMP Budget	Capital: 4.20 Lakhs Recurring: 10.65 Lakh / year
8	CSR / CER Budget	Rs. 0.55 Lakh , per year
9	New or Expansion	New Project
10	Mineable Reserves	Cu.M.: 381064 Cu. M. Tonnes: 1028872 Tonnes
11	Mine Life	10 years
12	Man power	20

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13	Water Requirement	:	10.60 KLD (Drinking:0.60 KLD, Dust Suppression:8.0 KLD, Plantation:2.0 KLD
14	Water Source	:	Water for drinking purpose will be taken out by open wells/ bore wells. For sprinkling & plantation water will be taken from private tanker
15	DG Set / power	:	10 KVA
16	Crusher	:	No
17	Nearest Water Body	:	Jamunia River 9.5 KM
18	Nearest Habitation	:	Matari Village: 1.0 KM; Topchanchi 8.5 KM
19	Nearest Rail Station	:	Matari Railway Station 1.5 KM
20	Nearest Air Port	:	Dhanbad: 17.4 KM
21	Nearest Forest	:	NIL
22	Road & Highways	:	NH-2 – 5.8 KM;; Dumra-Gomoh Road-6.2 KM

CO-ORDINATES

1	Latitude	From 23°50'22.02" N	To 23°50'29.76" N
2	Longitude	From 86°15'14.09" E	To 86°15'19.93" E

LAND DETAILS

	Mouza	Khata No.	Plot No.
1	Matari	71	2434
		22	2435
		24	2431
		68	2710(P)
		75	2711

STATUTORY CLEARANCES

1	LOI/Lease docs	The Letter of Intent (LoI) has been issued by District Mining Office, Dhanbad vide letter no. 550/M dated 10.03.2021
2	CO	The CO, Topchanchi (Dhanbad) vide letter no. 615, dated 18.11.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.

3	DMO	:	DMO, Dhanbad vide memo no. 946/M, dated 12.04.2021, certified that no lease exists within 500 m radius from proposed project site & Total lease area is less than 5 Ha.
4	DFO Wild Life	:	Divisional Forest Officer Wildlife Hazaribagh vide letter no. 1156, dated 16.07.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Dhanbad vide letter no. 2368, dated 10.12.2020 certified that the distance of reserved / protected forest is 690 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Giridih vide letter no. 988/M, dated 19.04.21 has informed that this project is part of District Survey Report (DSR) at Dhanbad district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 07.01.2021
8	Mine Plan Approval	:	Letter No. 546/G, Department of Mines & Geology, Hazaribagh, dated 24.05.2021

Working Details :

1	Mining Method	:	Semi Mechanized, Jack Hammer, Drilling & Blasting to be used
2	Quarry Area	:	5 years – 1.69 ha Life of Mine – 2.06 ha
3	Waste Generation	:	5 years-7386 Cu. M Life of Mine – Morum Morum-NIL NIL
4	Stripping Ratio	:	0:0
5	Working Days	:	300
6	Bench: size & No	:	6m x 6m
7	Elevation of Mine	:	243 AMSL
8	Ground Level Elevation	:	239 AMSL
9	Ultimate Working Depth	:	219 AMSL
10	Water Table	:	197 AMSL & 38-40 m bgl
11	Topography of Mine	:	Undulating Topography
12	Explosive Requirement	:	144 Tons/year
13	Diesel/Fuel requirement	:	30.00 KL/year (100 Litres/day)

Production Details

Year	Production of stone in Tonnes	Production of stone in Cu.m	Production of soil in Cu.m	Intercalated waste in Cu.m	Total Waste in Cu.m
1 st Year	102249	37870	7386	0	7386
2 nd Year	102109	37818	0	0	0
3 rd Year	102560	37985	0	0	0
4 th Year	102395	37924	0	0	0
5 th Year	102438	37940	0	0	0
Total	511751	189537	7386	0	7386

Land Use :

Sl	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	1.24	1.56	Water Reservoir
2	Office /Store	0.00	0.00	0.00	
3	Crusher	0.00	0.00	0.00	
4	Road	0.00	0.00	0.00	
5	Waste Dump	0.00	0.20	0.00	Plantation
6	Safety Zone	0.00	0.50	0.50	
7	Settling Tank	0.00	0.00	0.00	
8	Unutilized	2.05	0.12	0.00	
	TOTAL	2.06	2.06	2.06	

ENVIRONMENT MANAGEMENT

Green Belt Development :

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.24 ha	384 trees @ 1600 trees per ha
2	Other Reclaimed Area	NIL	NIL
3	Haul /Approach Road	0.01 KM	16 trees on both sides - 3 m distance

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Total 7386 Cu.m of soil shall be generated which shall be dumped in the Northern portion of lease area and shall be used for haul road dressing and Plantation during the plan period.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retaining walls shall be constructed to prevent water flowing into the lease area from outside and from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice

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- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard.
- The Boundary Pillars of the proposed mine lease area will be maintained properly.
- One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Matari Stone Mine of M/s Ganesh Enterprises, Village : Matari, Tehsil : Topchanchi, Dist. : Dhanbad, Jharkhand (2.06 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

- Korami Stone Mine of M/s Sunita Devi Stone Works, Village : Korami, P.S. : Naudiha Bazar, Dist. : Palamau, Jharkhand (1.303 Ha).

(Proposal No. : SIA/JH/MIN /231950 /2021).

Project Category : B2 – Application for Environment Clearance
EC Application for : Boulder Stone :22102 Cu.M. Per Annum / 61886 Ton Per Annum
Mobile Crusher: Not Proposed

Name of the consultant : OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd.

This is a new project which has been taken for appraisal on 20.10.2021.

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Korami stone mine by M/s Sunita Devi Stone Works
2	Partner's:	Sri. Rohit Kumar and Sri Rahul kumar,
3	Lease Address	Mouza – Korami; Thana – Naudiha Bazar, Thana No – 372, District – Palamau; State Jharkhand
4	Lease Area	Ha: 1.303 ha Acres: 3.22Acres

5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	38.00 Lakhs
7	EMP Budget	:	Capital: 5.88 Lakhs Recurring: 2.2 Lakh / year
8	CSR / CER Budget	:	Rs. 2.25 Lakhs
9	New or Expansion	:	New Project
10	Mineable Reserves	:	221122 Cu. M. Tonnes: 619141 Tonnes
11	Mine Life	:	10 years
12	Man power	:	18
13	Water Requirement	:	7.04 KLD (Drinking:0.54KLD,Dust Suppression:3.50 KLD, Plantation:3.0 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	Not Required
16	Crusher	:	Not Proposed
17	Nearest Water Body	:	Batane River 10.48 KM
18	Nearest Habitation	:	Nawatanr Village. 3.63 KM towards North west direction; Palamau 50 KM
19	Nearest Rail Station	:	Japla 40 KM
20	Nearest Air Port	:	Ranchi 160 KM
21	Nearest Forest	:	NIL
22	Road & Highways	:	NH-98-13.76 KM;

CO-ORDINATES :

1	Latitude	From 24° 21.160'N	To 24° 21.121'N
2	Longitude	From 84° 19.178'E	To 84° 19.189'E

LAND DETAILS :

	Mouza	Khata No.	Plot No.
1	Korami	24	727, 728 & 729

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LOI) has been issued by District Mining Office, Palamau, Medininagar vide letter no 1000/M, Dated 17/08.2021.
2	CO	:	The CO, Naudiha Bazar, Palamau vide letter no 18 dated 05.12.19 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.
3	DMO	:	DMO, Palamau vide memo no. 1134/M, dated

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4	DFO Wild Life		24.09.2021 certified that no lease exists within 500 m radius from proposed project site and total lease area is less than 5 Ha.
5	DFO Distance	Forest	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 816, dated 09.03.21 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
6	DSR		DFO, Medininagar Division vide letter no.2181 Dated 15.07.21 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
7	Gram Sabha		The DC-cum-District Magistrate, Palamau, Medininagar vide letter no. 1076, Dated 11.09.2021 has informed that this project is part of District Survey Report (DSR) at Palamau district and accordingly necessary action with regard to Environmental Clearance can be taken.
8	Mine Approval	Plan	Dated 29.07.2019
9	Laboratory test report		Letter No.670/G, Palamau, Dated 08.09.2021
			Test report no. ETS/1216, Dated-29.09.2021

Working Details :

1	Mining Method	Mechanised, Jack Hammer, Drilling & Blasting to be used
2	Quarry Area	5 years-0.47ha Life of Mine - 0.69ha
3	Waste Generation	5 years-2227 Cu.M Life of Mine - 2227Cu.M
4	Stripping Ratio	1:0.01
5	Working Days	300
6	Bench: size & No	6m x 6m
7	Elevation of Mine	275m In AMSL
8	Ground Level Elevation	272m In AMSL
9	Ultimate Working Depth	254m In AMSL/18m BGL
10	Water Table	242mAMSL
11	Topography of Mine	Uneven land
12	Explosive Requirement	25Kg/Day

13

Diesel/Fuel : 294 Litres/day
requirement

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	Removal of gritty Soil & Weathered rock in cum	Bench RL in Meters
1 st	22077	61816	1205	275-272
2 nd	22102	61886	1022	272-266
3 rd	22092	61858	00	272-266
4 th	22032	61690	00	272-266
5 th	22046	61729	00	266-260
Total	110349	308979	2227	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	0.47	0.69	Water Reservoir
2	Office /Store	0.00	0.00	0.00	Not Proposed
3	Crusher	0.00	0.00	0.00	Not Proposed
4	Road	0.00	0.02	0.01	Approach Road
5	Garland Drain with Dump	0.00	0.07	0.00	Backfilling
6	Safety Zone	0.00	0.60	0.60	Plantation
7	Settling Tank	0.00	0.001	0.00	Settling Tank
8	Unutilized	1.303	0.143	0.00	
9	Utilized Area	0.00	1.16	0.00	
	TOTAL	1.303	1.303	1.303	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.60 ha	960 trees @ 1600 trees per ha
2	Other Reclaimed Area	NIL	NIL
3	Haul /Approach	466 m	310

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease bound) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report

Solid Waste Management

- There is waste to be generated 2227 Cu.M. during life of mine which will be reclaimed after life of mine.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is found, mining activities will be stopped 2m above the Ground Water Table
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided. discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.

- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- The Boundary Pillars of the proposed mine lease area will be maintained properly
- One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Korami Stone Mine of M/s Sunita Devi Stone Works Village : Korami, P.S. : Naudiha Bazar, Dist. : Palamau, Jharkhand (1.303 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

- Shahpur Stone Mine of M/s Sri Ram Construction, Village : Shahpur, P.S. : Naudiha Bazar, Dist. : Palamau, Jharkhand (2.404 Ha).

(Proposal No. : SIA/JH/MIN /231940 /2021).

Project Category : B2 – Application for Environment Clearance
EC Application for : Boulder Stone 37,765 Cum Per Annum / 1,05,742 Ton Per Annum
Mobile Crusher: Not Proposed

Name of the consultant: OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd.

This is a new project which has been taken for appraisal on 20.10.2021.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	Shahpur stone mine by M/s Sri Ram construction
2	Partner's:	Sri Umesh yadav, Sri Gopal Yadav, Sri Baijnath Paswan Sri Ajat Shatru
3	Lease Address	Mauza -Shahpur Thana- Naudiha Bazar, Thana No. -380,

		District – Palamu, State Jharkhand.
4	Lease Area	2.404 ha Acres:5.94 Acres
5	Type of Land	Non Forest – Rayati Land
6	Project Cost	49.00 Lakhs
7	EMP Budget	Capital: 7.37 Lakhs Recurring: 3.0 Lakh / year
8	CSR / CER Budget	Rs. 2.40 Lakhs
9	New or Expansion	New Project
10	Mineable Reserves	377186Cu. M. Tonnes: 1056121Tonnes
11	Mine Life	10 years
12	Man power	23
13	Water Requirement	7.19 KLD (Drinking : 0.69 KLD, Dust Suppression : 3.50 KLD, Plantation : 3.0 KLD
14	Water Source	From Nearby villages by tankers
15	DG Set / power	Not Required
16	Crusher	Not Proposed
17	Nearest Water Body	Batane River 12.73 KM
18	Nearest Habitation	Saraidih Village: 1.33KM towards North east direction; Palamau 51 KM
19	Nearest Rail Station	Rajhura 33.64KM
20	Nearest Air Port	Chianki 37.61 KM
21	Nearest Forest	NIL
22	Road & Highways	NH-98-19.02 KM;

CO-ORDINATES :

1	Latitude	From 24°18'1.29"N To 24°17'57.29"N
2	Longitude	From 84°18'23.65"E To 84° 18' 23.43"E

LAND DETAILS :

	Mouza :	Khata No:	Plot Nos :
1	Shahpur	153	112(P), 120(P), 480(P), 485(P) and 486(P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	The Letter of Intent (LoI) has been issued by District Mining Office, Palamau, Medininagar vide letter no. 927/M, Dated 24.04.2021.
2	CO	The CO, Naudihia Bazar vide letter no. 45, Dated 09.02.19 has mentioned the plot no. of the project is

			not recorded as "Jangle Jhari" in Register II.
3	DMO	:	DMO, Palamau vide memo no. 960/M, Dated 30.07.2021 certified that no lease exists within 500 m radius from proposed project site and total lease area is less than 5 Ha.
4	DFO Wild Life	:	Deputy Director Palamu Tiger Project, North Division, Medininagar vide letter no. 847 Dated 22.09.21 certified that the National Park, Bio-Diversity & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Medininagar Division vide letter no. 947 Dated 15.03.19 certified that the distance of notified forest is 340 m from proposed project site
6	DSR	:	The DC-cum-District Magistrate, Palamau, Medininagar vide letter no. 1076, Dated 11.09.2021 has informed that this project is part of District Survey Report (DSR) at Palamau district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Dated 05.08.19
8	Mine Plan Approval	:	Letter No. 669/C, Palamau, Dated 08.09.2021
9	Laboratory test report	:	Test report no. ETS/1216, Dated-23.09.21

Working Details :

1	Mining Method	:	Mechanised, Wagon Drill, Jack Hammer, Drilling & Blasting to be used
2	Quarry Area	:	5 years-0.7-ha
3	Waste Generation	:	5 years-11875 Cu.M
			Life of Mine - 1.4m
			Life of Mine - 11875Cu.M
4	Stripping Ratio	:	1:0.02
5	Working Days	:	300
6	Bench: size & No	:	6m x 6m
7	Elevation of Mine	:	296m In AMSL
8	Ground Level Elevation	:	294m In AMSL
9	Ultimate Working Depth	:	278m AMSL/18m BGL
10	Water Table	:	270m In AMSL
11	Topography of Mine	:	Uneven land

12	Explosive Requirement	50Kg/Day
13	Diesel/Fuel requirement	350 Litres/day

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	Removal of gritty Soil & Weathered rock in cum	Bench RL in Meters
1 st	37638	105386	8024	296-290
2 nd	37719	105613	3851	296-290
3 rd	37715	105602	00	296-290
4 th	37765	105742	00	290-284
5 th	37665	105462	00	290-284
Total	188502	527805	11875	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	0.74	1.46	Water Body
2	Office /Store	0.00	0.00	0.00	Not Proposed
3	Crusher	0.00	0.00	0.00	Not Proposed
4	Road	0.00	0.03	0.02	Approach Road
5	Garland Drain with Dump	0.00	0.40	0.00	Backfilling
6	Safety Zone	0.00	0.91	0.91	Plantation in safety zone 7.5mtr
7	Settling Tank	0.00	0.001	0.00	Settling Tank
8	Unutilized	2.404	0.324	0.00	
9	Utilized Area	0.00	2.08	0.00	
	TOTAL	2.404	2.404	2.404	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Locationn	Area/Length	No. of Trees
1	Safety Zone	0.91 ha	1456 trees @ 1600 trees per ha
2	Other Reclaimed	NIL	NIL

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Area			
3	Haul /Approach Road	0.41 km	274

- Gazon Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management





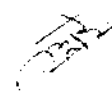

- There is waste to be generated 11875 Cu.M. during life of mine which will be reclaimed after life of mine.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles In the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retaining walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.

- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Shahpur Stone Mine of M/s Sri Ram Construction, Village : Shahpur, P.S. : Naudiha Bazar, Dist. : Palamau, Jharkhand (2.404 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure - II.

7. Nawa Bazar Stone Mine of M/s Jai Mata Di Stone Works, Village : Nawa Bazar, P.S. : Nawa Bazar, Thana no. : 148, Dist. : Palamau, Jharkhand (2.591 Ha).

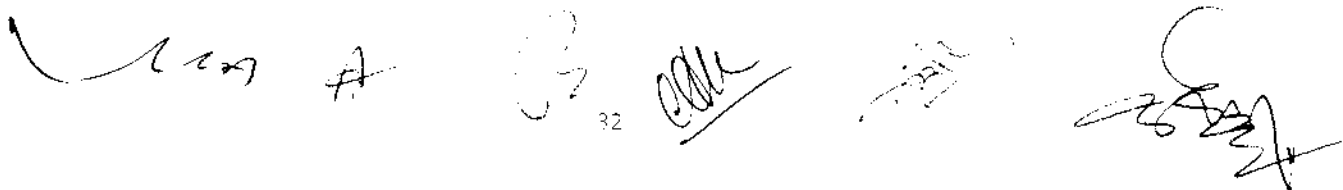
(Proposal No. : SIA/JH/MIN /234471 /2021).

Project Category : B2 – Application for Environment Clearance

EC Application for: Boulder Stone :44280Cu.M. Per Annum / 123984 Ton Per Annum
Mobile Crusher: Not Proposed

Name of the consultant : OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd.

This is a new project which has been taken for appraisal on 20.10.2021.



PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Nawa Bazar stone mine by M/s Jai Mata Di Stone Works
2	Partner's:	Sri. Kailash Kumar Singh, Sri. Vijay Singh & Sri. Birju Ram,
3	Lease Address	Mouza – Nawa Bazar; Thana – Nawa Bazar, Thana No. – 148, District – Palamau; State Jharkhand
4	Lease Area	Ha:2.591 ha Acres:6.40Acres
5	Type of Land	Non Forest – Rayuti Land
6	Project Cost	49.00 Lakhs
7	EMP Budget	Capital: 7.37 Lakhs Recurring: 3.0 Lakh / year
8	CSR / CER Budget	Rs. 2.50 Lakhs
9	New or Expansion	New Project
10	Mineable Reserves	440852 Cu. M Tonnes: 1234385 Tonnes
11	Mine Life	10 years
12	Man power	23
13	Water Requirement	7.19 KLD (Drinking:0.69KLD, Dust Suppression:3.50 KLD, Plantation:3.0 KLD)
14	Water Source	From Nearby villages by tankers
15	DG Set / power	Not Required
16	Crusher	Not Proposed
17	Nearest Water Body	North Koel River 18 KM
18	Nearest Habitation	Nawa Village: 1.4 KM towards North west direction Palamau 28 KM
19	Nearest Rail Station	Rajhara 18 KM
20	Nearest Air Port	Ranchi 161 KM
21	Nearest Forest	NIL
22	Road & Highways	NH-19 (Aurangabad-Daltonganj Rd.) 1.1km

CO-ORDINATES :

1	Latitude	From 24° 17'24.7" N	To 24° 17'22.53" N
2	Longitude	From 84° 6'42.8" E	To 84° 6'42.63" E

LAND DETAILS :

Mouza:	Khata No.	Plot No.
Nawa Bazar	28	245(P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	The Letter of Intent (LoI) has been issued by Dist. Mining Office, Palamau, Medininagar vide letter no. 1121/M, Dated 23.09.2021.
2	CO	The CO, Nawabazar (Palamau) vide letter no. 376, Dated 20.10.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.
3	DMO	DMO, Palamau vide memo no. 1172/M, Dated 06.10.2021 certified that no lease exists within 500 m radius from proposed project site and total lease area is less than 5 Ha.
4	DFO Wild Life	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 739 dated 03.09.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	DFO, Medininagar Division vide letter no. 2670 dated 02.08.2021 certified that the distance of notified forest is 250 m above from proposed project site
6	DSR	The DC-cum-District Magistrate, Palamau, Medininagar vide letter no. 1276, Dated 16.10.2021 has informed that this project is part of District Survey Report (DSR) at Palamau district and accordingly necessary action with regard to Environmental Clearance can be taken On Dated 14.05.2020
7	Gram Sabha	Letter No.714/G, Hazaribagh, Dated 11.10.2021
8	Mine Plan Approval	Test report no. ETS/1046-1/10/2021, Dated-11.10.2021
9	Laboratory test report	

Working Details :

1	Mining Method	Mechanised, Jack Hammer, Drilling & Blasting to be used	
2	Quarry Area	5 years-1.45ha	Life of Mine - 1.90ha
3	Waste Generation	5 years-13093 Cu.M	Life of Mine - 13093 Cu.M
4	Stripping Ratio	1:0.01	
5	Working Days	300	
6	Bench: size & No	6m x 6m	
7	Elevation of Mine	318m In AMSL	
8	Ground Level Elevation	316m In AMSL	

9	Ultimate Working Depth	:	301m In AMSL/17m BGL
10	Water Table	:	292m In AMSL
11	Topography of Mine	:	Uneven land
12	Explosive Requirement	:	44Kg/Day
13	Diesel/Fuel requirement	:	370 Litres/day

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	Removal of gritty Soil & Weathered rock in cum	Bench RL in Meters
1 st	44200	123760	9242	316-310
2 nd	44204	123771	3851	316-310
3 rd	44226	123833	00	316-310
4 th	44280	123984	00	310-304
5 th	43966	123105	00	310-304
Total	220876	618453	13093	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	1.45	1.90	Water Reservoir
2	Office /Store	0.00	0.00	0.00	Not Proposed
3	Crusher	0.00	0.00	0.00	Not Proposed
4	Road	0.00	0.03	0.02	Approach Road
5	Garland Drain with Dump	0.00	0.18	0.00	Backfilling
6	Safety Zone	0.00	0.67	0.67	Plantation
7	Settling Tank	0.00	0.001	0.00	Settling Tank
8	Unutilized	2.591	0.261	0.00	
9	Utilized Area	0.00	2.33	0.00	
	TOTAL	2.591	2.591	2.591	

ENVIRONMENT MANAGEMENT

Green Belt Development

Sl.	Location	Area/Length	No of Trees
1	Safety Zone	0.67 ha	1072 trees @ 1600 trees per ha
2	Other Reclaimed Area	NIL	NIL
3	Haul /Approach Road	480 Mtr One Side	384 trees both side in distance 2.5Mtr

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- There is waste to be generated 13093 Cu.M. during life of mine which will be reclaimed after life of mine.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission

- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- The Boundary Pillars of the proposed mine lease area will be maintained properly.
- One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Nawa Bazar Stone Mine of M/s Jai Mata Di Stone Works, Village : Nawa Bazar, P.S. : Nawa Bazar, Thana no. : 148, Dist. : Palamau, Jharkhand (2.591 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

- Huliapather Stone Mine of Sri Govind Mandal, Village : Huliapather, Thana no. : 334, Anchal Maheshpur, Dist. : Pakur, Jharkhand (0.81 Ha).

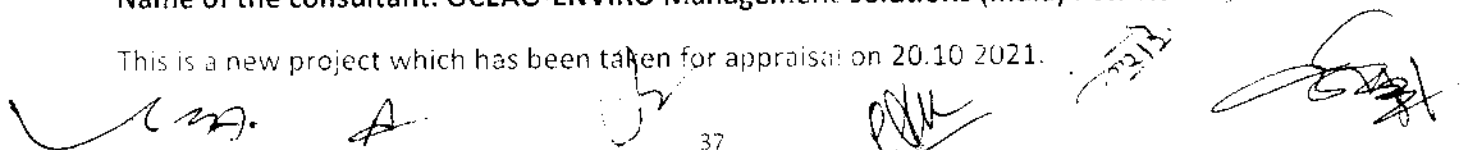
(Proposal No. : SIA/JH/MIN /233883 /2021).

Project Category : B2 – Application for Environment Clearance

EC Application for: Boulder Stone: 16800 Cum Per Annum / 47040 Ton Per Annum
Crusher: Not Proposed

Name of the consultant: OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd.

This is a new project which has been taken for appraisal on 20.10.2021.



PROJECT and LOCATION Details:

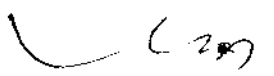
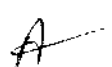


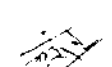
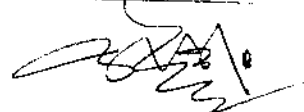
Sl	Parameter	Details
1	Project Name	M/s Huliapather Stone Mine
2	Applicant	Sri Govind Mandal S/o Late Sri Kumar Mandal
3	Lease Address	Mouza – Huliapather; Anchal – Mahespur, Thana No – 334, District – Pakur; State Jharkhand
4	Lease Area	Ha: 0.81 ha Acres: 2.0 Acres
5	Type of Land	Non Forest – Rayati Land
6	Project Cost	32.80 Lakhs
7	EMP Budget	Capital: 4.78 Lakhs Recurring: 3.0 Lakh / year
8	CSR / CER Budget	Rs. 2.15 Lakhs
9	New or Expansion	New Project
10	Mineable Reserves	168131 Cu.M. Tonnes: 470766 Tonnes
11	Mine Life	10 years
12	Man power	18
13	Water Requirement	9.54 KLD (Drinking:0.54KLD, Dust Suppression:5.0 KLD, Plantation:4.0 KLD)
14	Water Source	From Nearby villages by tankers
15	DG Set / power	60 KVA
16	Crusher	Not Proposed
17	Nearest Water Body	Brahmani River 11 KM
18	Nearest Habitation	Huliapather Village: 0.60 KM towards southern direction; Pakur 40 KM
19	Nearest Rail Station	Nalhati: 11 KM
20	Nearest Air Port	Kolkata: 210 KM
21	Nearest Forest	NIL
22	Road & Highways	MDR (Khagachua road) is 0.74km

CO-ORDINATES :

1	Latitude	From 24°21'2.54"N	To 24°21'1.42"E
2	Longitude	From 87°44'49.98"E	To 87°44'54.45"E

LAND DETAILS :

	MAUZA	J.B. NO	PLOT NO.
1	Mouza : Huliapather	12	624, 625, 623, 626
	HULIAPATHER	13	629 AND 630/P
		03	627
		22	628/P

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 1136/M dated 13.07.2021.
2	CO	:	The CO, Maheshpur vide letter no. 850/ra. dated 22.10.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatyan & Register II.
3	DMO/Contiguous Letter 500mtr	:	DMO, Pakur vide memo no. 1746/M, dated 30.09.2021 certified that 02 lease (4.683 acres & 5.32 acres) exist within 500 m radius from proposed project site and Total lease area is 12.003 Acre / 4.86 Ha.
4	DFO Wild Life	:	DFO Wildlife Hazaribagh vide letter no. 741, dated 10.04.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Division vide letter no. 595, dated 25.03.2021 certified that the distance of reserved & protected forest above is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Pakur vide letter no. 1412 / M, dated 12.08.2021 has informed that the project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Letter No.-1093/v, Pakur Dated-21/10/2020
8	Mine Plan Approval	:	Letter No. 1739/M, Dated 29.09.2021
9	Laboratory test report	:	Test report no. ETS/1046-5/10/2021, Dated-11.10.2021

Working Details :

1	Mining Method	:	Mechanised, Jack Hammer, Drilling & Blasting to be used
2	Quarry Area	:	5 years – 0.39 ha Life of Mine – 0.49 ha
3	Waste Generation	:	5 years-0.8-3971 Cu.M Life of Mine – 0.8- 3971 Cu.M




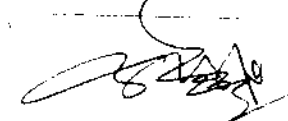
4	Stripping Ratio	1:0.01
5	Working Days	300
6	Benches: size & No	6m x 6m
7	Elevation of Mine	78m In AMSL
8	Ground Level Elevation	77m In AMSL
9	Ultimate Working Depth	59m In AMSL/19m BGL
10	Water Table	52m In AMSL
11	Topography of Mine	Almost applied area are flat
12	Explosive Requirement	25 Kg/Day
13	Diesel/Fuel requirement	294 Litres/day

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	Removal of gritty Soil & Weathered rock in cum	Bench RL in Meters
1 st	16794	47023	2815	77-71
2 nd	16800	47040	1156	77-71
3 rd	16791	47015	0	77-73
4 th	16790	47012	0	71-65
5 th	16798	47034	0	71-65
Total	83973	235124	3971	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	0.39	0.49	Water Reservoir
2	Office /Store	0.00	0.00	0.00	Not Proposed
3	Crusher	0.00	0.00	0.00	Not Proposed
4	Road	0.00	0.02	0.01	Approach Road
5	Garland Drain and Dump	0.00	0.09	0.00	Garland Drain
6	Safety Zone	0.00	0.31	0.31	Plantation in safety zone 7.5mtr
7	Settling Tank	0.00	0.001	0.00	Settling Tank
8	Unutilized	0.81	0.00	0.00	

9	Utilized Area	0.00	0.00	0.00	
	TOTAL	0.81	0.81	0.81	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.31 ha	496 trees @ 1600 trees per ha
2	Other Reclaimed Area	:	NIL	NIL
3	Haul /Approach Road	:	125 Mtr	100 Plants on both sides – 2.5m Distance


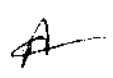




- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary, and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCE, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- There is waste to be generated 3971 Cu.M. during life of mine which will be reclaimed after life of mine.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / buffer area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Huliapather Stone Mine of Sri Govind Mandal, Village : Huliapather, Thana no. : 334, Anchal : Maheshpur, Dist. : Pakur, Jharkhand (0.81 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

9. Kukukala Stone Mine of M/s Mala Kumar Engineers Pvt. Ltd., Village : Kukukala, Thana no. : 406, P.S. : Naudiha Bazar (Chattarpur), Dist. : Palamau, Jharkhand (1.32 Ha).

(Proposal No. : SIA/JH/MIN /232899 /2021).

Project Category : B2 – Application for Environment Clearance
 EC Application for: Boulder Stone : 32175Cum Per Annum/90090 Ton Per Annum
 Crusher not Proposed in Applied Area
 Mobile Crusher: N/A

Name of the consultant :OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd.

This is a new project which has been taken for appraisal on 20.10.2021.

PROJECT AND LOCATION DETAILS:

Sl	Parameter	Details
1	Project Name	Kukukala stone mine by M/s Mala kumar engineers pvt. ltd
2	Partner's:	Shri Sanjiv Kumar(Managing Director) Shri Ranjit Prasad (Authorised person),
3	Lease Address	Village -Kukukala, Thana- Naudiha Bazar(Chattarpur). Thana No.- 406, District Palamu, Jharkhand
4	Lease Area	Ha:1.32 ha Acres:3.25Acres
5	Type of Land	Non Forest – Rayati Land
6	Project Cost	33.50 Lakhs
7	EMP Budget	Capital: 5.20 Lakhs Recurring: 2.8 Lakh / year
8	CSR / CER Budget	Rs. 2.15 Lakhs
9	New or Expansion	New Project
10	Mineable Reserves	321496Cu. M. Tonnes: 900189 Tonnes
11	Mine Life	10 years
12	Man power	19
13	Water Requirement	7 KLD (Drinking:0.57KLD,Dust Suppression:3.43 KLD) Plantation:3.0 KLD
14	Water Source	From Nearby villages by tankers
15	DG Set / power	Not Required
16	Crusher	Not Proposed
17	Nearest Water Body	Batane River 11.98 KM
18	Nearest Habitation	Nawatnir Village: 4.53 KM towards North west North direction; Palamau 41.52 KM
19	Nearest Rail Station	Rajhura 39.97KM
20	Nearest Air Port	Chianki 44.71KM
21	Nearest Forest	NIL
22	Road & Highways	NH-93-14.89 KM;

CO-ORDINATES :

1	Latitude	From 24°21'43.13"N	To 24°21'41.19"N
2	Longitude	From 84°20'16.99"E	To 84°20'16.25"E

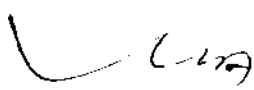
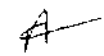


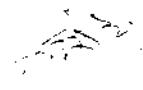
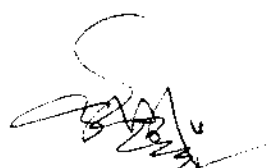
LAND DETAILS

	Mouza	Khata No	Plot Nos
1	Kukukala	36	353, 354, 355, 356, 357, 358, 359, 360 & 361(P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	The Letter of Intent (LoI) has been issued by District Mining Office, Palamau, Medininagar vide letter no. 232/M, Dated 08.02.2020.
2	CO	The CO, Naudiha Bazar, Palamau vide letter no. 246, Dated 18.07.19 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khativan
3	DMO	DMO, Palamau, Medininagar vide memo no. 1002/M, Dated 17.08.2021 certified that no lease exists within 500 m radius from proposed project site and total lease area is less than 5 Ha.
4	DFO Wild Life	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 740 Dated 03.09.2021 certified that the National Park, Bio-Diversity & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	DFO, Medininagar Division vide letter no.2718, Dated 29.07.19 certified that the distance of notified forest is 258 m from proposed project site.
6	DSR	The DC-cum-District Magistrate, Palamau, Medininagar vide letter no. 1076, Dated 11.09.2021 has informed that this project is part of District Survey Report (DSR) at Palamau district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	Letter No. 23, Dated 24.07.2019
8	Mine Plan Approval	Letter No.466/G, Palamau, Dated 13.03.2021
9	Laboratory test report	Test report no. ETS/1412-20.09.2021, Dated-5.10.21

Working Details :

1	Mining Method	:	Mechanised, Jack Hammer, Drilling & Blasting to be used
2	Quarry Area	:	5 years-0.85ha Life of Mine – 0.87ha
3	Waste Generation	:	5 years-3989 Cu.M Life of Mine – 3989 Cu.M
4	Stripping Ratio	:	1:0.01
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	278m In AMSL
8	Ground Level Elevation	:	276m In AMSL
9	Ultimate Working Depth	:	252mAMSL/24m BGL
10	Water Table	:	241m In AMSL
11	Topography of Mine	:	Uneven land
12	Explosive Requirement	:	36Kg/Day
13	Diesel/Fuel requirement	:	286 Litres/day

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	Removal of gritty Soil & Weathered rock in cum	Bench RL in Meters
1 st	32150	90020	2042	276-270
2 nd	32175	90090	1122	276-270
3 rd	32101	89883	822	276-270
4 th	32144	90003	00	270-264
5 th	32164	90059	00	270-264
Total	160734	450055	3989	

Land Use :

Sl	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	0.85	0.87	Water Reservoir
2	Office	0.00	0.00	0.00	Not Proposed

3	/Store Crusher	0.00	0.00	0.00	Not Proposed
4	Road	0.00	0.02	0.02	Approach Road
5	Garland Drain with Dump	0.00	0.02	0.00	Back Filling
6	Safety Zone	0.00	0.43	0.43	Plantation in 7.5mtr safety zone
7	Settling Tank	0.00	0.001	0.00	Settling Tank
8	Unutilized	1.32	0.00	0.00	
9	Utilized Area	0.00	0.00	0.00	
	TOTAL	1.32	1.32	1.32	

ENVIRONMENT MANAGEMENT Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.43 ha	688 trees @ 1600 trees per ha
2	Other Reclaimed Area	NIL	NIL
3	Haul /Approach Road	120Mtr Both side	48 trees in spacing 2.5m

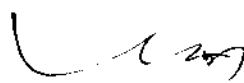
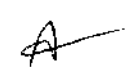
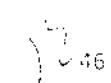

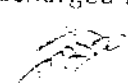
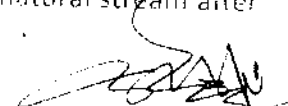
- * Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report

Solid Waste Management

- There is waste to be generated 3986 Cu.M. during life of mine which will be reclaimed after life of mine.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after

setting of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.

- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Kukukala Stone Mine of M/s Mala Kumar Engineers Pvt. Ltd., Village : Kukukala, Thana no. : 406, P.S. : Naudiha Bazar (Chattarpur), Dist. : Palamau, Jharkhand (1.32 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

10. Kukukala Stone Mine of M/s Mala Kumar Engineers Pvt. Ltd., Village : Kukukala, Thana no. : 406, P.S. : Naudiha Bazar, Dist. : Palamau, Jharkhand (1.56 Ha).

(Proposal No. : SIA/JH/MIN /233399 /2021).

Project Category : B2 – Application for Environment Clearance
EC Application for: Boulder Stone : 36140Cum Per Annum/101192 Ton Per Annum
Mobile Crusher: N/A

Name of the consultant : OCEAO-ENVIRO Management Solutions (India) Pvt. Ltd.

This is a new project which has been taken for appraisal on 20.10.2021.

PROJECT AND LOCATION DETAILS:

Sl	Parameter	Details
1	Project Name	Kukukala stone mine by M/s Mala kumar engineers pvt ltd
2	Partner's:	Shri Sanjiv Kumar (Managing Director) Shri Ranjit Prasad (Authorised person),
3	Lease Address	Village -Kukukala, Thana- Naudiha Bazar(Chattarpur), Thana No- 406, District Palamu, Jharkhand
4	Lease Area	Ha:1.56 ha Acres:3.85 Acres
5	Type of Land	Non Forest – Rayati Land
6	Project Cost	35.00 Lakhs
7	EMP Budget	Capital: 5.64 Lakhs Recurring: 3.0 Lakh / year
8	CSR / CER Budget	Rs. 2.25 Lakhs
9	New or Expansion	New Project
10	Mineable Reserves	361193 Cu. M. Tonnes: 1011340 Tonnes
11	Mine Life	10 years
12	Man power	21
13	Water Requirement	7 KLD (Drinking:0.63KLD.Dust Suppression:3.37KLD, Plantation:3.0 KLD
14	Water Source	From Nearby villages by tankers
15	DG Set / power	Not Required
16	Crusher	Not Proposed
17	Nearest Water Body	Batane River 11.98 KM

18	Nearest Habitation	:	Nawatanr Village: 4.53 KM towards North west North direction; Palamau 41.52 KM
19	Nearest Rail Station	:	Rajhura 39.85KM
20	Nearest Air Port	:	Chianki 44.71KM
21	Nearest Forest	:	NIL
22	Road & Highways	:	NH-98-14.89 KM;

CO-ORDINATES :

1	Latitude	From 24°21'41.75 "N	To 24°21'39.44 "N
2	Longitude	From 84°20'14.33 "E	To 84°20'12.96 "E

LAND DETAILS :

	Mouza	Khata No.	Plot No.
1	Kukukala	36	363, 365, 366,367 & 368(P),

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Palamau, Medininagar vide letter no 233/M, Dated 08.02.2020.
2	CO	:	The CO, Naudiha Bazar, Palamau vide letter no. 247, Dated 18.7.19 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatian
3	DMO	:	DMO, Palamau vide memo no. 1002/M, Dated 17.08.2021 certified that no lease exists within 500 m radius from proposed project site and total lease area is less than 5 Ha.
4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, North Division Medininagar vide letter no. 742 Dated 03.09.2021, certified that the National Park, Bio-Diversity & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Medininagar Division vide letter no. 2719 Dated 29.07.19 certified that the distance of notified forest is 255 m from proposed project site

6	DSR	The DC-cum-District Magistrate, Palamau, Medininaga vide letter no. 1076, Dated 11.09.2021 has informed that this project is part of District Survey Report (DSR) at Palamau district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	Letter no. 23, dated 10.08.2019
8	Mine Plan Approval	Letter No.467/G, Palamau, Dated 13.03.2021
9	Laboratory test report	Test report no. ETS/1412-16.09.2021,Dated-5.10.21

Working Details :

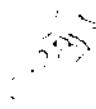
1	Mining Method	:	Mechanised, Wagon Drill, Jack Hammer, Drilling & Blasting to be used	
2	Quarry Area	:	5 years-0.92ha	Life of Mine – 1.10ha
3	Waste Generation	:	5 years-3688 Cu.M	Life of Mine – 3688 Cu.M
4	Stripping Ratio	:	1:0.01	
5	Working Days	:	300	
6	Bench: size & No	:	6m x 6m	
7	Elevation of Mine	:	274m In AMSL	
8	Ground Level Elevation	:	271m In AMSL	
9	Ultimate Working Depth	:	247m In AMSL/24m BGL	
10	Water Table	:	240mAMSL	
11	Topography of Mine	:	Uneven land	
12	Explosive Requirement	:	48Kg/Day	
13	Diesel/Fuel requirement	:	286 Litres/day	

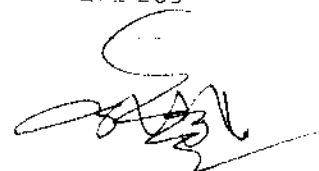
Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Removal of gritty Soil & Weathered rock in cum	Bench RL in Meters
1 st	36104	101091	2342	271-265
2 nd	36100	101080	1346	274-265
3 rd	36092	101058	00	271-265









4 th	36062	100974	00	265-259
5 th	36140	101192	00	265-259
Total	180498	505395	3688	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	0.92	1.10	Water Body
2	Office /Store	0.00	0.00	0.00	Not Proposed
3	Crusher	0.00	0.00	0.00	Not Proposed
4	Road	0.00	0.03	0.02	Approach Road
5	Garland Drain with Dump	0.00	0.06	0.00	Backfilling
6	Safety Zone	0.00	0.44	0.44	Plantation
7	Settling Tank	0.00	0.001	0.00	Settling Tank
8	Unutilized	1.56	0.11	0.00	
9	Utilized Area	0.00	0.00	0.00	
	TOTAL	1.56	1.56	1.56	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.44ha	704 trees @ 1600 trees per ha
2	Other Reclaimed Area	:	NIL	NIL
3	Haul /Approach Road	:	440 Mtr/220Mtr One Side	176 Tress in spacing 2.5m

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- There is waste to be generated 3688 Cu.M. during life of mine which will be reclaimed at the end of life of mine.

Water Quality Management

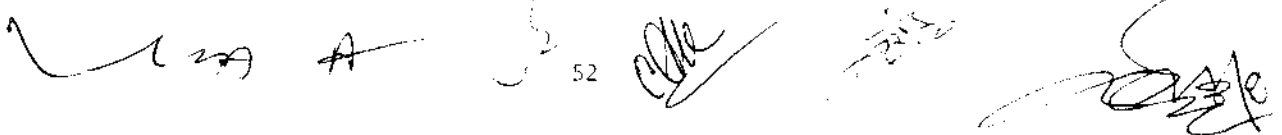
- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. if any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard

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- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Kukukala Stone Mine of M/s Mala Kumar Engineers Pvt. Ltd., Village : Kukukala, Thana no. : 406, P.S. : Naudiha Bazar, Dist. : Palamau, Jharkhand (1.56 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

Day 2 : October 21, 2021 [Thursday]

Consideration of Proposals

1. Integrated Municipal Solid Waste Management Facility for Bundu Nagar Panchayat, Village : Bundu, Tehsil : Bundu, Dist. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/MIS/ 58082/2020)

The Consultant vide email dated 20.10.2021 requested to defer appraisal of the proposal. The Committee considered the request and accepted the same.

2. Simariya Stone Deposit of M/s Pawanputra Stone Works, Vill. : Simariya, Thana : Jirwabari, Dist. : Sahibganj (6.07 Ha)

(Proposal No. : SIA/JH/MIN/61685/2017)

This project is kept on hold for the period of 02 months. It will be taken up for the consideration on request of PA's. If the request is not received within 02 months the project will be recommended for delisting.

3. Residential Group Housing Project "Shivam Heights" of M/s Durga Developers Pvt. Ltd, Mouza : Bada Ghaghra, Anchal : Argora, Tehsil : Ranchi, Dist. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/MIS/ 196279/2021)

The PA's vide email dated 19.10.2021 requested to defer appraisal of the proposal. The Committee considered the request and accepted the same. It will be taken up for the consideration on request of PA's. If the request is not received within 02 months the project will be recommended for delisting.

	Station		
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi approx. 290.60 km
		:	Dhangora Pahar PF, Approx. 6.75 km towards S direction
21	Nearest Forest		Protected Forest near Belpahari Village, Approx. 3.24 km towards WNW direction.
			Protected Forest near Bhandaro village, Approx. 4.10 km towards NW direction.
22	Road & Highways	:	SH-18, Approx. 15.60 km. in WSW direction.
			NH-34, Approx. 15.66 km. in NE direction.

CO-ORDINATES :

1	Latitude	From 24°41'05.87"N	To 24°41'10.57"N
2	Longitude	From 87°46'07.11"E	To 87°46'15.90"E

LAND DETAILS :

		Khata no.	Plot no.
		09	122
1	Murgadanga	103	125, 126
		89	127, 127/1513, 127/1514
		99	123

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Pakur vide letter no. 506/M dated 27.03.2021.
2	CO	:	The CO, Hiranpur, Pakur vide letter no. 299 dated 24.07.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatyan & Register II.
3	DMO	:	DMO, Pakur vide memo no. 513/ M, dated 30.03.2021 certified that there are two lease (7.35 acre & 6.97 acres) within 500 m radius of the proposed project. Total lease area within 500 meter is 7.90 ha or 19.53 acre.
4	DFO Wild Life	:	DFO Wildlife Hazaribag vide letter no. 786 dated 13.05.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

5	DFO Forest Distance	DFO, Pakur Forest Division vide letter no. 325 dated 17.02.2021 certified that the distance from the reserved / protected forest from the project site is more than 250 M.
6	DSR	The DC-cum-District Magistrate, Pakur vide letter no 878/M dated 21.06.2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	On 13-08-2020
8	Mine Plan Approval	Vide Memo no. 1166/M, Pakur dated 16/07/2021

Working Details

1	Mining Method	Opencast Semi - Mechanized Mining method
2	Quarry Area	5 years-1.011 ha Life of Mine - 1,640 ha
3	Waste Generation	5 years-11310.00 Cu.M Life of Mine -11310.00 Cu.M
4	Stripping Ratio	1: 0.02
5	Working Days	300
6	Bench: size & No	6m x 6m
7	Elevation of Mine	52 AMSL to 58 AMSL
8	Ground Level Elevation	25 AMSL
9	Ultimate Working Depth	20 AMSL (5m bgl)
10	Water Table	10 AMSL (15m bgl)
11	Topography of Mine	Area represents a undulating topography

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne) Cum*2.5	Waste Generation (cum)	Bench RL in Meters
1 st	39130.00	97825.00	5980.00	58 mRL - 50 mRL
2 nd	41990.00	104975.00	5330.00	56 - 44 mRL
3 rd	44460.00	111150.00	Nil	50 mRL - 38 mRL
4 th	42250.00	105625.00	Nil	44 mRL - 38 mRL
5 th	44980.00	112450.00	Nil	38 mRL - 26 mRL

Total	212810.00	532025.00	11310.00	
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Land Use :

Pattern of Utilization	Existing (Ha)	Plan period (Ha)	Conceptual stage (Ha)
Quarry	Nil	1.011	1.640 (0.101 ha area shall be backfilled & after backfilling entire area will be converted into water reservoir)
Road	0.011	0.011	0.003 (0.008 comes under quarry)
Proposed Dump	Nil	0.335	Nil
Safety Zone Plantation	Nil	0.461	0.461
Total	0.011	1.818	2.10
Unused Area	2.089	0.282	0.000

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.461 ha	1150
2	Haul /Approach Road	0.170 km	170

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste Generation will be 11310.00 Cu.M. during the Plan Period. At Plan Period proposed waste shall be temporarily dump on eastern side. Some quantity of the removed gritty soil would also be used for road dressing and plantation. After conceptual period De-Stoned area of quarry will be reclaimed to the extent possible.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely mining activities will be stopped 5m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.








- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Baseline Monitoring data generation in October, 2021 to December, 2021.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

5. Basmata Stone Mine of M/s Heena Stone Works, Village : Basmata, P.S. : Malpahari OP, Tehsil : Pakur, Dist. : Pakur, Jharkhand (2.58 Ha)

(Proposal No. : SIA/JH/MIN /68198/2021)

Project Category : B1 – Application for Terms of Reference

TOR Application for: Production capacity: 115474 TPA or 42,768 cum/annum

Waste: 10866.00 cum or 16299 MT

Name of the consultant: P & M Solution, Noida

This is a new project which has been taken for appraisal on 21.10.2021.

PROJECT and LOCATION Details :

Sl	Parameter	Details
1	Project Name	Basmata Stone Mine
2	Lessee:	M/s Heena Stone Works, Partner's- Sri Firoj Ahmed & Nasibul Sekh, at Village- Thanapada, Ward No-04 & P.O. – Pakur, District – Pakur, State – Jharkhand
3	Lease Address	Village – Basmata, P.S. – Pakur, District – Pakur, Jharkhand
4	Lease Area	Ha: 2.58 ha Acres: 6.37 Acres
5	Type of Land	Non Forest – Rayati Land
6	Project Cost	35 Lakhs
7	EMP Budget	Capital: 4.71 Lakhs Capital: 3.27 Lakhs
8	CSR / CER Budget	Rs. 0.70 Lakhs
9	New or Expansion	New
10	Mineable Reserves	Cu.M.: 403920.00 Cu. M. Tonnes: 1090584.00 Tones
11	Mine Life	9.50 or 10.00 years

12	Man power	35
13	Water Requirement	11.94 - 12.00 KLD (Drinking:-0.35 KLD, Dust Suppression:- 4.90 KLD, Plantation: 6.69 KLD)
14	Water Source	From Nearby villages by tankers
15	DG Set / power	Nil
16	Crusher	No crusher
17	Nearest Water Body	Torai Nadi, 8.72 km, North direction
18	Nearest Habitation	Chengadanga 0.60 km
19	Nearest Rail Station	Nagarnabi Railway station, approx. 2.0 km
20	Nearest Air Port	Birsa Munda Airport, Ranchi approx. 292.30 km
21	Nearest Forest	Protected Forest, near Mohanpur village Approx. 2.5 km in W direction. Protected Forest, near Dhangora Pahar Approx. 9.5 km in NW direction.
22	Road & Highways	SH-7 Approx. 4.30 km. in SE direction. NH-34 Approx. 12.7 km. in NE direction.

CO-ORDINATES :

1	Latitude	From 24°34'46.09"N	To 24°34'49.89"N
2	Longitude	From 87°51'02.35"E	To 87°51'07.98"E

LAND DETAILS :

	Khata no	Plot No
1 Basmata	10	301, 523, 524, 530, 539
	13	302
	05	525, 531, 532
	03	526, 527/P, 508/P, 509, 533P
	21	512
	08	529

STATUTORY CLEARANCES :

1	LOI/Lease docs	The LOI has been issued by District Mining Office, Pakur vide letter no. 463/M dated 14.03.2020.
2	CO	The CO, Pakur vide letter no. 1891 dated 26.12.2019 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatyan & Register II.
3	DMO	DMO, Pakur vide letter no. 977/M, dated 24.06.2020








		:	certified that there are five lease (7.43 acre, 4.60 acre, 1.85 acre, 4.95 acre, 4.42 acre) within 500 m radius of the proposed project. Total lease area within 500 meter is 11.99 ha or 29.62 acre.
4	DFO Wild Life	:	DFO, Wildlife Hazaribag Forest Division vide letter no 335 dated 10.02.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 302 dated 04.02.2020 certified that the distance from the reserved / protected forest from the project site is more than 250 M.
6	DSR	:	The DC-cum-District Magistrate, Pakur vide letter no 878/M dated 21/06/2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 21-01-2020
8	Mine Plan Approval	:	Vide Memo no. 201/DDM, Pakur dated 13/08/2020

Working Details :

1	Mining Method	:	Opencast Semi - Mechanized Mining method
2	Quarry Area	:	5 years-1.29 ha Life of Mine - 1.0 ha
3	Waste Generation	:	5 years-16299.00 tons Life of Mine -16299.00 tons
4	Stripping Ratio	:	1: 0.02
5	Working Days	:	300
6	Bench: size & No	:	6m x 6m
7	Elevation of Mine	:	38 AMSL to 39 AMSL
8	Ground Level Elevation	:	38 AMSL
9	Ultimate Working Depth	:	15 AMSL (23 mbgl)
10	Water Table	:	10 AMSL (28 mbgl)
11	Topography of Mine	:	Area represents a very gently sloping land

Production Details :

Year	Production of stone (Cum)	Production of stone (Tones) Cum*2.7	Waste Generation (Tones)	Bench RL in Meters
1 st	42768.15	115474.00	7726.00	39 mRL - 33 mRL

2 nd	42660.00	115182.00	5468.00	39mRL - 33 mRL
3 rd	42631.11	115104.00	3105.00	33mRL - 27 mRL
4 th	42705.92	115306.00	Nil	33 mRL - 21 mRL
5 th	42635.18	115115.00	Nil	27 mRL-15 mRL
Total	213400.36	576181.00	16299.00	

Land Use :

Pattern of Utilization	Existing (Ha)	During plan period (ha)	After Life of mine (ha)
Quarry	Nil	1.29 (including road)	1.92 (converted into water reservoir)
Road	Nil	Nil	Nil
Waste Dump	Nil	0.24	Nil
Safety Zone Plantation	Nil	0.66	0.66
Total	Nil	2.19	2.58
Unused Area	2.58	0.39	Nil
Lease Hold Area	2.58	2.58	2.58

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.85 ha	2130
2	Haul /Approach Road	0.100 km	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste Generation will be 10866.00 Cu.M. or 16299.00 MT during the Plan Period. At Plan Period proposed waste shall be temporarily dump on south-western side. Some quantity of the removed gritty soil would also be used for road dressing and plantation.

After conceptual period De-Stoned area of quarry will be reclaimed to the extent possible.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 5m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' roads shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.



- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Additional observation :

Some data in submitted mine plan were found to be inconsistent. Hence, the PA's asked to submit revised mine plan. Accordingly, the revised draft mine plan has been submitted on the basis of which grant of ToR is being recommended. Approved revised mine plan will be required at the time of consideration of EC.

Baseline Monitoring data generation in October, 2021 to December, 2021.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

6. Srirampur Stone Mine of M/s Rajiv Ranjan Pandey, Village : Srirampur, Thana : Pakur, Dist. : Pakur, Jharkhand (2.54 Ha)

(Proposal No. : SIA/JH/MIN /232564/2021)

Project Category : B2 – Application for Environment Clearance

EC Application for: Proposed Capacity: 34695.00 cu.m/annum or 100615.50 TPA

Name of the consultant: P & M Solution, Noida

This is a new project which has been taken for appraisal on 21.10.2021

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Srirampur Stone Deposit
		M/S Rajiv Ranjan Pandey
2	Lessee:	(Partner- Sri Rajiv Ranjan Pandey & Shri. Baski Nath Pandey)
		At P.Q.- Sindhipara, PS – Pakur, District- Pakur, State-

			Jharkhand
3	Lease Address	:	Village – Srirampur, Thana- Pakur, District – Pakur, State – Jharkhand.
4	Lease Area	:	2.54 ha Acres: 6.28 Acres
5	Type of Land	:	Non Forest – Raiyati Land
6	Project Cost	:	Rs. 30 Lakhs
7	EMP Budget	:	Capital: 4.95 Lakhs Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.60 Lakhs
9	New or Expansion	:	New
10	Mineable Reserves	:	Cu.m.: 351069 cum Tonnes: 14,38,000 tons
11	Mine Life	:	10.12 years
12	Man power	:	19
13	Water Requirement	:	12.40 KLD (Drinking: 0.19 KLD, Dust Suppression: 5.15 KLD, Plantation: 7.05 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	Nil
16	Crusher	:	No crusher
17	Nearest Water Body	:	Torai Nadi, 7.67 km, NE direction
18	Nearest Habitation	:	Pakur, 5.5 km
19	Nearest Rail Station	:	Ngarnabi Railway station, 5 km
20	Nearest Air Port	:	Durgapur Airport, 122 km
21	Nearest Forest	:	Protected Forest near Mohanpur Village, approx. 2.5 km Protected Forest near Dhangora Pahar, 8.0 km Protected Forest near Khutigora Village, 9.0 km
22	Road & Highways	:	NH-114 A, Approx. 5.30 km SH-7, Approx. 7.50 km

CO-ORDINATES :

1	Latitude	From 24°35'26.03"N	To 24°35'31.35"N
2	Longitude	From 87°49'00.60"E	To 87°49'07.79"E

LAND DETAILS :

1		Khata no.	Plot no.
	Srirampur	8	699 (P), 709 (P), 711 (P), 723 (P), 710, 724 (P)
		27	712 (P), 713 (P)

		34	714 (P)
		42	715 (P)
		5	716 (P), 717 (P), 718 (P), 719 (P), 720, 702 (P), 703 (P), 704, 705, 706, 707 & 708 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	The LOI has been issued by District Mining Office, Pakur vide letter no. 596/M, dated 19.05.2021
2	CO	The CO, Pakur vide letter no. 974, dated 30.06.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	DMO, Pakur vide letter no. 1245/M, dated 23.07.2021 certified that one lease (3.66 acre) exists within 500 m radius from proposed project and total area is less than 5 Ha.
4	DFO Wild Life	DFO, Wildlife Hazaribagh vide letter no. 424, dated 01.03.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Distance Forest	DFO, Pakur Forest Division vide letter no. 272, dated 04.02.2021 certified that the distance from the reserved / protected forest from the project site is more than 250 M.
6	DSR	The DC-cum-District Magistrate, Pakur vide letter no 1412/M dated 12.08.2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	on 16-06-2020
8	Mine Plan Approval	Vide Memo no. 1541/M dated 03.09.2021 Revised mine plan approval letter no. 731/G dated 23.10.2021.

Working Details :

1	Mining Method	Opencast Semi - Mechanized Mining method
2	Quarry Area	5 years- 0.93 ha Life of Mine - 1.21 ha

3	Waste Generation	:	5 years-- 72924.00 cu.m	Life of Mine – 72924.00 cu.m
4	Stripping Ratio	:	1: 0.07	
5	Working Days	:	300	
6	Benches: size & No	:	5 m x 5 m	
7	Elevation of Mine	:	44 AMSL to 44 AMSL	
8	Ground Level Elevation	:	44 AMSL	
9	Ultimate Working Depth	:	21 AMSL (23 mbgl)	
10	Water Table	:	19 AMSL (25 mbgl)	
11	Topography of Mine	:	Area represents a undulating topography	

Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1 st	76055.40	26226.0	37298.0	40 mRL - 31 mRL
2 nd	100615.50	34695.0	35626.0	40 mRL - 36 mRL
3 rd	100531.40	34666.0	Nil	36 mRL - 31 mRL
4 th	100516.90	34661.0	Nil	36 mRL - 31 mRL
5 th	79358.50	27365.0	Nil	31 mRL - 26 mRL
Total	457077.70	157613.0	72924.00	

Land Use :

Pattern of Utilization	Existing (Ha)	Plan period(Ha)	Conceptual stage (Ha)
Quarry	Nil	1.63	2.05 (Entire area will be converted into water reservoir after partial backfilling)
Road	0.0	Comes under quarry	Nil
Proposed Dump	Nil	0.24	Nil
Safety Zone Plantation	Nil	0.49	0.49
Total	0.0	2.36	2.54
Unused Area	2.54	0.18	--

Leasehold Area	2.54	2.54	2.54
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ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	Location	Area/Length	No of Trees
1	Safety Zone	0.90 ha	2250
2	Haul /Approach Road	0.10 km	100

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3 x 3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

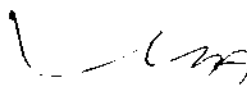
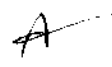
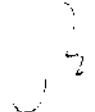

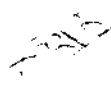
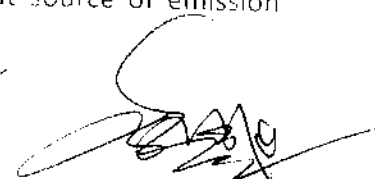
- Waste Generation will be 72924.00 cum (dump area- 0.07 ha & height- 3 m) during the plan period. During plan period the proposed waste shall be temporarily dump on south eastern side of the applied area. The Waste shall be removed which will be used for maintenance of mine road and village road.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.


- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

During appraisal the committee observed that some data in mine plan were not correct and asked the PAs to revised the mine plan. Accordingly, the revised approved mine plan has been submitted on 23.10.2021. Accordingly, this project was taken up for consideration on 23.10.2021 on the basis of revised approved mine plan.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Srirampur Stone Mine of M/s Rajiv Ranjan Pandey, Village : Srirampur, Thana : Pakur, Dist. : Pakur, Jharkhand (2.54 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.



7. Srirampur Stone Mine of M/s Cee Bee Stone Works, Village : Srirampur, Thana : Pakur, Dist Pakur, Jharkhand (2.73 Ha).

(Proposal No. : SIA/JH/MIN /231607/2021)

Project Category: B2 – Application for Environment Clearance

EC Application for: Production capacity: 57600.00 cu.m/annum or 144000.00 TPA

Name of the consultant: P & M Solution, Noida

This is a new project which has been taken for appraisal on 21.10.2021

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Srirampur Stone Deposit
2	Lessee:	M/s Cee Bee Stone Works, Partner- Sri Jitendra Kumar Bellani, At P.O. -Sindhipara, P.O+District – Pakur, State – Jharkhand
3	Lease Address	Village – Srirampur, P.S. – Pakur, District – Pakur, Jharkhand
4	Lease Area	Ha:- 2.73 ha Acre:- 6.75 Acres
5	Type of Land	Non Forest – Rayati Land
6	Project Cost	35 Lakhs
7	EMP Budget	Capital: 4.88 Lakhs Capital: 3.27 Lakhs
8	CSR / CER Budget	Rs. 0.70 Lakhs
9	New or Expansion	New
10	Mineable Reserves	Cum:- 575200.00 Cum Tonnes: 1438000.00 Tones
11	Mine Life	10.26 or 10.50 years
12	Man power	25
13	Water Requirement	13.50 KLD (Drinking: 0.25 KLD, Dust Suppression: 7.0 KLD, Plantation: 6.27 KLD)
14	Water Source	From Nearby villages by tankers
15	DG Set / power	Nil
16	Crusher	No crusher
17	Nearest Water Body	Torai Nadi, 7.22 km, NE direction
18	Nearest Habitation	Srirampur 0.70 km
19	Nearest Rail Station	Ngarnabi Railway station, approx. 5.0 km
20	Nearest Air Port	Durgapur Airport, approx. 123 km.

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21	Nearest Forest	:	Protected Forest near Mohanpur Village, 3.0 km Protected Forest near Dhangora Pahar, 6.0 km Protected Forest near Khutigora Village, 8.5 km
22	Road & Highways	:	NH-114 A, Approx. 5.0 km. SH-7, Approx. 8.0 km.

CO-ORDINATES :

1	Latitude	From 24°35'40.88"N	To 24°35'47.54"N
2	Longitude	From 87°49'00.13"E	To 87°49'09.85"E

LAND DETAILS

		Khata no.	Plot no.
		36	544(P), 545(P), 546(P)
1	Srirampur	31	540
		38	493(P), 494(P), 495(P), 496, 529, 541,

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Pakur vide letter no. 595/M, dated 19.05.2021
2	CO	:	The CO, Pakur vide letter no. 1344, dated 01.09.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Pakur vide letter no. 996/M, dated 01.07.2021 certified that no other lease exists within 500 m radius from proposed project. Total area is less than 05 ha.
4	DFO Wild Life	:	DFO, Wildlife Hazari bagh, vide letter no. 780, dated 13.05.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 326 dated 17.02.2021 certified that the distance from the reserved / protected forest from the project site is more than 250 m.
6	DSR	:	The DC-cum-District Magistrate, Pakur vide letter no. 1412/M dated 12/08/2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	on 24-07-2020
8	Mine Plan Approval	:	Vide Memo no. 1339/M dated 03.08.2021

Working Details :

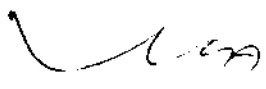
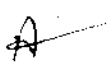
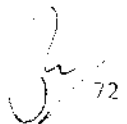

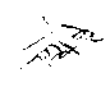

1	Mining Method	:	Opencast Semi - Mechanized Mining method
2	Quarry Area	:	5 years-1.145 ha End of the Life of Mine - 2.004 ha
3	Waste Generation	:	5 years-16960.00Cum End of the Life of Mine - 16960.00 Cum
4	Stripping Ratio	:	1: 0.02
5	Working Days	:	300
6	Bench: size & No	:	6m x 6m
7	Elevation of Mine	:	44 AMSL to 49 AMSL
8	Ground Level Elevation	:	25 AMSL
9	Ultimate Working Depth	:	20 AMSL (5 mbgl)
10	Water Table	:	10 AMSL (15 mbgl)
11	Topography of Mine	:	Area represents a undulating topography

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne) Cum*2.5	Waste Generation (cum)	Bench RL in Meters
1 st	50080.00	125200.00	16960.00	49 mRL - 44 mRL
2 nd	51200.00	128000.00	Nil	44 mRL - 38 mRL
3 rd	55200.00	138000.00	Nil	44 mRL - 32 mRL
4 th	57600.00	144000.00	Nil	38 mRL - 32 mRL
5 th	57600.00	144000.00	Nil	32 mRL - 26 mRL
Total	271680.00	679200.00	16960.00	

Land Use :

Pattern of Utilization	Existing (Ha)	During plan period (ha)	After Life of mine (ha)
Quarry	Nil	1.145	2.004 (0.228 ha area shall be backfilled & entire area after backfilling will be converted into water reservoir)
Road	0.014	0.003	0.003
Proposed Dump	Nil	0.337	(Including Reclamation)
Plantation	Nil	0.723	0.723
Total	0.014	2.208	2.73

Unused Area	2.716	0.522	Nil
Lease Hold Area	2.73	2.73	2.73

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.723 ha	1810
2	Haul /Approach Road	:	0.28 km	280

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste Generation will be 16960.00 Cum. during the Plan Period. At Plan Period proposed waste shall be temporarily dump on eastern corner of the applied area. Some quantity of the removed gritty soil would also be used for road dressing and plantation. After conceptual period De-Stoned area of quarry will be reclaimed to the extent possible.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 5m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

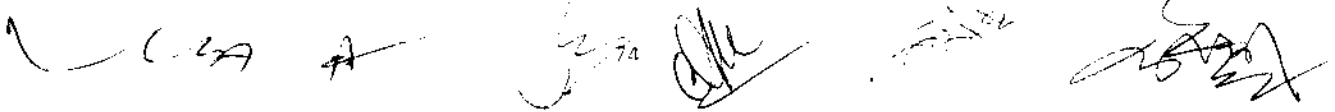
- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Srirampur Stone Mine of M/s Cee Bee Stone Works, Village : Srirampur, Thana : Pakur, Dist. : Pakur, Jharkhand (2.73 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

8. Kashila Stone Deposit of M/s Shree Guru Stone Works, Village : Kashila, Thana : Pakur (M), Dist. : Pakur, Jharkhand (2.30 Ha).

(Proposal No. : SIA/JH/MIN /234512 /2021)

Project Category : B2 – Application for Environment Clearance



EC Application for: Production capacity:- 11538.0 cu.m/annum or 31,151.0 TPA
Waste:-6087.00 cum

Name of the consultant: P & M Solution, Noida

This is a new project which has been taken for appraisal on 21.10.2021

PROJECT and LOCATION Details:

Sl	Parameter	:	Details
1	Project Name	:	Kashila Stone Deposit
2	Lessee:	:	M/s Shree Guru Stone Works, Proprietor- Sri Amarjit Singh, At-Malgodam Road, P.O.- P.S.+District – Pakur, State –Jharkhand
3	Lease Address	:	Village – Kashila, P.S. – Pakur, District – Pakur, Jharkhand
4	Lease Area	:	Ha:- 2.30ha Acres:- 5.69Acres
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	30 Lakhs
7	EMP Budget	:	Capital: 2.93 Lakhs Capital: 3.27 Lakhs
8	CSR / CER Budget	:	Rs. 0.60 Lakhs
9	New or Expansion	:	New
10	Mineable Reserves	:	Cum:- 115377.00 Cum Tonnes:- 311517.90 Tones
11	Mine Life	:	10.00 years
12	Man power	:	18
13	Water Requirement	:	8.0 KLD (Drinking: 0.18 KLD, Dust Suppression: 3.83 KLD, Plantation: 4.02 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	Nil
16	Crusher	:	No crusher
17	Nearest Water Body	:	Torai Nadi, 6 km, NE direction
18	Nearest Habitation	:	Kashila 1.00 km
19	Nearest Rail Station	:	Tilbhita Railway station, approx. 3.50 km.
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi, approx. 293.20 km.
21	Nearest Forest	:	Dhangora Pahar PF, 6.75 km Protected Forest near Belpahari Village, 3.24 km Protected Forest near Bhandaro village, 4.10 km
22	Road & Highways	:	NH-114 A, Approx. 2.80 km. in S direction. SH-7, Approx. 15.0 km. in SE direction.

CO-ORDINATES :

1	Latitude	From 24°40'14.34"N	To 24°46'22.58" N
2	Longitude	From 87°48'24.51"E	To 87°48'32.30"E

LAND DETAILS :

		Khata no.	Plot no.
1	Kashila	48	646(P)
		39	647(P), 647/1587(P)
		21	648(P), 649(P),
		44	650(P), 651(P),
		59	652(P), 653(P),
		65	654(P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Pakur vide letter no. 1073/M dated 06.07.2021.
2	CO	:	The CO, Maheshpur, Pakur vide letter no. 1671, dated 31.10.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khaliyan & Register II.
3	DMO	:	DMO, Pakur vide letter no. 1342/M, Pakur on 04-08-2021 certified that one lease (2.45 acres) exists within 500 m radius from proposed project and total lease area is less than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 605, dated 23.03.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 526 dated 12.03.2021 certified that the distance from the reserved / protected forest from the project site is more than 250 m.
6	DSR	:	The DC-cum-District Magistrate, Pakur vide letter no. 1412/M dated 12.08.2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	on 31-10-2020
8	Mine Plan Approval	:	Vide Memo no. 675/G dated 09.09.2021

Working Details :

1	Mining Method	:	Opencast Semi - Mechanized Mining method	
2	Quarry Area	:	5 years-1.064 ha	End of the Life of Mine - 1.804 ha
3	Waste Generation	:	5 years-6087.00Cum	End of the Life of Mine - 6087.00Cum
4	Stripping Ratio	:	1: 0.02	
5	Working Days	:	300	
6	Bench: size & No	:	3m x 3m	
7	Elevation of Mine	:	29 AMSL to 33 AMSL	
8	Ground Level Elevation		29 AMSL	
9	Ultimate Working Depth	:	25.6 AMSL (3.4 mbgl)	
10	Water Table	:	16.6 AMSL (10 mbgl)	
11	Topography of Mine	:	Area represents a undulating topography	

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne) Cum*2.7	Total Waste Generation (cum)	Bench RL in Meters
1 st	11538.00	31151.00	3550.00	30 mRL - 29.95 mRL
2 nd	11538.00	31151.00	713.00	29.95 mRL - 28.8 mRL
3 rd	11538.00	31151.00	608.00	28.8 mRL- 27.85 mRL
4 th	11538.00	31151.00	608.00	27.85 mRL - 26.7 mRL
5 th	11537.00	31148.00	608.00	26.7 mRL-25.6 mRL
Total	57689.00	155752.00	6087.00	

Land Use :

Pattern of Utilization	Existing (Ha)	During plan period (ha)	After Life of mine (ha)
Quarry	Nil	1.064	1.804 (0.735 ha area shall be backfilled & entire area after backfilling will be converted into water reservoir)
Road/Haul Road	0.003	0.025	Nil
Proposed Dump	Nil	0.15	Nil

Garland Drain & Sump	Nil	0.013	Nil
Parapet Wall	Nil	0.005	Nil
Plantation	Nil	0.493	0.496
Total	0.003	1.750	2.30
Unused Area	2.297	0.55	Nil
Lease Hold Area	2.30	2.30	2.30

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.496 ha	1240
2	Haul /Approach Road	0.100 km	100

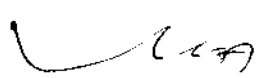
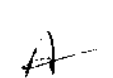


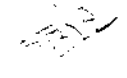
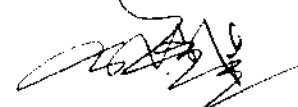
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste Generation will be 6087.00 Cu.m. during the Plan Period. At Plan Period proposed waste shall be temporarily dump on southern side of the applied area. Some quantity of the removed gritty soil would also be used for road dressing and plantation. After conceptual period De-Stoned area of quarry will be reclaimed to the extent possible.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 5m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside

- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- it shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. if any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Kashila Stone Deposit of M/s Shree Guru Stone Works, Village : Kashila, Thana : Pakur (M), Dist. : Pakur, Jharkhand (2.30 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure

- II.

9. Jiyapani Stone Deposit of M/s Sri Hariom Stone Works (Prop. : Sri Gurdip Motwani), Village : Jiyapani, Thana : Maheshpur, Dist. : Pakur, Jharkhand (2.83 Ha).

(Proposal No. : SIA/JH/MIN/ 68472/ 2021).

Project Category : B1 – Application for TOR

TOR Application for: Production capacity:- 56,159.60 cum/annum or 140400.00 TPA of Stone

Name of the consultant: P & M Solution, Noida

This is a new project which has been taken for appraisal on 21.10.2021

PROJECT and LOCATION Details:

Sl	Parameter	Details	
1	Project Name	Jiyapani Stone Deposit	
2	Lessee:	M/s Hariom Stone Works, Proprietor- Sri Gurdip Motwani, S/O Late Thakur d. Motwani, At-Mission Road Sindhipara, Pakur, State –Jharkhand	
3	Lease Address	Village – Jiyapani, P.S. – Maheshpur, District – Pakur, Jharkhand	
4	Lease Area	Ha:- 2.83 ha	Acre:- 7.00 Acres
5	Type of Land	Non Forest – Raiyati Land	
6	Project Cost	35 Lakhs	
7	EMP Budget	Capital: 3.17 Lakhs	Capital: 3.27 Lakhs
8	CSR / CER Budget	Rs. 0.70 Lakhs	
9	New or Expansion	New	
10	Mineable Reserves	Cum:- 761880.00 Cum	Tonnes:- 1904700.00 Tones
11	Mine Life	13.60 years or 14.0 years	
12	Man power	30	
13	Water Requirement	9.19 ~ 9.20 KLD (Drinking:0.30 KLD, Dust Suppression: 4.32 KLD, Plantation:4.56 KLD)	
14	Water Source	From Nearby villages by tankers	
15	DG Set / power	Nil	
16	Crusher	No crusher	
17	Nearest Water Body	Bansloi Nadi, 5.86 km, S direction	
18	Nearest Habitation	Jiyapani 1.00 km	
19	Nearest Rail Station	Rajgram Railway station, Approx. 14.00 km in E direction	

20	Nearest Air Port	:	Birsa Munda Airport, Ranchi approx. 279.70 km towards SW direction.
21	Nearest Forest	:	Protected Forest, near Belpahari village, Approx. 1.80 km. Protected Forest, near Panchanandpur Village, Approx. 1.10 km. Protected Forest near Ganropahari Village. Approx. 7.80 km.
22	Road & Highways	:	SH-18 Approx. 15.10 km. in W direction SH-7 Approx. 14.00 km. in E direction. NH-114A Approx. 12.10 km. in N direction

CO-ORDINATES :

1	Latitude	From 24°32'42.62"N	To 24°32'49.88"N
2	Longitude	From 87°43'37.43"E	To 87°43'44.51"E

LAND DETAILS :

		Khata no.	Plot no.
		04	79(P)
1	Jiyapani	19	73(P), 75, 78(P), 80
		20	76(P), 77(P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Pakur vide letter no. 1059/M dated 06.07.2021.
2	CO	:	The CO, Maheshpur vide letter no. 753 dated 10.09.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Pakur vide letter no. 1177/M, dated 16.07.2021 certified that there are two other mining lease exists within 500 m radius of the proposed project. Total lease area within 500 meter is 7.64 ha or 18.88 acre which is more than 5 ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribag vide letter no. 1338, dated 27.07.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 545 dated 13.03.2021 certified that the distance from the

		reserved / protected forest from the project site is more than 250 m.
6	DSR	The DC-cum-District Magistrate, Pakur vide letter no 1412/M dated 12/08/2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	On 21-09-2020
8	Mine Plan Approval	Vide Memo no. 1807/M, Pakur dated 11/10/2021

Working Details :

1	Mining Method	:	Opencast Semi - Mechanized Mining method	
2	Quarry Area	:	5 years--1.817 ha	End of the Life of Mine -- 2.240 ha
3	Waste Generation	:	5 years-- 17360.0 Cum	End of the Life of Mine -- 17360.0 Cum
4	Stripping Ratio	:	1: 0.07	
5	Working Days	:	300	
6	Benches: size & No	:	6m x 6m	
7	Elevation of Mine	:	95 AMSL 105 AMSL	
8	Ground Level Elevation	:	55 AMSL	
9	Ultimate Working Depth	:	60 AMSL (5m bgl)	
10	Water Table	:	40 AMSL (15m bgl)	
11	Topography of Mine	:	Area represents a undulating topography	

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne) Cum*2.5	Waste Generation (cum)	Bench RL in Meters
1 st	54838.00	137094.00	10640.00	103 mRL - 96 mRL
2 nd	55440.00	138600.00	6720.00	103 mRL - 90 mRL
3 rd	56159.60	140400.00	-	96 mRL- 90 mRL
4 th	56159.60	140400.00	-	90 mRL - 84 mRL
5 th	56159.60	140400.00	-	90 mRL-78 mRL
Total	278756.80	696894.00	17360.00	

Land Use :

Pattern of Utilization	Existing (Ha)	During plan period (ha)	After Life of mine (ha)
Quarry	Nil	1.817	2.240 (Entire area will be converted into water reservoir)
Road/Haul Road	0.006	0.003	0.001
Proposed Dump	Nil	0.217	Nil
Plantation	Nil	0.589	0.589
Total	0.006	2.626	2.83
Unused Area	2.824	0.204	Nil
Lease Hold Area	2.83	2.83	2.83

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.589 ha	1470
2	Haul /Approach Road	0.05 km	50

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid waste Management

- Waste Generation will be 17360.00 Cum. during the Plan Period. At Plan Period proposed waste shall be temporarily dump on northern side of the applied area. Some quantity of the removed gritty soil would also be used for road dressing and plantation. After conceptual period De-Stoned area of quarry will be reclaimed to the extent possible.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 5m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.

- Garland drain shall be made around the Waste dump and the rain water shall be collected in gariand drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Baseline Monitoring data generation in October, 2021 to December, 2021.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

10. Belpahari Stone Mine of M/s Guru Stone Product, Mouza : Belpahari & Suraidih, Tehsil : Hiranpur, Dist. : Pakur, Jharkhand (7.34 Ha).

(Proposal No. : SIA/JH/MIN/ 187675/ 2020).

Project Category : The State Expert Appraisal Committee, Jharkhand deliberated the project during its 65th meeting held on 07-09.01.2019 and SEIAA, Jharkhand has approved the ToRs in 66th meeting held on 22nd January, 2019. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 74, date 07.02.2019.

The final EIA / EMP submitted by PP to SEIAA on 13.09.2021 and which was forwarded to SEAC on 13.09.2021.

EC Application for: Boulder Stone : 118,138 Cu.M. / year i.e.3,42,600 TPA
Mobile Crusher

Name of the consultant : POLLUTION & ECOLOGY CONTROL SERVICES (PECS) , NAGPUR

This is a new project which has been taken for appraisal on 21.10.2021

Project and Location Details :

Sl	Parameter		Details
1	Project Name	:	Guru Stone Product
2	Lessee:	:	Sri Pankaj Bhagat
3	Lease Address	:	Mouza : Belpahari & Suraidih, Tehsil : Hiranpur, Dist. Pakur, Jharkhand
4	Lease Area	:	Ha: 7.34 Acres: 18.13
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	81.9 Lakhs
7	EMP Budget	:	Capital: 2,76,300/year Recurring: 1,80,000/ year
8	CSR / CER Budget	:	Rs. 2,20,000Lakhs/year
9	New or Expansion	:	New Project
10	Mineable	:	1304352 Cu. M. Tonnes: 3782620Tonnes

	Reserves		
11	Mine Life	:	11.15 years
12	Man power	:	42 persons
13	Water Requirement	:	9.25KLD (Drinking: 2.75 KLD, Dust Suppression: 3.50 KLD, Plantation: 3.00KLD)
14	Water Source	:	Mine pit Water, tanker from abandoned mine pits and Bore-well water for domestic use
15	DG Set / power	:	NA
16	Crusher	:	NIL
17	Nearest Water Body	:	Torai Nadi 1.7km in SW
18	Nearest Habitation	:	Belpahari Village~ 680m NE, Suraidih Village-58m SE Hiranpur Town – 3.4 km NW
19	Nearest Rail Station	:	Pakur Railway Station – 16 km (SE),
20	Nearest Air Port	:	Birsha Munda Airport, Ranchi Approx. 300km in SW.
21	Nearest Forest	:	NIL
22	Road & Highways	:	NH-34 –Approx 18.3km

CO-ORDINATES

1	Latitude	From 24°41'44.14"N	To 24°41'56.73"N
2	Longitude	From 87°44'8.71"E	To 87°44'27.41"E

LAND DETAILS :

Sl. No.	Mouza	Khata no.	Plot no.
1	Belpahari	3	285, 286, 287
2		22	288, 341
3		16	289, 290
4		14	357
5		50	340
6		34	353
7		31	354
8		15	355, 356
9	Suraidih	25	138, 139
10		01	428, 429

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (Loi) has been issued by District Mining Office, Pakur, vide letter no. 76/M dated 17.01.2017.
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2	CO	:	The CO, Hiranpur vide memo no. 579, dated 12.11.2018 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatyan.
3	DMO	:	DMO, Pakur vide memo no. 1157/M, dated 18.05.2017 certified that the 02 lease (5.45 Acre & 4.81 Acre) within 500 m radius total lease area is 11.49 ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribag vide letter no. 29, dated 08.01.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Division vide letter no. 668, dated 07.05.2016 certified that the distance of notified forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, vide letter no. 1412/M, dated 12.08.21 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 21.07.2016
8	Mine Plan Approval	:	Memo No. 213/DDM, Dated: 28.04.17
9	Public Hearing	:	Public Hearing of the project was conducted on 12.10.2020.

Working Details :

1	Mining Method	:	Semi - Mechanized Open Cast Mining, Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 3.43ha	Life of Mine – 3.43ha
3	Waste Generation	:	5 years– 46044Cu.M	Life of Mine – 46044Cu.M
4	Stripping Ratio	:	1:0.01	
5	Working Days	:	300 days	
6	Bench: size & No	:	5m x5m	
7	Elevation of Mine	:	74 AMSL	
8	Ground Level Elevation	:	61 -74 AMSL	
9	Ultimate Working Depth	:	30 AMSL	

10	Water Table	25 AMSL	
11	Topography of Mine	Flats and elevated with undulation	
12	Explosive Requirement	3.27Tons/Month	
13	Diesel/Fuel requirement	Wagon Drill- 01	50 Lts. (Approx.) For 8 Hrs.
		Compressor- 01	30 Lts. (Approx.) Per Day
		Tractor sprinkle01	50 Lts. (Approx.) For 4 Hrs.
		Tipper - 04	150 Lts. (Apprx.) For 8 Hrs
		Hydraulic Tractor- 04	100 Lts. (Apprx.) For 8 Hrs..
		Total	380 Lts.

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste Generation (CuM)	Bench PL in Meters
1 st	115113	333829	11549	55m-50m
2 nd	115074	333713	7061	45m-40m
3 rd	114606	332357	7944	35m-30m
4 th	114833	333015	9124	35m-30m
5 th	118167	342683	10366	35m-30m
Total	577793	1675597	46044	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	3.371	4.099	5.888 (1.789 Ha area shall be backfilled & 4.099 Ha area shall be left as water reservoir)
2	Office /Store	0.00	0.21	0.00	00
3	Crusher	0.00	0.00	0.00	00
4	Road	0.14	0.104	0.017	0.017
5	Dump	0.00	1.004	0.00	Nil
6	Safety Zone	0.00	1.435	1.435	1.435
7	Settling Tank	0.00	00	Backfilled area (1.789 Ha)	
8	Unutilized	7.20	1.216	0.00	0.00

TOTAL	7.34	7.34	7.34	7.34	
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ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	1.435 Ha	1500 plants
2	Other Reclaimed Area	:	NIL	
3	Haul /Approach Road	:	Haul Road Length is 326 m	160 plants (80 plants on both side at the interval of 2 m)

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

There will be no solid waste generation.

Water Quality Management

- The working at the end of 5years of the plan period will not intercept the water table.
- In the applied mining lease area the flow of water is very low.
- The major portion of the area comprises of gently sloping surrounded with peripheral slop all along, there will be no problem of water drainage.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retained walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.

- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

During appraisal the PAs were asked to submit a consolidated ToR compliance report which has been submitted in proper format.

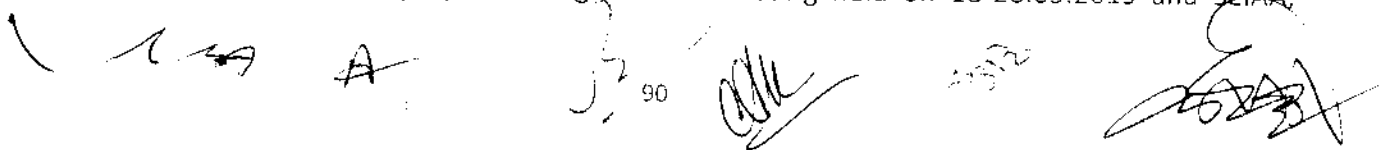
Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Belpahari Stone Mine of M/s Guru Stone Product, Mouza : Belpahari & Suraidih, Tehsil : Hiranpur, Dist. : Pakur, Jharkhand (7.34 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure - II.

11. Belpahari Stone Mine of M/s Maa Durga Stone Works, Mouza : Belpahari & Beldiha, Tehsil : Hiranpur, Dist. : Pakur, Jharkhand (12.15 Ha).

(Proposal No. : SIA/JH/MIN/ 190783/ 2020).

Project Category : The State Expert Appraisal Committee, Jharkhand deliberated the project during its 78th meeting held on 18-20.09.2019 and SEIAA.

1 2 3 A 90



Jharkhand has approved the ToRs in 80th meeting held on 25th September, 2019. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 579, date 26.10.2019.

The final EIA / EMP submitted by PP to SEIAA on 27.09.2021 and which was forwarded to SEAC on 29.09.2021.

EC Application for: **Boulder Stone :130,485 Cu.M. / year i.e. 3,78,408 TPA
Mobile Crusher**

Name of the consultant: **POLLUTION & ECOLOGY CONTROL SERVICES (PECS) , NAGPUR**

This is a new project which has been taken for appraisal on 21.10.2021

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: M/s Maa Durga Stone Works
2	Lessee:	: Sri Soumitro Ghosh
3	Lease Address	: Mouza : Belpahari & Beldiha, Tehsil : Hiranpur, Dist. : Pakur, Jharkhand
4	Lease Area	: Ha: 12.15ha. Acres: 30.02 Acres
5	Type of Land	: Non Forest – Rayati Land
6	Project Cost	: Rs. 98 Lakhs
7	EMP Budget	: Capital: 4,28,000Lakhs/year Recurring: 2,83,000Lakh / year
8	CSR / CER Budget	: Rs. 2,20,000 Lakhs/year
9	New or Expansion	: New Project
10	Mineable Reserves	: Cu.M.: 3012357 Tonnes: 8735835
11	Mine Life	: 23.33years
12	Man power	: 49 persons
13	Water Requirement	: 10 KLD (Drinking : 0.980 KLD, Dust Suppression : 4.00 KLD Plantation : 5.00 KLD)
14	Water Source	: Mine pit Water, tanker from abandoned mine pits and Bore-well water for domestic use
15	DG Set / power	: NA
16	Crusher	: NA
17	Nearest Water Body	: Torai Nadi at a distance of 3.2 Km
18	Nearest Habitation	: Ghagharjani village, 2.2 km
19	Nearest Rail Station	: Pakur Railway Station – 22 km (NW)
20	Nearest Air Port	: Netaji Subhash Chandra Boss Airport, Kolkata – 250.00 km (SE)

21	Nearest Forest	NIL
22	Road & Highways	NH-34 –Approx. 16.2km (NE)

CO-ORDINATES :

1	Latitude	From 24°42'04.78"N	To 24°42'21.59"N
2	Longitude	From 87°44'45.51"E	To 87°45'03.25"E

LAND DETAILS :

Sl. No.	Mouza	Khata no.	Plot no.
1	Belpahari & Beldiha	18	123
2		56	124
3		27	131,132,133,134,136,722,723,724
4		25	135
5		07	137
6		30	138,139,140
7		59	141
8		32	676,679
9		17	677,682
10		02	678,680,681
11		13	683,684,685,686
12		05	691
13		06	692,693,694,695
14		03	696,697
15		24	698,699,720,721

STATUTORY CLEARANCES :

1	LOI/Lease docs	: The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 2791/M dated 29.12.2018.
2	CO	: The CO, Hiranpur vide memo no. 581, dated 12.11.2018 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatian.
3	DMO	: DMO, Pakur vide memo no. 1168/M, dated 19.05.2017 certified that the 01 lease (6.08 Acre) exists within 500 m radius and total lease area is 14.609 ha.
4	DFO Wild Life	: DFO, Wildlife Hazaribag vide letter no. 1392, dated 20.07.2019 certified that the Udhwa Lake Bird Sanctuary is 29,930 m from project site and not within 10 km from National Park, Bio-Diversity area & Wildlife Sanctuary and proposed project is not situated in any ESZ.
5	DFO Forest Distance	: DFO, Pakur Division vide letter no. 1198, dated 01.08.2016 certified that the distance of notified forest is more than 250 m from

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		proposed project site.
6	DSR	The DC-cum-District Magistrate, Pakur vide letter no. 1412/M, dated 12.08.21 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	On 02.07.2016
8	Mine Plan Approval	Memo No. 212, Dated- 26.04.2017
9	Public Hearing	Public Hearing of the project was conducted on 13.10.2020.

Working Details :

1	Mining Method	:	Semi - Mechanized Open Cast Mining, Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 7.77ha	Life of Mine – 7.77ha
3	Waste Generation	:	5 years– 54564 Cu.M	Life of Mine – 54564 Cu.M
4	Stripping Ratio	:		
5	Working Days	:	300 days	
6	Bench size & No	:	5m x 5m	
7	Elevation of Mine	:	82 m RL	
8	Ground Level Elevation	:	73 to 82 m above MSL	
9	Ultimate Working Depth	:	30m bgl	
10	Water Table	:	30-39m bgl	
11	Topography of Mine	:	Flats and elevated with undulation	
12	Explosive Requirement	:	2.108Tons/Month	
13	Diesel/Fuel requirement	:	-	

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste Generation (Cum)	Bench RL in Meters
1 st	111863	324402	14044	62m-67m
2 nd	117233	339977	10122	62m-57m
3 rd	129902	376714	11537	57m-52m
4 th	130297	377862	9328	52m-47m
5 th	130486	378408	9533	52m-47m
Total	619781	1797363	54564	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	3.14	7.26(water reservoir)	Water body
2	Office /Store	0.00	0.12	0.00	
3	Crusher	0.00	0.00	0.00	
4	Road	0.18	0.18	0.35	
5	Garland Drain	0.00	0.60	3.12(backfilled)	
6	Safety Zone	0.00	0.96	1.42	Plantation
7	Settling Tank	0.002	0.20	0.00	
8	Unutilized	11.97	6.95	0.00	
	TOTAL	12.15	12.15	12.15	

ENVIRONMENT MANAGEMENT**Green Belt Development**

SL	Location	Area/Length	No of Trees
1	Safety Zone	4.00ha	1300 trees/ 260 sapling every year
2	Other Reclaimed Area	NIL	
3	Haul /Approach Road	0.45Acres	

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

There will be no solid waste generation.

Water Quality Management

- The working at the end of 5years of the plan period will not intercept the water table.
- In the applied mining lease area the flow of water is very low.
- The major portion of the area comprises of gently sloping surrounded with peripheral slope all along, there will be no problem of water drainage.

- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission.
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

During appraisal the PAs were asked to submit a consolidated ToR compliance report which has not been submitted.

Hence, the project will be taken up for consideration after submission of above.

Day 3 : October 22, 2021 [Friday]

Consideration of Proposals

1. Serengdag Bauxite Mine with production capacity of Bauxite 1,00,000 TPA of M/s Hindalco Industries Ltd., Village : Serengdag, Hanrup and Paunri, Taluka : Bishunpur & Ghaghra, Dist. : Gumla, Jharkhand (77.89 Ha).

(Proposal No. : SIA/JH/MIN/29237 /2018).

Project Category : B1 -- Application for TOR

EC Application for : Bauxite: 100000 TPA

Name of the consultant: JM EnviroNet Pvt. Ltd., Gurugram-122001

Project & Location Details :

Sl	Parameter	Details
1	Project Name	Serengdag Bauxite Mine
2	Lessee:	M/s. Hindalco Industries Limited
3	Lease Address	Ahura Centre, 1st Floor, 'B' Wing, Mahakal caves road, Andheri (East), Mumbai- 400093
4	Lease Area	Ha: 77.89 ha Acres: 192.47 Acres
5	Type of Land	Total Mine lease area is 140.07 Ha. Out of which HIL proposed surrender of 62.18 Ha and therefore effective area over which mining is being and will be done is 77.89 ha only.
6	Project Cost	Rs. 5.5 Crores/-
7	EMP Budget	Capital: Rs 196.98 Lac/- Recurring: Rs 16.07 lacs/- per annum
8	CSR / CER Budget	Rs. 12 lakh
9	New or Expansion	For ToR under EIA Notification 2006 and Govt. of India Gazette Notification vide S.O. 1530(E) dated 6th April 2018
10	Mineable Reserves	Cu.M.: 1123366 Cu.M. Tonnes: 2583740 Tonnes (As on 01.04.2021)

11	Mine Life	:	20 Years
12	Man power	:	113
13	Water Requirement	:	15 KLD
14	Water Source	:	Existing rain water harvesting pond
15	DG Set / power	:	30 kva
16	Crusher	:	100 TPH
17	Nearest Water Body	:	PhuliharNala (~4.0 km in WSW direction) SalgiNala (~4.0 km in SE direction)
18	Nearest Habitation	:	Gumla (~37 km in SSE direction)
19	Nearest Rail Station	:	Lohardaga (~29km in NE direction)
20	Nearest Air Port	:	Ranchi Airport (~90 km in ESE direction)
21	Nearest Forest	:	Serka PF (~2.5 km in NNW direction)
22	Road & Highways	:	SH-9 (~2.0 km in WSW direction)

CO-ORDINATES :

1	Latitude	From 23°21'27.067" N	To 23° 23'14.921" N
2	Longitude	From 84° 25' 41.639" E	To 84° 26' 33.211" E

LAND DETAILS

1	Serengdag	115.31 Acre	Khasra No	15, 27, 29, 30, 31, 32, 33, 34, 35, 36, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 107 (Part), 109, 110, 111, 112, 113, 114, 115, 116, 118, 119, 120, 121, 122, 128 (Part), 129 (Part), 130, 131, 132, 133, 134, 135 (Part), 136 (Part), 138 (Part), 144 (Part), 273, 276 (Part), 278, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307 (Part), 308, 309, 310, 312, 313, 314, 315, 316, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347 & 1351
2	Harrup	71.54 Acre	Khasra No	1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1104, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1129, 1130, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1276, 1277, 1278, 1280, 1281, 1295, 1296, 1297, 1298, 1299, 1300, 1302, 1303, 1311, 1312, 1313
3	Paunri	5.61 Acre	Khasra No	71,74,75,76

STATUTORY CLEARANCES

1	LOI/Lease docs	Mining Lease was executed on 04-10-1948. Validity of Mining Lease has been extended upto 31.03.2030 in favor of M/s Hindalco Industries Limited. Supplementary lease
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		deed executed on 27.03.2017.
2	CO	: The CO, Bishunpur vide letter no. 95, dated 26.03.2019 & CO, Ghaghra vide letter no. 749, dated 17.11.2020 has mentioned the plot nos. of the project is not recorded as "Jangle Jhari" in R.S. Khatyan & Register II.
3	DFO Wildlife	: Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 456, dated 19.03.2021 certified that the National Park, Bio-Diversity & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
4	DFO Territorial	: DFO, Lohardaga Division vide letter no. 2845 and 2640, Dated 11.08.2021 and 04.10.2021 certified that the distance of reserved / protected forest is Zero m (adjacent to forest) from proposed project site.
5	Mine Plan Approval	: Modification of Mining Plan with Progressive Mine Closure Plan has been submitted IBM, Ranchi dated 09.10.2021

1	Mining Method	: Mechanized Opencast, Drilling & Blasting to be used
2	Quarry Area	: 5 years – 6.01 ha (20.12 ha will be total excavated area, out of which 13.61 will be reclaimed with waste generated, 0.5 ha area will be converted into water reservoir and 6.01 ha will be working quarry area) Life of Mine – 0 ha (45.79 ha will be total excavated area, out of which 40.73 will be reclaimed and 5.06 ha will be converted into water reservoir)
3	Waste Generation	: 5 years– 1184695 tonnes Life of Mine – 4703597 tonnes
4	Stripping Ratio	: 1 : 3.03 (T: T)
5	Working Days	: 300
6	Bench: size & No	: 6m x 6m
7	Elevation of Mine	: 1,020 to 1,045.5 AMSL
8	Ground Level Elevation	: 1032.75 AMSL
9	Ultimate Working Depth	: 10-13 m (1019.75 AMSL)
10	Water Table	: 90 m bgl (942.75 AMSL)
11	Topography of Mine	: The bauxite deposits of Lohardaga occur on a Paleopaneplane

12	Explosive Requirement	:	146.68 Kg/day (Slurry Explosives)
13	Diesel/Fuel requirement	:	700 ltr/day

Production Details :

Year	Total Excavation (t)	OB (t)	Soil (t)	ROM (t)	Ore (t)	Mineral Reject /Waste(t)
2021-22	444355	188220	91626	164509	98705	65804
2022-23	505856	231495	114810	159551	95731	63820
2023-24	519794	212648	143618	163528	98117	65411
2024-25	365456	126793	75485	163178	97907	65271
Total	1835461	759156	425539	650766	390460	260306

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Excavated Area	4.76	13.61	40.73	40.73	Backfilled and reclaimed
		-	0.5	5.06	5.06	Reservoir
		11.67	6.01	-	-	working area / quarry
2	OB Dump	0.69	0.18	-	-	
3	Soil Dump	0.53	-	-	-	
4	Road	0.26	0.27	0.15	0.15	
5	Green Belt	-	2.5	5.0	5.0	
6	Undisturbed Area	64.74	54.82	26.95	26.95	
	Total	77.89	77.89	77.89	77.89	

ENVIRONMENT MANAGEMENT

Green Belt Development

Sl	LOCATION	Area/Length	No of Trees
1	Safety Zone	: 5.0 ha	20000

2	Other Reclaimed Area	:	0.8 ha	2000
3	Haul /Approach Road	:	0.15 ha	1000

Solid Waste Management

- Initially, excavated soil & waste is dumped separately in the non -mineralized area with proper terracing, parapet wall & garland drain. At the end of life of mine, all excavated Overburden & waste will be used for concurrent back filling & same will be rehabilitated by plantation/agricultural land

Water Quality Management

- There is no waste water is being generated during mining process as of now.
- Domestic wastewater generated from mines office is being disposed of in soak pit via septic tank.
- Retaining walls, Garland drains, along the periphery of pits and dumps& settling tanks etc. being constructed arrest surface run-offs.

Air Quality Management

- Drilling machines are being equipped with wet drilling arrangements.
- Controlled blasting has been adopted and optimum use of explosive energy helps in reducing the air pollution.
- Proper maintenance (preventive as well as scheduled maintenance) of vehicles is being carried out regularly for minimization of generation of gaseous pollutants
- Personal Protective Equipment (PPEs) such as dust masks are being provided to employees working in dust prone areas.
- Periodic air quality monitoring is being carried out

Noise Level Management

- Drilling machines are being equipped with wet drilling arrangements.
- Controlled blasting technique is being adopted during day time only.
- HEMMs are equipped with AC cabins for operators.
- In order to reduce the effect of noise pollution, personal protective equipment like ear plugs, ear muffs are provided to workers exposed to high noise levels.
- Regular monitoring of ambient noise level is being carried out.

The PAs have also mentioned quantities of OB waste, Top Soil and Mineral rejects in the original application. These are not saleable outputs. Hence, EC for the same is not required to be considered.

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The PAs have also requested for installation of 100 TPA mobile crusher. However, no details of the same have been provided in the PFR and the technical presentation before the committee. Hence, the installation of 100 TPA mobile crusher has not been considered for grant of ToR.

The PAs have also requested for Public Consultation in lieu of Public Hearing. However, the Committee is of the opinion that the previous EC was granted based on EIA notification, 1994 and this being the first EC under EIA notification, 2006 the PAs are required to carry on Public Hearing as per EIA notification, 2006.

As per DFO, Lohardaga vide letter no. 2845 and 2690 dated 11.08.2021 and 04.10.2021 certified that the distance of lease area (77.89 ha) from reserved / protected forest is Zero m (outside of forest).

Regarding distance criteria for existing mines w.r.t forest i.e. 100 m decided by SEIAA in its 59th meeting dated 09.08.2018, the PAs vide letter no. HIL/LHD/GM(G)/ MoEF&CC-EC SHD-B/150A dated 22.10.2021 have submitted a request letter wherein it is stated that environmental clearance has already been granted on 23rd June, 2006 by MoEF&CC in the light of EIA notification, 1994 and the present application has been submitted for the same production capacity under EIA notification, 2006 and S.O. no. 1530(E) dated 06.04.2018 and requested that present distance criteria for existing mines followed by SEIAA will not be applicable. PAs have also cited other cases which has been granted ToR and EC by MoEF&CC without applicability of this criteria.

Hence, the Committee is of the opinion that the above cited distance criteria w.r.t forest is not applicable for this project.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

2. Bharnia Stone Deposit of M/s Vridhi Construction, Village : Bharnia, Thana : Chakradharpur Dist. : West Singhbhum (Chaibasa), Jharkhand (2.715 Ha)

(Proposal No. : SIA/JH/MIN/228935/2021)

Project Category : B2 – Application for Environment Clearance

EC Application for: Stone : 266958 TPA ~ 95342 m³/yr; 1333954 Tons ~ 476412 m³ during plan period
Waste : 31964 Tonnes ~ 21309 m³ (Gritty Soil) during plan period.
Mobile Crusher : Not proposed

Name of the consultant : Visiontek Consultancy Pvt. Ltd., Bhubneshwar

This is a new project which has been taken for appraisal on 22.10.2021

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Bharnia Stone Deposit
2	Lessee:	M/s Vridhi Construction, Partner- Shri Varun Ahuja A/c

			Sai Nibas, Jhumka Mohalla, Thana- Chakradharpur, District- West-Singhbhum (Chaibasa), Jharkhand.
3	Lease Address		Village : Bharnia, Thana : Chakradharpur, Dist. : West Singhbhum (Chaibasa), Jharkhand
4	Lease Area		Ha: 2.715 Acres: 6.71
5	Type of Land		Non Forest – Rayati Land
6	Project Cost		Rs. 89.25 Lakhs
7	EMP Budget	Capital: Rs. 12.00 Lakhs	Recurring: Rs. 3.60 Lakhs/ year Monitoring cost: Rs. 0.90 Lakhs/year
8	CSR / CER Budget		Rs. 1.80 Lakhs
9	New or Expansion		New
10	Mineable Reserves	Cu.M.: 476743 Cu. M.	Tonnes: 1334880
11	Mine Life		5 Years Only
12	Man power		45 Person
13	Water Requirement		9.36 KLD (Drinking: 1 KLD, Dust Suppression & Plantation: 8.36 KLD)
14	Water Source		Through Water Tanker - nearby spring/Nala & Wells
15	DG Set / power		Not Applicable
16	Crusher		Not Applicable
17	Nearest Water Body		Bharnia Nala at 0.92 Km in ENE Karkari river at the distance of 19.00 km N.
18	Nearest Habitation		Bharnia village 1.40 km ENE direction from the mine site.
19	Nearest Rail Station		Chakradharpur Railway Station 14 km SE direction from the mine site.
20	Nearest Air Port		Birsa Munda Airport, Ranchi 63 km NE direction from the mine site.
21	Nearest Forest		251 m, as per forest division. Letter no – 1123 Dt- 25-08- 2021
22	Road & Highways		MDR at 0.34 Km in S direction NH 75 at 11.00 km SW direction from the mine site.

CO-ORDINATES :

1	Latitude	:	From 22°48'23.11"N	To 22°48'30.97"N
2	Longitude	:	From 85°35'57.00"E	To 85°36'05.50"E

LAND DETAILS :

The lease area is situated near Bharnia

Khata No.	Plot No.	Area In Acre.
246	1846 (P)	0.07
247	1847 (P)	0.87
148	1849 (P)	0.93
520	1852 (P)	0.65

521	1851 (P)	0.97
223	1853	0.25
223	1855 (P)	0.88
597	1850	1.20
197	1848 (P)	0.89
Total Area in Acre		6.71

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, West Singhbhum vide letter no. 489/M dated 01.04.2021.
2	CO Certificate	:	The CO, Chakradharpur vide letter no. 125, dated 04.03.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyani.
3	DMO Certificate	:	DMO, West Singhbhum, Chaibasa vide memo no. 840/M dated 19.07.2021 certified that no other lease exists within 500 m radius and total lease area is less than 05 ha.
4	DFO Wild Life	:	DFO, Wildlife division Ranchi, Letter no.- 20210724 Dated 24.07.2021 has clarified that proposed location does not belongs to South Chhotanagpur Commissioner, its falls under Kolhan Commissioner of Dalma Wildlife Sanctuary. Subsequently, the Wildlife Warden of Dalma Wildlife Sanctuary has informed that proposed location does not fall under the jurisdiction of Dalma Wildlife Sanctuary and advice to take the required certificate from concerned Territorial DFO. Accordingly, certificate has been obtained from DFO, Porhat Division, Chaibasa vide letter no. 1123, dated 25.08.2021. The Committee is of the view for this project the letter issued by DFO, Porhat Division, Chaibasa serve the required purpose.
5	DFO Territorial	:	DFO, Porhat Division, Chaibasa vide letter no. 1123, dated 25.08.2021 certified that the distance of reserved protected forest is 251 m from proposed project site.
6	DSR	:	The District Magistrate-cum-DC, West Singhbhum, Chaibasa vide letter no. 1109/M, dated 27.09.2021 has informed that this project is part of District Survey Report (DSR) at West Singhbhum, Chaibasa district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Letter no- 142(A) Dated- 15-02-2021
8	Mine Plan	:	Additional Director, Geology (Hazaribagh)

Approval	Letter No.- 550/G Dated- 29-05-2021
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WORKING DETAILS :

1	Mining Method	:	Opencast Mechanized Mining
2	Quarry Area	:	5 years - 2.130 ha Life of Mine - 2.130 ha
3	Waste Generation	:	5 years- 31964 Tons Life of Mine - 31964 Tons
4	Stripping Ratio	:	1:0.016 (T:m ³)
5	Working Days	:	300 days/year
6	Bench: size & No	:	6m x 6m
7	Elevation of Mine	:	In 398 MSL to 362 MSL
8	Ground Level Elevation	:	In 334 MSL
9	Ultimate Working Depth	:	In 336 MSL
10	Water Table	:	In 327-325 MSL and also 7.10 m bgl
11	Topography of Mine	:	Hilly & sloping area
12	Explosive Requirement	:	Yes - No. of holes: 5/day; Explosive: Slurry-115 Kg/Day
13	Diesel/Fuel requirement	:	Diesel required only for Mining machinery operation and Tippers/trucks for transportation.

PRODUCTION DETAILS :

Year	Production of stone		Removal in Soil	
	in Tonnes	in Cum	in Tonnes	in Cum
1st	266795	95284	16479	10986
2nd	266347	95124	12210	8140
3rd	266958	95342	0	0
4th	266913	95326	0	0
5th	266941	95336	3275	2183
Total	1333954	476412	31964	21309

LAND USE :

SL	Pattern	Existing Land Use (Ha)	Proposed End of Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.000	2.130	2.130	Reservoir
2	Office /Store	0.000	0.000	0.000	
3	Road	0.020	0.000	0.000	
4	Safety Zone	0.000	0.585	0.585	Plantation

7	Unutilized	2.695	0.000	0.000	-
	TOTAL	2.715	2.715	2.715	-

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.585 Ha	1465
2	Other Reclaimed Area	:	0.00	No
3	Haul /Approach Road	:	500 meter	335 Tree both side approach road.

- Gabion Plantation work in the approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste Generation will be 21309 Cu.M. during the life of Mine. Waste storage area is 0.202 ha. The waste shall be used for backfilling in the 5th year of the mining operation.

Water Pollution Control Measures:

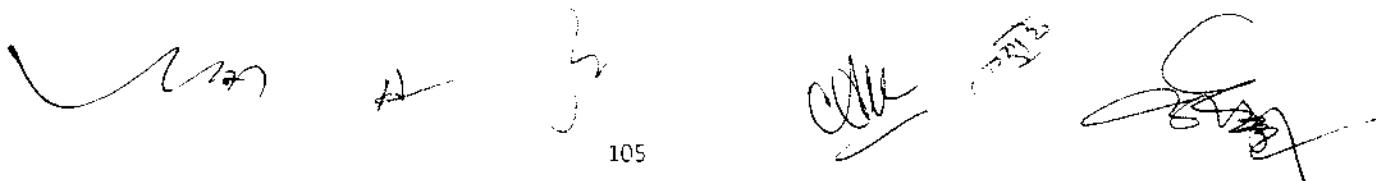
- Negligible impact envisaged on surface water and ground water due to mining as no discharge of effluent or intersection of ground water.
- No major surface water body within 1 km radius of the project site.
- Garland drain & settling tank will be constructed around dump for arresting run-off, it will be integral part of rainwater harvesting system.
- Post-project the quarry area will serve as reservoir, which will be source of water for the nearby areas.

Air and Noise Pollution Control Measures:

- Water sprinkling shall be done on the haul roads.
- Plantation to be done in the safety zone develop a green belt along the ML boundary.
- Sharp drill will be used and wet drilling will be followed.
- Controlled blasting- Nonel technology will be used.
- Overloading will be prohibited while transporting. Water sprinkling will be taken up.
- Plantation along transportation route will be done.
- Regular monitoring of Air quality & PUC for vehicle will be carried out.

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.



- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The road side plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles will be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Bharnia Stone Deposit of M/s Vridhi Construction, Village : Bharnia, Thana : Chakradharpur, Dist. : West Singhbhum (Chaibasa), Jharkhand (2.715 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

3. Expansion & Modernization for enhancing the production of 60,000 TPA ingots to 1,48,500 TPA Billets, TMT Bar / Rods from 21,349 TPA to 2,37,600 TPA and increase installed capacity of reheating furnace and slag crusher of M/s Atibir Hi-Tech Private Limited, Village : Mohanpur, Tehsil : Giridih, Dist. : Giridih, Jharkhand.

(Proposal No. : SIA/JH/IND/ 56100/ 2021).

Name of the consultant : Vardan Environet, Gurgaon, Haryana

This is an expansion & modernization project which has been taken for appraisal on 22.10.2021.

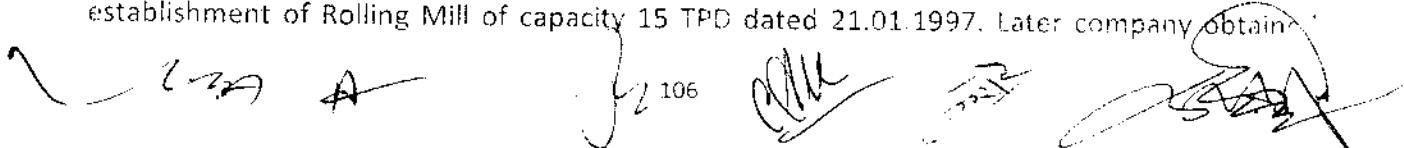
The proposal was considered by the committee to determine the "Terms of Reference (TOR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the Project Proponent has submitted the prescribed Form - I & PFR the proposed project falls under item 3 (a) Metallurgical Industries (Ferrous & Non-Ferrous) as per EIA Notification, 2006.

M/s Atibir HiTech Private Limited (AHTPL) is an existing steel plant at Village – Mohanpur, PO – Udnabad, District -Giridih, Jharkhand.

Atibir Hi-Tech Private Limited was incorporated on 24th August 1994 under Registrar of Companies; Bihar, vide incorporation certificate No. 03-06200 of 1994-95 (CIN- U37100WB1994PTC134781).

Company obtained NOC from Bihar State Pollution Control Board (BSPCB) for the establishment of Rolling Mill of capacity 15 TPD dated 21.01.1997. Later company obtained

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NOC from BSPCB vide Ref. No. T-4512, dated 23.10.2000 for expansion of rolling capacity to 35 TPD and vide Ref. No. T-4513, dated 23.10.2000 for 200 TPD MS Ingots production through 2x8T & 1x6T Induction Furnace along with 1x5TPH slag crusher unit. Company has obtained current Consent to Operate (CTO) from the JSPCB vide ref No. JSPCB/HO/RNC/CTO-9102932/2021/770, dated 12.06.2021, valid upto 31.03.2026 for the 21,349 TPA MS Bar, coils & MS Rods and 200 TPD M.S. Ingots.

Company now proposes to obtain Fresh Environmental Clearance for enhancing the production of TMT bars/Rods from 21,349 TPA to 237,600 TPA through modernization of its existing Re-Rolling Mill from 9TPH to 50TPH capacity along with replacement of existing 1x10TPH Reheating Furnace by 1x30TPH Reheating furnace and also for production of 148,500 TPA MS Billets by replacing the existing (2x8T & 1x6T) Induction Furnace by 3x15T induction Furnace along with installation of new 3x2strand CCM and modernization of existing slag crusher from 5TPH to 10TPH capacity. M/s Atibir Hi-Tech Private Limited has proposed the expansion of its existing plant by modernizing and expansion of facilities in the total plant area of 4.2Ha (10.38Acres).

Cost of the existing facilities is Rs. 16.5866 Crs. The estimated cost of the project after the proposed expansion will be Rs. 51.4966 Crs.

Salient Features of the project :

Sl. No.	Particulars	Details	
1.	Project name	Expansion & Modernization of Atibir Hi-Tech Private Limited for enhancing the production of TMT Bar/Rods from 21,349 TPA to 237,600 TPA	
2.	Location of the Project	Village- Mohanpur, PO- Udnabad, and District- Giridih in the state of Jharkhand	
3.	Khata No. & Plot No.	Khata No.	Plot No.
		68	1526, 1527, 1528, 1529, 1532, 1533 & 1536
		27	1552
		57	1554
		51	1553
		78	1551
		55	1550
		73	1555
		109	1524
		49	1546
		32	1549
		75	1556
		12	1547

		47	1467
		41	1463, 1464
		85	1459
		72	1557
		88	1548
		109	1524
		89	1523
4.	Topo-sheet Nos.	72 L/8	
5.	Latitude	24° 08' 09.30"N	
6.	Longitude	86° 21' 16.39"E	
7.	Area of the Plant	4.2Ha (10.38 Acres)	
8.	Existing Units	Induction Furnace- 2x8T & 1x6T Slag Crusher- 1x5TPH Rolling Mill- 1x9TPH Reheating Furnace- 1x10TPH	
9.	Production as per the existing capacity	1. MS Ingots- 60,000 TPA 2. TMT Bar/ Rods- 21,349 TPA	
10.	Proposed Expansion	1. Replacement of existing 2x8T & 1x6T Induction Furnace with 3x15T Induction Furnace 2. Installation of new Continuous Casting Machine 3x2Strand 3. Modernization of Rolling Mill from 9TPH capacity to 50TPH 4. Replacement of 1x10TPH Reheating Furnace with 1x30TPH Reheating Furnace 5. Modernization of existing Slag crusher from 1x5TPH to 1x10TPH capacity	
11.	Production Capacity after the expansion	1. MS Billets- 148,500TPA 2. TMT Bar/Rods- 237,600TPA	
12.	Cost of the proposed expansion	Total after expansion- Rs. 51.4966Crs.	
13.	Manpower Requirement	Total after expansion- 300	
14.	Requirement of Water	Total 290 m ³ /day after Expansion, Source: Groundwater	
15.	Requirement of Power and Fuel	Total 15MVA after expansion Source: DVC DG set 1x500KVA has been installed and additional 1x1000KVA will be installed for expansion.	

Configuration and Production Capacities of the existing & Proposed Units :

Sl. No	Plant Facilities	Existing Configuration	Proposed New Configuration	Final Production Capacity (TPA)
1	Induction Furnace	60,000 TPA MS Ingots (2x8T & 1x6T) Will be replaced	148,500 TPA MS Billets (3x15 T)	MS Billets 148,500 TPA
	Continuous Casting Machine	-	3 x 2 strand (for 148,500 TPA)	
2	Rolling Mill	21,349 TPA (1x9TPH) Will be modernized	237,600 TPA (1x50TPH)	Roll Products (TMT Bars/Rods etc.) 237,600 TPA
3	Re-heating Furnace	1x10 TPH (max. 22,500 TPA) Will be replaced	1 x 30 TPH (max. 99,000 TPA)	Re-heated billets (for rolling) 99,000 TPA
4	Slag Crusher	1x5 TPH (max. 16,500 TPA)	1x 10TPH (max. 33,000 TPA)	Crushed Slag 33,000 TPA

Raw Material details:

Raw Materials	Total after Expansion
For Steel Melt Shop	
Sponge Iron	118800
Pig Iron	44550
Purchased + Return Scrap	22275
Ferro-alloy	297
Total	185922
For Rolling Mill	
Hot Billets/M.S. Billets	242,352 TPA
Fuel for Reheating Furnace	
Coal/Furnace Oil	6,580 TPA or 3,300 KL per year

Pollution Control Equipment:

Section	Source of Pollution	Pollutants	Air pollution control Measures
Induction Furnace &	Charging of raw materials in	Particulate matter,	Fume extraction system with spark

CCM	Furnace, Melting in Induction Furnace and Continuous Casting	Fumes and gases	arrestor and B-Filter.
Rolling Mill & Re-heating furnace	Re-heating furnace charging and use of Coal/Furnace Oil	Particulate matter, Fumes and gases	Fume extraction system with Bag Filter.
Over all Plant area	Open space	Fugitive dust emission	Pucca roads within the premises, water sprinkling in dusty areas and green belt/green cover to arrest the fugitive dust emission.

Connectivity :

Site Location	Village- Mohanpur, PO- Udnabad, District- Giridih in the state of Jharkhand
Height above MSL	281 meters
Road Connectivity	The site is connected to SH- 13 (connecting Koderma - Giridih - Tundi - Govindpur Marg) at a distance of 0.15 km, which connects by pucca road.
Rail Connectivity	Giridih Station is at 6.50km in North direction from project site
Nearest Airport	Ranchi Airport, Jharkhand (140 kms) in SW
Nearest River	Usri River at 1.58 km in East direction Barakar river at 8.98kms in South direction

Land Use :

SL No	TYPE OF USE	AREA (acres)	AREA (ha)
1	Production & Allied facilities	2.40	0.97
2	Admin Building, Stores, Temple etc.	0.20	0.08
3	Entrance, Roads and Pavements	1.20	0.49
4	Storage yard, vacant area etc.	2.42	0.98
5	Water complex & RWH pond	0.70	0.28

6	Green Belt	3.46	1.40
TOTAL		10.38	4.20

STATUTORY CLEARANCES :

1	CO	:	The CO, Giridih Sadar vide letter no. 1093, dated 08.09.2021 has mentioned the plot nos. of the project is not recorded as "Jangle Jhari".
2	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1674, dated 06.09.2019 certified that the National Park & Wildlife Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	DFO Forest Distance	:	DFO, Giridih East Division vide letter no. 2103, Dated 31.08.2018 certified that the distance of notified forest is 528 m from proposed project site.

During the appraisal it was found that in the certificate issued by DFO Territorial & DFO Wildlife plot no. 1457 has been mentioned in place of plot no. 1557. The PAs has pointed out that this is a typographical error. They have submitted an affidavit stating that they have submitted an application for rectification of plot no. as above. The copy of receipt for application for rectification has been submitted to the office.

The Committee has accepted their above request and recommend for issuance of Tok mentioning correct plot no. 1557.

Baseline Monitoring data generation from October, 2021 to December, 2021.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure III and also to conduct public hearing as per EIA notification, 2006.

4. Expansion of existing 24,600 TPA Billets unit by addition of 2x12T Induction Furnaces with CCM and replacement of existing 1x8T Induction Furnace by 1x12T Induction Furnace with CCM along with addition of 20 TPH Rolling Mill for final production capacity of Billets 1,18,800 TPA and Rolled Products 1,17,600 TPA of M/s JSV Enterprises at Plot no. 48, Barhi Industrial Area, Village : Konra, Tehsil : Barhi, Dist. : Hazaribagh, Jharkhand.

(Proposal No. : SIA/JH/IND/ 67689/ 2021)

Name of the consultant : Vardan Environet, Gurgaon, Haryana

This is a new project which has been taken for appraisal on 22.10.2021.

The proposal was considered by the committee to determine the "Terms of Reference (TOR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance.

accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the Project Proponent has submitted the prescribed Form - I & PFR the proposed project falls under item 3 (a) Metallurgical Industries (Ferrous & Non-Ferrous) as per EIA Notification, 2006.

M/s. JSV ENTERPRISES is a Partnership firm incorporated on 07/04/2014. The firm has its object of manufacturing M.S. Billets and Rolled Product. The Registered/Head office of the Firm is situated at Siyaram Nagar, Ranchi Road, Marar, Ramgarh, Jharkhand 829117. The Manufacturing unit is proposed to be set up at Plot no. 48, Barhi Industrial Area in Hazaribagh district of Jharkhand. Company obtained Consent To Establish (CTE) from Jharkhand State Pollution Control Board (JSPCB) vide Ref. No. JSPCB/HO/RNC/CTE-3780260/2019/334, dated 29.05.2019 for 24600 TPA MS Billets production through 1x8T Induction Furnace along with 4800TPA capacity slag crusher unit. Consent to Operate (CTO) for the same was obtained from the JSPCB vide ref No. JSPCB/HO/RNC/CTO-7180571/2020/1323, dated 18.08.2020 for the period upto 31.12.2020. The current application for CTO was applied on 04.01.2021 and is under consideration at JSPCB.

The company proposes for enhancing the production of MS Billets from 24,600 TPA to 118,800 TPA by installing additional 2x12T Induction Furnace and replacing the existing 1x8T Induction Furnace by 1x12T induction Furnace along with CCM (2x2 strands 4/7) and Production of 117,600TPA Rolled products by installing 1x20TPH Rolling Mill (Direct Hot Billet Charging) and enhancing the slag crusher capacity from 4800TPA to 30,000TPA. Estimated cost for the proposed expansion is Rs. 14.90 Crores. Total Project Cost is estimated as Rs. 32.45 Crores. including cost of existing plant as Rs. 17.55 Crores.

Project at a Glance

1.	Name of the Company	M/s. JSV ENTERPRISES
2.	Address of the Company	Plant :Plot no. 48, Barhi Industrial Area, Barhi, District - Hazaribagh, Jharkhand
3.	Constitution	Partnership Firm
4.	Promoters of The Project	Mr.Neeraj Agarwal (Partner) Mr.Dev Agarwal (Partner) Mr. Rajeev Kumar Agarwal (Partner) Mr. Gaurav Kansal (Partner)
5.	Units &Product	Existing Induction Furnace 1 x 8T (Billets 24600 TPA) Slag Crusher - 4800

Proposed Addition

Induction Furnace 2x 12T and replacement of existing furnace by 1x 12T along with addition of 20 TPH Rolling Mill (Direct Hot Billet Charging).

Final Product (after Expansion):

Billets – 118800 TPA and

Rolled Products (Direct Hot Rolling) – 117600 TPA

Slag Crusher –30000 TPA

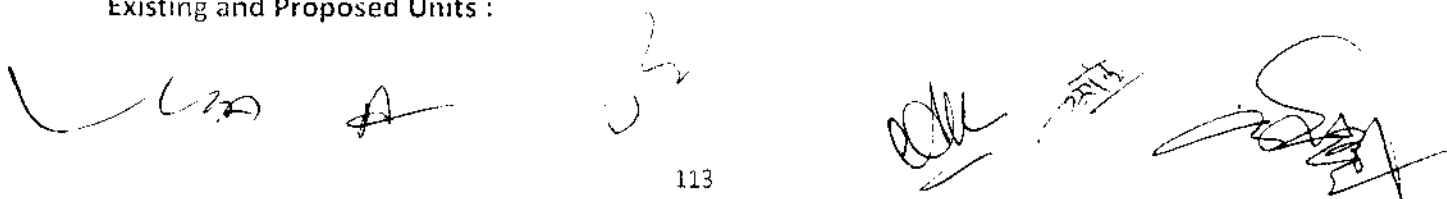
6.	Total Power Requirement	16 MVA from DVC (Present – 6.0 MVA from DVC)
7.	Water Requirement	204 KLD
8.	Manpower Requirement	Present – 57 numbers After Expansion - 217 numbers
9.	Land Area	Total 11.26 acres (4.55 Ha.)
10.	Green Belt area	3.71 acres.

Khata no. & Plot no. :

Khata no.	Plot no.
78	807 (P), 1474 (P)
46	1475 (P)
26	1476 (P)
22	1477 (P)
20	1478 & 1479 (P)
64	1482 (P)
59	1484 (P)

Site Location :

This project will be located at Plot no. 48, Barhi Industrial Area, Barhi, District-Hazaribagh in the state of Jharkhand over an area of 11.26 acres (4.55 ha.). The Latitude and Longitude of the proposed site is Latitude: 24°18'7.22"N to 24°17'58.74"N & Longitude: 85°26'1.22" E to 85°26'11.13"E.

Existing and Proposed Units :


Plant	Existing installed		Proposed Expansion		
	Units	Capacity		Operation	Capacity
	Unit	TPA	Unit	Days	TPA
Steel Melting Shop	1x8	24600	2x12 Tons + 1x12 Tons (replacement)	330	118800
Induction Furnace	Tons				
Rolled Products (Direct Hot Rolling)	-	-	20 TPH	330	117600

Raw Material Requirement

Requirement of Major Raw Materials

For Induction Furnaces with CCM – Billets

Induction Furnace with CCM : (Billets – 360TPD ~ 118800 TPA)

Raw material	Specific Consumption /Ton	Consumption TPA	Source	Distance & Mode of Transportation
Sponge Iron	0.80	95040		
Cast Iron/ Pig Iron	0.30	35640	Local Plant in Hazaribagh,	40 to 120 Km By Road
MS Scrap	0.15	17820	Ramgarh,	
Ferro Alloys	0.002	240	Giridih etc.	
TOTAL	1.252	148740		

Rolling Mill: (Direct Hot Rolling– 117600 TPA)

Raw material	Specific Consumption /Ton	Consumption TPA	Source	Distance & Mode of Transportation
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Hot M.S. Billets	1.01	118800	In-house	Direct charging from CCM
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Solid Waste Generation and Management :

Units	Solid Wastes	Qty In TPA	Disposal practice
Induction Furnace	Slag	29000	After metal extraction (approx. 12% of slag), it will be supplied to outside parties for construction filling.
Rolling Mill	Mill Scale & cuttings	1200	Recycled in-house along with scrap in the induction furnace.
Bag Filter Dust from process	Dust from process	130	Supplied to outside parties for construction filling

STATUTORY CLEARANCES :

1	CO	:	The CO, Barhi, (Hazaribagh) vide letter no. 657, dated 03.09.2021 has mentioned the plot nos. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
2	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 107, dated 18.01.2021 certified that the National Park & Wildlife Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	DFO Forest Distance	:	DFO, Hazaribagh West Division vide letter no. 6577, Dated 16.11.2019 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.

Baseline Monitoring data generation from March, 2021 to May, 2021. The Committee desired that additional one month data for the current period should be collected and incorporated in EIA/EMP report.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure III and also to conduct public hearing as per EIA notification, 2006.

5. Installation of Captive Power Plant of 8 MW Capacity based on WHRB / AFBC Boilers within existing premises of M/s Balmukund Sponge & Iron (P) Ltd., Village : Manjhiladih, P.O. : Gadisrirampur, P.S. : Giridih (Muffasil), Dist. : Giridih, Jharkhand.

(Proposal No. : SIA/JH/THE/ 59149/2020).

This project proposal is expansion of 300 TPD sponge iron plant. Hence, this is a category A project as per EIA notification, 2006. Accordingly, this project was not considered by the Committee and recommends for delisting.

6. Brick Soil Mining for M/s Jai Mata Di Bricks (J.M.D.), Mouza : Sugnu, Thana : Sadar, Dist. : Ranchi, Jharkhand (0.86 Ha).

(Proposal No. : SIA/JH/MIN/46213/2019).

This project is kept on hold for the period of 02 months. It will be taken up for the consideration on request of PA's. If the request is not received within 02 months the project will be recommended for delisting.

7. Nand Vatika Greens of M/s Nand Vatika Developers Pvt. Ltd., Village : Bariatu, Tehsil : Bargain, Dist. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/MIS/232876/2021).

Name of the consultant : Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 22.10.2021.

Project is classified as Category 8(a) as per EIA Notification as the built up area is less than 1,50,000 sq m and development area is less than 50 ha.

Salient Features of the Project :

Particular	Details					
Project Name	Nand Vatika Greens					
Proponent	Nand Vatika Developers Pvt. Ltd.					
Type of Building	Residential Building & Community Building					
Latitude	23°23'18.0"N					
Longitude	85°21'26.0"E					
Plot No.	4	8	27	37	50	56
Khata No.	834	840	837, 839	838	835, 841	836
Mauza	Bariatu					
Tehsil	Baragain					
District	Ranchi					
State	Jharkhand					
Plot Area	Total Plot Area as per sale deed is 12140.47 m ²					
Plantation	4249.16 m ² (35 %)					
Ground	3884.96 m ²					

Coverage	
FAR	3.71 (3.5 + 7% for Platinum rating in IGBC)
Height	Block I: 50 m Block II: 46.2 m Community Building : 5 m
Total Built-Up Area & its break - up	Total Built- Up Area: 64213.20 m ²
No. of Floor	Block I : G+14 Block II : G+13 Community Hall : G
No. of Building Block	3 2 Residential Building Block (I & II) 1 Community Building Block
Building Configuration	Total Dwelling Units: 276 + 104 = 380 2 BHK: 31 3 BHK: 184 4 BHK: 59 5 BHK: 2 EWS Units: 52 LIG Units: 52
Municipal Solid Waste	Total Municipal Solid Waste = 1421.40 Kg Bio-Degradable = 568.56 Kg Non-Biodegradable= 852.84 Kg
Population	2369 (including 10% floating population)
Parking	4 Wheelers: 559 2 Wheelers : 321
Power Requirement	1,679.62 kW Source : Jharkhand State Electricity Board
Power Back-up	400 kW (Common Area Lighting) Solar Panel DG Sets for 500 kVA
RWH Pits	11 Pits
Total Water Demand	335.74 KLD
Fresh Water Demand	213.21 KLD
Treated Water Demand	122.53 KLD
Volume of Waste Water	277.17 KLD
Capacity of STP	300 KLD Block – I = 140 KLD Block – II =160 KLD
Project Cost	Construction Cost = Rs. 85,49,83,668.55 Land Cost = Rs. 12,14,18,250.00 Total Cost = Rs. 97,64,01,918.55 [Construction Cost + Land Cost = Total Cost]

EMP Cost	Rs. 64 Lakhs (Recurring Cost : Rs. 6.4 Lakhs)
CER @2%	Rs. 1,95,28,038.37

STATUTORY CLEARANCE

- Building Plan Applied in Ranchi Municipal Corporation vide File No. : RMC/AH/0144 /W08/2021 dated : 18/02/2021.
- Airport Authority of India issued a height clearance NOC vide its NOC ID – RANC/EAST/B/ 113030/513186, dated 17/12/2020.
- Fire Fighting Department, Jharkhand has issued a Advisory vide its Letter No. – 408/Tech./ 2021, dated 23/01/2021.
- The DFO, Wildlife Ranchi Vide Memo No. : 271 dated : 18/03/2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
- The DFO, Ranchi Division vide Letter No. 1059, dated 18/03/2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
- The CO, Baragai, Ranchi vide Letter no. 88 i(ii) dated 30/09/2021 has mentioned plot nos. of the project is not recorded as "Jangle Jhari" in R.S Khatiyan & Register II.

The PAs has agreed to increase the green belt area to the extent of 15% of the plot area and submitted the undertaking and plan for the same.

Based on the presentation made and information provided, the Committee decided that the proposal for Nand Vatika Greens of M/s Nand Vatika Developers Pvt. Ltd., Village : Bariatu, Tehsil : Bargain, Dist. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

8. Dugdugia Stone Mine of Shri Nitesh Sarda, Village : Dugdugia, Tehsil : Khunti, Dist. : Khunti, Jharkhand (1.948 Ha).

(Proposal No. : SIA/JH/MIN/233814/2021).

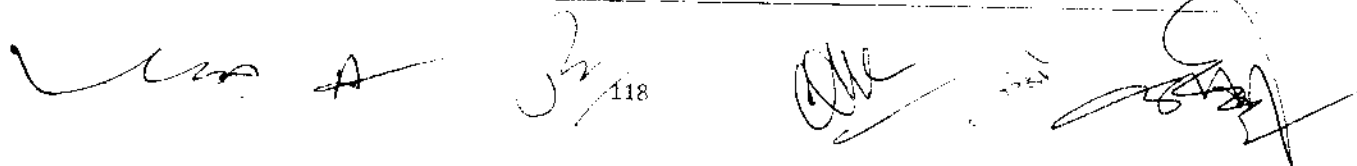
Project Category : B2 – Application for Environment Clearance
EC Application for : Boulder Stone: 48333 Cu.M./ year i.e. 1,30,500 TPA

Name of the consultant: Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 22.10.2021.

PROJECT AND LOCATION DETAILS:

Sl	Parameter		Details
1	Project Name	:	Dugdugiya Stone Mine
2	Lessee:	:	Sri Nitesh Sarda
3	Lease Address	:	Mouza – Dugdugiya, Thana – Khunti



			District – Khunti, State – Jharkhand.	
4	Lease Area	:	Ha: 1.948 ha.	Acres: 4.81 Ac.
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	84.50 Lakhs	
7	EMP Budget	:	Capital: 8.00 Lakhs	Recurring: 4.00 Lakh / year
8	CSR / CER Budget	:	Rs. 1.50 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 3,11,503	Tonnes: 8,41,059 Tonnes
11	Mine Life	:	6 years	
12	Man power	:	27	
13	Water Requirement	:	10 KLD (Drinking: 1.0 KLD, Dust Suppression: 8.0 KLD, Plantation: 1.0 KLD)	
14	Water Source	:	Dug well for drinking & Mine/River water for dust suppression/ green belt	
15	DG Set / power	:	Not required	
16	Crusher	:	Not within mine lease area	
17	Nearest Water Body	:	Kanchi River 3.50 KM	
18	Nearest Habitation	:	Hutar Village: 3.0 KM; Khunti: 6.00 KM	
19	Nearest Rail Station	:	Hatia - 20.00 KM	
20	Nearest Air Port	:	Ranchi - 25.00 KM	
21	Nearest Forest	:	Not within 250m	
22	Road & Highways	:	Ranchi – Khunti Road (NH 75) – 03.00 KM;	

CO-ORDINATES :

1	Latitude		From 23° 08' 17.81" N	To 23° 08' 24.45" N
2	Longitude		From 85° 17' 29.24" E	To 85° 17' 36.62" E

LAND DETAILS :

Sl. No.	Khata no.	Plot no.
1.	04	1339
	47	1341 (P)

STATUTORY CLEARANCES :

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Khunti vide letter no. 117/M dated 18.05.2021.
2	CO	:	The CO, Khunti vide letter no. 459, dated 18.06.2020 na.

			mentioned the plot no. of the project is recorded as Tanr Teen / Raiyati (Kaymi).
3	DMO	:	DMO, Khunti vide memo no. 286/M, dated 25.09.2021 certified that no other lease exist within 500 m radius from proposed project site.
4	DFO Wild Life	:	Division Forest Officer, Wildlife Division Ranchi, vide memo no. 52, dated 15.01.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	Division Forest Officer, Khunti Forest Division vide letter no. 1656, dated 08.07.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Khunti vide letter no. 285/M, dated 25.09.21 has informed that this project is part of District Survey Report (DSR) at Khunti district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Issued NOC on dated 25.06.2020
8	Mine Plan Approval	:	Letter No. 252/M, Ranchi dated 29.10.2020

Working Details

1	Mining Method	:	Opencast Mechanized.
2	Quarry Area	:	Plan period – 0.975 ha
3	Waste Generation	:	Plan period – 14099 m ³
4	Stripping Ratio	:	0.04526 (overall stripping ratio)
5	Working Days	:	300
6	Bench: size & No	:	6m x 6m and 6 benches.
7	Elevation of Mine	:	618m AMSL
8	Ground Level Elevation	:	600m AMSL
9	Ultimate Working Depth	:	580 m AMSL
10	Water Table	:	575 m AMSL
11	Topography of Mine	:	Gentle slope from North – West to South - East
12	Explosive Requirement	:	13,050 kg/year
13	Diesel/Fuel requirement	:	NA (as DG set not required)

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	OB (Cum)	Bench AMSL in Meters
1 st	48,333	1,35,000	14099	618 - 600
2 nd	48,185	1,30,100	-	617 - 604

3 rd	48,150	1,30,005	-	616 - 604
4 th	48,176	1,30,075	-	610 - 593
5 th	48,150	1,30,005	-	604 - 592
Total	2,42,661	6,55,185	14,099	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	0.975	1.311	Water Body
2	Office /Store	0.00	0.000	0.000	-
3	OB Dump	0.00	0.180	0.000	
4	Crusher	0.00	0.000	0.000	-
5	Road	0.00	0.050	0.000	-
6	Safety Zone	0.00	0.600	0.600	Green Belt
7	Unutilized	1.948	0.143	0.037	-
	TOTAL	1.948	1.948	1.948	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.60 ha	600 trees
2	Other Reclaimed Area	:	NIL	NIL
3	Haul /Approach Road	:	0.05 km	100 trees

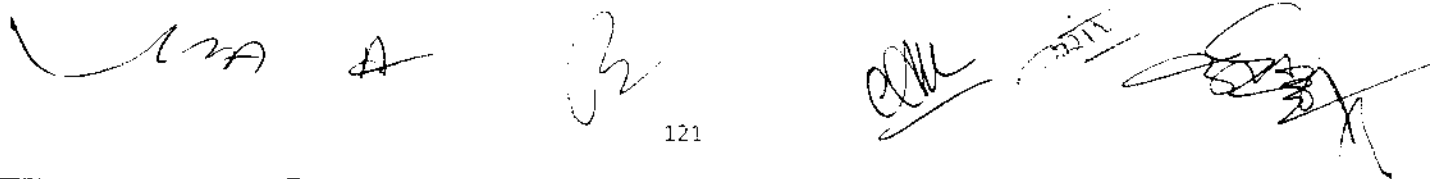
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- There is no waste to be generated.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.



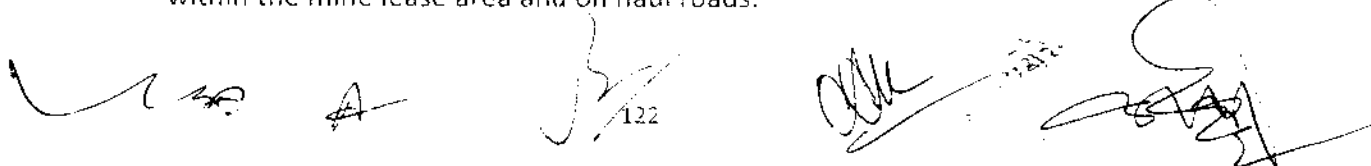
- The rain water during rainy season will be collected in a pit and shall be used for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made in the outer part of safety barrier and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- Domestic waste water will not be generated.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.



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- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

In the CO, Khunti certificate issued vide letter no. 459, dated 18.06.2020 has not clearly mentioned that class of land is Jungle-Jhari or not. The PAs have submitted an affidavit that within 01 week the certificate w.r.t. Jungle-Jhari will be obtained from the concerned CO and submitted to SEIAA.

The Committee is of the view that this project can be recommended for grant of EC but SEIAA may issue the EC after receipt of the above required certificate from the concerned CO.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Dugdugia Stone Mine of Shri Nitesh Sarda, Village : Dugdugia, Tehsil : Khunti, Dist. : Khunti, Jharkhand (1.948 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

9. Chaprakocha Stone Mine of Shri Moiz Akhtar, Village : Chaprakocha, Tehsil : Ormanjhi, Dist. : Ranchi, Jharkhand (1.555 Ha).

(Proposal No. : SIA/JH/MIN/232601/ 2021).

Project Category : B2 – Application for Environment Clearance
EC Application for : Boulder Stone: 53459 Cu.M./ year i.e. 1,44,339 TPA

Name of the consultant: Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 22.10.2021.

PROJECT AND LOCATION DETAILS:

Sl	Parameter		Details
1	Project Name	:	Chaprakocha Stone Mine
2	Lessee:	:	M/s Hardrock Infra, (Partner: Sri Moiz Akhtar)
3	Lease Address	:	Mouza – Chaprakocha, Thana – Ormanjhi District – Ranchi, State – Jharkhand.
4	Lease Area	:	Ha: 1.555 ha. Acres: 3.84 Ac.
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	88.60 Lakhs
7	EMP Budget	:	Capital: 7.00 Lakhs Recurring: 4.00 Lakh / year
8	CSR / CER Budget	:	Rs. 1.60 Lakhs
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 3,76,987 Tonnes: 10,17,865 Tonnes
11	Mine Life	:	7 years
12	Man power	:	28

13	Water Requirement	:	10 KLD (Drinking: 1.0 KLD, Dust Suppression: 8.0 KLD, Plantation: 1.0 KLD)
14	Water Source	:	Dug well for drinking & River water for dust suppression/ green belt
15	DG Set / power	:	Not required
16	Crusher	:	Not within mine lease area
17	Nearest Water Body	:	Doma River 5.50 KM
18	Nearest Habitation	:	Kuchhu Village: 2.50 KM; Ormanjhi: 5.00 KM
19	Nearest Rail Station	:	Ranchi - 20.00 KM
20	Nearest Air Port	:	Ranchi - 25.00 KM
21	Nearest Forest	:	Not within 250m
22	Road & Highways	:	NH 33 – 05.00 KM; Ormanjhi – Kuchhu Road – 2.50 KM

CO-ORDINATES :

1	Latitude	From 23° 31' 01.50" N	To 23° 31' 05.78" N
2	Longitude	From 85° 26' 55.33" E	To 85° 27' 01.33" E

LAND DETAILS :

1.	Mouza :	Khata No.	Plot No.
	Chaprakocha	27	102
		07	103
		60	104

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Ranchi, vide letter no. 960/M dated 27.08.2020.
2	CO	:	CO, Ormanjhi (Ranchi) vide letter no. 254(II), dated 13.06.2020 has mentioned the plot nos. of the project is not recorded as "Jangle Jhari" in R.S. Khatyan & Register II.
3	DMO	:	DMO, Ranchi issued report vide memo no. 625/M, dated 23.06.2021 certified that one lease (5.42 Ac.) exists within 500 m radius from proposed project site & total lease area is less than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide memo no. 474, dated 24.06.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest	:	DFO, Ranchi vide letter no. 2121, dated 24.06.2020

	Distance		certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ranchi vide letter no. 751/M, dated 12.08.2021 has informed that this project is part of District Survey Report (DSR) of Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Issued NOC on vide memo no. 518 (ii) dated 02.06.2020
8	Mine Plan Approval	:	Letter No. 164/M, Ranchi dated 10.10.2020

Working Details :

1	Mining Method	:	Opencast Mechanized.
2	Quarry Area	:	Plan period – 0.750 ha
3	Waste Generation	:	Plan period – 27509 m ³
4	Stripping Ratio	:	0.073 (overall stripping ratio)
5	Working Days	:	300
6	Bench: size & No	:	6m x 6m and 6 benches.
7	Elevation of Mine	:	647m AMSL
8	Ground Level Elevation	:	630m AMSL
9	Ultimate Working Depth	:	610 m AMSL
10	Water Table	:	605 m AMSL
11	Topography of Mine	:	Hump like
12	Explosive Requirement	:	14,400 kg/year
13	Diesel/Fuel requirement	:	NA (as DG set not required)

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	OB (Cum)	Bench AMSL in Meters
1 st	53,395	1,44,167	25745	652 - 640
2 nd	53,025	1,43,167	-	646 - 634
3 rd	53,301	1,43,913	-	640 - 628
4 th	53,426	1,44,249	-	639 - 622
5 th	53,459	1,44,339	1764	645 - 627
Total	2,66,606	7,19,835	27,509	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan	Proposed Land Use at End of	Land Usage at Conceptual
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			Period (Ha)	Life of Mine (Ha)	Stage
1	Mining Area	0.00	0.750	1.195	Water Body
2	Dump	0.00	0.216	0.000	
3	Office /Store	0.00	0.000	0.000	
4	Crusher	0.00	0.000	0.000	
5	Road	0.00	0.050	0.000	
6	Safety Zone	0.00	0.360	0.360	Green Belt
7	Unutilized	1.555	0.179	0.000	
	TOTAL	1.555	1.555	1.555	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.36 ha	400 trees
2	Other Reclaimed Area	:	NIL	NIL
3	Haul /Approach Road	:	0.125 km	100 trees

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCE, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- There is no waste to be generated.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be used for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made in the outer part of safety barrier and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- Domestic waste water will not be generated.

- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

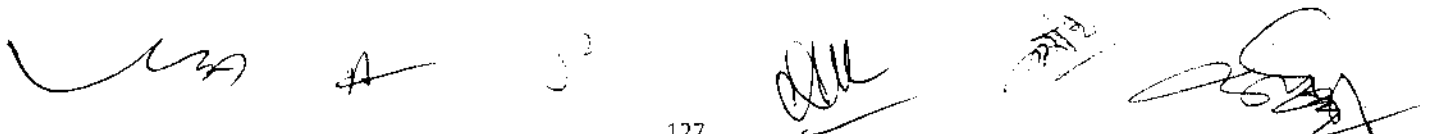
Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chaprakocha Stone Mine of Shri Moiz Akhtar, Village : Chaprakocha, Tehsil : Ormanjhi, Dist. : Ranchi, Jharkhand (1.555 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.



10. Huringdag Stone Mine of M/s Jai Balaji Minerals, Village : Huringdag, Tehsil : Namkum, Dis. Ranchi, Jharkhand (1.191 Ha).

(Proposal No. : SIA/JH/MIN/232837/ 2021).

Project Category : B2 – Application for Environment Clearance

EC Application for: Boulder Stone: 38924 Cu.M./ year i.e. 1,05,095 TPA

Name of the consultant: Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 22.10.2021.

PROJECT AND LOCATION DETAILS:

Sl	Parameter		Details
1	Project Name	:	Huringdag Stone Mine
2	Lessee:	:	M/s Jai Balaji Minerals (Partner: Sri Ayush Agarwal)
3	Lease Address	:	Mouza – Huringdag, Thana – Namkum District – Ranchi, State – Jharkhand.
4	Lease Area	:	Ha: 1.191 ha. Acres: 2.94 Ac.
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	100.60 Lakhs
7	EMP Budget	:	Capital: 7.00 Lakhs Recurring: 4.00 Lakh / year
8	CSR / CER Budget	:	Rs. 3.00 Lakhs
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 2,85,492 Tonnes: 7,70,828 Tonnes
11	Mine Life	:	7 years
12	Man power	:	24
13	Water Requirement	:	09 KLD (Drinking: 1.0 KLD, Dust Suppression: 6.0 KLD, Plantation: 2.0 KLD)
14	Water Source	:	Dug well/ Bore Well for drinking & River water for dust suppression/ green belt
15	DG Set / power	:	Not required
16	Crusher	:	Not within mine lease area
17	Nearest Water Body	:	Kanchi River 0.60 KM
18	Nearest Habitation	:	Sukurhuttu: 2.50 KM; Tupudana (Ranchi): 10.00 KM
19	Nearest Rail Station	:	Balsiring - 06.00 KM
20	Nearest Air Port	:	Ranchi - 15.00 KM
21	Nearest Forest	:	Not within 250m
22	Road & Highways	:	Ranchi – Khunti Road (NH 75) – 3.50 KM;

CO-ORDINATES

1	Latitude	From 23° 13' 31.06" N	To 23° 13' 36.23" N
2	Longitude	From 85° 15' 55.13" E	To 85° 15' 59.30" E

LAND DETAILS

1.	Mouza : Huringdag	Khata No. 11	Plot No. 481, 482 & 492
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STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Lol has been issued by District Mining Office, Ranchi, vide letter no. 978/M dated 05.09.2020.
2	CO	:	CO, Namkum vide letter no. 625(II), dated 27.06.2020 has mentioned the plot nos. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Ranchi vide letter no. 33/M, dated 08.01.2021 certified that one other mining lease (2.0 acre) exists within 500 m radius from proposed project site & total lease area is less than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide memo no. 871, dated 05.12.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Ranchi vide letter no. 4301, dated 11.09.2019 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ranchi vide letter no. 751/M, dated 12.08.2021 has informed that this project is part of District Survey Report (DSR) of Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Issued NOC vide letter no. 1160(ii) dated 03.10.2019
8	Mine Plan Approval	:	Letter No. 170/M, Ranchi dated 28.10.2020

Working Details :

1	Mining Method	:	Opencast Mechanized.
2	Quarry Area	:	Plan period – 0.641 ha

3	Waste Generation	:	Plan period – 23680 m ³
4	Stripping Ratio	:	0.0829 (overall stripping ratio)
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m and 7 benches.
7	Elevation of Mine	:	623m AMSL
8	Ground Level Elevation	:	610m AMSL
9	Ultimate Working Depth	:	591 m AMSL (Mine Period)
10	Water Table	:	575 m AMSL
11	Topography of Mine	:	Gentle slope from North –East
12	Explosive Requirement	:	10,500 kg/year
13	Diesel/Fuel requirement	:	NA (as DG set not required)

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	OB (Cum)	Bench AMSL in Meters
1 st	38,924	1,05,095	14430	621 - 609
2 nd	38,924	1,05,095	9250	615 - 603
3 rd	38,924	1,05,095	-	609 - 603
4 th	38,924	1,05,095	-	603 - 597
5 th	38,924	1,05,095	-	601 - 591
Total	1,94,620	5,25,475	23,680	

Land Use :

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area	0.00	0.641	0.891	Water Body
2	Office /Store	0.00	0.000	0.000	-
3	OB Dump	0.00	0.100	0.000	-
4	Crusher	0.00	0.000	0.000	-
5	Road	0.00	0.050	0.000	-
6	Safety Zone	0.00	0.300	0.300	Green Belt
7	Unutilized	1.191	0.100	0.000	-
	TOTAL	1.191	1.191	1.191	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
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1	Safety Zone	:	0.30 ha	350 trees
2	Other Reclaimed Area	:	NIL	NIL
3	Haul /Approach Road	:	0.15 km	150 trees

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- There is no waste to be generated.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be used for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made in the outer part of safety barrier and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- Domestic waste water will not be generated.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.

- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Huringdag Stone Mine of M/s Jai Balaji Minerals, Village : Huringdag, Tehsil : Namkum, Dist. : Ranchi, Jharkhand (1.191 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

11. Stone Mine of M/s Bhagwan Chips Stone Project (Shri Ajit Singh & Shri Abhishek Anand), Mouza : Mahuari, P.S. : Naudiha Bazar, Dist. : Palamau, Jharkhand (2.027 Ha).

(Proposal No. : SIA/JH/MIN/ 234510/ 2021).

Project Category : B2– Application for EC

EC Application for : Boulder Stone : 40,500 Cu.M. / year i.e. 1,21,500TPA

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi

This is a new project which has been taken for appraisal on 22.10.2021.



PROJECT and LOCATION Details:

Sl	Parameter		Details
1	Project Name	:	M/S Bhagwan Chips Stone Project Type – Stone Mine
2	Lessee:	:	Partners – Shri Ajit Singh & Abhishek Anand
3	Lease Address	:	Mouza – Mahuari, P.S.- Naudiha Bazar, Dist.- Palarnau, Jharkhand
4	Lease Area	:	Ha: 2.027 ha Acres: 5.01 Acres
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	Capital Cost – 56.65 Lakhs Recurring Cost – 13.75 Lakhs
7	EMP Budget	:	Capital: 13.402 Lakhs Recurring: 1.79 Lakhs
8	CSR / CER Budget	:	1.60
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 3,83,186.77 Cu. M. Tonnes: 11,49,560.32 Tonnes
11	Mine Life	:	8.83 years
12	Man power	:	15
13	Water Requirement	:	13.97 KLD (Drinking: 0.23 KLD, Dust Suppression: 6.12 KLD, Plantation: 7.62 KLD
14	Water Source	:	<ul style="list-style-type: none"> Water will be sourced from Pond at a distance of 1.50 Km through Water Tanker for Dust Suppression and Plantation. Water will be sourced from Bore Well within Lease area for Drinking and Domestic Consumption.
15	DG Set / power	:	20 KVA
16	Crusher	:	NA
17	Nearest Water Body	:	Batane River 0.47 KM
18	Nearest Habitation	:	Mahuri Village: 0.66 Km, Daltonganj – 47.22 KM
19	Nearest Rail Station	:	Jalpa Railway Station – 29.77
20	Nearest Air Port	:	Gaya Airport – 76.06
21	Nearest Forest	:	Protected Forest - 1.00 Km
22	Road & Highways	:	NH 98 – 5.19 Km

CO-ORDINATES :

Pillar	Latitude	Longitude
P1	24° 25' 59.95" N	84° 16' 22.70" E
P2	24° 26' 00.21" N	84° 16' 24.51" E
P3	24° 26' 00.32" N	84° 16' 24.59" E
P4	24° 26' 00.43" N	84° 16' 24.91" E
P5	24° 26' 00.54" N	84° 16' 25.10" E
P6	24° 26' 00.55" N	84° 16' 25.16" E
P7	24° 26' 00.35" N	84° 16' 25.13" E
P8	24° 26' 00.21" N	84° 16' 24.88" E
P9	24° 26' 00.00" N	84° 16' 24.89" E
P10	24° 25' 57.92" N	84° 16' 24.90" E
P11	24° 25' 57.93" N	84° 16' 25.21" E
P12	24° 26' 00.18" N	84° 16' 25.16" E
P13	24° 26' 00.33" N	84° 16' 28.80" E
P14	24° 26' 00.34" N	84° 16' 32.62" E
P15	24° 26' 01.10" N	84° 16' 32.71" E

LAND DETAILS :

Mouza	Khata No.	Plot No.
Mahuari	41	37(P), 40(P), 41

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Palamau, Medininagar vide letter no. 265/M dated 24.03.2021.
2	CO	:	The CO, Palamu, vide letter no. 190, dated 21.07.2017 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Palamau, Medninagar vide memo no. 1114/11, dated 23.09.2021 certified that no other lease exists within 500 m radius from proposed project site & Total lease area is less than 5 Ha.
4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 372, dated 09.04.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Medninagar Division vide letter no. 4227, dated 17.08.2017 certified that the distance of notified forest is more than 250 m.

6	DSR	:	The Project is mentioned in page no.- 27 of District Survey Report (DSR), Palamau.
7	Gram Sabha	:	On 28.08.2017
8	Mine Plan Approval	:	Letter No. 25/G Palamu Dated 01.02.2018

Working Details :

1	Mining Method	:	Semi Mechanised. Wagon Drilling & Blasting to be used
2	Quarry Area	:	5 years – 1.267 Ha
3	Waste Generation	:	5 years– Very less O.B. will be generated which will be utilized for internal mine road construction & berm along the approach road construction & maintenance.
		:	End of Mine – 1.267 Ha Life of Mine (Waste Gen.) – Very less O.B. will be generated which will be utilized for internal mine road construction & berm along the approach road construction & maintenance.
4	Stripping Ratio	:	1:0
5	Working Days	:	300
6	Bench: size & No	:	6m x 6 m, Bench No.- 1 to 3
7	Elevation of Mine	:	Maximum – 300.25 AMSL Minimum – 297.28 AMSL
8	Ground Level Elevation	:	297.28 AMSL
9	Ultimate Working Depth	:	279.28 AMSL
10	Water Table	:	259.28 AMSL (38 m bgl)
11	Topography of Mine	:	Flat Terrain
12	Explosive Requirement	:	41.40 Tons/year
13	Diesel/Fuel requirement	:	93.6 KL/year (312 Litres/day)

Production Details :

Year	Production of Stone		Bench RL in meters
	Cubic meters	Tons	
1st Year	40,500	1,21,500	243-240
2nd Year	40,500	1,21,500	240-234
3rd Year	40,500	1,21,500	240-234
4th Year	40,500	1,21,500	234-228

5th Year	40,500	1,21,500	234-228
Total	2,02,500	6,07,500	Depth during plan period - 15 m

Land Use :

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.01
Total area in use	0.00
Balance area unused	1.60
Total Lease hold area	2.027

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.267
Road	0.04
Infrastructure	0.016
Green Belt / Safety Zone	0.648
Garland Drain	0.04
Settling Tank	0.016
Total area in use	2.027
Total Leasehold area	2.027

Land Use pattern at the Conceptual Stage i.e. end of mine

Category	Area in Hectares
Quarry	1.267 Water body – 1.267
Green Belt/ Safety Zone	0.648 (Plantation)
Infrastructure + Road + Garland Drain	0.096 (Plantation)
Settling Tank	0.016
Total area in use	2.027
Total Leasehold area	2.027

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.648 ha	1620 trees @ 2500 trees per ha
2	Other Reclaimed Area	:	0.096 Ha.	240 trees @ 2500 trees per Ha.

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3	Haul /Approach Road	:	1.02 KM	681 trees on both sides – 3 m distance
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- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

Disposal of Waste from the Quarry

Very less O.B. will be generated which will be utilized for internal mine road construction & berm along the approach road construction & maintenance.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.

- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- The Boundary Pillars of the proposed mine lease area will be maintained properly.
- One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Stone Mine of M/s Bhagwan Chips Stone Project (Shri Ajit Singh & Shri Abhishek Anand), Mouza : Mahuari, P.S. : Naudihia Bazar, Dist. : Palamau, Jharkhand (2.027 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

12. Suraidih Stone Mine of M/s Laxmi Ganesh Stone Works, Mouza : Suraidih, Block & P.S. : Hiranpur, Dist. : Pakur, Jharkhand (2.81 Ha).

(Proposal No. : SIA/JH/MIN/ 68425/ 2021).

Project Category : B1– Application for ToR

EC Application for: Boulder Stone : 59,658 Cu.M. / year i.e. 1,61,077 TPA

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi

This is a new project which has been taken for appraisal on 22.10.2021.

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Suraidih Stone Mine Project Type – Stone Mine
2	Lessee:	Shri Ajay Kumar

3	Lease Address	:	Mouza – Suraidih, Block & P.S.- Hiranpur, Dist.- Pakur, Jharkhand
4	Lease Area	:	Ha: 2.81 ha Acres: 6.94 Acres
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	Capital Cost – 91.50 Lakhs Recurring Cost – 18.24 Lakhs
7	EMP Budget	:	Capital: NA Recurring: NA
8	CSR / CER Budget	:	NA
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 5,47,966 Cu. M. Tonnes: 14,79,508 Tonnes
11	Mine Life	:	9.87 years
12	Man power	:	46
13	Water Requirement	:	22.35 KLD (Drinking: 0.69 KLD, Dust Suppression: 10.62 KLD, Plantation: 11.04KLD)
14	Water Source	:	<ul style="list-style-type: none"> Water will be Sourced from Surrendered Mine at a distance of 80 meters for Dust Suppression and Plantation. Water for Domestic Consumption will be sourced from Bore Well at a distance of 300 meters. Water will be supplied through water tanker.
15	DG Set / power	:	60 KVA
16	Crusher	:	NA
17	Nearest Water Body	:	Torai River 3.00 KM
18	Nearest Habitation	:	Suraidih Village: 0.24 Km, Pakur 13.10 KM
19	Nearest Rail Station	:	Pakur 13.50 KM
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Durgapur – 130 Km
21	Nearest Forest	:	Protected Forest - 6.00 Km
22	Road & Highways	:	NH 114 A – 0.92 KM; Belpahari – Beldiha Road – 0.275 KM

CO-ORDINATES :

Geo-Coordinates		
Corner Point	Longitude	Latitude
A	24°41'56.76"N	87°44'21.84"E
B	24°41'56.28"N	87°44'26.70"E
C	24°41'55.56"N	87°44'29.64"E
D	24°41'50.46"N	87°44'29.04"E
E	24°41'53.58"N	87°44'21.78"E

LAND DETAILS :

Mouza	Khata No.	Plot No.
Suraidih	04	140 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LOI) has been issued by District Mining Office, Pakur vide letter no. 1646/M da. 18.09.2020
2	CO	:	The CO, Hiranpur vide letter no. 41, dated 29.01.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Pakur vide memo no. 39/M, dated 11.01.2021 certified that three other leases (6.43 Acres, 18.13 Acres & 5.50 acres) exist within 500 m radius from proposed project site & Total lease area is 14.97 Ha.
4	DFO Wild Life	:	DFO Wildlife, Hazaribagh vide letter no. 1830, da. 27.10.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Division vide letter no. 633, dated 20.03.2020 certified that the distance of reserved / protected forest is more than 250 m.
6	DSR	:	The DC-cum-District Magistrate, Pakur vide letter no. 878 / M, dated 21.06.2021 has informed that this project is part of District Survey Report (DSR) at Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 10.02.2020
8	Mine Plan Approval	:	Letter No. 285 / DDM DDM dated 30.09.2020

Working Details :

1	Mining Method	:	Semi Mechanised. Jack Hammer Drilling & Blasting to be used
2	Quarry Area	:	5 years – 0.95 Ha End of Mine – 1.81Ha
3	Waste Generation	:	5 years-- 65,670 Cu.M Life of Mine (Waste Gen.) – 65,670 Cu.M
4	Stripping Ratio	:	1:0.09
5	Working Days	:	300
6	Bench: size & No	:	3 m in height & 3/ 4 m wide, Bench No.- 1 to 7
7	Elevation of Mine	:	Maximum – 136.46 AMSL Minimum - 123.46 AMSL

8	Ground Level Elevation		123.46 AMSL
9	Ultimate Working Depth	:	86.46 AMSL
10	Water Table	:	81.46 AMSL (42 m bgl)
11	Topography of Mine	:	Undulating Terrain
12	Explosive Requirement	:	18.6 Tons/year
13	Diesel/Fuel requirement	:	608 KL/year (182 Litres/day)

Production Details

Year	Production of Stone		Over Burden (OB)	Bench RL in meters
	Cubic meters	Tons	Cum.	
1st Year	55536	149947	65670	Zone – A Bench No.- 1, 2 R.L. - 76 – 70
2nd Year	59658	161077	0	Zone – A Bench No.- 2,3 R.L.- 73 – 67
3rd Year	49956	134881	0	Zone – A Bench No.- 4 R.L.- 67 – 64
4th Year	55470	149769	0	Zone – A Bench No.- 5,6 R.L. - 64 – 58
5th Year	56880	153576	0	Zone – A Bench No.- 6,7 R.L. - 61 – 55
Total	277500	749250	65670	Depth during plan period – 21 meters

Land Use :

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.00
Total area in use	0.00
Balance area unused	2.81
Total Leasehold area	2.81

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	0.95

Infrastructure	0.02
Dump	0.10
Road	0.02
Green Belt / Safety Zone	0.84
Garland Drain	0.02
Total area in use	1.95
Unutilized	0.86
Total Leasehold area	2.81

Land Use pattern at the Conceptual Stage i.e. end of mine

Category	Area in Hectares
Quarry	1.81 To be Converted to Water Body after reducing the depth partially by backfilling
Green Belt/ Safety Zone	0.84 (Plantation)
Office + Dump + Road + Garland Drain	0.16 (Plantation)
Post Mining Land Use	Water body 1.81 Ha.
Total Leasehold area	2.81

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.84 ha	2100 trees @ 2500 trees per ha
2	Other Reclaimed Area	0.16 Ha.	400 trees @ 2500 trees per Ha.
3	Haul /Approach Road	1.77 KM	1,180 trees on both sides – 3 m distance

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- A total of 65,670 Cum of wastes (Over Burden) will be generated from entire Suraidih Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

Generation of Waste during Planned Period

Year	Waste Generation, In Cum
1 st Year	65,670
2 nd Year	0
3 rd Year	0
4 th Year	0
5 th Year	0
Total	65,670

Disposal of Waste from the Quarry

Over burden will be dumped in the waste dump within the mining lease area in 0.10 Ha. waste dump area inside the lease. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in gariand drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard.
- The Boundary Pillars of the proposed mine lease area will be maintained properly.
- One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Baseline Monitoring data generation from October, 2021 to December, 2021.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

13. Paharpur Stone Mine of M/s Anantdhara Construction Pvt. Ltd., Mouza : Paharpur, P.O. : Benagaria, Panchayat : Saharpur, P.S. : Shikaripara, Dist. : Dumka, Jharkhand (2.81 Ha).

(Proposal No. : SIA/JH/MIN/ 68427/ 2021).

Project Category : B1- Application for ToR

EC Application for: Boulder Stone : 27,904.70 Cu.M. / year i.e. 75,342.69 TPA

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi

This is a new project which has been taken for appraisal on 22.10.2021.

PROJECT and LOCATION Details:

Sl	Parameter		Details
1	Project Name	:	Paharpur Stone Mine Project Type – Stone Mine
2	Lessee:	:	Shri Deepak Kumar Singh
3	Lease Address	:	Mouza – Paharpur, P.O. – Benagaria, Panchayat – Saharpur, P.S.- Shikaripara, Dist.- Dumka, Jharkhand

4	Lease Area	:	Ha: 1.80 ha	Acres: 4.45 Acres
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 57.64 Lakhs	Recurring Cost – 10.95 Lakhs
7	EMP Budget	:	Capital: NA	Recurring: NA
8	CSR / CER Budget	:	NA	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 1,21,775 Cu. M.	Tonnes: 3,28,792.50 Tonnes
11	Mine Life	:	5.6 years	
12	Man power	:	24	
13	Water Requirement	:	15.39 KLD (Drinking: 0.36 KLD, Dust Suppression: 7.50 KLD, Plantation: 7.53 KLD)	
14	Water Source	:	<ul style="list-style-type: none"> For Dust Suppression and Plantation, water will be Sourced from nearby Abandon mine, available at a distance of 350 meters from the Mine. For domestic use, water will be purchased locally through Tankers. 	
15	DG Set / power	:	60 KVA	
16	Crusher	:	NA	
17	Nearest Water Body	:	Brahmani River 7.30 KM	
18	Nearest Habitation	:	Saharpur Village: 0.84 Km, Dumka 35.00 KM	
19	Nearest Rail Station	:	Pinargaria 6.35 KM	
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Durgapur – 72 Km	
21	Nearest Forest	:	Protected Forest - 2.20 Km	
22	Road & Highways	:	NH 114 A – 3.00 KM; Pakka Road – 1.25 KM	

CO-ORDINATES :

Sl.no.	Latitude	Longitude
A	24°11'24.31"N	87°34'56.74"E
B	24°11'22.77"N	87°34'59.89"E
C	24°11'24.08"N	87°35'0.51"E
D	24°11'23.43"N	87°35'1.52"E
E	24°11'22.27"N	87°35'3.11"E
F	24°11'20.98"N	87°35'3.38"E
G	24°11'19.87"N	87°35'2.70"E
H	24°11'20.50"N	87°35'1.27"E
I	24°11'21.04"N	87°35'1.55"E

J	24°11'21.52"N	87°35'0.88"E
K	24°11'20.26"N	87°34'59.77"E
L	24°11'20.43"N	87°34'59.37"E
M	24°11'18.06"N	87°34'57.70"E
N	24°11'18.31"N	87°34'57.09"E
O	24°11'21.26"N	87°34'57.88"E
P	24°11'20.88"N	87°34'58.87"E
Q	24°11'21.27"N	87°34'59.13"E
R	24°11'22.09"N	87°34'57.98"E
S	24°11'20.86"N	87°34'56.50"E
T	24°11'21.58"N	87°34'55.15"E

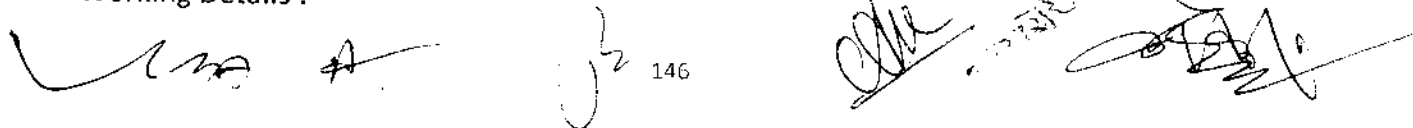
LAND DETAILS :

Mouza	Khata No.	Plot No.
Paharpur	10	1168
	14	1171

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Dumka vide letter no. 1331/M dated 04.11.2019.
2	CO	:	The CO, Shikaripara vide letter no. 999, dated 16.10.2019 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.
3	DMO	:	DMO, Dumka vide memo no. 3173/M, dated 23.12.2020 certified that 02 other lease (3.43 Acres & 6.78 ac) exists within 500 m radius from proposed project site. Total lease area is more than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 394, dated 27.02.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Dumka Division vide letter no. 3527, dated 25.10.2019 certified that the distance of reserved / protected forest is more than 250 m.
6	DSR	:	The DC-cum-District Magistrate, Dumka vide letter 683 / M, dated 19.04.2021 has informed that this project is part of District Survey Report (DSR) at Dumka district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 05.10.2019
8	Mine Plan Approval	:	Letter No. 395/G DDM dated 05.02.2021

Working Details :

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1	Mining Method	:	Semi Mechanised. Jack Hammer Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 1.13 Ha	End of Mine – 1.13 Ha
3	Waste Generation	:	5 years– 13,702 Cu.M	Life of Mine (Waste Gen.) – 13,702 Cu.M
4	Stripping Ratio	:	1:0.04	
5	Working Days	:	300	
6	Benches: size & No	:	3 m in height & 3/ 4 m wide, Bench No.- 1 to 5	
7	Elevation of Mine	:	Maximum Elevation – 183.57 AMSL Minimum Elevation – 171.33 AMSL	
8	Ground Level Elevation		171.33 AMSL	
9	Ultimate Working Depth	:	170.33 AMSL	
10	Water Table	:	151.33 AMSL (20 m bgl)	
11	Topography of Mine	:	Undulating Terrain	
12	Explosive Requirement	:	11.7 Tons/year	
13	Diesel/Fuel requirement	:	404 KL/year (121 Litres/day)	

Production Details :

Year	Production of Stone		Over Burden (OB)	Bench RL in meters
	Cubic meters	Tons	Cubic meters	
1st Year	18,900.00	51,030.00	6,291	Zone A: 129-125
2nd Year	25,296.00	68,299.20	0	Zone A: 125-119
3rd Year				Zone A: 119 – 116
	27,904.70	75,342.69	5,345	Zone B: 129 - 125
4th Year	24,306.00	65,626.20	0	Zone B: 125-119
5th Year	12,200.25	32,940.68	2,066	Zone C: 129-122
Total	1,08,607	2,93,238.77	13,702	Depth- 7 m

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00

Category	Area in Hectares
Road	0.00
Total area in use	0.00
Balance area unused	1.80
Total Leasehold area	1.80

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.13
Infrastructure	0.02
Dump / Stock Yard	0.04
Road	0.02
Green Belt / Safety Zone	0.57
Garland Drain	0.02
Total area in use	1.80
Total Leasehold area	1.80

Land Use pattern at the Conceptual Stage i.e. end of mine

Category	Area in Hectares
Quarry	1.13 To be Converted to Water Body after reducing the depth partially by backfilling of OB
Green Belt/ Safety Zone	0.57 (Plantation)
Office + Dump + Road + Garland Drain	0.10 (Plantation)
Post Mining Land Use	Water Body 1.13 Ha.
Total area in use	1.80
Total Leasehold area	1.80

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	: 0.57 ha	1425 trees @ 2500 trees per ha
2	Other Reclaimed Area	: 0.10 Ha.	250 trees @ 2500 trees per Ha.
3	Haul /Approach Road	: 1.25 KM	835 trees on both sides – 3 m distance

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- A total of 13,702 Cum of wastes (Over Burden) will be generated from entire Paharpur Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

Generation of Waste during Planned Period

Year	Waste Generation, In Cum
1 st Year	6,291
2 nd Year	0
3 rd Year	5,345
4 th Year	0
5 th Year	2,066
Total	13,702

Disposal of Waste from the Quarry

Over burden will be dumped in the waste dump within the mining lease area in 0.03 Ha. waste dump area inside the lease. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Baseline Monitoring data generation from October, 2021 to December, 2021.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

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14. Paharpur Stone Mine of Shri Arun Kumar Sah., Mouza : Paharpur, P.O. : Benagaria, P.S. : Shikaripara, Dist. : Dumka, Jharkhand (1.61 Ha).

(Proposal No. : SIA/JH/MIN/ 230659/ 2021).

Project Category : B2 – Application for EC

EC Application for: Boulder Stone : 54,492 Cu.M. / year i.e. 1,47,128.40 TPA

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi

PROJECT and LOCATION Details:

Sl	Parameter		Details
1	Project Name	:	Paharpur Stone Mine Project Type – Stone Mine
2	Lessee:	:	Shri Arun Kumar Sah
3	Lease Address	:	Mouza – Paharpur, P.O. – Benagaria, P.S.- Shikaripara, Dist.- Dumka, Jharkhand
4	Lease Area	:	Ha: 1.61 ha Acres: 3.97 Acres
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	Capital Cost - 58.85 Lakhs Recurring Cost – 18.86 Lakhs
7	EMP Budget	:	Capital: 15.175 Lakhs Recurring: 02.09 Lakhs
8	CSR / CER Budget	:	1.75 Lakhs
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 3,10,232 Cu. M. Tonnes: 8,37,626.40Tonnes
11	Mine Life	:	5.69 years
12	Man power	:	21
13	Water Requirement	:	12.33 KLD (Drinking:0.315 KLD, Dust Suppression: 0.42 KLD, Plantation:11.595 KLD
14	Water Source	:	<ul style="list-style-type: none"> Water will be Sourced from Pond at a distance of 3.00 Km through Water Tanker for Dust Suppression and Plantation. Water will be sourced from Bore Well at a distance of 1.50 Km through Water Tanker for Drinking and Domestic Consumption.
15	DG Set / power	:	20 KVA
16	Crusher	:	NA
17	Nearest Water Body	:	Brahmani River 7.00 KM
18	Nearest Habitation	:	Haripur Village: 580 metre, Dumka 35.00 KM
19	Nearest Rail	:	Pinargaria 6.20 KM

	Station		
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Durgapur – 72.50 Km
21	Nearest Forest	:	Protected Forest - 4.50 Km
22	Road & Highways	:	NH 114 A – 2.30 KM; Pakka Road – 0.07 KM

CO-ORDINATES :

Sl.no.	Latitude	Longitude
1	24°11' 21.06" N	87°35' 05.58" E
2	24°11' 22.26" N	87°35' 05.00" E
3	24°11' 22.54" N	87°35' 03.88" E
4	24°11' 25.18" N	87°35' 03.05" E
5	24°11' 27.02" N	87°35' 03.81" E
6	24°11' 26.88" N	87°35' 04.42" E
7	24°11' 25.37" N	87°35' 06.47" E
8	24°11' 26.46" N	87°35' 07.19" E
9	24°11' 25.92" N	87°35' 08.30" E
10	24°11' 23.69" N	87°35' 07.57" E
11	24°11' 21.52" N	87°35' 06.67" E

LAND DETAILS :

Mouza	Khata No.	Plot No.
Paharpur	19	960 (P) & 961
	04	962
	23	963, 964, 965 & 966

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Dumka, vide letter no. 574/M dated 03.04.2021
2	CO	:	The CO, Shikaripara vide letter no. 975, dated 22.10.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatliyan & Register II.
3	DMO	:	DMO, Dumka vide memo no. 3032/M, dated 26.11.2020 certified that one lease (3.43 Acres) exists within 500 m radius from proposed project site & Total lease area is less than 5 Ha.
4	DFO Wild Life	:	DFO Wildlife Hazaribagh vide letter no. 340, dated 20.02.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Dumka Division vide letter no. 2403, dated 17.11.2020 certified that the distance of reserved / protected forest is more than 250 m.
6	DSR	:	The DC-cum-District Magistrate, Dumka vide letter no.

			683 / M, dated 19.04.2021 has informed that this project is part of District Survey Report (DSR) at Dumka district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 13.08.2020
8	Mine Plan Approval	:	Letter No. 165/DDM dated 13.07.2021

Working Details :

1	Mining Method	:	Semi Mechanised. Wagon, Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 1.16 Ha	End of Mine – 1.16 Ha
3	Waste Generation	:	5 years– 28,996 Cu.M	Life of Mine (Waste Gen.) – 28,996 Cu.M
4	Stripping Ratio	:	1:0.04	
5	Working Days	:	300	
6	Bench: size & No	:	6 m x 6 m, Bench No.- 1 to 6	
7	Elevation of Mine	:	Maximum Elevation – 189.33 AMSL Minimum Elevation – 180.33 AMSL	
8	Ground Level Elevation		180.33 AMSL	
9	Ultimate Working Depth	:	156.33 AMSL	
10	Water Table	:	141.33 AMSL (39 m bgl)	
11	Topography of Mine	:	Undulating Terrain	
12	Explosive Requirement	:	18 Tons/year	
13	Diesel/Fuel requirement	:	366 KL/year (109.8 Litres/day)	

Production Details :

YEARS	Production/Year in Cum	Production /Day in Cum	Production /Year in Ton	Production /Day in Ton	O.B / Year in Cum	Bench RL in meter
1st	51982.10	173.27	140351.67	467.84	19500.00	137 – 123 m
2nd	52795.30	175.98	142547.31	475.16	0	129 – 117 m
3rd	54026.50	180.09	145871.55	486.24	0	123 – 105 m
4th	54492.00	181.64	147128.40	490.43	9496.00	131 – 117 m

						117 m –
5th	54359.00	181.20	146769.30	489.23	0	117 –
						105 m
Total	2,67,654.90	178.44	7,22,668.23	481.78	28996.00	Depth – 32 m

Land Use :

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.01
Total area in use	0.00
Balance area unused	1.60
Total Leasehold area	1.61

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.16
Road	0.002
Green Belt / Safety Zone	0.40
Garland Drain	0.048
Total area in use	1.61
Total Leasehold area	1.61

Land Use pattern at the Conceptual Stage i.e. end of mine

Category	Area in Hectares
Quarry	1.16 (To be converted into Water Body & Plantation area after reducing the depth partially) Back filled area 0.11 ha (plantatiion) Water body 0.35 ha Dead banch 0.70 ha (plantation)
Green Belt/ Safety Zone	0.40 (Plantation)
Road + Garland Drain	0.05

1 m A

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	(Plantation)
Total area in use	1.61
Total Leasehold area	1.61

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.40 ha	1000 trees @ 2500 trees per ha
2	Other Reclaimed Area	:	0.86 Ha.	2150 trees @ 2500 trees per Ha.
3	Haul /Approach Road	:	1.07KM	715 trees on both sides – 3 m distance

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- A total of 28,996 Cum of wastes (Over Burden) will be generated from entire Saharpur Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

Generation of Waste during Planned Period

Year	Waste Generation, In Cum
1 st Year	19,500.00
2 nd Year	0
3 rd Year	0
4 th Year	9,496.00
5 th Year	0
Total	28,996

Disposal of Waste from the Quarry

- Pit layout has been shown in development plan & 19,500 Cum O.B will be generated and it is stored as temporary proposed waste dump in southern corner of applied area in 1st Year and finally it is removed & backfilled in 3rd year of plan period over it plantation will be done. In 4th Year 9496.00 Cum O.B generated which will be used for approach road and mine road maintenance.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.

- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Paharpur Stone Mine of Shri Arun Kumar Sah., Mouza : Paharpur, P.O. : Benagaria, P.S. : Shikaripara, Dist. : Dumka, Jharkhand (1.61 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure - II.

15. Basmata Stone Mine of Mr. Yar Mohammad, Mouza : Basmata, Thana no. : 112, P.S. : Pakur, Dist. : Pakur, Jharkhand (1.79 Ha).

(Proposal No. : SIA/JH/MIN/ 68470/ 2021).

Project Category : B1- Application for ToR

EC Application for: Boulder Stone : 37,917 Cu.M. / year i.e. 1,06,168 TPA

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi

PROJECT and LOCATION Details:

Sl	Parameter	Details
1	Project Name	Basmata Stone Mine Project Type – Stone Mine
2	Lessee:	Mr. Yar Mohammad
3	Lease Address	Mouza – Basmata, Block & P.S.- Pakur, Dist.- Pakur, Jharkhand
4	Lease Area	Ha: 1.79 ha Acres: 4.42 Acres
5	Type of Land	Non Forest – Rayati Land
6	Project Cost	Capital Cost – 78.55 Lakhs Recurring Cost – 8.60 Lakhs
7	EMP Budget	Capital: NA Recurring: NA
8	CSR / CER Budget	NA
9	New or Expansion	New Project
10	Mineable Reserves	Cu.M.: 3,78,612 Cu. M. Tonnes: 10,60,114 Tonnes
11	Mine Life	10 years
12	Man power	19
13	Water Requirement	10.06 KLD (Drinking: 0.285 KLD, Dust Suppression: 2.10 KLD, Plantation: 7.677 KLD)

14	Water Source	:	<ul style="list-style-type: none"> Water will be sourced from Bore Well (Inside the lease area) for Drinking Purpose. Water will be sourced from Abandon Mine at a distance of 1 Km from the lease area.
15	DG Set / power	:	20 KVA
16	Crusher	:	NA
17	Nearest Water Body	:	Ganga River 14.50 KM
18	Nearest Habitation	:	Basмата Village: 0.57 Km, Pakur 5.45 KM
19	Nearest Rail Station	:	Pakur 5.45 KM
20	Nearest Air Port	:	Malda Airport – 54 Km
21	Nearest Forest	:	Protected Forest - 1.20 Km
22	Road & Highways	:	NH 114 A – 5.90 KM; Malpahari Road – 0.35 KM

CO-ORDINATES :

Sl. No.	Latitude	Longitude
1	24° 35' 4.56" N	87° 51' 9.94" E
2	24° 35' 4.12" N	87° 51' 10.8" E
3	24° 35' 4.01" N	87° 51' 11.36" E
4	24° 35' 3.87" N	87° 51' 11.43" E
5	24° 35' 3.66" N	87° 51' 11.04" E
6	24° 35' 3.52" N	87° 51' 11.42" E
7	24° 35' 2.89" N	87° 51' 10.79" E
8	24° 35' 3.14" N	87° 51' 10.27" E
9	24° 35' 2.88" N	87° 51' 10.05" E
10	24° 35' 2.62" N	87° 51' 9.89" E
11	24° 35' 2.79" N	87° 51' 9.47" E
12	24° 35' 2" N	87° 51' 8.92" E
13	24° 35' 1.56" N	87° 51' 9.76" E
14	24° 35' 1.72" N	87° 51' 9.93" E
15	24° 35' 1.77" N	87° 51' 10.14" E
16	24° 35' 1.86" N	87° 51' 10.14" E
17	24° 35' 1.99" N	87° 51' 9.93" E
18	24° 35' 2.4" N	87° 51' 10.41" E
19	24° 35' 2.08" N	87° 51' 10.97" E
20	24° 35' 1.57" N	87° 51' 11.16" E
21	24° 35' 1.11" N	87° 51' 11.26" E
22	24° 35' 0.91" N	87° 51' 10.95" E

23	24° 35' 0.83" N	87° 51' 10.95" E
24	24° 35' 0.28" N	87° 51' 11.89" E
25	24° 34' 58.52" N	87° 51' 10.66" E
26	24° 34' 58.78" N	87° 51' 9.79" E
27	24° 34' 58.28" N	87° 51' 9.54" E
28	24° 34' 58.77" N	87° 51' 8.07" E
29	24° 34' 59.18" N	87° 51' 8.05" E
30	24° 34' 59.24" N	87° 51' 7.85" E
31	24° 34' 58.8" N	87° 51' 7.55" E
32	24° 34' 59.69" N	87° 51' 6.23" E
33	24° 34' 59.7" N	87° 51' 6.72" E
34	24° 34' 59.97" N	87° 51' 6.77" E
35	24° 34' 59.97" N	87° 51' 7.24" E
36	24° 34' 59.94" N	87° 51' 7.46" E
37	24° 34' 59.96" N	87° 51' 7.58" E
38	24° 35' 0.13" N	87° 51' 7.87" E
39	24° 35' 0.44" N	87° 51' 7.87" E
40	24° 35' 0.89" N	87° 51' 6.99" E
41	24° 35' 1" N	87° 51' 6.94" E
42	24° 35' 1.27" N	87° 51' 6.97" E
43	24° 35' 1.39" N	87° 51' 7" E
44	24° 35' 1.56" N	87° 51' 7" E
45	24° 35' 1.56" N	87° 51' 6.76" E
46	24° 35' 1.69" N	87° 51' 6.81" E
47	24° 35' 1.88" N	87° 51' 6.84" E
48	24° 35' 2.02" N	87° 51' 6.81" E
49	24° 35' 2.19" N	87° 51' 6.81" E
50	24° 35' 2.46" N	87° 51' 6.94" E
51	24° 35' 2.53" N	87° 51' 7.03" E
52	24° 35' 2.65" N	87° 51' 7.05" E
53	24° 35' 2.98" N	87° 51' 7.05" E
54	24° 35' 3.23" N	87° 51' 7.16" E
55	24° 35' 3.43" N	87° 51' 7.26" E
56	24° 35' 3.48" N	87° 51' 7.26" E
57	24° 35' 3.58" N	87° 51' 7.23" E
58	24° 35' 3.63" N	87° 51' 7.52" E
59	24° 35' 3.6" N	87° 51' 7.63" E
60	24° 35' 3.55" N	87° 51' 7.72" E
61	24° 35' 3.55" N	87° 51' 7.81" E
62	24° 35' 3.58" N	87° 51' 7.83" E
63	24° 35' 3.68" N	87° 51' 7.83" E
64	24° 35' 3.77" N	87° 51' 7.91" E

65	24° 35' 3.77" N	87° 51' 8.04" E
66	24° 35' 3.86" N	87° 51' 8.24" E
67	24° 35' 3.61" N	87° 51' 8.57" E
68	24° 35' 3.61" N	87° 51' 8.65" E
69	24° 35' 3.82" N	87° 51' 8.8" E
70	24° 35' 3.82" N	87° 51' 8.84" E
71	24° 35' 3.98" N	87° 51' 9" E
72	24° 35' 4" N	87° 51' 9.05" E
73	24° 35' 4" N	87° 51' 9.14" E
74	24° 35' 3.87" N	87° 51' 9.22" E
75	24° 35' 3.89" N	87° 51' 9.33" E
76	24° 35' 4.11" N	87° 51' 9.49" E
77	24° 35' 4.27" N	87° 51' 9.49" E
78	24° 35' 4.47" N	87° 51' 9.88" E

LAND DETAILS :

Khata No.	Plot No.
25	242 P, 243
22	223, 225, 224, 226
14	244, 246, 227
27	229, 240, 238 P
12	232 P, 222, 233 P
24	247, 248, 249 P, 250 P
20	258 P
06	228, 239, 245, 257

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 543/M dated 21.03.2020
2	CO	:	The CO, Pakur vide letter no. 20, dated 08.01.2020 has mentioned the plot no. of the project is not recorded ; "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Pakur vide memo no. 978/M, dated 24.06.2020, certified that 02 leases (7.43 acre & 5.37 acres) exist within 500 m radius from proposed project site & Total lease area is 7.38 Ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 332, dated 18.02.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project

			is not situated in any ESZ.
5	DFO Distance	Forest	: DFO, Pakur Forest Division vide letter no. 303, dated 04.02.2020 certified that the distance of reserved / protected forest is more than 250 m.
6	DSR		: Basmata Stone Mine of Mr. Yar Mohammad is mentioned in page no. – 71 of Pakur DSR approved by Dy. Commissioner, Pakur dated – 26.10.2019
7	Gram Sabha		: On 14.10.2019
8	Mine Approval	Plan	: Letter No. 198 / DDM DDM dated 13.08.2020

Working Details :

1	Mining Method	:	Semi Mechanised. Jack Hammer Drilling, Wagon Drilling & Blasting to be used
2	Quarry Area	:	5 years – 0.86 Ha End of Mine – 1.36 Ha
3	Waste Generation	:	5 years– 7,943 Cu.M Life of Mine (Waste Gen.) – 7,943Cu.M
4	Stripping Ratio	:	1:0.02
5	Working Days	:	300
6	Bench: size & No	:	6 m x 6 m, 3 benches
7	Elevation of Mine	:	Maximum – 96.16 AMSL Minimum - 95.16 AMSL
8	Ground Level Elevation		95.16 AMSL
9	Ultimate Working Depth	:	72.16 AMSL
10	Water Table	:	67.16 AMSL (28 m bgl)
11	Topography of Mine	:	Flat Terrain
12	Explosive Requirement	:	6 Tons/year
13	Diesel/Fuel requirement	:	407 KL/year (122 Litres/day)

Production Details

Year	Production of Stone		Over Burden (OB)	Bench RL in meters
	Cubic meters	Tons	Cum.	
1st Year	37,842	105,958	3,774	39-33
2nd	37,917	106,168	2,673	39-33

Year				
3rd Year	37,840	105,952	1,496	33-27
4th Year	37,890	106,092	Nil	33-27
5th Year	37,908	106,142	Nil	27-21
Total	189,397	530,312	7,943	Depth- 18 m

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.00
Total area in use	0.00
Balance area unused	1.79
Total Leasehold area	1.79

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	0.86
Dump	0.01
Mining Road	0.01
Green Belt / Safety Zone	0.50
Garland Drain	0.01
Total area in use	1.39
Unutilized	0.40
Total Leasehold area	1.79

Land Use pattern at the Conceptual Stage i.e. end of mine

Category	Area in Hectares
Quarry	Water body 1.26 (To be Converted to Water Body after reducing the depth partially)
Green Belt/ Safety Zone	0.50 (Plantation)

Dump + Road + Garland Drain	0.03 (Plantation)
Total Leasehold area	1.79

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.40 ha	1000 trees @ 2500 trees per ha
2	Other Reclaimed Area	:	0.53 Ha.	1,325 trees @ 2500 trees per Ha.
3	Haul /Approach Road	:	0.35 KM	234 trees on both sides – 3 m distance

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- A total of 7,943 Cum of wastes (Over Burden) will be generated from entire Basmata Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:


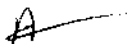
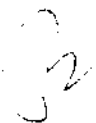


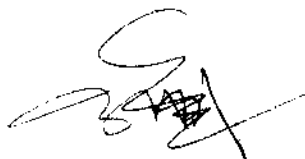
Generation of Waste during Planned Period

Year	Waste Generation, In Cum
1 st Year	3,774
2 nd Year	2,673
3 rd Year	1,496
4 th Year	Nil
5 th Year	Nil
Total	7,943

Disposal of Waste from the Quarry

Over burden will be dumped in the waste dump within the mining lease area in 0.03 Ha. waste dump area inside the lease. OB will be utilized for mine road construction & berm along the mine haul road.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and a good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.

- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Baseline Monitoring data generation from October, 2021 to December, 2021.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 20, 21, 22 & 23.10.2021, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.

16. Sunita Devi Stone Mines of Smt. Sunita Devi, Village : Konjoba, Block : Kalebira, Dist. : Simdega, Jharkhand (2.62 Ha).

(Proposal No. : SIA/JH/MIN/ 234571/ 2021).

Project Category : B2 – Application

EC Application for: Boulder Stone : 58,620 Cu.M. / year i.e. 1,75,860 TPA

Name of the consultant : Sathi Planners Pvt. Ltd., Ranchi

PROJECT and LOCATION Details:

Sl	Parameter	:	Details
1	Project Name	:	Sunita Devi Stone Mine Project Type – Stone Mine & Crusher (100 TPH capacity)
2	Lessee:	:	Smt. Sunita Devi
3	Lease Address	:	Mouza – Konjoba, Thana – Kolbira No.- 125, Dist.- Simdega, Jharkhand
4	Lease Area	:	Ha: 2.62 ha Acres: 6.48 Acres
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	Capital Cost – 61.00 Lakhs Recurring Cost – 21.76 Lakhs
7	EMP Budget	:	Capital: 15.0455 Lakhs Recurring: 02.04 Lakhs
8	CSR / CER Budget	:	2.357 Lakhs
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 6,97,343.95 Cu. M. Tonnes: 20,92,031.85 Tonnes
11	Mine Life	:	10.19 years
12	Man power	:	25
13	Water Requirement	:	15.71 KLD (Drinking:0.375 KLD, Dust Suppression: 5.70 KLD, Plantation: 9.63 KLD)

14	Water Source	:	<ul style="list-style-type: none"> Water will be Sourced from near by Abandoned Mine for Dust Suppression and Plantation. Water will be sourced from Bore Well within the lease area for Drinking and Domestic Consumption.
15	DG Set / power	:	20 KVA
16	Crusher	:	Movable Crusher over an area of 0.10 Ha.
17	Nearest Water Body	:	Koel River 11.90 KM
18	Nearest Habitation	:	Konjoba Village: 1.18 Km, Simdega 33.00 KM
19	Nearest Rail Station	:	Kurkura Railway station – 17.00 km
20	Nearest Air Port	:	Ranchi Airport – 84.73 km
21	Nearest Forest	:	Protected Forest - 4.00 Km
22	Road & Highways	:	NH 23 – 7.83 KM; Torpa Road – 3.00 Km, Pakka Road – 0.95 KM

CO-ORDINATES :

SL NO.	LATITUDE	LONGITUDE
P1	22°45'19.22"	84°46'11.16"
P2	22°45'18.72"	84°46'12.92"
P3	22°45'16.50"	84°46'12.35"
P4	22°45'16.37"	84°46'13.08"
P5	22°45'15.25"	84°46'13.28"
P6	22°45'14.52"	84°46'12.83"
P7	22°45'14.86"	84°46'11.79"
P8	22°45'13.85"	84°46'11.30"
P9	22°45'13.65"	84°46'11.70"
P10	22°45'12.54"	84°46'11.36"
P11	22°45'12.71"	84°46'08.84"
P12	22°45'15.41"	84°46'09.28"
P13	22°45'15.99"	84°46'07.58"
P14	22°45'18.15"	84°46'09.00"
P15	22°45'17.85"	84°46'07.66"
P16	22°45'18.84"	84°46'07.53"
P17	22°45'19.26"	84°46'08.86"
P18	22°45'19.76"	84°46'07.14"
P19	22°45'21.10"	84°46'07.31"
P20	22°45'20.53"	84°46'09.64"
P21	22°45'19.94"	84°46'09.83"

LAND DETAILS :

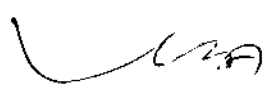

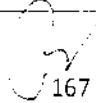


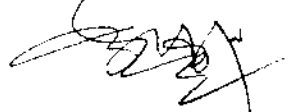
Khata No.	Plot No.
47	526, 527
194	514, 515
195	525
196	509, 510, 512 (P), 516, 517

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Simdega, vide letter no. 414/M dated 05.08.2021
2	CO	:	The CO, Kalebira vide letter no. 494, dated 28.08.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatyan & Register II.
3	DMO	:	DMO, Simdega vide memo no. 50/M, dated 19.01.2021 certified that 02 lease (1.50 Acres & 2.00 Acres) exist within 500 m radius from proposed project site & Total lease area is less than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide memo no. 876, dated 05.12.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Simdega Division vide letter no. 2394, dated 05.10.2020 certified that the distance of reserved, protected forest is more than 250 m.
6	DSR	:	The DC-cum-District Magistrate, Simdega vide letter no. 470 / M, dated 08.09.2020 has informed that this project is part of District Survey Report (DSR) at Simdega district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Letter from BDO regarding Gram Sabha Letter no.- 1630 (i) dated 09.09.2020
8	Mine Plan Approval	:	Letter No. 530 / M Simdega dated 07.11.2020

Working Details :

1	Mining Method	:	Semi Mechanised. Wagon, Drilling & Blasting to be used
2	Quarry Area	:	5 years – 1.59 Ha End of Mine – 1.59 Ha
3	Waste Generation	:	5 years– Waste material will be less and Life of Mine (Waste Gen. – Waste material will be

			will be utilized in Mine road	less and will be utilized in Mine road
4	Stripping Ratio	:	1:0	
5	Working Days	:	300	
6	Benches: size & No	:	6 m x 6 m, Bench No.- 1 to 4	
7	Elevation of Mine	:	Maximum – 630.72 AMSL Minimum- 624.72 AMSL	
8	Ground Level Elevation		625.72 AMSL	
9	Ultimate Working Depth	:	600.72 AMSL	
10	Water Table	:	594.72 AMSL (30 m bgl)	
11	Topography of Mine	:	Undulating Terrain	
12	Explosive Requirement	:	62.1 Tons/year	
13	Diesel/Fuel requirement	:	HSD – 370 liters / day (111 KL/year)	

Production Details :

Year	Production of Stone		Bench RL in meters
	Cubic meters	Tons	
1st Year	58,620	1,75,860	576-570
2nd Year	58,620	1,75,860	576-570
3rd Year	58,620	1,75,860	570-564
4th Year	58,620	1,75,860	570-564
5th Year	58,620	1,75,860	564-558
Total	2,93,100	8,79,300	Depth- 18 m

Land Use :

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.00
Total area in use	0.00
Balance area unused	2.62
Total Leasehold area	2.62

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.59

Crusher	0.10
Road	0.02
Infrastructure	0.01
Green Belt / Safety Zone	0.86
Garland Drain	0.02
Settling Tank	0.02
Total area in use	2.62
Total Leasehold area	2.62

Land Use pattern at the Conceptual Stage i.e. end of mine

Category	Area in Hectares
Quarry	1.59 (To be converted into Water Body area after reducing the depth partially) Water Body – 1.59 Ha.
Green Belt/ Safety Zone	0.86 (Plantation)
Crusher area + Road + Garland Drain + Settling Tank + Infrastructure	0.17 (Plantation)
Total area in use	2.62
Total Leasehold area	2.62

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.86 ha	2150 trees @ 2500 trees per ha
2	Other Reclaimed Area	:	0.17 Ha.	425 trees @ 2500 trees per Ha.
3	Haul /Approach Road	:	0.95 KM	634 trees on both sides – 3 m distance

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

Waste Generation

Waste material will be less and the same will be utilized for internal mine road construction & berm along the approach road construction & maintenance. Hence, there will not be any dump in the lease hold area

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area notified issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard

- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Sunita Devi Stone Mines of Smt. Sunita Devi, Village : Konjoba, Block : Kalebira, Dist. : Simdega, Jharkhand (2.62 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II.

Day 4 : October 23, 2021 [Saturday]

A. Matter referred by SEIAA :

- i. Confindendum EC letter for Proposed Residential & Commercial Building belongs of M/s Shekhar Buildcon Pvt. Ltd., Village : Lalpur, Tehsil : Sahar, Dist. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/ MIS/232170/2021)

The PA's vide letter dated 18.10.2021 has requested for necessary correction in Environmental Clearance issued vide letter no. EC/SEIAA/2021-22/ 2408 /2021/148, dated 23.09.2021 with regard to the following :

Project is classified as Category 8(a) as per EIA Notification as the built up area is less than 1,50,000 sq m and development area is less than 50 ha.

Salient Features of the Project :

Plot Area	21739.52 m ² 20643.64 m ² (plot area after leaving land for road widening)
Plot No.	MS 1138
Total Built-Up Area	84868.56 m ²
Main Commercial Building	35896.98 m ²
Commercial Building Block C	2155.00 m ²
Community Building	539.94m ²
Residential Block A1	11428.74 m ²
Residential Block A2	11216.82 m ²
Residential Block B1	11815.54 m ²
Residential Block B2	11815.54 m ²
Plot Area	20,643.64 Sq. m.
Ground Coverage Proposed	7,068.22 Sq. m.

[Handwritten signatures and initials are present below the table, including 'H1' and several illegible signatures.]

Plantation / Green Area	6,474.86 Sq. m. (31.36%) 4,235.16 Sq. m. (20.52%) (Tree Plantation)
Total Built-Up Area	84868.56 Sq. m.
Proposed FAR	2.88
Building Height	29.7 m
No. of Floor	G+9
No. of Block	7
Number of Dwelling Units	299
Estimated Population	2263
Total Water Requirement	424.49 KLD
Fresh Water Requirement	194.29 KLD
Waste Water Generation	287.75 KLD
Capacity of STP	For Residential Building 252 KLD For Commercial Building 93 KLD
Treated Water Recycled	230.20 KLD
Parking	Residential Block For 2 Wheeler – 313 For 4 Wheeler – 299 Commercial Block For 2 Wheeler – 287 For 4 Wheeler – 400
Rain Water Harvesting Pits	7 Pits
Power Requirement	Residential Building – 1645 kW Back – Up - D.G. Set for 500 KVA Commercial Building – 845 kW Back – Up - D.G. Set for 350 KVA Source – Jharkhand State Electricity Board.
Project Cost	Rs. 127,30,28,400.00
CER	Rs. 1,90,95,426.00
EMP Cost	Rs. 60.00 Lakhs
Recurring Cost	Rs. 6.00 Lakhs

Water Demand

	Water Demand (KLD)	Source
Domestic	194.29	Fresh Water
Flushing	132.32	Treated Water
Horticulture	30.00	Treated Water
Car Washing	25.00	Treated Water
Dust Suppression	5.00	Treated Water
Discharge	37.88	Treated Water
Total Fresh Water Demand		194.29 KLD
Total Treated Water Demand		230.20 KLD

Total Water Demand	424.49 KLD
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The DFO Wildlife Ranchi, vide memo no. 53, dated 15.01.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

The DFO Ranchi Division vide letter no. 2121, dated 11.08.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.

The CO Shahar, Ranchi vide letter no. 455(ii), dated 04.08.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyon & Register II.

The SEAC recommends to issue the corrected EC as stated above and rest other terms & conditions mentioned in EC letter no. EC/SEIAA/2021-22/ 2408 /2021/148, dated 23.09.2021 shall remain the same.

- ii. **Bankuchia Stone Deposit of M/s K.K. Builders Pvt. Ltd.,** Village : Bankuchia, Thana : Patamda, Dist. : East Singhbhum, Jharkhand (11.74 Ha).

(Proposal No. : SIA/JH/ MIN/63125/2017)

The Committee considered the project in the light of letter no. 213, dated 10.05.2019 and letter no. 293, dated 28.06.2019 issued by SEIAA, Jharkhand to RCCF, Jamshedpur and following are observed :

- The PAs have been advised to obtain the certificate from the competent authority regarding distance of the project site from the RF/PF.
- The PAs have been advised to obtain the certificate from the competent authority that whether the project site is a part of ESZ or not.

Project proposal will be taken up for reconsideration after receipt of the above required certificates.

- iii. **Armai Stone Mine of Sri Manish Kumar Lal,** Village : Dumardih (Armai), Teshil + Dist. : Gumla, Jharkhand (2.430 Ha).

This project is kept on hold for the period of 02 months. It will be taken up for the consideration on request of PA's. If the request is not received within 02 months the project will be recommended for delisting.

B. Discussion on matter related to :

- iv. **Dindli Sand Mining Project on Kharkai River of M/s Amit Trading Corporation** at Vill.- Dindli, Adityapur, Dist. : Saraikel-Kharsawan, Jharkhand (6.07 Ha).

(Proposal No. : SIA/JH/ MIN/63041/2017)

As per the request from the PAs vide letter dated 23.10.2021, this project is kept on hold for the period of 02 months. It will be taken up for the consideration on request of PA's. If the request is not received within 02 months the project will be recommended for delisting.

C. Discussion on the prevailing citing criteria as followed by SEIAA / SEAC, Jharkhand for all renewal of existing projects.

The SEIAA, Jharkhand has adopted the following citing criteria from RF/PF in its 59th meeting held on 09.08.2018 for all project is as follows :

*"The Authority examined the recommendations made by SEAC upon the issue of minimum distance from forest for all projects wherein SEAC has reiterated its recommendation made in 49th meeting held on 16th and 17th October, 2017 which states that the minimum distance from forest for all projects, in renewal cases should be **100 meter** and for new cases it should be at a distance of **250 meter**. The Authority decided unanimously to accept the recommendations of SEAC made in this regard"*

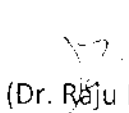
The Committee after detailed discussion has come to the conclusion that the citing criteria for all renewal of existing project will be based on guidelines, rules and regulations issued by MoEF&CC published in Gazette as per EIA notification, 2006 and some decision related to environment by Hon'ble Apex Court.

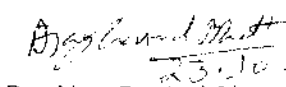
It is accordingly recommended that guidelines followed by SEIAA, Jharkhand for renewal of existing project prior to 09.08.2018 should be implemented & followed.

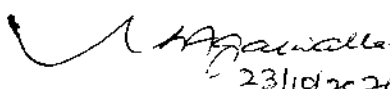
Therefore, it is recommended as follows :

in the case of all renewal of proposal / consideration of existing projects EC will be granted on "as is where it is basis but not in the notified / demarcated forest and Eco Sensitive Zone (ESZ)"

The meeting concluded with thanks to all present.

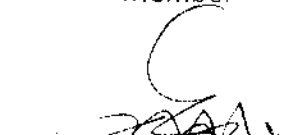

(Dr. Raju Kumar)
Member


(Dr. Ajay Govind Bhatt)
Member


(Niranjana Lal Agarwalla)
Member


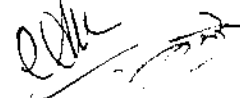

(Dr. Kirti Avishek)
Member


(Ashok Kumar Dubey)
Secretary


(Ashok Kumar Singh)
Chairman

The TORs prescribed for undertaking detailed EIA study are as follows:

- i. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- ii. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- iii. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- iv. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- v. Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- vi. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- vii. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
- viii. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- ix. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- x. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and



other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

- xi. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- xii. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- xiii. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- xiv. Implementation status of recognition of forest rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- xv. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- xvi. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- xvii. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- xviii. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- xix. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also

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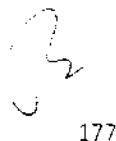
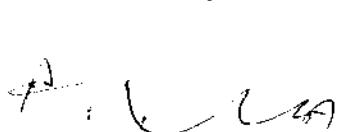
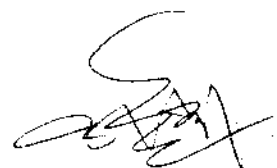
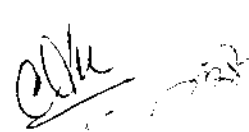
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be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.

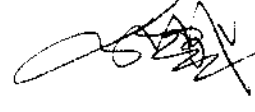
- xx. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- xxi. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- xxii. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- xxiii. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- xxiv. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- xxv. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.


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- xxvi. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- xxvii. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- xxviii. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- xxix. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- xxx. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- xxxi. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
- xxxii. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
- xxxiii. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- xxxiv. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- xxxv. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and



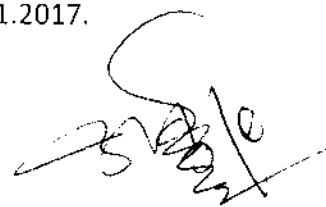
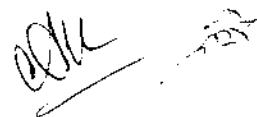
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periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

- xxxvi. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- xxxvii. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- xxxviii. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- xxxix. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- xl. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- xli. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- xlii. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- xlili. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- xliv. Besides the above the below mentioned general points are also to be followed :-
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF & CC / NABL accredited laboratories. All the original analysis / testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.

- g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF & CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
- h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF & CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
- xliv. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
- xlvi. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.

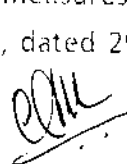

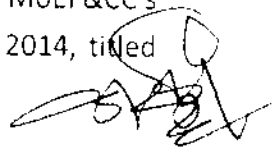


I. Statutory compliance

- i. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- ii. The Project proponent complies with all the statutory requirements and judgement of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- iii. The Hon'ble Supreme Court vide order dated 08.01.2020 in W.P. (Civil) No.114/2014 in the matter of Common Cause vs. Union of India has directed that the area which has been mined should be restored so that grass and other vegetation including trees can grow in the mining area for the benefit of animals.

"The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- iv. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgement of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- v. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- vi. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- vii. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.
- viii. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- ix. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- x. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-11013/57/2014-IAJL (M), dated 29th October, 2014, titled



"Impact of mining activities on Habitations-Issues related to the mining Project wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

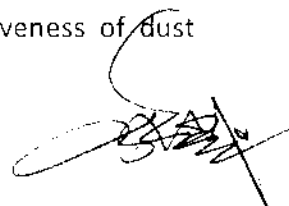
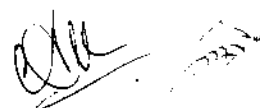
- xi. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- xii. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- xiii. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- xiv. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.environmentclearance.nic.in). A copy of the advertisement may be forwarded to the concerned MoEF & CC Regional Office for compliance and record.
- xv. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

- i. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2; CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCUI, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
- ii. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust



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control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF&CC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

- i. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF&CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- ii. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug well located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- iii. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- iv. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and

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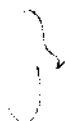
Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

- v. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IAI (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- vi. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
- vii. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
- viii. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

- i. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- ii. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
- iii. The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining Plan



- i. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.
- ii. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.
- iii. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

VI. Land reclamation

- i. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- ii. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- iii. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- iv. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of

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local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

- v. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.
- vi. Catch drains, settling tanks and ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
- vii. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
- viii. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

- i. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain


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Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.

- ii. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt

- i. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
- ii. The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- iii. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- iv. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- v. And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

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IX. Public hearing and human health issues

- i. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
- ii. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- iii. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium-Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
- iv. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line

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X-Ray should not show any capacities. (c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.

- v. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- vi. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
- vii. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

X. Corporate Environment Responsibility (CER)

- i. The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-18 (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
- ii. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF&CC and its concerned Regional Office.

XI. Miscellaneous

- i. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.



- ii. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- iii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- iv. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
- v. The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
- vi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- vii. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- viii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- ix. The Environmental Clearance accorded shall be valid for the period of lease of the mine, the PP does not increase production rate and alter lease area during the validity of Environmental Clearance.

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The TORs prescribed for undertaking detailed EIA study are as follows:

A. Standard Terms of Reference

1. Executive Summary

2. Introduction

- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent
- iii. Importance and benefits of the project

3. Project Description

- i. Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion/modernization proposals:
 - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing / existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification, 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

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- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site. .
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area. utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

5. Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM₁₀, PM_{2.5}, SO₂, NO_x, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQPM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7. Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor- cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment.

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Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

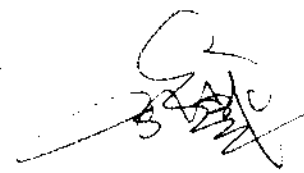
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.



- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
 - iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
 - iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report
10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. Enterprise Social Commitment (ESC)

- i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
13. A tabular chart with index for point wise compliance of above TOR.

B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON FERROUS)

- 1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
- 2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
- 3. Details on installation/activation of opacity meters with recording with proper calibration system
- 4. Details on toxic metals including mercury, arsenic and fluoride emissions
- 5. Details on stack height requirement for integrated steel
- 6. Details on ash disposal and management -Non-ferrous metal
- 7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
- 8. Raw materials substitution or elimination
- 9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
- 10. Details on Holding and de-gassing of molten metal from primary and secondary aluminium, materials pre-treatment, and from melting and smelting of secondary aluminium
- 11. Details on solvent recycling

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12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery
18. Trace metals in water

C. Other

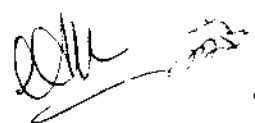
1. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered.
2. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.

The image shows five handwritten signatures or initials in black ink, arranged horizontally. From left to right: the first is a stylized 'A' followed by 'U' and 'A'; the second is a simple 'J'; the third is a cursive signature; the fourth is a small, illegible mark; and the fifth is a large, complex signature.

I. Statutory Compliance

- i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- ix. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.
- xii. Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.







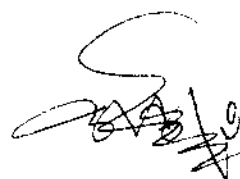
- xiii. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.
- xiv. All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peak hours.
- xv. Accumulation/stagnation of water shall be avoided ensuring vector control.
- xvi. Water during construction phase should be preferred from Municipal supply.
- xvii. Unskilled construction labourers shall be recruited from the local areas.
- xviii. Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.
- xix. Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.
- xx. Rest room facilities shall be provided for service population.
- xxi. Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.
- xxii. Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.
- xxiii. Project proponent shall install Wind Augmentation and Air Purifying Unit (4 Units at one location in Ranchi) on Pilot basis to deal with particulate matter pollution.

II. Air quality monitoring and preservation

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the



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combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

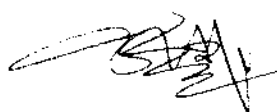
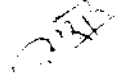
- v. Construction site shall be adequately barricaded. Before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xii. For indoor air quality the ventilation provisions under National Building Code of India.

III. Water quality monitoring and preservation

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total fresh water use shall not exceed the projected requirement as provided in the project details.



- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water source, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerator etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

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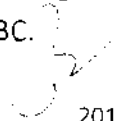
- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention

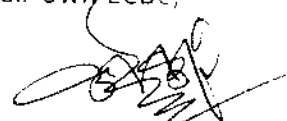
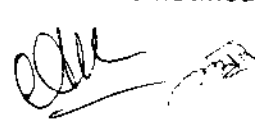
- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.



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- ii. Outdoor and common area lighting shall be LED.
- iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

VI. Waste Management


- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity.



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These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.

- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport

- i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation



- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human Health Issues

- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporate Environment Responsibility

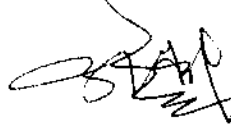
- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.



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- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Miscellaneous

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

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- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. It shall be mandatory for the project management to submit six (06) month compliance report in respect of the stipulated prior environmental clearance terms & conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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