

MINUTES OF THE 100TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 09TH, 10TH, 11TH, 12TH, 13TH and 14TH JANUARY, 2023.

The 100th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 09th, 10th, 11th, 12th, 13th and 14th January, 2023 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. Kirti Avishek - Member
3. Shri Niranjana Lal Agarwalla - Member
4. Dr. Raju Kumar - Member
5. Dr. Ajay Govind Bhatt - Member
6. Shri Srikant Verma, IFS - Secretary

SEIAA forwarded various projects to the SEAC for the technical appraisal after the last SEAC meeting held on 07th, 08th, 09th, 10th and 11th December, 2022. These projects have been put up for discussions. 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 : January 09th, 2023 [Monday]

A. Deputy Commissioner - cum – District Magistrate, Ranchi or through authorized representative and M/s Crystal Consultants, Ranchi.

i. Draft District Survey Report (DSR) of Sand, Ranchi







The DSR was submitted by A. Deputy Commissioner - cum – District Magistrate, Ranchi. He was represented by District Mining Officer, Ranchi Sri Sanjeev Kumar and Assistant Director, Geology, Ranchi Smt. Anima Xess at the SEAC meeting on 09.01.2023.

During the meeting the consultant M/s Crystal Consultants, Ranchi submitted as follows :

1. The DSR submitted was at a draft stage. The final DSR after approval by Sub Divisional Committee, Deputy Commissioner and incorporation of the Public comments is to be submitted for appraisal by SEAC.
2. The final DSR should be signed by all members of the Sub Divisional Committee and the Consultant involved in the preparation of the same. All pages of the DSR should be signed by the authorized officer of the DC / Sub Divisional Committee.
3. The draft DSR submitted is based only on part survey. In the submitted draft DSR the complete area of the river / rivers have not been surveyed, only some selected ghats / leases have been surveyed. The complete potential area should be demarcated before proposing the sand leases / ghats as per EMGSM guideline 2020.

The field survey of pre-monsoon period is to be included in final DSR.

5. The DSR should be placed in the public domain for atleast 01 (One) month from the date of publication of the advertisement for obtaining comments of the public. The comments received shall be placed before the concerned Sub Divisional Committee for consideration. The final DSR should be submitted to SEIAA, after incorporation of all replies of the comments received from the public.
6. Demand and supply of the river bed material through market survey needs to be carried out. In addition to this, future demand for the next five years also needs to be considered to justify the number & area of the sand ghat to be included in the final DSR.
7. The sand ghats / leases have not to be proposed on the confluence / meanders / concavities / active channels of the river.
8. The Khata & Khasra (class / nature of land including "Jungle Jhari") of the lease area should be certified by the concerned Circle Officer (CO) and to be incorporated in the final DSR.
9. The distance of sand leases / ghats from the Forest / Wildlife Protected area / Birds Sanctuary / Wildlife Sanctuary / National Park / Eco Sensitive Zone should be verified and certified by the concerned DFO's of the respective Territorial and Wildlife division.
10. The undertaking regarding presence of aquatic animal in the river in proximity of the proposed sand ghats should be verified and certified by concerned Govt. Departments like Zoological Survey of India.
11. The proposed leases / ghats should meet all the siting criteria of State Pollution Control Board / SEIAA.
12. Clear and high resolution color satellite images of the proposed potential sand mining area should be submitted with final DSR including the date of photographs / Geocoded location. Details of all such satellite imageries should be included in the final DSR.
13. The table of estimation of sand resources after pre-monsoon and post monsoon survey should be included in the final DSR.
14. All primary & secondary data should be supported with relevant references and documentary evidences in the final DSR.
15. Bulk density and specific gravity of the sand should be certified by NABL accredited laboratory.
16. Concave side of the river should be avoided for identification of sand leases / ghats.
17. KML files of Existing leases / ghats and proposed leases / ghats should be provided.
18. Cluster and contiguous cluster formation should be followed as per EMGSM guidelines, 2020.
19. Average length and width of the river should be included and mining should be restricted to 3/4th of the river width and mining should be restricted within 60% of the mineable reserve.
20. Transportation routes should be defined for the proposed mining sites and duly certified from the competent Authorities.
21. All the annexures given in the EMGSM guidelines, 2020 should be filled and included in the final DSR.

22. Point no. 9.3 of the EMGSM guidelines, 2020 regarding monitoring of mining near inter-district or inter-state boundary should be addressed in the final DSR, if applicable.
23. In addition to above any other applicable criteria as required under SSMG, 2016 & EMGSM guidelines, 2020 should be included in the final DSR.
24. The presentation of the final DSR at the time of appraisal by SEAC should cover all the points of SSMG, 2016 & EMGSM guidelines, 2020.

The Committee is of the view that the DSR should be prepared in the light of Hon'ble Apex Court in Civil Appeal no. 3661-3662/2020, Pawan Kumar vs State of Bihar & ors, Hon'ble NGT in O.A. no. 54/2022/EZ, Bhumi Adhigrahan Visthapan Avam Punarvas Kisan Samiti vs State of Jharkhand & ors and Enforcement and Monitoring Guidelines for Sand Mining 2020.

The final DSR should be prepared in the light of above guidelines and Hon'ble Apex Court & Hon'ble NGT direction and to be submitted for appraisal.

B. Consideration of Proposals

1. Kalichatan Stone Mine of M/s Gangadhar Mining Pvt. Limited, Village : Kalichatan, Tehsil : Bagodar, Distt. : Giridih, Jharkhand (2.6568 Ha).

(Proposal No. SIA/JH/MIN/ 412516 /2022).

Name of the consultant : Crystal Consultant, Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 09.01.2023.

Project Category : B2 – Application for Environment Clearance

EC Application for : Boulder Stone: 55,625 Cu.M./ Year i.e. 1,50188 TPA

Project and Location Details :

Sl. No.	Parameter		Details
1	Project Name	:	Kali Chatan Stone Mine
2	Lessee:	:	M/s Gangadhar Mining (P) Limited, (Director: Sri Manoj Kedia)
3	Lease Address	:	Mouza – Kali Chatan, Thana – Bagodar District – Giridih, State – Jharkhand.
4	Lease Area	:	Ha: 2.6568 ha.
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	90.10 Lakhs
7	EMP Budget	:	Capital: 8.50 Lakhs
8	CSR / CER Budget	:	Rs. 1.60 Lakhs

9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu. M.: 5,88,644
11	Mine Life	:	11 years
12	Man power	:	30
13	Water Requirement	:	11.50 KLD (Drinking: 1.50 KLD, Dust Suppression: 8.00 KLD, Plantation: 2.00 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	:	Barsoti River 2.00 KM
18	Nearest Habitation	:	Dhankitanr Village: 3.00 KM; Bagodar: 18 KM
19	Nearest Rail Station	:	Suriya - 28 KM
20	Nearest Air Port	:	Ranchi - 180 KM
21	Nearest Forest	:	Not within 250m
22	Road & Highways	:	NH 02 – 02.00 KM;

CO-ORDINATES

1	Latitude	:	From 24° 09' 00.55" N
2	Longitude	:	From 85° 40' 47.07" E

LAND DETAILS

Sl. no.	Khata no.	Plot no.
1.	10	73 (P)
2.	12	70 & 76
3.	14	72
4.	16	71, 75 & 77

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Giridih vide letter no. 1002/M dated 29.10.2022.
2	CO	:	The CO, Bagodar, Giridih vide letter no. 705, dated 11.10.2022 has mentioned the plot no. of the project is not recorded as "Jangal Jhari" in Khatiyen.
3	DMO	:	DMO, Giridih vide memo no. 1085/M, dated 23.11.2022 certified that no other lease area exists within 500 m radius from proposed project site.

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4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 2055, dated 15.10.2022 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Hazaribag East Forest Division vide letter no. 1799, dated 11.07.2022 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 issued letter regarding DSR vide letter no. 1054/M, dated 14.11.2022 has informed that this project is part of District Survey Report (DSR) of Giridih district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 17.10.2022
8	Mine Plan Approval	:	DMO, Ranchi vide Letter No. 1059/M, Ranchi dated 06.12.2022

Working Details

1	Mining Method	:	Opencast Mechanized.
2	Quarry Area	:	Plan period – 1.5310 ha.
3	Waste Generation	:	Plan period – 45,529 m ³
4	Stripping Ratio	:	0.077 (overall stripping ratio)
5	Working Days	:	300
6	Benches: Size & No	:	6m x 6m and 6 benches.
7	Elevation of Mine	:	376m AMSL
8	Ground Level Elevation	:	370m AMSL
9	Ultimate Working Depth	:	341 m AMSL
10	Water Table	:	336 m AMSL
11	Topography of Mine	:	Gentle slope from South- West to North-East.
12	Explosive Requirement	:	15,019 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
1st	55,568	1,50,033	15,180	374 – 362
2nd	55,568	1,50,033	-	368 – 356
3rd	55,625	1,50,188	30,349	371 - 365

4th	55,625	1,50,188	-	371 - 359
5th	55,625	1,50,188	-	365 - 359
Total	2,78,011	7,50,630	45,529	

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	1.5310	1.3535	Water Body
2	Dump	0.00	0.4000	0.5833	Green Belt (Reclaimed)
3	Office /Store	0.00	0.0000	0.0000	-
4	Crusher	0.00	0.0000	0.0000	-
5	Road	0.00	0.0000	0.0000	-
6	Safety Zone	0.00	0.7200	0.7200	Green Belt
7	Unutilized	2.6568	0.0058	0.0000	-
	TOTAL	2.6568	2.6568	2.6568	

ENVIRONMENT MANAGEMENT

Green Belt Development

Sl. No	LOCATION	Area/Length	No. of Trees
1.	Safety Zone	: 0.720 ha	350 trees
2.	Other Reclaimed Area	: 0.5833 ha	275 trees (Conceptual stage)
3.	Haul /Approach Road	: 150 m	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

- Total OB to be removed during mining period has been estimated as 45,529 M³ (1st year 15,180 M³ and 3RD year 30,349 M³).
- Mined out OB would be stored in demarcated OB dump area.

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- On the end of mining operations, the quantity stored in external dump would be back filled in the upper benches of mined out quarry.

Water Quality Management




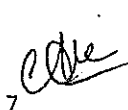


- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be used for dust suppression and plantation. Excess water, if any shall 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.
- i. If any tree felling is required permission should be taken from competent authority.

During the presentation the following documents were sought :

- i. The table providing details of project cost estimate is to be revised with detail break up.
- ii. Conceptual plan to be revised so that all features are to the scale.

The Project Authorities have submitted the above mentioned documents.

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 Kalichatan Stone Mine of M/s Gangadhar Mining Pvt. Limited, Village : Kalichatan, Tehsil : Bagodar, Distt. : Giridih, Jharkhand (2.6568 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

2. Chagjo Stone Mine of M/s Bhagwan Stone & Minerals, Village : Chagjo, Tehsil : Pathna, Dist. : Sahibganj, Jharkhand (1.62 Ha).

(Proposal No. : SIA/JH/ MIN/271266 /2022)

Name of the consultant : Crystal Consultant, Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 09.01.2023.

Project Category : B2 – Application for Environment Clearance

EC Application for : Boulder Stone: 57062 Cu.M./ year i.e. 1,54,067 TPA

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Chagjo Stone Mine
2	Lessee:	: M/s Bhagwan Stone & Minerals, (Proprietor: Sri Bhagwan Bhagat)
3	Lease Address	: Mouza – Chagjo, Thana – Ranga District – Sahibganj, State – Jharkhand.
4	Lease Area	: Ha: 1.62 ha. Acres: 4.00 Ac.

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5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	68.20 Lakhs
7	EMP Budget	:	Capital: 7.00 Lakhs Recurring: 4.00 Lakh / year
8	CSR / CER Budget	:	Rs. 1.20 Lakhs
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 2,85,733 Tonnes: 7,71,479 Tonnes
11	Mine Life	:	5 years
12	Man power	:	32
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	:	Ganga River 15 KM
18	Nearest Habitation	:	Amdanda Village: 2.00 KM;
19	Nearest Rail Station	:	Barharwa - 6.00 KM
20	Nearest Air Port	:	Kolkata - 300 KM
21	Nearest Forest	:	Not within 250m
22	Road & Highways	:	NH 33 – 05.00 KM; (Barharwa – Rajmahal Road)

CO-ORDINATES

1	Latitude	From 24° 53' 33.71" N	To 24° 53' 39.69" N
2	Longitude	From 87° 44' 05.96" E	To 87° 44' 11.18" E

LAND DETAILS :

1.	Mouza	Khata No.	Plot No.
	Chagjo	02	09 (P)
		09	20 (P)
		08	21 (P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	Lol has been issued by District Mining Office, Sahibganj vide letter no. 911/M dated 04.09.2021.
2	CO	:	CO, Pathna vide letter no. 09(रतो), dated 04.11.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Sahibganj vide memo no. 915/M, dated 06.09.2021 certified that no other mine lease exists within 500 m radius from proposed

			project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1704, dated 30.09.2020 certified that the proposed project is outside Eco Sensitive Zone of Udhwa Lake Bird Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Sahibganj vide letter no. 2153, dated 15.09.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Sahibganj vide letter no. 1156/M, dated 29.11.2021 has informed that this project is part of District Survey Report (DSR) of Sahibganj district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 09.06.2021
8	Mine Plan Approval	:	DMO, Sahibganj vide Letter No. 1083/M, Sahibganj dated 03.11.2021.

Working Details

1	Mining Method	:	Opencast Mechanized.
2	Quarry Area	:	Plan period – 1.09 ha
3	Waste Generation	:	Plan period – 21493 m ³
4	Stripping Ratio	:	0.0753 (overall stripping ratio)
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m and 6 benches.
7	Elevation of Mine	:	150m AMSL
8	Ground Level Elevation	:	50m AMSL
9	Ultimate Working Depth	:	118 m AMSL
10	Water Table	:	46 m AMSL
11	Topography of Mine	:	Slope from West- West to North- East
12	Explosive Requirement	:	15,407 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	57,050	1,54,035	14,138	148 - 142
2 nd	57,057	1,54,054	3560	148 - 136
3 rd	57,052	1,54,040	-	136 - 124
4 th	57,037	1,54,000	3795	148 - 136

5 th	57,062	1,54,067	-	130 - 118
Total	2,85,258	7,70,196	21,493	

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	1.080	1.090	Water Body
2	Dump	0.00	0.150	0.150	Green Belt (Back Filled)
3	Office /Store	0.00	0.000	0.000	-
4	Crusher	0.00	0.000	0.000	-
5	Road	0.00	0.010	0.000	-
6	Safety Zone	0.00	0.380	0.380	Green Belt
7	Unutilized	1.620	0.000	0.000	-
	TOTAL	1.620	1.620	1.620	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone	: 0.38 ha	400 trees
2	Other Reclaimed Area	: NIL	NIL
3	Haul /Approach Road	: 0.100 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

- Overburden generated during mining operation will be stored in OB dump area and will be utilized for backfilling of mined out area in conceptual stage.

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.

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- 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.
- i. If any tree felling is required a permission should be taken from competent authority.

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During the presentation the following documents were sought :

- i. Land use table and the conceptual plan to be coherent with each other and accordingly the plan and the table to be revised & submitted.
- ii. The table providing details of project cost estimate is to be revised with detail break up.
- iii. Conceptual plan to be revised so that all features are to the scale.

The Project Authorities have submitted the above mentioned documents.

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 Chagjo Stone Mine of M/s Bhagwan Stone & Minerals, Village : Chagjo, Tehsil : Pathna, Dist. : Sahibganj, Jharkhand (1.62 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

3. Installation of 0.5 MTPA combi Mill (Special Bar Quality and Wire Rod Mill) with re-heating furnace and finishing line of M/s Indian Steel & Wire Products Limited at Ward no. : 19, Jamshedpur notified area committee of Jamshedpur, Distt. : East Singhbhum, Jharkhand.

(Proposal No. : SIA/JH/IND1 /411022 /2022)

Name of the consultant : Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar.

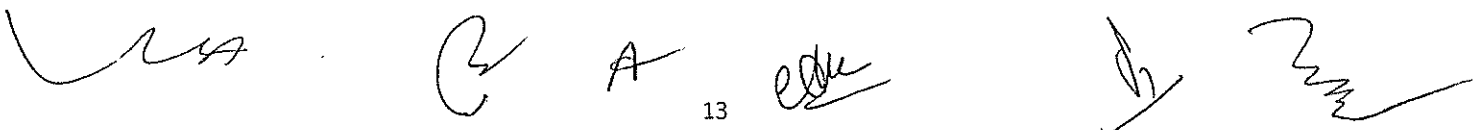
This is a new project which has been taken for appraisal on 09.01.2023.

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.

The present proposal is Greenfield Project for installation of 0.5 MTPA Combi Mill (Special Bar Quality and Wire Rod Mill) located in Khata no. 35, ward no. 19, Jamshedpur, District – East Singhbhum, Jharkhand by M/s The Indian Steel and Wire Products Limited (A Subsidiary of Tata Steel Limited).

The proposed project falls under Schedule 3 (a) "Metallurgical Industries", as Category B secondary metallurgical industry of the EIA notification 2006 and its amendments thereof.

The proposed combi mill will be located in Khata no. 35, Ward no. 19 of Jamshedpur Notified Area, District East Singhbhum, Jharkhand. The project lies in between latitude 22°46'7.356"N to 22°45'56.408"N and longitude 86°13'33.050"E to 86°13'33.033"E, details of the corner coordinates are as below:



Pt. no	Latitude	Longitude
1	22°46'7.356"	86°13'33.050"
2	22°45'58.262"	86°13'43.512"
3	22°45'48.997"	86°13'48.961"
4	22°45'47.568"	86°13'48.331"
5	22°45'49.081"	86°13'38.829"
6	22°45'50.374"	86°13'38.634"
7	22°45'51.243"	86°13'29.611"
8	22°45'54.684"	86°13'29.597"
9	22°45'54.684"	86°13'28.336"
10	22°45'56.708"	86°13'28.439"
11	22°45'56.408"	86°13'33.033"

Khata no. & Plot no. of the project :

Khata No.	Plot No.
35	360 (P), 367 (P), 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400 (P), 401 (P), 402, 405

Estimated cost for the proposed project is Rs. 1170 Crores. Employment Generation after the proposed project will be 385 direct employment and approximately 1000 people will be employed during the construction phase and will be recruited from the local areas nearby the project site. Raw material for the plant would be procured from Tata Steel Long Project (TSLP), GAIL & OEM.

The transportation of raw material and the final products will be done by existing roads adjacent to the project site. The capacity of different proposed units are as follows:

Unit	Capacity/Size (TPH)	Capacity/Size (TPA)*	No.
Billet Grinding Machine	16.4	130,000	1working+1future
Reheating Furnace	110	515464	1 set

Mill Strands	100	500000	1 set
Sizing Blocks	100	500000	1 set (bars), 1 set (wire rods)
Shears	--	--	5 nos.
Water Box	--	--	1 set
Bar Cooling Bed	--	78 m x 12 m	1 no.
Disk Saws	100	500000	2 nos.
Diverter	--	--	1 no.
Wire Rod Laying Head	100	500000	1 set
Wire Rod Coil Forming & Handling System	100	500000	1 set
In-line Profile Gauges	--	--	3 nos.
Bar Conditioning Line	25.25	200,000 TPA	1 set
Bar Unloading and Singling System, Bar Straightening Machine, Shot Blasting Machine, Chamfering and Facing Machine, UT & MFLT, Re-Conditioning, Bar Traceability, Bar Bundling and Dispatch.			
*As rolling ball bearing requires higher retention time, the production value will be less for the said period. Therefore, equipment of higher capacity has been proposed to achieve the proposed output.			

Total requirement of power is estimated as 31.65 MW. Power requirement will be sourced from TSUISL (previously JUSCO). DG Set of capacity 1250 MVA for meeting emergency requirement of the plant shall be obtained.

Total Raw material requirement after the proposed expansion of plant is given below :

Sl. No.	Name of Raw Material	Proposed Requirement (per day)	Total Requirement (per annum)	Source	Mode of Transport
Raw Materials					
1	Billets/Bloom	1562 T	515464 T	TSLP	Road
Fuel					
1	Natural Gas	76000 Nm ³	25 MCum	GAIL	Pipeline
Consumables & Others					
1	SS shots	0.3 T	100 TPA	OEM	Road
2	Mill Rolls	1.81 T	600 TPA		

3	Bearing and guides	--	3 Sets		
4	TC Rings	--	3 Sets		
5	Refractories	1.51 T	500 T		
6	Lubricant & Greases	0.18 KL	60 KL/Yr		
7	Shear Knives	0.02 T	7 TPA		
Reheating furnace shall be fired only by natural gas, LDO will be kept in backup for emergencies & start-up.					

The total water requirement after the proposed project will be 1709 KLD, 1684 KLD for industrial use and 25 KLD for domestic use. Water requirement will be met from TSUISL (previously JUSCO) supply line. Existing STP of Jemco, based on MBBR technology will be used for treatment of domestic sewage (approx. 20 KLD) and ETP of 350 KLD, based on DAF technology will be installed for treatment of industrial effluent (approx. 306 KLD) from the project.

The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Environment consultant Visiontek Consultancy Services Pvt. Ltd. (VCSPL) has been accredited by NABET, QCI as per the NABET Certificate No.: NABET/EIA/2023/RA 0209, dated 29.06.2021. – Valid up to 16th December 2023.

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Lease deed dated 01.06.1935 with Tata Iron and Steel Company Limited.
2	CO	:	The CO, Jamshedpur, East Singhbhum vide letter no. : 2358, dated 07.12.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. : 1735, dated 02.12.2022 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. : 2898, dated 30.11.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site. The additional comments given by the DFO, Dalma Elephant Project is not appropriate.

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 09, 10, 11, 12, 13 & 14.01.2023, the Committee recommends for issuing of TOR to SEIAA for

7	EMP Budget	:	Capital: Rs. 2.50 Lakhs	Recurring: Rs. 1.80 Lakhs/ year Monitoring cost: Rs. 0.60 Lakhs/year
8	CSR / CER Budget	:	Rs. 0.81 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 11187 Cu. M.	Tonnes: Nil
11	Mine Life	:	9.32 years ~ 9 Years Only	
12	Manpower	:	14 Person	
13	Water Requirement	:	3.15 KLD (Drinking: 0.40 KLD, Dust Suppression & Plantation: 1.50 KLD, Other: 1.25 KLD)	
14	Water Source	:	Supplied through authorized tankers	
15	DG Set / power	:	Not Applicable	
16	Crusher	:	Not Applicable	
17	Nearest Water Body	:	Hiru Nadi – 2.91 Km (NE) Lilajan Nadi – 4.38 Km (SW) Nala – 0.36 Km (SW)	
18	Nearest Habitation	:	Pundri 1.18 km SE direction from the mine site.	
19	Nearest Rail Station	:	Katkamsamdi Railway Station-30.60 Km (E)	
20	Nearest Airport	:	Birsra Munda Airport, Ranchi 101.06 km S direction from the mine site.	
21	Nearest Forest	:	Protected Forest – 0.26 Km Protected Forest – 1.51 Km (NW) Protected Forest – 1.10 Km (W) Simariya Protected Forest – 3.95 (SW)	
22	Road & Highways	:	Chatra – Simariya Road – 1.61 Km (W) NH -22 (Chatra - Chandwa Road) - 4.00 Km (W) direction from the mine site.	

CO-ORDINATES

1	Latitude	:	From 24° 08' 48.63"N	To 24°08' 54.33"N
2	Longitude	:	From 84° 53' 47.90"E	To 84° 53' 55.54"E

LAND DETAILS :

Khata No.	Plot No.
17	108
09	111, 120 & 128
07	112
02	118 & 121
23	126
01	129

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land agreement made.
2	CO	:	The CO, Chatra vide letter no. 817, dated 30.10.2019 has mentioned the plot no. of the project is not recorded as "Jangal Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Chatra vide memo no. 452, dated 27.04.2022 certified that no other lease exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1282, dated 02.07.2019 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Chatra South Forest Division vide letter no. 3364, dated 27.09.2018 certified that the distance of notified forest is 260 m from the project site.
6	DSR	:	The DC-cum-District Magistrate, Chatra vide letter no. 1230/Khanan, dated 14.12.2022 has informed that this project is part of District Survey Report (DSR) at Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 08.03.2022
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribagh vide letter no. G/2022-23-108, dated 26.06.2022.

WORKING DETAILS

1	Mining Method	:	Opencast Manual Mining
2	Quarry Area	:	5 years- 0.34 ha Life of Mine - 0.34 ha
3	Waste Generation	:	5 years- Nil Life of Mine - Nil
4	Stripping Ratio	:	NA
5	Working Days	:	200 days/year
6	Benches: size & No	:	1m x 1m
7	Elevation of Mine	:	In 470 MSL
8	Ground Level Elevation	:	In 468 MSL
9	Ultimate Working Depth	:	In 466 MSL
10	Water Table	:	In 440 MSL and also 5.0 - 10.0 m bgl

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11	Topography of Mine	:	Flat area
12	Explosive Requirement	:	Not applicable
13	Diesel/Fuel requirement	:	Not applicable due to manual mining

PRODUCTION DETAILS

Year	Production Bricks Clay in cum per Annum	Topsoil removable in cum for 5 years
1 st	1200	685
2 nd	1200	
3 rd	1200	
4 th	1200	
5 th	1200	
Total	6000	685

LAND USE

Category	Existing (Acres)	Existing (Ha.)	End of Plan Period (Acres)	End of Plan Period (ha.)	Conceptual Plan (ha.)
Quarry Area	0.00	0.00	0.85	0.34	(Converted to levelled land with topsoil spread)
Topsoil storage, Road/ Infrastr./etc.	0.00	0.00	0.14	0.06	
Safety Zone & Plantation	0.00	0.00	0.10	0.04	Area under plantation
Unutilized Area	2.51	1.02	1.42	0.58	-
Total Area	2.51	1.02	2.51	1.02	-

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	: 0.04 Ha	100
2	Other Reclaimed Area	: 0.000	000
3	Haul /Approach Road	: 0.18 Km	120 Tree both side approach road.

- 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

- Topsoil Generation will be 685 Cu.M. during the life of Mine. Topsoil storage area is 0.02 ha. The topsoil shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

1. Mining operation will be restricted to the depth of 2m from surface level.
2. Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

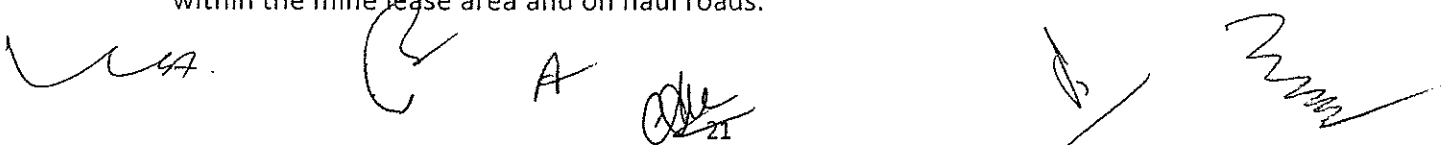
1. Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
2. Overloading of the truck / tractor trolleys will not be done.

As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

1. Carts or tractor-trolleys will be developed on village roads.
2. Tractors-trolleys will be well maintained and PUC certified.
3. Timely maintenance of vehicles and their silencers to minimize vibration and sound.
4. Minimum use of horns in the village area and silence zone (if any) as applicable.

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.
- i. If any tree felling is required permission should be taken from competent authority.

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 Pundri Brick Clay Mining Project of M/s M.S.C. Bricks (Prop. : Shri Om Prakash Gupta), Village : Pundri, Tehsil : Chatra, Distt. : Chatra, Jharkhand (1.02 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

5. Aguidangra Brick Soil Mining of M/s B.K.S. Bricks (Prop. : Shri Santosh Rajan), Village : Aguidangra, Tehsil : Patamda, Distt. : East Singhbhum, Jharkhand (1.39 Ha).

(Proposal No. SIA/JH/MIN/405812 /2022).

Name of the consultant : Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar.

This is a new project which has been taken for appraisal on 09.01.2023.

Applied Area : 3.43 Acres (1.39 Ha)
 Project Category : B2 – Application for Environment Clearance
 EC Application for : Soil 1200 m³/yr.
 6000 m³ during plan period
 Topsoil 750 m³ during plan period.
 DG Set Not proposed
 Mobile Crusher is Not proposed

Project and Location Details:

Sl.	Parameter	Details	
1	Project Name	: Aguidangra Brick Soil Deposit	
2	Lessee:	: M/s B.K.S Bricks, Proprietor- Mr. Santosh Rajan	
3	Lease Address	: Village–Aguidangra, P.S. – Patamda, District – East Singhbhum, Jharkhand.	
4	Lease Area	: Ha: 1.39	Acres: 3.43
5	Type of Land	: Non-Forest – Rayati Land	
6	Project Cost	: Rs. 16.00 Lakhs	
7	EMP Budget	: Capital: Rs. 3.10 Lakhs	Recurring: Rs. 1.80 Lakhs/ year Monitoring cost: Rs. 0.60

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			Lakhs/year
8	CSR / CER Budget	:	Rs. 0.80 Lakhs
9	New or Expansion	:	New
10	Mineable Reserves	:	Cu.M.: 19854 Cu. M. Tonnes: Nil
11	Mine Life	:	16.6 years ~ 15 Years Only
12	Manpower	:	18 Person
13	Water Requirement	:	4.88 KLD (Drinking: 1.10 KLD, Dust Suppression & Plantation: 1.00 KLD, Other: 2.78 KLD)
14	Water Source	:	Supplied through authorized tankers
15	DG Set / power	:	Not Applicable
16	Crusher	:	Not Applicable
17	Nearest Water Body	:	Sona Nadi – 2.21 Km (W)
18	Nearest Habitation	:	Aguidangra 0.90 km SW direction from the mine site.
19	Nearest Rail Station	:	Tatanagar Railway Station-26.05 Km (SW)
20	Nearest Airport	:	Birsa Munda Airport, Ranchi 116.80 km NW direction from the mine site.
21	Nearest Forest	:	Mathurapur PF – 1.93 Km SE Bandih PF – 3.2 Km SE Jadukuli PF – 4.4 Km W Dighi PF – 3.6 Km W Eherua PF - 4.7 Km SW Patamda PF – 4.1 Km S
22	Road & Highways	:	MDR Road - 1.09 Km E NH 33 – 15.75 Km SW mine site.

CO-ORDINATES

1	Latitude	:	From 22°55'43.14" N	To 22°55'48.03" N
2	Longitude	:	From 86°23'14.13" E	86°23'20.56" E

LAND DETAILS :

Khata No.	Plot No.
634	1365


STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land agreement made.
2	CO	:	The CO, Patamda vide letter no. 266, dated 02.04.2022 has mentioned the plot no. of the project is not recorded as "Jangal Jhari" in Khatian.
3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 583/Khanan,

			dated 12.07.2022 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 71, dated 24.01.2022 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 1946, dated 22.08.2022 certified that the distance of reserved / protected forest is more than 250 m from the project site.
6	DSR	:	The District Magistrate & DC, East Singhbhum, Jamshedpur vide letter no. 29/Khanan, dated 05.01.2023 has informed that this project is part of District Survey Report (DSR) at East Singhbhum district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 25.12.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. 27/G, dated 31.01.2022.

WORKING DETAILS

1	Mining Method	:	Opencast Manual Mining
2	Quarry Area	:	5 years– 0.38 ha Life of Mine – 0.38 ha
3	Waste Generation	:	5 years–Nil Life of Mine –Nil
4	Stripping Ratio	:	NA
5	Working Days	:	200 days/year
6	Benches: size & No	:	1m x 1m
7	Elevation of Mine	:	In 255 MSL
8	Ground Level Elevation	:	In 252 MSL
9	Ultimate Working Depth	:	In 250 MSL
10	Water Table	:	In 245 MSL and also 5.0 – 7.0 m bgl
11	Topography of Mine	:	Flat area
12	Explosive Requirement	:	Not applicable
13	Diesel/Fuel requirement	:	Not applicable due to manual mining








PRODUCTION DETAILS

Year	Production Bricks Clay in cum per Annum	Topsoil removable in cum for 5 years
1 st	1200	750
2 nd	1200	
3 rd	1200	
4 th	1200	
5 th	1200	
Total	6000	750

LAND USE

Category	Existing (Acres)	End of Plan Period (Acres)	End of Plan Period (ha.)	Conceptual Plan (Acres.)
Mining Activity	0.00	0.94	0.38	2.80
Safety Zone (2)/ (Berm area)	0.00	0.27	0.11	0.27
Top Soil Storage/haul road	0.00	0.04	0.02	0.00
Tem. Rest House Infrastructure etc	0.00	0.36	0.14	0.36
Unutilized Area	3.43	1.82	0.74	0.00
Total Area	3.43	3.43	1.39	3.43

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	: 0.002 Ha	50
2	Other Reclaimed Area	: 0.000	000
3	Haul /Approach Road	: 0.21 Km	134 Tree both side approach road.

- 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

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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

- Topsoil Generation will be 750 Cu.M. during the life of Mine. Topsoil storage area is 0.02 ha. The topsoil shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

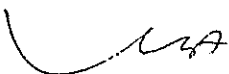
1. Mining operation will be restricted to the depth of 2m from surface level.
2. Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

1. Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
2. Overloading of the truck / tractor trolleys will not be done.
3. As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:
4. Carts or tractor-trolleys will be developed on village roads.
5. Tractors-trolleys will be well maintained and PUC certified.
6. Timely maintenance of vehicles and their silencers to minimize vibration and sound.
7. Minimum use of horns in the village area and silence zone (if any) as applicable.

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.
- i. If any tree felling is required permission should be taken from competent authority.

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 Aguidangra Brick Soil Mining of M/s B.K.S. Bricks (Prop. : Shri Santosh Ranjan), Village : Aguidangra, Tehsil : Patamda, Distt. : East Singhbhum, Jharkhand (1.39 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

- 6. Bhandaria Brick Clay Mining Project of M/s Ambey Construction (Prop. : Mr. Partha Pratim Shaw), Village : Bhandaria, Tehsil : Bahargora, Distt. : East Singhbhum, Jharkhand (1.32 Ha).

(Proposal No. SIA/JH/MIN/404537 /2022).

Name of the consultant : Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar.

This is a new project which has been taken for appraisal on 09.01.2023.

Applied Area : 3.27 Acres (1.32 Ha)

Project Category : B2 – Application for Environment Clearance

EC Application for : Soil 2400 m³/yr.

6000 m³ during plan period

Topsoil 2186 m³ during plan period.

DG Set Not proposed

Mobile Crusher is Not proposed

Project and Location Details :

Sl.	Parameter	Details	
1	Project Name	: Bhandaria Brick Soil Deposit	
2	Lessee:	: M/s Ambey Construction, Proprietor- Mr. Partha Pratim Shaw	
3	Lease Address	: Vill. -Bhandaria, P.S- Ghatsila, District – East Singhbhum, Jharkhand.	
4	Lease Area	: Ha: 1.32	Acres: 3.27
5	Type of Land	: Non-Forest – Rayati Land	
6	Project Cost	: Rs. 14.89 Lakhs	

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7	EMP Budget	:	Capital: Rs. 3.25 Lakhs	Recurring: Rs. 1.80 Lakhs/ year Monitoring cost: Rs. 0.60 Lakhs/year
8	CSR / CER Budget	:	Rs. 0.80 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 20792 Cu. M.	Tonnes: Nil
11	Mine Life	:	8.5 years	
12	Manpower	:	17 Person	
13	Water Requirement	:	Total Water Requirement will be 3.98 KLD Drinking water from Bore well – 0.34 KLD Process & other requirements from nearby Pond/River – 1.0 KLD and for Greenbelt & Dust Suppression – 2.64 KLD	
14	Water Source	:	Supplied through authorized tanker	
15	DG Set / power	:	Not Applicable	
16	Crusher	:	Not Applicable	
17	Nearest Water Body	:	Subarnarekha River – 0.98 Km S	
18	Nearest Habitation	:	Raghunathpur – 450 m N direction from the mine site.	
19	Nearest Rail Station	:	Kokpara Railway Station – 27.52 Km N	
20	Nearest Airport	:	Birsa Munda Airport (Ranchi) –185.34 Km (NW)direction from the mine site.	
21	Nearest Forest	:	Chandua RF - 3.4 Km S	
22	Road & Highways	:	NH -6 – 1.68 Km (E)	

CO-ORDINATES

1	Latitude	:	From 22°13'46.68" N	To 22°13'52.47" N
2	Longitude	:	From 86°41'56.92" E	To 86°42'01.22" E

LAND DETAILS :

Khata No.	Plot No.
80	46
44	50, 54 & 137
60	47 & 53
29	48 & 140
30	139
46	57 & 136
47	55, 56 & 58
45	135
104	145 (P)
52	49, 52 & 138

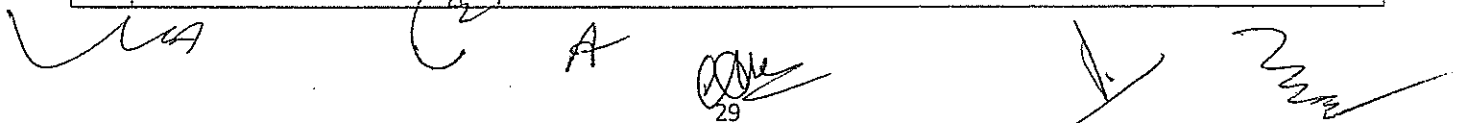


STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land agreement made.
2	CO	:	The CO, Bahragora vide letter no. 745, dated 28.10.2021 has mentioned the plot no. of the project is not recorded as "Jangal Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 1377/Khanan, dated 08.11.2021 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 1938, dated 13.12.2021 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 3189, dated 06.12.2021 certified that the distance of reserved / protected forest is more than 250 m from the project site.
6	DSR	:	The District Magistrate & DC, East Singhbhum, Jamshedpur vide letter no. 29/Khanan, dated 05.01.2023 has informed that this project is part of District Survey Report (DSR) at East Singhbhum district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 23.11.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. 748/G, dated 01.11.2021.

WORKING DETAILS

1	Mining Method	:	Opencast Manual Mining
2	Quarry Area	:	5 years- 0.688 ha Life of Mine - 0.688 ha
3	Waste Generation	:	5 years- Nil Life of Mine - Nil
4	Stripping Ratio	:	NA
5	Working Days	:	200 days/year
6	Benches: size & No	:	1m x 1m
7	Elevation of Mine	:	In 60 MSL
8	Ground Level Elevation	:	In 60 MSL
9	Ultimate Working Depth	:	In 58 MSL
10	Water Table	:	In 53 MSL and also 5.0 - 7.0 m bgl
11	Topography of Mine	:	Flat area



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12	Explosive Requirement	:	Not applicable
13	Diesel/Fuel requirement	:	Not applicable due to manual mining

PRODUCTION DETAILS

Year	Production Bricks Clay in cum per Annum	Topsoil removable in cum for 5 years
1 st	2400	2186
2 nd	2400	
3 rd	2400	
4 th	2400	
5 th	2400	
Total	12000	2186

LAND USE

Category	Existing (Acres)	End of Plan Period (Acres)	End of Plan Period (ha.)	End of Mine Life (Acres)	Conceptual Plan (Acres.)
Quarry Area	0.00	1.70	0.688	1.27	2.97
Topsoil storage, Road/ Infrastr./etc.	0.00	0.05	0.02	0.00	0.30
Berm Area & Plantation	0.00	0.30	0.121	0.00	0.00
Unutilized Area	3.27	1.22	0.493	0.00	0.00
Total Area	3.27	3.27	1.32	1.27	3.27

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.121 Ha	300
2	Other Reclaimed Area	:	0.000	000
3	Haul /Approach Road	:	0.20 Km	134 Trees both side approach road.

- 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

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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

- Topsoil Generation will be 2186 Cu.M. during the life of Mine. Topsoil storage area is 0.02 ha. The topsoil shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

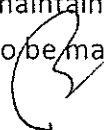
1. Mining operation will be restricted to the depth of 2m from surface level.
2. Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

1. Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
2. Overloading of the truck / tractor trolleys will not be done.
3. As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:
 4. Carts or tractor-trolleys will be developed on village roads.
 5. Tractors-trolleys will be well maintained and PUC certified.
 6. Timely maintenance of vehicles and their silencers to minimize vibration and sound.
 7. Minimum use of horns in the village area and silence zone (if any) as applicable.

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.



i. If any tree felling is required permission should be taken from competent authority.

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 Bhandaria Brick Clay Mining Project of M/s Ambey Construction (Prop. : Mr. Partha Pratim Shaw), Village : Bhandaria, Tehsil : Bahargora, Distt. : East Singhbhum, Jharkhand (1.32 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

7. Kharswati Brick Soil Mining of M/s B.M.B. Bricks (Prop. : Shri Subhas Gorai), Village : Kharswati, Tehsil : Ghatsila, Distt. : East Singhbhum, Jharkhand (0.95 Ha).

(Proposal No. SIA/JH/MIN/404394 /2022.)

Name of the consultant : Visiontek Consultancy Services Pvt. Ltd., Bhubaneswar.

This is a new project which has been taken for appraisal on 09.01.2023.

Applied Area : 2.35 Acres (0.95 Ha)

Project Category : B2 – Application for Environment Clearance

EC Application for : Soil 1200 m³/yr.

6000 m³ during plan period

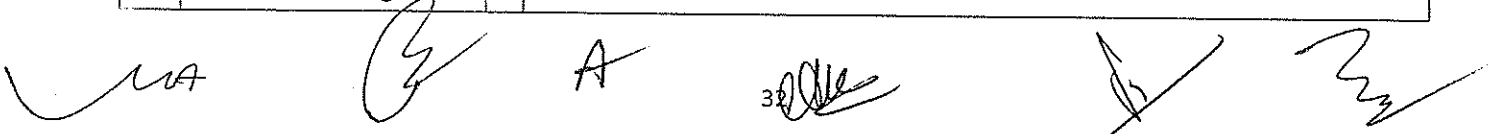
Topsoil 710 m³ during plan period.

DG Set Not proposed

Mobile Crusher is Not proposed

Project and Location Details :

Sl.	Parameter	Details	
1	Project Name	: Kharswati Brick Soil Deposit	
2	Lessee:	: M/s B.M.B. Bricks, Proprietor- Mr. Subhas Gorai	
3	Lease Address	: Village–Kharswati, P.S.–Ghatsila, District – East Singhbhum, Jharkhand.	
4	Lease Area	: Ha: 0.95	Acres: 2.35
5	Type of Land	: Non-Forest – Rayati Land	
6	Project Cost	: Rs. 13.50 Lakhs	
7	EMP Budget	: Capital: Rs. 2.75 Lakhs	Recurring: Rs. 1.70 Lakhs/ year Monitoring cost: Rs. 0.60 Lakhs/year
8	CSR / CER Budget	: Rs. 0.67 Lakhs	



9	New or Expansion	:	New
10	Mineable Reserves	:	Cu.M.: 13696 Cu. M. Tonnes: Nil
11	Mine Life	:	11 Years Only
12	Manpower	:	12 Person
13	Water Requirement	:	2.89 KLD (Drinking: 0.24 KLD, Dust Suppression & Plantation: 1.9 KLD, Other: 0.75 KLD)
14	Water Source	:	Supplied through authorized tankers
15	DG Set / power	:	Not Applicable
16	Crusher	:	Not Applicable
17	Nearest Water Body	:	Subarnarekha – 9.09 Km (SW)
18	Nearest Habitation	:	Kharswati 0.92 km NE direction from the mine site.
19	Nearest Rail Station	:	Ghatsila Railway Station – 8.37 Km SW
20	Nearest Airport	:	Birsa Munda Airport (Ranchi) –146 Km (NW)
21	Nearest Forest	:	Kharikashol Protected Forest – 1.93 Km (NW) Mahishduba Protected Forest – 2.64 Km (NW) Bhaduya Protetced Forest – 2.87 Km (NW) Makuli Jangli Reserved Forest – 5.34 Km NW
22	Road & Highways	:	NH -33 (Jamshedpur - Ghatsila) – 7.46 Km (SW) direction from the mine site.

CO-ORDINATES

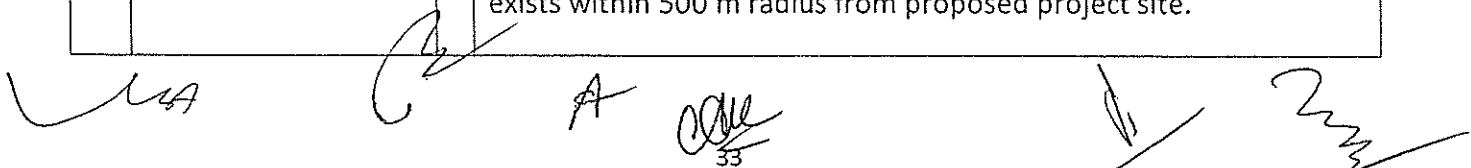
1	Latitude	:	From 22° 37'33.48" N To 22° 37'42.73" N
2	Longitude	:	From : 86° 32' 55.88"E To 86°32'59.12"E

LAND DETAILS :

Khata No.	Plot No.
174	844

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land agreement made.
2	CO	:	The CO, Ghatsila vide letter no. 981, dated 04.12.2021 has mentioned the plot no. of the project is not recorded as "Jangal Jhari" in Khatian.
3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 1543/Khanan, dated 17.12.2021 certified that 01 other lease area (1.14 acre) exists within 500 m radius from proposed project site.



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4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 1978, dated 20.12.2021 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 3188, dated 06.12.2021 certified that the distance of reserved / protected forest is more than 250 m from the project site.
6	DSR	:	The District Magistrate & DC, East Singhbhum, Jamshedpur vide letter no. 29/Khanan, dated 05.01.2023 has informed that this project is part of District Survey Report (DSR) at East Singhbhum district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Ghatsila vide letter no. 2026, dated 02.12.2021 informed that Gram Sabha conducted on 02.11.2021.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. 766/G, dated 20.11.2021.

WORKING DETAILS

1	Mining Method	:	Opencast Manual Mining
2	Quarry Area	:	5 years-- 0.348 ha Life of Mine – 0.348 ha
3	Waste Generation	:	5 years--Nil Life of Mine –Nil
4	Stripping Ratio	:	NA
5	Working Days	:	200 days/year
6	Benches: size & No	:	1m x 1m
7	Elevation of Mine	:	In 130 MSL
8	Ground Level Elevation	:	In 127 MSL
9	Ultimate Working Depth	:	In 125 MSL
10	Water Table	:	In 120 MSL and also 5.0 – 7.0 m bgl
11	Topography of Mine	:	Flat area
12	Explosive Requirement	:	Not applicable
13	Diesel/Fuel requirement	:	Not applicable due to manual mining

PRODUCTION DETAILS

Year	Production Bricks Clay in cum per Annum	Topsoil removable in cum for 5 years
1 st	1200	710

2 nd	1200	
3 rd	1200	
4 th	1200	
5 th	1200	
Total	6000	710

LAND USE

Category	Existing (Acres)	Existing (Ha)	End of Plan Period (Acres)	End of Plan Period (ha.)	Conceptual Plan (ha.)
Quarry Area	0.00	0.00	0.86	0.348	(Converted to levelled land with topsoil spread)
Topsoil storage, Road/ Infrastr./etc.	0.00	0.00	0.05	0.02	
Berm Area & Plantation	0.00	0.00	0.30	0.121	Area under plantation
Unutilized Area	2.35	0.95	1.14	0.461	-
Total Area	2.35	0.95	2.35	0.95	-

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	: 0.12 Ha	300
2	Other Reclaimed Area	: 0.000	000
3	Haul /Approach Road	: 0.24 Km	140 Tree both side approach road.

- 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

- Topsoil Generation will be 710 Cu.M. during the life of Mine. Topsoil storage area is 0.02 ha. The topsoil shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

1. Mining operation will be restricted to a depth of 2m from the surface level.

2. Quality of the dug well will be monitored, in order to ensure the quality of water is not affected.

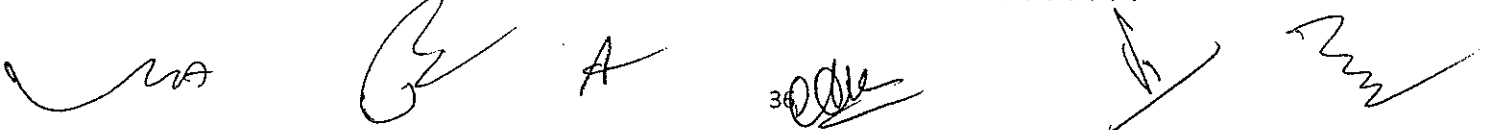
Air and Noise Pollution Control Measures:

1. Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
2. Overloading of the truck/tractor trolleys will not be done.
3. As the only impact is due to the transportation of soil through village roads, emphasis will be given on the following points:
 4. Carts or tractor-trolleys will be developed on village roads.
 5. Tractors-trolleys will be well maintained and PUC certified.
 6. Timely maintenance of vehicles and their silencers to minimize vibration and sound.
 7. Minimum use of horns in the village area and silence zone (if any) as applicable.

Undertaking submitted affirming:

- a. Groundwater will be used only for domestic purposes 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 the future.
- c. If any changes are noticed in the 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 environmental 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 machinery/equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling is required permission should be taken from competent authority.

-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 Kharswati Brick Soil Mining of M/s B.M.B. Bricks (Prop. : Shri Subhas Gorai), Village : Kharswati, Tehsil : Ghatsila, Distt. : East Singhbhum, Jharkhand (0.95 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

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Day 2 : January 10th , 2023 [Tuesday]

Consideration of Proposals

1. Chatak Stone Mine of M/s Rishi Construction and Supplier (Prop. : Shri Chhotelal Mahto), Mouza : Chatak, Thana no. : 136, Thana : Rajrappa, Distt. : Ramgarh, Jharkhand (0.97 Ha).

(Proposal No. SIA/JH/MIN/408681 /2022).

Name of the consultant: Oceao-Enviro Management Solutions (India) Pvt. Ltd., Ghaziabad, Uttar Pradesh.

This is a new project which has been taken for appraisal on 10.01.2023.

Project Category: B2 – Application for Stone Quarry

EC Application for: Boulder Stone: 16068 Cu.M. Per Annum / 44990 Ton Per Annum

Crusher not proposed in Applied Area

DG Set: Not Requirement

Mobile Crusher: NA

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Chatak Stone Mine Of M/S Rishi Construction And Supplier
2	Director:	: Shri Chhotelal Mahto
3	Lease Address	: Village/Mauza– Chatak, Thana no.- 136, Thana- Rajrappa , District- Ramgarh; State Jharkhand
4	Lease Area	: Ha: 0.97 Acres: 2.40 Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: 33.50 Lakhs
7	EMP Budget	: Capital: 4.01 Lakhs Recurring: 3.0 Lakh / year
8	New or Expansion	: New
9	Mineable Reserves	: Cu.M.: 162246 Cu. M. Tonnes: 454288 Tonnes
10	Mine Life	: 10 years
11	Man power	: 19
12	Water Requirement	: Total water requirement is about 11.57KLD, Drinking water (human) about 0.57, water sprinkling (Source-Near Canal/Water Tanker) about 5, Plantation about 6 KLD
13	Water Source	: The drinking water will be available from nearby village by tractor tank manually by labors at the site.
14	DG Set / power	: Required
15	Crusher	: No

16	Nearest Water Body	:	Subarnarekha River about 8.25 Km in S direction
17	Nearest Habitation	:	Chatak about 0.70 km in NE direction
18	Nearest Rail Station	:	Mael Railway Station is about 6.8 Km in N direction.
19	Nearest Air Port	:	Bisra munda airport ranchi is about 32.16 km in SW direction
20	Nearest Forest	:	PF is about 1.1 Km in SSE direction
21	Road & Highways	:	NH-320 is 4.52 km in SE direction

CO-ORDINATES





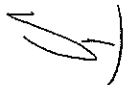
1	Latitude	:	From 23°31'35.09"N	To 23°31'33.60"N
2	Longitude	:	From 85°35'0.96"E	To 85°35'1.85"E

LAND DETAILS :

Khata No.	Plot No.
34	678
61	672, 669, 676, 677, 674 & 673

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (Lol) has been issued by DMO, Ramgarh vide memo no. 962/Khanan, dated 10.11.2020.
2	CO	:	The CO, Dulmi (Ramgarh) vide letter no. : 206, dated 22.05.2019 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatian.
3	DMO	:	DMO, Ramgarh vide memo no. 131/Khanan, dated 05.03.2022 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. : 2196, dated 06.12.2021 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Ramgarh Forest Division vide letter no. : 636, dated 25.03.2022 certified that the distance of notified forest is 460 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Ramgarh vide letter no. 1406/Khanan, dated 14.12.2021 has informed that this project is part of District Survey Report (DSR) of Ramgarh district and accordingly necessary action with regard to Environmental

			Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 26.11.2018.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide memo no. 50/G, dated 15.02.2022.

Working Details

1	Mining Method	:	MECHANIZED
2	Quarry Area	:	0.97 ha Life of Mine – 10 years
3	Waste Generation	:	5 years–00 Cu.M
4	Stripping Ratio	:	1:0.01
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	409 In AMSL
8	Ground Level Elevation	:	406 m In AMSL
9	Ultimate Working Depth	:	389 AMSL
10	Water Table	:	382 m AMSL
11	Topography of Mine	:	Uneven land
12	Explosive Requirement	:	10 Kg/Day
13	Diesel/Fuel requirement	:	238.8 KL/year (796 Liters/day)

Production Details

Year	Generation of waste/O.B in Ton	Production of stone in (Cum)	Production of stone in (Ton)
1st	2621	16068	44990
2nd	1255	16036	44901
3rd	00	16056	44957
4th	00	16060	44968
5th	00	16058	44962
Total	3876	80278	224778

Land Use

LAND USE PATTERN			
Category	Existing	First to Fifth years	After life of mine
	Area in Hectares	Area in Hectares	Area in Hectares
Quarry	0.00	0.39	0.55ha (convert as water reservoir)

Haul Road	0.00	0.02	0.00
Proposed Crusher	0.00	0.00	0.00
Green belt in Safety Barrier	0.00	0.42	0.42
Dump with Parapet wall & Garland drain	0.00	0.14	Nil (waste dump to be removed and backfilled)
Total area in use	0.00	0.97	0.97
Balance unused area	0.97	0.00	0.00
Balanced used area	0.00	0.00	0.00
Total existing Area	0.97	0.97	0.97

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.42 Ha	672 trees @ 1600 trees per ha
2	Other Reclaimed Area	:	NIL	NIL
3	Haul /Approach Road	:	NIL	NIL

- 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 10% Mine waste will be generated, 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 07 m 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.
- i. If any tree felling is required permission should be taken from competent authority.

During the presentation the following documents were sought :

- i. Updated presentation (after incorporating the changes in slide no. 1, 26, 28, 36, 37 & 43).
- ii. Environmental management plan to be revised.

10	Mineable Reserves	:	Cu.M.: 199188 Cu. M.	Tonnes: 577645 Tonnes
11	Mine Life	:	10 years	
12	Man power	:	17	
13	Water Requirement	:	Total water requirement is about 6.51, Drinking water (human) about 0.51, water sprinkling (Source-Near Canal/Water Tanker) about 3.0, Plantation about 3.0	
14	Water Source	:	The drinking water will be available from nearby village by tractor tank manually by labors at the site.	
15	DG Set / power	:	Required	
16	Crusher	:	Yes	
17	Nearest Water Body	:	N/A	
18	Nearest Habitation	:	Lalgara village about 1.23km km in WNW direction	
19	Nearest Rail Station	:	Japla Railway Station is about 42.86 km in WNW direction.	
20	Nearest Air Port	:	Daltonganj Airport is about 47.08 km in SSW direction	
21	Nearest Forest	:	NIL	
22	Road & Highways	:	NH-139 is 17.90 km in WNW direction	

CO-ORDINATES

1	Latitude	:	From 24°21'33.78"N	To 24°21'33.35"N
2	Longitude	:	From 84°22'47.46"E	To 84°22'44.68"E

LAND DETAILS

1	Mouza : Lalgara	Khata No : 09	Plot No : 1110 (P)
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STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Palamu, Medininagar vide letter no. 2673/M, Dated 22.10.2022
2	CO	:	The CO, Naudiha Bazar, Palamu vide letter No 35, Dated 10.07.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Palamu vide memo no. 3453/M, dated 30.12.2022 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 351, Dated 12.04.2022 certified that the proposed project site is outside Eco Sensitive Zone.







5	DFO Forest Distance	:	DFO, Medininagar Forest Division vide Letter No: 3904, dated 30.10.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Palamu, Medininagar vide letter No. 3087, Dated 01.12.2022 has informed that this project is part of District Survey Report (DSR) of Palamu district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Naudiha Bazar, Palamu vide letter no. 555, dated 28.09.2022 has informed that Gram Sabha conducted on 23.09.2022
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Memo No- 333, Hazaribagh, Dated 26.10.2022

Working Details

1	Mining Method	:	Open cast mechanized mine
2	Quarry Area	:	1.06 ha Life of Mine – 10 years
3	Waste Generation	:	5 years–00 Cu.M
4	Stripping Ratio	:	1:0.01
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	295 In AMSL
8	Ground Level Elevation	:	291 m In AMSL
9	Ultimate Working Depth	:	276 AMSL
10	Water Table	:	251 m AMSL
11	Topography of Mine	:	Uneven land
12	Explosive Requirement	:	13 Kg/Day
13	Diesel/Fuel requirement	:	238.8 KL/year (796 Liters/day)

Production Details

Year	Generation of waste/O.B in Ton	Production of stone in (Cum)	Production of stone in (Ton)
1st	1124	19856	57582
2nd	00	19899	57707
3rd	00	19894	57693
4th	00	19924	57780
5th	00	19899	57707

Total	1124	99472	288469
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Land Use

LAND USE PATTERN			
Category	Existing	First to Fifth years	After life of mine
	Area in Hectares	Area in Hectares	Area in Hectares
Quarry	0.00	0.66	0.72(rain water harvesting)
Haul Road	0.00	0.01	0.00
Proposed Crusher	0.00	0.05	Remove from Lease Area
Green belt in Safety Barrier	0.00	0.34	0.34
Dump with Parapet wall & Garland drain	0.00	0.00	0.00
Total area in use	0.00	1.06	1.06
Balance unused area	0.00	0.00	0.00
Balanced used area	0.00	0.00	0.00
Total existing Area	1.06	1.06	1.06

ENVIRONMENT MANAGEMENT

Green Belt Development







SL	LOCATION	Area/Length	No of Trees
1	Safety Zone	: 0.34 Ha	544 trees @ 1600 trees per ha
2	Other Reclaimed Area	: NIL	NIL
3	Haul /Approach Road	: 0.04	64 Plants on both sides – 150 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

- There is waste to be generated 10% Mine waste will be generated, 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 25m 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.
- i. If any tree felling is required permission should be taken from competent authority.

During the presentation the following documents were sought :

- i. Updated presentation (after incorporating the changes in slide no. 1, 26, 28, 36, 37 & 43).
- ii. Environmental management plan to be revised.
- iii. Calculation of the capacity of the water reservoir in the lease area to be provided.
- iv. No. of trees to be planted along the haul road to be provided.

The Project Authorities have submitted the above mentioned documents.

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 Lalgara Stone Mine of M/s Om Mines, Mouza : Lalgara, Thana no. : 410, Thana : Naudiha Bazar, Distt. : Palamu, Jharkhand (1.06 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

3. **Bhuinya Sagatu – Bamhan Sagatu Stone Deposit of M/s New India Industries (Partners : Md. Abid Husain & Sri Shekhar Mishra), Village : Bhuinya Sagatu – Bamhan Sagatu, Circle : Gola, Distt. : Ramgarh, Jharkhand (2.70 Ha).**

(Proposal No. SIA/JH/MIN/409182 /2022).

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 60069.45 cu.m/annum or 150173.625 TPA

Name of the consultant : P & M Solution, Noida, Uttar Pradesh.

This is a new project which has been taken for appraisal on 10.01.2023.



Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Bhuinya Sagatu - Bamhan Sagatu Stone Deposit
2	Lessee:	: M/S NEW INDIA INDUSTRIES, Partners -

		1. Md. Abid Husain 2. Sri Shekhar Mishra
3	Lease Address	: M/S NEW INDIA INDUSTRIES, Partners - 1. Md. Abid Husain, At- Gandhoniya, P.O.- Boko, P.S.- Bagodar, District- Giridih, Jharkhand 2. Sri Shekhar Mishra, At- Pathaldiha, P.O.- Barwadih, P.S.- Bagodar, District- Ramgarh, Jharkhand
4	Lease Area	: 2.70 ha Acres- 6.67 Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: Rs. 60 Lakhs
7	EMP Budget	: Capital: 6.95 Lakhs Recurring: 3.77 Lakh / year
8	CSR / CER Budget	: Rs. 1.20 Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: cum.: 277963.84 cum Tonnes: 750502.375 tons
11	Mine Life	: 4.99 ~ 05 years
12	Man power	: 17
13	Water Requirement	: 11.60 KLD(Drinking: 0.17 KLD, Dust Suppression: 6.98 KLD, Plantation: 4.50 KLD)
14	Water Source	: From Nearby villages by tankers
15	DG Set / power	: -
16	Crusher	: No crusher
17	Nearest Water Body	: Bhera River - Approx 8.30 km towards WNW direction of mine site.
18	Nearest Habitation	: Bhuinya Sagatu, at 380 meters
19	Nearest Rail Station	: Gola Railway station, approx. 11.60 km towards SW direction.
20	Nearest Air Port	: Birsa Munda Airport, approx. 60.10 km towards SW direction.
21	Nearest Forest	: Fairly Dense Mixed Jungle - Approx 1.90 km towards SE direction of mine site. Open Jungle - Approx 2.80 km towards NE direction of mine site. Dense Mixed Jungle - Approx 4.40 km towards NW direction of mine site.
22	Road & Highways	: NH- 320, Approx. 2.50 km in East direction.

CO-ORDINATES

1	Latitude	From 23°36'25.30" N	To 23°36'30.70" N
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2	Longitude	From 85°47'16.10" E	To 85°47'26.10" E
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LAND DETAILS :

Khata No.	Plot No.
9	41 (P)
17	537 (P)
29	532
44	535

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Ramgarh vide memo no. 1020/Khanan, dated 29.10.2022.
2	CO	:	The CO, Gola (Ramgarh) vide letter no. : 1047, dated 26.07.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Ramgarh vide memo no. 1036/Khanan, dated 03.11.2022 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. : 2537, dated 17.12.2022 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Ramgarh Forest Division vide letter no. : 1135, dated 06.06.2022 certified that the distance of notified forest is 280 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Ramgarh vide letter no. 1116/Khanan, dated 18.11.2022 has informed that this project is part of District Survey Report (DSR) of Ramgarh district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Gola (Ramgarh) vide letter no. 1273, dated 05.09.2022 has informed that Gram Sabha conducted on 05.09.2022.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide memo no. 371, dated 30.10.2022.

Working Details

1	Mining Method	:	Opencast other than fully mechanized (OTFM) Method
2	Quarry Area	:	2.70 ha. Or 6.67 Acres
			Life of Mine – 4.99 ~ 5 Years
3	Waste Generation	:	15800.05 cum or 39500.125 tons
4	Stripping Ratio	:	1: 0.01
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	332 AMSL to 340 AMSL
8	Ground Level Elevation	:	332 AMSL
9	Ultimate Working Depth	:	316 AMSL
10	Water Table	:	209 AMSL (10mbgl)
11	Topography of Mine	:	Area represents undulating topography
12	Explosive Requirement	:	8kg/day
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Production of stone (cum)	Production of stone (tons)	Bench RL in Meters
1 st	60016.25	150040.625	334mRL - 340mRL
2 nd	60011.50	150028.750	328mRL - 334mRL
3 rd	60040.00	150100.000	322mRL - 328mRL
4 th	60063.75	150159.375	316mRL - 322mRL
5 th	60069.45	150173.625	310mRL - 316mRL
Total	300200.95	750502.375	

Land Use

Type of Land Use	Existing (ha)	During Plan Period (ha)	During Conceptual Period/after closure of mines (ha)
Excavation	--	2.0	2.0 (1.030 ha area shall be left as Water Reservoir for Rain Water Harvesting, 0.97 ha. shall be dead bench plantation)

Road	--	--	--
Waste Dump	--	--	--
Safety Zone (Plantation)	--	0.700 (Within Safety Zone)	0.700 (Within Safety Zone)
Total	--	2.70	2.70
Untouched Area	2.70	-	-
Total Lease Hold Area	2.70	2.70	2.70

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.700 ha	1750
2	Along Approach Road	0.580 km	580

- 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 15800.05 cum or 39500.125 tons waste during the plan period will be generated. Part of the waste shall be utilized for maintenances of the village road and making of approach road, haul road etc. and part of the waste shall be temporary dump in the western side of the applied 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 suspendedparticles in the pit. Pump having required capacity will be installed to liftaccumulated 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 becollected in garland drain and allowed to settle in a small pit for settling suspendedparticles 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

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- 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.
- i. If any tree felling is required permission should be taken from competent authority.

During the presentation the following documents were sought :

- i. Green belt table to be revised, specifying the no. of trees to be planted.

The Project Authorities have submitted the above mentioned document.

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 Bhuinya Sagatu – Bamhan Sagatu Stone Deposit of M/s New India Industries (Partners : Md. Abid Husain & Sri Shekhar Mishra), Village : Bhuinya Sagatu – Bamhan Sagatu, Circle : Gola, Distt. : Ramgarh, Jharkhand (2.70 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

4. Medki Stone Mine of M/s Bhagwati Stone Crusher, Village : Medki, P.O. : Dholadih, P.S. : Rajnagar, Distt. : Saraikela-Kharsawan, Jharkhand (2.024 Ha).

(Proposal No. SIA/JH/MIN/409013 /2022).

Name of the consultant : P & M Solution, Noida, Uttar Pradesh.

The PA's has requested for withdrawal of the proposal vide letter dated 10.01.2023 citing the reason that there are some errors in the submitted application. The PAs also requested to consider the scrutiny fee submitted for this proposal to be considered for the revised proposal to be submitted in due course. Since, the appraisal of this project has not been done yet by SEAC, so the scrutiny fees of this project may not be charged for revised proposal which has to be submitted by PA's later at SEIAA.

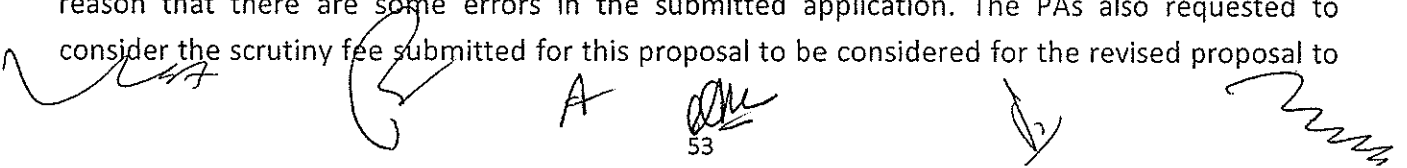
The Committee is of the view that this project is recommended for delisting to SEIAA with intimation that the appraisal of this project has not been done by SEAC. Hence, the Committee is requesting SEIAA that the scrutiny fee deposited for this project may be adjusted for revised application and accordingly, this project proposal is recommended for delisting to SEIAA.

5. Medki Stone Mine of M/s Bhagwati Stone Crusher, Village : Medki, P.O. : Dholadih, P.S. : Rajnagar, Distt. : Saraikela-Kharsawan, Jharkhand (1.651 Ha).

(Proposal No. SIA/JH/MIN/408988 /2022).

Name of the consultant : P & M Solution, Noida, Uttar Pradesh.

The PA's has requested for withdrawal of the proposal vide letter dated 10.01.2023 citing the reason that there are some errors in the submitted application. The PAs also requested to consider the scrutiny fee submitted for this proposal to be considered for the revised proposal to



be submitted in due course. Since, the appraisal of this project has not been done yet by SEAC, so the scrutiny fees of this project may not be charged for revised proposal which has to be submitted by PA's later at SEIAA.

The Committee is of the view that this project is recommended for delisting to SEIAA with intimation that the appraisal of this project has not been done by SEAC. Hence, the Committee is requesting SEIAA that the scrutiny fee deposited for this project may be adjusted for revised application and accordingly, this project proposal is recommended for delisting to SEIAA.

6. Pandiasai Stone Block of Sri Manoj Kumar Singhdeo, Village : Pandiasai, P.S. : Kowali, Distt. : East Singhbhum, Jharkhand (1.618 Ha).

(Proposal No. SIA/JH/MIN /412413 /2022).

Name of the consultant : P & M Solution, Noida, Uttar Pradesh.

This is a new project which has been taken for appraisal on 10.01.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 16217.74 cum/annum or 43787.88 TPA

Project and Location Details :

Sl	Parameter	Details	
1	Project Name	: Pandiasai Stone Block	
2	Lessee:	: Sri Manoj Kumar Singhdeo	
3	Lease Address	: Village –Pandiasai, P.S.- Kowali, District –East Singhbhum, State - Jharkhand	
4	Lease Area	: 1.618 ha	Acres- 4.0 Acres
5	Type of Land	: Non Forest – Raiyati Land	
6	Project Cost	: Rs. 40 Lakhs	
7	EMP Budget	: Capital: 5.10 Lakhs	Recurring: 3.27 Lakh / year
9	New or Expansion	: New	
10	Mineable Reserves	: Cu.m.: 204491.47 cum	Tonnes: 552126.99 tons
11	Mine Life	: 12.60 years	
12	Man power	: 24	
13	Water Requirement	: 10.0 KLD (Drinking: 0.24 KLD, Dust Suppression: 5.985 KLD, Plantation: 3.60 KLD)	
14	Water Source	: From Nearby villages by tankers	
15	DG Set / power	: Electric Supply from Jharkhand Government.	

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16	Crusher	:	There is No Crusher.
17	Nearest Water Body	:	Dosimani Nadi, Approx. 1.30 km towards East direction of mine site. Gudra Nadi, Approx. 1.90 km towards NE direction of mine site. Ramgarh Nadi, Approx. 4.60 km towards NW direction of mine site.
18	Nearest Habitation	:	Pandiasai, Approx. 0.950 km
19	Nearest Rail Station	:	Haldipokhar Railway station, approx. 11.80 km towards NW direction.
20	Nearest Air Port	:	Birsa Munda Airport, approx. 124.10 km towards NW direction.
21	Nearest Forest	:	Banka Forest, Approx. 4.40 km towards SW direction of mine site. Fairly Dense Mixed Jungle, Approx. 2.50 km towards SE direction of mine site. Jhapan Protected Forest, Approx. 2.80 km towards South direction of mine site.
22	Road & Highways	:	NH- 220, Approx. 8.90 km. in NW direction.

CO-ORDINATES

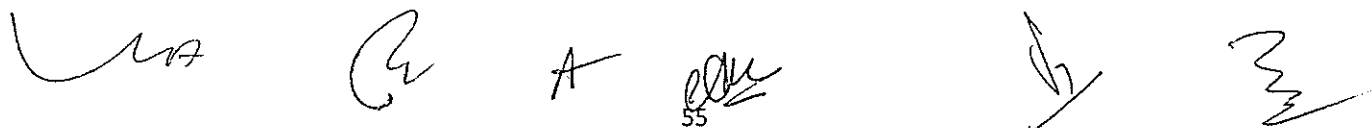
1	Latitude	From 22°30'36.76" N	To 22°30'45.87" N
2	Longitude	From 86°10'27.63" E	To 86°10'33.11" E

LAND DETAILS :

Khata No.	Plot No.
222	1360 (P) & 1374 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by Director of Mines, Department of Mines & Geology, Govt. of Jharkhand vide letter no. Kha.Ni (Nilami)- 72/2022/1480, dated 15.07.2022.
2	CO	:	The CO, Potka, East Singhbhum vide letter no. : 731, dated 12.11.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 914/Khanan, dated 11.11.2022 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. : 1771, dated 05.12.2022 certified that the proposed project site is outside Eco



			Sensitive Zone of Dalma Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. : 2210, dated 20.09.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The project is already mentioned in District Survey Report (DSR) of District East Singhbhum.
7	Gram Sabha	:	BDO, Potka vide Letter no. 1777, dated 19.11.2022 informed that Gram Sabha conducted on 18.11.2022
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide memo no. 196/G, dated 23.08.2022.

Working Details

1	Mining Method	:	Opencast other than fully mechanized (OTFM) method
2	Quarry Area	:	1.618 Ha Life of Mine – 12.60 years
3	Waste Generation	:	5 years– 3952.78 cum or 10672.506 tons
4	Stripping Ratio	:	1: 0.04
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	194 AMSL to 210 AMSL
8	Ground Level Elevation	:	194 AMSL
9	Ultimate Working Depth	:	190 AMSL
10	Water Table	:	173 AMSL (21 mbgl)
11	Topography of Mine	:	Area represents small hillock of stone (Dolerite)
12	Explosive Requirement	:	8kg/day
13	Diesel/Fuel requirement	:	NA

Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (Cum)	Bench RL in Meters
1st	27637.87	10236.25	538.75	190mRL - 196mRL
2nd	43785.83	16216.98	853.52	186mRL - 190mRL
3rd	43781.21	16215.27	853.43	204mRL - 210mRL

4th	43787.88	16217.74	853.56	198mRL - 204mRL
5th	43785.57	16216.88	853.52	138mRL - 144mRL
Total	202778.36	75103.12	3952.78	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	0.676	1.01	1.117 (0.502 ha area shall be left as water reservoir for rain water harvesting)
Waste Dump	Nil	Nil	Nil
Road	0.066	0.046	0.016
Infrastructure	0.01	0.01	---
Safety Zone Plantation	---	0.477 (Within Safety Zone)	0.477 (Within Safety Zone)
Total	0.752	1.543	1.610
Balanced Area	0.866	0.075	0.008
Total Applied Area	1.618	1.618	1.618

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.477 ha	1200
2	Haul /Approach Road	:	0.600 km	600

Afforestation will be done along the barrier zone. Plantation will also be done along both sides of approach road. 1800 no. of trees will also be planted in buffer zone consulting local authorities. Therefore, total number of Plantation will be of plants.

- 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

[Handwritten signatures and initials]

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 3952.78 cum or 10672.506 tons waste during the plan period will be generated which will be used in making and maintenance of haul road and village road, so there is no requirement of waste dumping Plan for this mining plan period.

Water Quality Management

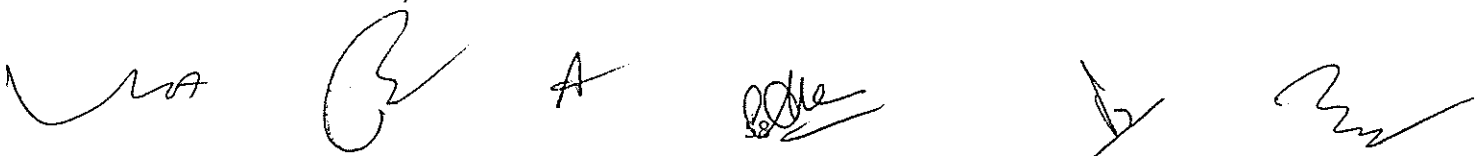
- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall 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 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.
- i. If any tree felling is required permission should be taken from competent authority.

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 Pandiasai Stone Block of Sri Manoj Kumar Singhdeo, Village : Pandiasai, P.S. : Kowali, Distt. : East Singhbhum, Jharkhand (1.618 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

7. Dulmi Stone Deposit Project of M/s Elite Power Project and Construction Pvt. Ltd., Village : Siru, Tehsil : Dulmi, Distt. : Ramgarh, Jharkhand (9.50 Ha).

(Proposal No. SIA/JH/MIN /296448 /2023).

Name of the consultant : P & M Solution, Noida, Uttar Pradesh.

This is amendment project which has been taken for appraisal on 10.01.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Production –3,49,428.04 TPA

Project and Location Details :

S. No.	Parameter	Details
1	Project Name	: Dulmi Stone Deposit
2	Lessee:	: Director : Parasant Kumar Barma M/s Elite Power Project and Construction Pvt.Ltd
3	Lease Address	: Village-Siru, Block - Dulmi, District-Ramgarh, State: Jharkhand

4	Lease Area	:	9.50 ha	Acres- 23.474 Acre
5	Type of Land	:	Non Forest Land	
6	Project Cost	:	Rs.45 Lakhs	
7	EMP Budget	:	Capital: 8.69Lakhs	Recurring: 6.73 Lakh / year
8	CSR / CER Budget	:	Rs. 60,000/-	
9	New or Expansion	:	Amendment	
10	Mineable Reserves	:	34,93,833.60 tonnes	
11	Mine Life	:	10 years	
12	Man power	:	44	
13	Water Requirement	:	24.26 or 25 KLD.(Drinking: 0.44 KLD,Dust Suppression: 8.64 KLD, Plantation: 15.18 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	500 KVA	
16	Crusher	:	With Crusher	
17	Nearest Water Body	:	Damodar River, Approx. 7.0 km. in North direction. Bhera River, Approx. 5.5 km. in East direction.	
18	Nearest Habitation	:	Dulmi , Approx. 3.5 km. in SW direction.	
19	Nearest Rail Station	:	Chitarpur Railway station, approx. 2.0 km toward North direction.	
20	Nearest Air Port	:	Bisra Munda Airport, approx. 31.0 km towards SW direction.	
21	Nearest Forest	:	Dense Forest at 7.5 Km in NE direction. Protected forest at 8.2 Km SE direction. Protected forest at 9.3 Km SW direction	
22	Road & Highways	:	NH-23 Approx. 3.0 km. in North direction.	

CO-ORDINATES

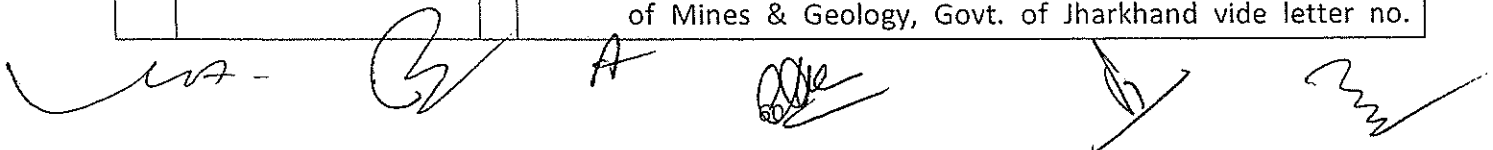
1	Latitude		From 23°32'58.81"N	To 23°32'57.84"N
2	Longitude		From 85°38'31.60"E	To 85°38'31.60"E

LAND DETAILS :

Khata No.	Plot No.
107	171 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	i. The LOI has been issued by Director of Mines, Department of Mines & Geology, Govt. of Jharkhand vide letter no.
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		1173, dated 27.05.2019. ii. Lease deed period 04.08.2022 upto 03.08.2032.
2	CO	: The CO, Dulmi (Ramgarh) vide letter no. 295, dated 26.06.19 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyani & Register II.
3	DMO	: DMO, Ramgarh vide memo no. 963/Khanan, dated 30.08.2019 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	: DFO, Wildlife Hazaribagh vide letter no. 1475, dated 29.07.19 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
5	DFO Forest Distance	: DFO, Ramgarh Division vide letter no. 1448, dated 15.06.19 certified that the distance of notified forest is 300 m from proposed project site.
6	DSR	: The project is already mentioned in District Survey Report (DSR) of District Ramgarh.
7	Gram Sabha	: BDO, Dulmi (Ramgarh) vide Letter no. 283, dated 18.06.2019 informed that Gram Sabha conducted on 17.06.2019
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide letter no. 689/G, dated 15.09.2021.
9	Previous Environmental Clearance (EC)	: Previous EC granted by SEIAA, Jharkhand vide letter no. EC/SEIAA/2018-19/2198/2019/11, dated 13.04.2021.
10	EC compliance	: Self certified compliance report by Project Authorities.

WORKING DETAILS

1	Mining Method	: Opencast semimechanized Mining method
2	Quarry Area	: 9.50 ha.
3	Waste Generation	: 73786.25 cum
4	Stripping Ratio	: 0.04
5	Working Days	: 300
6	Bench: size & No	: 6m to 6m
7	Elevation of Mine	: 380 AMSL to 350AMSL
8	Ground Level Elevation	: 335AMSL
9	Ultimate Working	: 341 AMSL

	Depth		
10	Water Table	:	335 AMSL
11	Topography of Mine	:	Area represents hillock of dolerite
12	Explosive Requirement	:	90 kg/day
13	Diesel/Fuel requirement	:	2000 litre/day

PRODUCTION DETAILS

Year	Production of stone (Tonnes)	O/B waste (cum)	Generation of l/waste(cum)	Total waste (cum)	Stripping Ratio (cum/t)
1 st	349424.16	0.00	13915.74	13915.74	0.04
2 nd	349216.29	0.00	13907.46	13907.46	0.04
3 rd	349428.04	4216.65	13915.89	18132.54	0.04
4 th	349404.52	0.00	13914.96	13914.96	0.04
5 th	349419.49	0.00	13915.55	13915.55	0.04
Total	1746892.50	4216.65	69569.59	73786.25	0.04

Land Use

Pattern of Utilization	Existing land use	Plan Period	Conceptual Stage
	Ha	Ha	Ha
Quarry	0.934	6.841	8.527 (0.672ha area shall be used for backfilling & 6.774 ha area shall be left as water reservoir)
Road	0.232	0.004	0.004
Dump	Nil	1.555	Nil (waste dump shall be removed & backfilled)
Safety Zone Plantation	Nil	0.969	0.969
Total	1.166	9.369	9.500
Unused Area	8.334	0.131	0.000

ENVIRONMENT MANAGEMENT

Green Belt Development








Afforestation will be done along the barrier zone. About 7590 no of plant of different species will be planted in five years.

- 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

It is proposed that the total wastes will be used in making and maintenance of haul road and village road, so there is no requirement of waste dumping Plan for this mining plan period.

Water Quality Management

The impact of mining project on groundwater hydrology and surface water regime are site specific and depends upon the characteristics of the mineral, hydrogeology and requirement of groundwater for other uses.

Following water pollution control measures are proposed:

- The quarrying activity will be confined to the lease area and there are no perennial streams or nalas present over there.
- To prevent the siltation, garland drain along with settling tank will be constructed around the lease area to maintain the natural flow of surface run-off during rains.
- Rain water collected in the excavated area will be pumped into the garland drain upstream of settling tank.
- Settling tanks will be de-silted regularly, especially before onset of the monsoon season.
- No effluent will be generated during the mining operation.
- Sewage from washrooms will be treated in septic tanks and disposed in Soak pits.

(i) SURFACE WATER MANAGEMENT

There is no surface water body within the 500m radius of this lease area so surface water will not be contaminated due this mine, etc.

(ii) GROUND WATER MANAGEMENT

This mining is not going to intersect the ground water. Hence water quality will not be changed in the surrounding area due this mine, etc.

Air Quality Management

The method of mining is open cast semi mechanized operation which involved controlled drilling and blasting. Hence, it is expected that the ambient air quality may slightly change significantly & dust particles get generated during various mining activities. This activities lead to increase in

PM₁₀ & PM_{2.5} level in the ambient air. The major source of dust generation will be from transportation of material. However, following measures will be adopted to minimize fugitive dust emission:

- Tractor water tanker shall be used to irrigate plantation.
- Grading of haul roads, service roads time to time, to remove the accumulated dusty material.
- Proper maintenance of the earth moving equipment and vehicles, checking of exhaust emission and imposing of speed restrictions on them.
- Twice in a week, water sprinkling will be done on haul and approach roads by water Tanker.
- Two row plantations will be carried out in the barrier zone.
- The trucks with loading material will be covered with tarpaulin sheets and Speed of the vehicles will be maintained within the prescribed limits.
- Only "Pollution Under Control" certified vehicles will be used for transportation
- Half yearly monitoring will be carried out of air, water, soil and noise.
- PPE Kit (Helmet, boots, Mask, sanitizer etc) will be provide for each of the mining worker.

Undertaking submitted affirming:

- i. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- ii. 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.
- iii. 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
- iv. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- v. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- vi. 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.
- vii. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- viii. 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.
- ix. If any tree felling than necessary permission shall be taken from the competent authority.

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 Dulmi Stone Deposit Project of M/s Elite Power Project and Construction Pvt. Ltd., Village : Siru, Tehsil : Dulmi, Distt. : Ramgarh, Jharkhand (9.50 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.



8. -Nawagarh Stone Deposit of Md. Ramiz Raza, Village : Nawagarh, Thana : Angara, Thana no. : 58, Distt. : Ranchi, Jharkhand (2.47 Ha).

(Proposal No. SIA/JH/MIN /413559 /2023).

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 66,871 Cu.M. / year i.e 1,87,240 Tonnes / year

Name of the Consultant: M/s P & M Solution, Noida -201301 UP.

This is a new project which has been taken for appraisal on 10.01.2023

Project and Location Details :

Sl	Parameter	Details	
1	Project Name	: Nawagarh Stone Deposit	
2	Applicant Address:	: Md. Ramiz Raza At- Near Jama Masjid, Bariatu, P.O. + Thana – Bariatu, District – Ranchi, State – Jharkhand.	
3	Lease Address :	: In Mouza - Nawagarh, Thana – Angara, Thana No. – 58, District - Ranchi, Jharkhand.	
4	Applied Area	: Ha: 2.47 Hectares	Acres: 6.10 Acres
5	Type of Land	: Non Forest – Raiyati Land	
6	Project Cost	: 64 Lakhs	
7	EMP Budget	: Capital: 16.37 Lakhs	Recurring: 5.18 Lakh / year
8	CSR / CER Budget	: Rs. 1.28 Lakhs	
9	New or Expansion	: New	
10	Mineable Reserves	: Cu.M.: 3,34,350 Cu. M.	Tonnes: 9,36,180 Tonnes
11	Mine Life	: 5 years	
12	Man power	: 35	
13	Water Requirement	: 14.83 KLD Dust Suppression: 7.5 KLD, Drinking: 1.40 KLD, , Plantation: 5.93 KLD	
14	Water Source	: From nearby authorized sources.	
15	DG Set / power	: 60 KVA	
16	Crusher	: No	
17	Nearest Water Body	: Subarnarekha River is flowing approx. 3.18 Km aerial distance away towards North direction.	
18	Nearest Habitation	: Beti village is approx. 640m aerial distance away in South West direction.	
19	Nearest Rail Station	: Jonha Railway Station is approx. 7.25 Km aerial distance away in South direction.	
20	Nearest Air Port	: Birsa Munda Airport, Ranchi, Jharkhand is approx. 31.60 Km aerial distance away in South-West direction.	

21	Nearest Forest	:	More than 250m away from the proposed project.
22	Road & Highways	:	Approach Road: Nawagarh - Beti Road is approx. 0.35 Km away in south direction. Highway: NH-320 is about 5.70 Km aerial distance away in North direction.

CO-ORDINATES

1	Latitude	:	From N23°25'25.97"	To N23°25'32.98"
2	Longitude	:	From E85°36'43.13"	To E85°36'53.42"

LAND DETAILS

Khata No -	104
Plot Nos -	1734 & 1736

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (Lol) has been issued by District Mining Office, Ranchi vide letter no. 1009/M dated 30.11.2022.
2	CO	:	The CO, Angara, Ranchi vide letter no. 803, dated 02.11.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar or Register II.
3	DMO	:	DMO, Ranchi vide memo no. 1110/M, dated 22.12.2022 certified that there is no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO Wild Life Ranchi vide letter no. 1071, dated 03.12.2022 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Ranchi Forest Division vide letter no. 4154, dated 01.10.2022 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. 1115/M, dated 23.12.2022 has informed that this project is part of District Survey Report (DSR) at Ranchi district and accordingly necessary action with

		regard to Environmental Clearance can be taken.
7	Gram Sabha	BDO, Angara, Ranchi vide letter no 208 (ii), dated 14.11.2022 informed that Gram Sabha conducted on 13.11.2022.
8	Mine Plan Approval	Approved by the Assistant Mining Officer, Ranchi vide Memo No. 1075/M dated 14.12.2022.

Working Details

1	Mining Method	: Opencast Mechanized Mining.
2	Quarry Area	: 5 years – 1.71 Ha Life of Mine – 1.71 Ha
3	Waste Generation	: 5 years– 11228 Cu.M (Gritty Soil) Life of Mine – 11228 Cu.M (Gritty Soil)
4	Stripping Ratio	: 1 : 0.03
5	Working Days	: 300 Days
6	Bench: size & No	: Size: 6m x 6m, No. - 5
7	Elevation of Mine	: Highest RL 550m AMSL, Lowest RL 540m AMSL
8	Ground Level Elevation	: 540m AMSL
9	Ultimate Working Depth	: 520m AMSL
10	Water Table	: 508m AMSL
11	Topography of Mine	: Gently sloping land.
12	Explosive Requirement	: 28.35 Tons/year
13	Diesel/Fuel requirement	: 42 KL/year (140 Litres/day)

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste (gritty soil) Generation (CuM)	Bench RL in Meters
1st Year	66,870	1,87,236	5282	550m – 532m
2nd Year	66,869	1,87,234	5946	544m – 538m
3rd Year	66,870	1,87,236	Nil	538m – 526m
4th Year	66,869	1,87,234	Nil	538m – 526m
5th Year	66,871	1,87,240	Nil	538m – 520m
Total	3,34,349	9,36,180	11,228	

Land Use

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Proposed Land Use at End of Life of Mine	Land Usage at Conceptual Stage

					(Ha)	
1	Mining Area (Quarry)	Nil	1.71 (including backfilling 0.09 Ha)	1.71 (including backfilling 0.09 Ha)	0.09	Backfill
					1.30	Water body
					0.32	Dead bench Plantation
2	Green Belt Within Safety Barrier	Nil	0.76	0.76	0.76	Plantation
3	Road	0.01	Nil	Nil	Nil	-
4	Unutilized	2.46	Nil	Nil	Nil	-
	TOTAL	2.47	2.47	2.47	2.47	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.76 Ha	1900 trees @ 2500 trees per Ha
2	Dead Bench	:	0.32 Ha	800 trees @ 2500 trees per Ha
3	Haul /Approach Road	:	0.07 Ha	234 trees on both sides – 3m distance
			i.e. Length 350 width 2m	

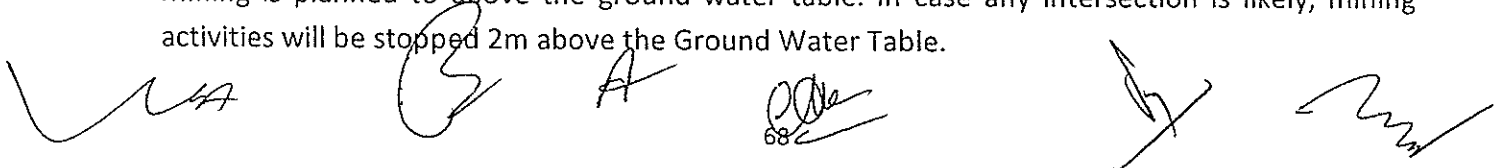
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality 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 (gritty soil) Generation will be 11,228 Cu.M. during the life of Mine.
- The area is covered with a thin layer of gritty soil. During quarry development in 1st year gritty soil will be removed and this soil will be temporarily dumped [Area – 0.13 Ha, (L x W x H = 41m x 32m x 5m)] at the south-east part of the area with suitable precautions like constructing parapet wall, garland drain & in 2nd year total removal soil & existing dumped soil will be backfilled within the exhausted quarry.

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 applied 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 water required for the mining activities shall be supplied by the tanker from nearby authorized sources.
- c. The letter issued in respect of District Survey Report (DSR), is issued by the competent authority. I will abide by any directives issued by any court of law in future.
- d. 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
- e. The Boundary Pillars of the proposed mine applied area will be maintained properly.
- f. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.

- g. 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.
- h. Sufficient water spray using water tankers will be done for effective dust suppression within the mine applied area and on haul roads.
- i. 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.
- j. If any tree felling than necessary permission shall be taken from the competent authority.

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 Nawagarh Stone Deposit of Md. Ramiz Raza, Village : Nawagarh, Thana : Angara, Thana no. : 58, Distt. : Ranchi, Jharkhand (2.47 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

9. Gurgain Brick Clay Deposit of M/s Duja Bricks, Village : Gurgain, Thana : Thakurgaon, Thana no. : 88, Distt. : Ranchi, Jharkhand (1.278 Ha).

(Proposal No. SIA/JH/MIN /413592 /2023).

Project Category: B2 – Application for Environment Clearance

EC Application for: Soil: 1200 Cu.M. / Year i.e. Bricks 6,00,000 Numbers / year.

Name of the consultant: M/s P & M SOLUTION, NOIDA, UP 201301.

This is a new project which has been taken for appraisal on 10.01.2023

Project and Location Details :

Sl	Parameter	Details	
1	Project Name	: Gurgain Brick Clay Deposit For M/s Duja Bricks	
2	Applicant Address:	: M/s Duja Bricks Proprietor - Md. Attaulla Ansari Village - Mohanpur, PO- Gurgain, PS- Burmu, District - Ranchi, State - Jharkhand, Pin Code- 835205	
3	Lease Address :	: In Mouza - Gurgain, Thana – Thakurgaon, Thana No. – 88, District – Ranchi, Jharkhand.	
4	Applied Area	: Ha: 1.278 Hectares	Acres: 3.16 Acres
5	Type of Land	: Non Forest – Rayati Land	
6	Project Cost	: 10 Lakhs	
7	EMP Budget	: Capital: 11.00 Lakhs	Recurring: 3.90 Lakh / year
8	CSR / CER Budget	: Rs. 0.20 Lakhs	

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9	New or Expansion	:	New
10	Mineable Reserves	:	Cu.M.: 16727 Cu. M.
11	Mine Life	:	14 years
12	Man power	:	13
13	Water Requirement	:	18.08 KLD (Dust Suppression: 12.4 KLD, Drinking: 0.52 KLD, Plantation: 5.16 KLD)
14	Water Source	:	From nearby authorized sources.
15	DG Set / power	:	No
16	Crusher	:	No
17	Nearest Water Body	:	Bhur Nadi is flowing approx. 2.07 km aerial distance away in North - West direction.
18	Nearest Habitation	:	Patratoli village is situated approx. 870m aerial distance away in South West direction.
19	Nearest Rail Station	:	Itki Railway Station is situated approx. 16.49 Km aerial distance away towards South West direction.
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi is situated approx. 25.52 Km aerial distance away towards South-East direction.
21	Nearest Forest	:	Approx 1625m away from the proposed project.
22	Road & Highways	:	Approach Road: Ginjo Thakurgaon – Brambe Main Road is approx 1.05 Km away from the applied area in North-East direction. Highway: SH-2 is about 13.44 Km away in East direction.

CO-ORDINATES

1	Latitude	From N23°29'44.37"	To N23°29'50.85"
2	Longitude	From E85°10'02.82"	To E85°10'07.57"

LAND DETAILS

Khata No -	185
Plot Nos -	1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792 & 1793.

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Land agreement made.
2	CO	:	The CO, Burmu, Ranchi vide letter no. 125(ii), dated 25.03.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari"

			in R.S. Khatiyar or Register II.
3	DMO	:	DMO, Ranchi vide letter no. 982/M, dated 27.11.2021 certified that no other lease exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	Division Forest Officer, Wildlife Division Ranchi, vide memo no. 499, dated 26.06.2021 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Ranchi Forest Division vide letter no. 5338, dated 28.12.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	Project's name is mentioned in page no 159 (SL no 57) of District Survey report (DSR) Ranchi.
7	Gram Sabha	:	Gram Sabha conducted on 26.05.2018.
8	Mine Plan Approval	:	Approved by the Additional Director, Geology, Hazaribag vide Letter no. 636/G dated 03.08.2021.

Working Details

1	Mining Method	:	Opencast Manual Mining and transportation by tippers.
2	Quarry Area	:	5 years – 0.310 Ha Life of Mine – 0.716 Ha
3	Waste Generation	:	5 years– 700 Cu.M (Top Soil) Life of Mine – 1900 Cu.M (Top Soil)
4	Stripping Ratio	:	1 : 0.12
5	Working Days	:	200 Days
6	Benches: size & No	:	Size: 1m X 1.5m, No. - 2
7	Elevation of Mine	:	Highest RL 682m AMSL, Lowest RL 681m AMSL
8	Ground Level Elevation	:	681m AMSL
9	Ultimate Working Depth	:	679m AMSL
10	Water Table	:	670m AMSL
11	Topography of Mine	:	Flat Land.
12	Explosive Requirement	:	No
13	Diesel/fuel requirement	:	4 KL/year (20 Litres/day)

Production Details :

Year	Production of Sub Soil (Cum)	Production of Bricks (Numbers)	Top Soil Generation (CuM)	Bench RL in Meters
1st Year	1200	6,00,000	140	681m – 679m
2nd Year	1200	6,00,000	140	681m – 679m
3rd Year	1200	6,00,000	140	682m – 680m
4th Year	1200	6,00,000	140	682m – 680m
5th Year	1200	6,00,000	140	682m – 680m
Total	6000	30,00,000	700	

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	Mining Area (Quarry)	Nil	0.310	0.716	0.716	Grass cultivation will be done on it
2	Green Belt Within Safety Barrier	Nil	0.375	0.375	0.375	Plantation
3	Village Road	0.029	0.029	0.029	0.029	Public Use
4	Block area Due to Village Road	Nil	0.158	0.158	0.158	Public Use
5	Unutilized	1.249	0.406	Nil	Nil	
	TOTAL	1.278	1.278	1.278	1.278	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location	Area/Length	No of Trees
1	Safety Zone	0.716 Ha	1790 trees @ 2500 trees per Ha
2	Haul /Approach Road	0.21 i.e. Length 1050m width 2m	700 trees on both sides in single row – 3m distance

- Gabion Plantation work in the safety zone (7.5m 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 (Top soil) Generation will be 1900 Cu.M. during the life of Mine.
The fertile top soil will be preserved temporarily by dumping and then it will be spread concurrently over the excavated part of the land after the end of each year lifting up of brick soil and grass cultivation will be done on it.

Water Quality Management

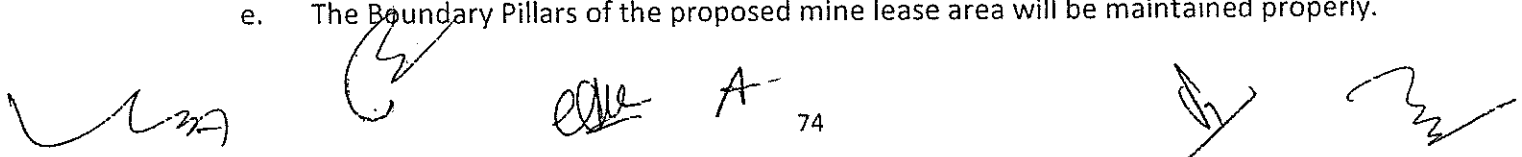
- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall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

- No drilling and blasting is proposed.
- 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 water required for the mining activities shall be supplied by the tanker from nearby authorized sources.
- c. The District Survey Report (DSR) of Ranchi District is prepared by the competent authority and abides to follow any directive issued by any court of law in this regard in future.
- d. 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
- e. The Boundary Pillars of the proposed mine lease area will be maintained properly.

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- f. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- g. 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.
- h. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- i. All the transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- j. If any tree felling than necessary permission shall be taken from the competent authority.

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 Gurgain Brick Clay Deposit of M/s Duja Bricks, Village : Gurgain, Thana : Thakurgaon, Thana no. : 88, Distt. : Ranchi, Jharkhand (1.278 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

10. Group Housing Project "Garden Valley" of M/s Vinayak Developers and Associates, Village : Hesag, Ward no. : 52 Hatia, Thana no. : 247, P.S. : Jagarnathpur, Distt. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/INFRA2 /412897/2023)

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

This is a case of violation which has been taken for reappraisal on 10.01.2023

The project is a violation case since the project proponent has started the construction without prior Environmental Clearance from State Environment Impact Assessment Authority (SEIAA), Jharkhand.

However, The Honourable Supreme court in its order dated 9th December 2021 In the matter of the Civil appeal No 7576-7577 of 2021 in the Electro steel Steels Limited Vs Union of India and Ors in its para 93 has inter- alia observed the following :

"The interim order passed by the Madras high Court appears to be misconceived. However, this court is not hearing an Appeal from that interim order. The interim stay passed by the Madras High court can have no application of operations of the Standard Operating Procedure to the projects in territories beyond the territorial jurisdiction of Madras High court. However, final decision may have been taken in accordance with the Orders/ Rules prevailing prior to 7th July, 2021."

Thus, the SEIAA, Jharkhand, in the light of Ho'ble Supreme Court order dated 9th December 2021, Office Memorandum no. F.No.22-21/2020-IA.III[E 138949] dated 28.01.2022 of MoEF&CC, Govt.

of India and Standard Operating Procedure (SOP) issued by MoEF&CC, Govt. of India vide its file number 22-21/2020-IA-III, dated 07.07.2021, the matter has been taken for consideration & recommendation of EC for violation projects.

Project Category: 8 (a) Category B2 – (at par with B1 being violation case)

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 98th meeting held on 02-05.11.2022 and SEIAA, Jharkhand has approved the violation ToRs in 99th meeting held on 28th & 29th November, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2667/2022/295, date 12.12.2022. The final EIA / EMP submitted by PP to SEIAA on 07.01.2023 and which was forwarded to SEAC on 07.01.2023.

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.

Application for Residential building: Total built-up area of 43498.56 Sqm. (Approx. 25% part of the project has already been constructed).

Project and Location Details :

Sl. No.	Parameters	Description
1.	Latitude	23°17'27.90"N
2.	Longitude	85°19'23.34"E
3.	Plot Area	9735.37 Sqm. (Or 0.973537 Ha.)
4.	Project Cost	INR 42 Crores
5.	Built-up Area	43498.57 m ²
6.	Green Belt Area Soft Green Area	1617.78 Sqm. (~16.61% of the plot area) 388.31 Sqm. (3.98%)
7.	Population	Residential: 1724 Nos., Visitors: 172 Nos. & Staff: 35 Nos.
8.	Water Requirement	180 KLD
9.	Fresh Water Requirement	122 KLD
10.	Reuse of Recycled Water	58 KLD
11.	Wastewater Generation	152 KLD
12.	STP Capacity	182 KLD
13.	Total Municipal Waste	807 kg/day Biodegradable Waste: ~ 484 Kg/day Non-Biodegradable Waste: ~323 Kg/day
14.	Power Requirement	1250 KVA (Jharkhand State Electricity board)
15.	DG Sets	250 KVA 1x100 KVA + 3x50 KVA

16.	RWH Pits	4 (42.68 Cumec / hour)
17.	Parking	283 (Four-wheeler), 2 (Physically Handicapped Car), 309 (Two-wheeler), 30 (Visitors car Parking), 1 (Loading/Unloading Parking), 2 (Ambulance), 1 Heavy Vehicle.
18.	Connecting road	Project site is well connected with road. Site is well connected with Hatia Main Road, Ranchi Ring Road & Dhurwa Road
19.	National Highway	Hatia Main Road (Approx. 1.2 km, West) Ranchi Ring Road (Approx. 2.9 km, South) Dhurwa Road (Approx. 3.7 km, NW)
20.	Nearest Railway Station	Hatia Railway Station, (2.4 km, NW)
21.	Airport	Birsa Munda Airport, (Approx. 2.9 km, North)
22.	Nearest Hospitals	City Hospital (Approx. 5.9 km, NNW) Summer Hospital & Research Centre Pvt. Ltd. (Approx. 1.5 km, NW) Heritage Hospital (Approx. 3.3 km, SW)
23.	Nearest Water Bodies	Dhurwa Dam- Approx. 6.6 km, West Ranchi Lake- Approx. 8.2 km, North Lake of Chamber- Approx. 5.5 km, WNW Subarnarekha River - Approx. 0.08 km, SW
24.	EMP Budget	During Construction: Capital: 18 Lakhs Recurring: 20.25 Lakhs Operational Cost: Capital: 80 Lakhs Recurring: 25 Lakhs
24.	Construction Phase:	Power Back-up: 50 KVA each Water Requirement & Source: Fresh water – 9 KLD Treated wastewater-12 KLD Source: Tanker Water STP (Modular): 20 KLD
25.	Connectivity	Hatia Railway Station: Approx. 2.4 km, NW Birsa Munda Airport: Approx. 2.9 km, North

Area Summary

S. No.	Description	Area (Sqm.)
1.	Plot Area at Site	9735.37
2.	Green Belt Area (@16.61% of the plot area) Soft Green Area (@3.98% of the plot area)	1617.78 Sqm. 388.31 Sqm.

3.	Open Area and Paved Area	4931.07
4.	Proposed Ground Coverage (@ 34.54% of net plot area)	3344.69
5.	Proposed FAR (@ 3.31 of plot area)	32259.32
6.	Non-FAR Area (Strain Case, Lift, Balcony, Ramp, Accessory Use, Parking)	11239.25
7.	Built-Up	43498.57
8.	Dwelling Units/Units Residential	Block A-108 Block B-66 Block C-66 Block D-72
9.	Height	Approx. 35.85 m

Co-Ordinates:

1	Latitude	23°17'27.90"N
2	Longitude	85°19'23.34"E

Land Details:

1	Village- Hesag, Ward No.- 52, Hatia, P.S.- Jagarnathpur, P.S. No.- 247, District- Ranchi, Jharkhand	Khata no. 77	Plot No. 848, 847, 858, 1089,
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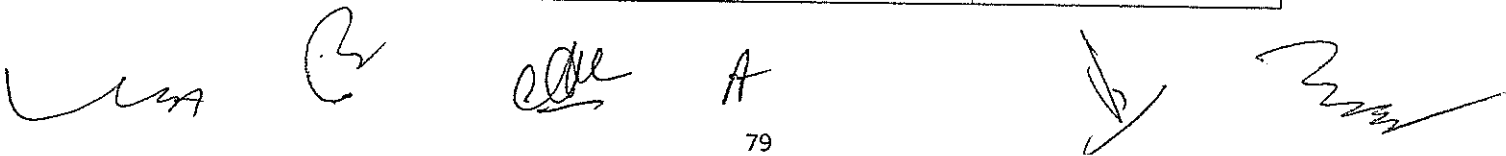
Statutory Clearances:

1	DFO Certificate	: Divisional Forest Officer (DFO), Ranchi Forest Division vide letter no. 4521, dated 04.11.2022 certified that distance of Reserved Forest/Protected Forest is more than 250 meters from project site.
2	DFO wildlife	: DFO, Wild life Ranchi vide letter no. 675, dated 01.08.2022 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
3	CO certificate	: The CO, Namkon (Ranchi) vide letter no. 1694 (ii), dated 25.08.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyon.
4	AAI NOC	: Airport authority of India issued NOC vide NOC ID RANC/EAST /B/021419/370660, dated 21/02/2019.
5	Fire Department	: A Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi vide memo no. 275/Tech., dated 30.01.2019.
6	Building Plan	: Ranchi Municipal Corporation approved building plan vide memo no. RMC/BP/0514/W52/2018 dated 25.06.2019.

Water and waste water Requirement Details :

S. No.	Description	No. of units	Unit Population	Population	Unit water consumption (LPCD)	Total water required (kl)	Fresh water required (kld)	Flushing (kld)	Total Wastewater (kld) (80% of domestic +100% Total flushing)
1	Main Dwelling Units (Residential)	1724	5 Person for 2 BHK 6 Person for 3 BHK 4 Person for 1 BHK	1724	100	172	120	52	148
2	Staff @ 2 % of total population	.....	.....	35	45 (30+15)	1.57	1.05	0.52	1.36
3	Visitors (10% of the residential population)	.....	.....	172	15 (5+10)	2.58	0.86	1.72	2.41
Subtotal -I						176.55	121.91	54.24	151.77
Reuse of treated water									
1	Horticulture	1460 Sqm.	3 liter/ sqm of Landscape area	...	...	4.38			
Subtotal II						4			
Grand Total I+II						180			

Category	Total Quantity (KLD)
Fresh water Req. for domestic purpose	122
Flushing water Req.	54
Sewage generation (@80% of the fresh water consumption + 100% flushing water)	152 (98+54)
Capacity of STP	182
Recovered water from STP (80% of Waste water)	122
1. Flushing	54
2. Landscaping	4
3. Discharge to Sewer	64



Solid Waste Requirement

S. No.	Category of Solid Waste	Waste Generation Rate	Formula	Total Population	Waste Generated	Bio-degradable	Non-biodegradable
1	Main Dwelling Units (Residential)	0.3 to 0.6 kg/cap/day	Total Population*0.45	1724	775.8	465.48	310.32
2	Staff @ 2 % of total population	0.1 to 0.3 kg/cap/day	Total Population*0.15	35	5.25	3.15	2.1
3	Visitors (15% of the residential population)	0.1 to 0.3 kg/cap/day	Total Population*0.15	172	25.8	15.48	10.32
	Total			1931	807	484	323

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green belt will be provided in 1617.78 sqm. (@16.61% of plot area) and Green Cover will be provided in 388.31 sqm. (@3.98 % of plot area), which will enhance the beauty of the site and help combat air and noise pollution.
- The plant species will be selected on the basis of Guidelines for Developing Green Belts, CPCB March 2000.







Solid Waste Management

During Construction Phase

- Construction yards are proposed for storage of construction material.
- Excavated top soil will be stored in temporary constructed soil bank and will be reused for landscaping of the project.
- Remaining soil will be utilized for refilling/road work/raising of site level at locations.
- There will be "Refuse Containers" at site for the management of domestic waste generated by the construction labourers and these containers will be emptied at least once daily.
- Cement bags, waste paper and packing material (cardboard) will be sold off to recyclers.

During Operation Phase

- The solid waste will be segregated at source & collected.

- b. Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site.
- c. Bio-degradable (will be composted through organic waste converter).
- d. Recyclable wastes will be disposed to govt. or SPCB approved third party vendors.
- e. Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer.
- f. The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.
- g. Horticultural Waste is composted and used for gardening purposes.

Water Quality Management

During Construction Phase

- a. The site drainage will be planned in such a way that there is no accumulation of water/wastewater within the project premises or in the vicinity of the site.
- b. Mobile toilets to be provided for construction Labourers.
- c. Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- a. STP of capacity i.e. 182 KLD is proposed for treatment of wastewater.
- b. Treated waste water would be reused for Horticulture, DG cooling, flushing and in nearby construction site/sewer.
- c. Use of water efficient plumbing fixtures to conserve water.
- d. Approx. 122 KLD of fresh water is required during operational phase of the project.

Air Quality Management

- a. Warehouse/stock yard will be provided for storage of construction material
- b. Covering of stored construction materials with tarpaulin covers which will be resold to authorized construction material handling agency for reuse.
- c. Covering of trucks carrying construction materials.
- d. Dust suppression by water sprinkling.
- e. Adequate maintenance of construction equipment & vehicles.
- f. Wheel wash facility at the entry/exit of the site to prevent dust emissions.
- g. Periodical Ambient Air Quality Monitoring.
- h. PUC Certified vehicles.
- i. Glow signs Speed Limits to 20 kmph to reduce emissions on site will be displayed at the important junctions.

Energy conservation

Solar Panels will be used in Street Lights, Common area, Pumping area.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of rupees 73,31,250 as per CPCB guidelines towards remediation plan

and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

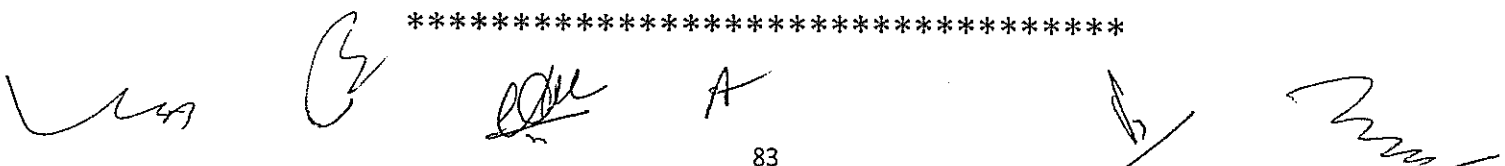
Sl. No.	Environmental Component	Description	Location	Cost in Rs.
1	Environmental Activities	For environmental and allied activities in Ranchi Area in consultation with DFO Ranchi	Territorial division of Ranchi	30,00,000
2	Community augmentation	Distribution of 3 Nos. of 5 KW solar Panels	Charitable Hospital / Schools / College of Ranchi District	15,00,000
		Installation Charges of above Solar Panels		3,31,250
		Development of Roads / Nallah in nearby area of the project site in consultation with local Authority.	In impact area	25,00,000
		Total	--	73,31,250

- I. The Committee visited the project site on 09.01.2023 to verify the details submitted by PAs. During inspection, Committee saw that the STP is installed and is operational, RWH has been installed with 02 no. of pits, dedicated solid waste handling site was in place and green belt has been developed. Fly ash dump site was existing before initiation of the project. It has been stabilized by development of green belt & green cover on the entire fly ash dump site and has improved aesthetic of the area.
- II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. **73,31,250**.
- III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. **73,31,250** towards remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board and evidence of the same submitted to SEIAA, Jharkhand prior to grant of EC.
- IV. The bank guarantee shall be released after successful completion of remediation plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.
- V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.
- VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.

- VII. STP of adequate capacity shall be established within the project permises.
- VIII. Energy conservation measures adhearing to part of ECBC norms shall be complied with.
- IX. The penalty of Rupees 7,50,000 being 1% of the project cost incurred till date (Rs. 7,50,00,000) shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft and evidence of the same to be submitted to SEIAA, Jharkhand prior to grant of EC.
- X. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

Based on the presentation made and information provided, the Committee decided that the proposal for Group Housing Project "Garden Valley" of M/s Vinayak Developers and Associates, Village : Hesag, Ward no. : 52 Hatia, Thana no. : 247, P.S. : Jagarnathpur, Distt. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – III alongwith the following specific conditions :

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging points to be installed.

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11. Domchanch Stone Deposit of M/s Maa Jagdamba Stone Works, Village : Domchanch, Thana no. : 68, Thana : Domchanch, Distt. : Koderma, Jharkhand (1.072 Ha).

(Proposal No. : SIA/JH/MIN/413199/2023)

Project Category: B2 – Application

EC Applicationfor: Boulder Stone : 1,29,654 Tons (Max) per year / 48,020 Cum. (Max.) per Year

DG Set : 20 KVA

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

This is a new project which has been taken for appraisal on 10.01.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Domchanch Stone Deposit, Project type – Stone Mine
2	Lessee:	: M/S Maa Jagdamba Stone Works, Shri Sanjay Kumar Mehta,
3	Lease Address	: Village – Domchanch, Thana No. – 68, Thana – Domchanch, Dist. – Koderma, State – Jharkhand
4	Lease Area	: Ha: 1.072 ha Acres: 2.65 Acres
	Type of Land	: Non Forest – Rayati Land
6	Project Cost	: Capital Cost – 81.80 Lakhs
7	EMP Budget	: Capital: 21.22 Lakhs Recurring: 3.74 Lakhs
8	CSR / CER Budget	: 1.75 Lakhs
9	New or Expansion	: New Project
10	Mineable Reserves	: Cu.M.: 3,32,514 Cum. Tonnes: 8,97,788 Tons
11	Mine Life	: 6.92 Years Say 7 Years
12	Man power	: 32
13	Water Requirement	: 35.16 KLD (Drinking:0.48 KLD, Dust Suppression: 25.6 KLD, Plantation:9.08 KLD)
14	Water Source	: <ul style="list-style-type: none"> Water will be Sourced from Abandon Mine (Kamal Prabhat abandon Stone Mine at a distance of 600 metre) for Dust Suppression and Plantation. Water will be sourced from Water Tankers, to be purchased locally for Drinking and Domestic Consumption.
15	DG Set / power	: 20 KVA DG Set proposed
16	Crusher	: NA
17	Nearest Water Body	: Hurrahi Nadi – 3.85 km in SE direction
18	Nearest Habitation	: Domchanch Village, Koderma – 10 KM

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19	Nearest Rail Station	:	Koderma Railway station - 17 Km in West direction.
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi – 132 Km in SW direction
21	Nearest Forest	:	Protected Forest – 0.70 Km in South direction
22	Road & Highways	:	Metal Road – 0.30 Km in West direction. SH 13 – 1.30 Km. in North direction

CO-ORDINATES

Geo-Coordinates of all corner points of Demarcated Block Boundary (GPS Co-ordinates) Datum : WGS 84		
Corner Point	Latitude	Longitude
1	24°27'35.60" N	85°41'36.38" E
2	24°27'35.45" N	85°41'35.19" E
3	24°27'35.73" N	85°41'33.62" E
4	24°27'37.98" N	85°41'34.03" E
5	24°27'40.50" N	85°41'34.75" E
6	24°27'40.20" N	85°41'36.51" E
7	24°27'39.75" N	85°41'36.75" E
8	24°27'39.43" N	85°41'37.24" E
9	24°27'37.14" N	85°41'36.52" E
10	24°27'36.65" N	85°41'36.48" E
11	24°27'36.25" N	85°41'36.31" E

LAND DETAILS

Sl. No.	Khata No.	Plot No.
1	568	4959

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Koderma vide memo no. 1109/M dated 30.06.2022.
2	CO	:	The CO, Domchanch vide letter no. 744, dated 09.09.2017 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyar.
3	DMO	:	DMO, Koderma vide memo no. 1284/M, Koderma, dated 10.08.2022 certified that 01 mining lease area (3.50 acre) 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. 2615 , dated 27.12.2022

			certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Koderma vide letter no. 1717, dated 27.04.2017 certified that the distance of notified forest is 295 metre from project site.
6	DSR	:	The DC-cum-District Magistrate, Koderma vide letter no. 1139 / M, dated 07.07.2022 has informed that this project is part of District Survey Report (DSR) at Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 12.08.2017
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. G/2022 – 23-167 dated 03.08.2022

Working Details

1	Mining Method	:	Semi Mechanised. Wagon Drilling & Blasting to be used	
2	Quarry Area	:	5 years–0.757 Ha	End of Mine – 0.768 Ha
3	Waste Generation	:	5 years– 14,602 Cum.	Life of Mine (Waste Gen.) – 14,602 Cum.
4	Stripping Ratio	:	1:0.02	
5	Working Days	:	300	
6	Bench: size & No	:	5 m x 3/5 m , Bench No.- 1 to 6(Conceptual Period)	
7	Elevation of Mine	:	Maximum Elevation – 452 AMSL Minimum Elevation – 448 AMSL	
8	Ground Level Elevation	:	450 AMSL	
9	Ultimate Working Depth	:	421 AMSL	
10	Water Table	:	414 AMSL	
11	Topography of Mine	:	Flat Terrain	
12	Explosive Requirement	:	9.29 Tons/year	
13	Diesel/Fuel requirement	:	732 liters / day (219.6 KL/year)	

Production Details

SUMMARY OF YEARWISE OF PRODUCTION						
Years	Production In Cum/Year	Production In Cum/Day	O.B Production In Cum/Year	Production In Tons/Year	Prod. In Tons./Day	Bench RL in meters
1st	44492	148.3	9506	120128	400.43	395 – 389 (O.B.

						Depth 2 m)
2nd	44492	148.3	5096	120128	400.43	397- 384 (O.B. Depth 1 m)
3rd	48020	160	-	129654	432.18	389 – 384
4th	44492	148.3	-	120128	400.43	384 – 379
5th	44492	148.3	-	120128	400.43	384 – 374
Total	225988		14602	610168		Depth 21 m

Land Use

Existing Land Use pattern

S.I	Category	Area in Hectares
1	Mining Area	0.000
2	Office	0.000
3	Dump	0.000
4	Road	0.000
5	Garland Drain	0.000
6	Safety Zone	0.000
7	Settling Tank	0.000
8	Unutilized	1.072
	Total	1.072

Proposed Land Use for Current Plan Period

SI	Category	Area in Hectares
1	Mining Area	0.757
2	Office	0.010
3	Dump	0.000
4	Road	0.001
5	Garland Drain	0.010
6	Safety Zone	0.300
7	Settling Tank	0.004
8	Unutilized	0.000
	Total	1.072

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

SI	Category	Area in Hectares
1	Mining Area +Office+ Road	0.768 (Water Body)

2	Safety Zone	0.300 (Plantation)
3	Garland Drain/ Settling Tank	0.014
4	Unutilized	0.000
	Total	1.072

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone/Green Belt and other reclaimed area (Garland Drain, Settling Tank)	: 0.30 ha	750 trees @ 2500 trees per ha.
2	Haul /Approach Road	: 1.60 KM	1,066 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.

Waste Generation

A total of 14,602 Cum of wastes (Over Burden) will be generated from entire Domchanch Stone Deposit up to conceptual stage. OB will be utilized for backfilling, internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

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.
- i. If any tree felling is required a permission should be taken from competent authority.

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 Domchanch Stone Deposit of M/s Maa Jagdamba Stone Works, Village : Domchanch, Thana no. : 68, Thana : Domchanch, Distt. : Koderma, Jharkhand (1.072 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

12. Rano Stone Mine of M/s Jai Shankar Stone, Mouza : Rano, P.S. : Hunterganj, Distt. : Chatra, Jharkhand (2.02 Ha).

(Proposal No. : SIA/JH/MIN/413467/2023)

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

This is a new project which has been taken for appraisal on 10.01.2023.

Project Category: B2 – Application

EC Applicationfor: Boulder Stone : 80,248 Tons (Max) per year / 29,722 Cum. (Max.) per Year

Proposed Crusher - NA

DG Set : 20 KVA

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Rano Stone Mine Project type – Stone Mine
2	Lessee:	: M/s Jai Shankar Stone Shri Rajesh Kumar Singh
3	Lease Address	: Mouza – Rano, Block & P.S. -Hunterganj, Dist. – Chatra, State – Jharkhand
4	Lease Area	: Ha: 2.02 ha Acres: 5.00 Acres
	Type of Land	: Non Forest – Rayati Land
6	Project Cost	: Capital Cost – 78.10 Lakhs
7	EMP Budget	: Capital: 21.57 Lakhs Recurring: 2.44 Lakhs
8	CSR / CER Budget	: 1.50 Lakhs
9	New or Expansion	: New Project
10	Mineable Reserves	: Cu.M.: 1,35,159.48 Cum. Tonnes: 3,64,930.596 Tons

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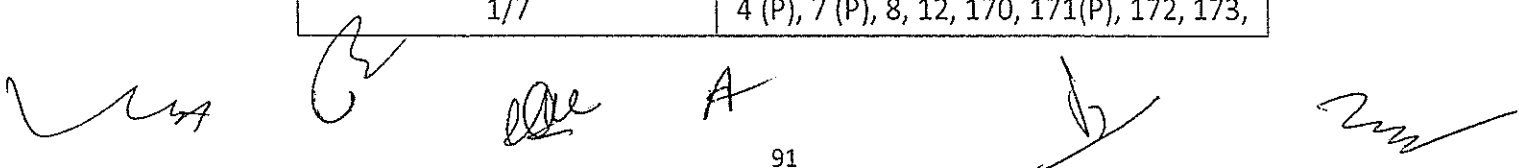
11	Mine Life	:	5 Years
12	Man power	:	21
13	Water Requirement	:	30.29 KLD (Drinking:0.32 KLD, Dust Suppression: 16.32 KLD, Plantation:13.65 KLD)
14	Water Source	:	<ul style="list-style-type: none"> Water will be sourced from Water Tankers, to be purchased locally for Dust Suppression, Plantation, Drinking and Domestic Consumption.
15	DG Set / power	:	20 KVA DG Set proposed
16	Crusher	:	NA
17	Nearest Water Body	:	Lilajan Nadi – 6.70 km in East direction
18	Nearest Habitation	:	Rano Village, Chatra – 24.30 KM
19	Nearest Rail Station	:	Gaya Railway Station – 52.30 Km in NE direction from the ML area.
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi-133.00 Km in SE direction.
21	Nearest Forest	:	Protected Forest – 0.80 Km in West direction
22	Road & Highways	:	Pucca Road – 20 metre in West direction. NH 22 – 6.35 KM in East direction.

CO-ORDINATES :

Geo-Coordinates of all corner points of Demarcated Block Boundary (GPS Co-ordinates) Datum: WGS 84		
Corner Point	Latitude	Longitude
1	24°23'30.46"N	84°44'38.62"E
2	24°23'33.44"N	84°44'38.87"E
3	24°23' 32.78"N	84°44' 40.82"E
4	24°23'33.30"N	84°44' 40.83"E
5	24°23' 32.99"N	84°44' 38.91"E
6	24°23' 36.15"N	84°44' 38.67"E
7	24°23'36.36"N	84°44'43.40"E
8	24°23' 33.33"N	84°44'43.99"E
9	24°23' 33.34"N	84°44' 43.40"E
10	24°23' 32.35"N	84°44'43.44"E
11	24°23'31.92"N	84°44' 42.48"E
12	24°23'31.96"N	84°44'40.95"E
13	24°23'30.72"N	84°44'40.52"E
14	24°23'30.88"N	84°44'39.65"E
15	24°23'30.32"N	84°44'39.62"E

LAND DETAILS :

Khata No.	Plot No.
1/7	4 (P), 7 (P), 8, 12, 170, 171(P), 172, 173,



	174, 175, 176, 194 (P)
8/4	6(P), 9,10,13,14, 14/296, 180, 181,182,183,184,185,186,187
10	177,178,196,197
11	3(P), 198

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Chatra vide letter no. 943/Khanan, dated 28.09.2022.
2	CO	:	The CO, Hunterganj vide letter no. 939, dated 02.11.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar & Register II.
3	DMO	:	DMO, Chatra vide memo no. 1015, dated 13.10.2022 certified that 01 mining lease area (6.96 acre) 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. 1544, dated 27.08.2020 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Chatra North vide letter no. 435, dated 26.02.2021 certified that the distance of reserved / protected forest is more than 250 metre from project site.
6	DSR	:	The DC-cum-District Magistrate, Chatra vide letter no. 1230 / Khanan, dated 14.12.2022 has informed that this project is part of District Survey Report (DSR) at Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 13.03.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. G/2022 – 23-325, dated 22.10.2022.

Working Details

1	Mining Method	:	Semi Mechanised. Wagon Drilling & Blasting to be used
2	Quarry Area	:	5 years–1.15 Ha End of Mine – 1.15 Ha
3	Waste Generation	:	5 years– 93,070 Cum. Life of Mine (Waste Gen.) – 93,070 Cum.
4	Stripping Ratio	:	1:0.3
5	Working Days	:	300

6	Benches: size & No	:	5 m x 3/5 m , Bench No.- 1 to 7(Conceptual Period)
7	Elevation of Mine	:	Maximum Elevation – 276 AMSL
8	Ground Level Elevation	:	276 AMSL
9	Ultimate Working Depth	:	242 AMSL
10	Water Table	:	236 AMSL
11	Topography of Mine	:	Flat Terrain
12	Explosive Requirement	:	9 Tons/year
13	Diesel/Fuel requirement	:	820 liters / day (246 KL/year)

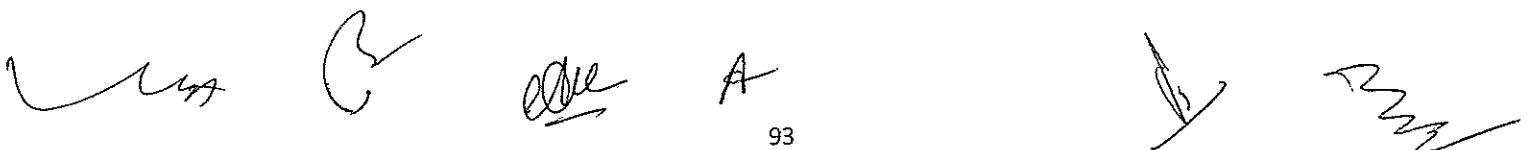
Production Details

Summary Of Yearwise of Production						
Years	Production In Cum/Year	Production In Cum/Day	O.B Production in Cum/Year	Production In Tons/Year	Prod. In Tons. /Day	Bench RL in meters
1st	27,601	92	47,806	74,523	248.41	218.21 – 198.21
2nd	27,167	91	14,430	73,352	244.51	217.5 – 193.21
3rd	25,623	85	19,890	69,182	230.61	217.29 – 193.21
4th	24,948	83	10,944	67,360	224.53	217.01 – 188.21
5th	29,722	99	0	80,248	267.49	193.21 – 183.21
Total	135,061	90	93070	364665	243.11	Depth – 35 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	2.02
Total Leasehold area	2.02



Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.15
Infrastructure	0.03
Dump	0.08
Road	0.01
Green Belt / Safety Zone	0.55
Garland Drain	0.05
Total area in use	1.87
Unutilized	0.15
Total Leasehold area	2.02

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

Category	Area in Hectares
Quarry	1.15 Water Body
Green Belt/ Safety Zone	0.55 (Plantation)
Office + Dump + Road	0.12 (Plantation)
Unutilized	0.15 (Plantation)
Garland Drain	0.05
Total area in use	2.02
Total Leasehold area	2.02
Plantation	0.82 (40 % of area)

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone/Green Belt and other reclaimed area	: 0.82 ha	2,050 trees @ 2500 trees per ha.
2	Haul /Approach Road	: 1.02 KM	680 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.

Waste Generation

A total of 93,070 Cum of wastes (Over Burden) will be generated from entire Rano Stone Deposit up to conceptual stage. OB will be utilized for backfilling, internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

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.
- i. If any tree felling than necessary permission shall be taken from the competent authority.

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 Rano Stone Mine of M/s Jai Shankar Stone, Mouza : Rano, P.S. : Hunterganj, Distt. : Chatra, Jharkhand (2.02 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

Day 3 : January 11th , 2023 [Wednesday]

Consideration of Proposals

1. Expansion of existing plant of 36000 TPA M.S. Billets / Ingots to a final configuration of induction furnaces 2x10 T & 2x12 T (Billets / Ingots-145200 TPA) with Slag Crusher (10 TPH) – 33000 TPA, TMT Bars & Rolled Products – 165000 TPA and reheating furnace of 30 TPH (emergency use) of M/s Jai Prabhuji Iron & Steel Pvt. Ltd., Village : Kanshitanr, Tehsil : Govindpur, Distt. : Dhanbad, Jharkhand.

(Proposal No. SIA/JH/IND1/413165 /2023)

Name of the consultant : Vardan Environet, Haryana

This is an expansion project which has been taken for appraisal on 11.01.2023.

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.

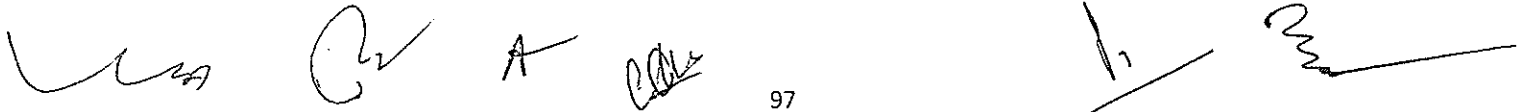
M/s Jai Prabhuji Iron & Steel (P) is an existing steel plant at Plot No C-21 to C-25 at Kandra Industrial Area Govindpur, District -Dhanbad, Jharkhand. M/s Jai Prabhuji Iron & Steel (P) is registered with Registrar of Companies, West Bengal. This unit was established in the year 2004. The total land area as on date is 1.97 ha (4.88 acres).

The unit was installed after obtaining Consent to Establish (CTE) dated 19.02.2005 for 51.500 MT/day MS Ingots, 14.12.2005 for 20.350 MT/day MS Ingots, 12.09.2011 for 48.000 MT/day MS Ingots, 07.09.2017 for 36000 TPA Billets. Consent To Operate (CTO) for the same was obtained vide letter no. JSPCB/HO/RNC/CTO-3706288/2018/1699 dated 30.10.2018 for 36000 TPA M.S. Billets/Ingots, valid upto 31.12.2023.

Previous Environment Clearance was granted vide letter No. J-11011/180/2010-IA II(I) dated 13.07.2011 for MS Ingots 36000 TPA and Silico Manganese 15000 TPA.

No increase in pollution load (NIPL) granted: vide letter Ref. no. B-1156, dated 17.06.2022 for change of product from M.S. Ingot – 36000 TPA to M.S. Billet/Ingot – 36000 TPA.

The company now proposes for Expansion & Diversification of the Project for Final Configuration of Induction Furnaces 2x10T & 2x12T (Billets/Ingots- 145200 TPA) with Slag Crusher –33000TPA, TMT Bar and Rolled Product Mill– 165000TPAfrom existing plant of – M.S. Billets/Ingots36000 TPA. There will be a stand by re-heating furnace of capacity 99000 TPA for emergency and start-up after shutdowns.



Land Details :

Sl. No.	Khata No.	Plot No.
1	19	81 (P), 78 (P), 95 (P), 101 (P) & 102
2	18	82, 83, 85 & 98 (P)
3	4	84 (P), 79 (P), 420 (P) & 108 (P)
4	23	96 (P), 97, 103 (P) & 104 (P)
5	11	100

Latitude & Longitude of the project :

Points	Latitude	Longitude
A	23°50'59.08"N	86°28'41.35"E
B	23°50'56.31"N	86°28'46.47"E
C	23°50'53.93"N	86°28'45.33"E
D	23°50'52.68"N	86°28'44.05"E
E	23°50'54.34"N	86°28'40.37"E

The existing project cost is Rs. 9.05 Crores. The estimated project cost for the proposed expansion is Rs. 57.10 Crores . The total project cost after the expansion will be Rs. 66.15 Crores.

Employment Generation after the proposed project will be 150 direct employment and approximately 50-60 people will be employed during the construction phase and will be recruited from the local villages surrounding the project site.

Raw material for the plant would be procured from local and other state markets depending upon the quality. The transportation of raw material and the final products will be done through NH-2 that is adjacent to the project site. The capacity of different existing and proposed units is as follows:

Units	Existing installed Units		Proposed Final Configuration after Expansion & Diversification		
	Unit	Capacity TPA	Unit	Operation Days	Capacity TPA
Steel Melting Shop Induction Furnace	1x3 Tons + 2x6 Tons	120 TPD (36000 TPA)	2x10T + 2x12T Existing furnaces to be replaced & addition of one new furnace	330	145200
	2 Strand,	120 TPD		330	

Continuous Casting Machine (CCM)	4/7m rad	(36000 TPA)	2 Strand, 4/7m rad		
Reheating Furnace	-	-	1x30 TPH	330	99000
Rolling Mill	-	-	1x25 TPH	330	165000
Slag Crusher Unit	-	-	1 x 10 TPH	330	33000 TPA (Metal Recovery - 3180 TPA)

Presently the unit is having a connected load of 9.5 MVA from DVC. Total power requirement for the project after expansion is envisaged as 25.0 MVA, which will be met from DVC.

The total requirement of makeup water for industrial and domestic purposes after the proposed expansion will be 198.8KLD. The water requirement will be met from ground water through bore well. NOC of proposed ground water will be obtained of CGWA.

Total Raw material requirement after the proposed expansion of plant is given below:

Raw Materials	Required materials for Per Ton of product	Total Raw materials required After Expansion	Source
Billets/Ingots (Total production: 145200 TPA)			
Sponge Iron	0.800	116160 TPA	Local Plants in vicinity Through Road
Pig Iron	0.300	43560 TPA	
Scrap	0.150	21780 TPA	In-house & nearby Plants. Through Road
Ferro Alloys (SiMn/FeSi)	0.002	290 TPA	Local Plants in vicinity Through Road
Rolling Mill – TMT Bars/Strips(Total production: 165000 TPA)			
Hot Billets/Ingots/M.S. Billets/Ingots	1.02	168300 TPA	145200TPA, In-house – Hot Billets direct charging & rest 23100 TPA from nearby Plants. Through Road
Coal/Furnace Oil for re-heating furnace	0.07	11088 TPA/3300 KL	Purchase from open market

The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

STATUTORY CLEARANCES

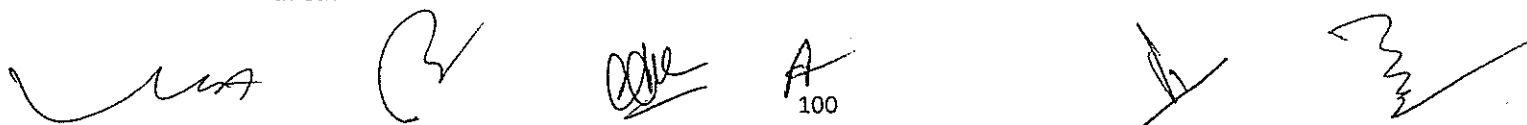
1	LOI/Lease docs	:	Deed No. 8675 - 2.00 Acre - Dated: 10.12.2003. Deed No. 6808 - 1.38 Acre – Dated: 26.08.2004. Deed No. 1184/1108 – 1.50 Acre – Dated: 21.03.2018.
2	CO	:	The CO, Govindpur (Dhanbad) vide letter no. 1424, dated 20.11.2021 has mentioned the plot no. of the project is not recorded as “Jungle Jhari” in R.S. Khatiyani & Register II.
3	DFO Wild Life	:	DFO Wildlife, Hazaribagh vide letter no. 1347, dated 11.07.2019 certified that the proposed project site is outside Eco Sensitive Zone of Topchanchi Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Dhanbad vide letter no. 1678, dated 06.11.2018 certified that the distance of notified forest is 2037 meters from project site.
5	Consent to Operate (CTO)	:	CTO granted by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO-3706288/2018/1699, dated 30.10.2018.
6	CGWA	:	No Objection Certificate (NOC) for Ground Water Abstraction vide NOC no. CGWA/NOC/IND/ORIG/2021/10346, dated 20.01.2021.
7	Previous Environmental Clearance (EC)	:	Previous EC granted by MoEF&CC, Govt. of India vide F. No. J-11011/180/2010-IA.II (I), dated 13.07.2011.

Public Hearing to be conducted as per EIA notification, 2006.

The Project Authorities have declared that the baseline data is being generated for the period December, 2022 to February, 2023.

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 09, 10, 11, 12, 13 & 14.01.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure II alongwith the following specific conditions :

- I. Details of land to be utilized for green belt development outside the project premises is to be provided alongwith details of plantation. Atleast 10% of the project area should be utilized for green belt development within the premises and the land outside the premises to be utilized for green belt development should be atleast 30% of the project area.

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- II. Application to CGWA for the additional requirement of water due to the expansion project must be submitted and the copy of the same to be enclosed as part of EIA report.

2. Expansion of Existing MS Ingot/Billet production from 13200 TPA to 118800 TPA through existing 2x8T Furnace & installing additional 2x10T Furnaces along with CCM-1x2strand, Rad-4/7 and production of 29700 TPA to 117600 TPA by increasing Rolling Mill capacity 1x20 TPH of M/s Mangalam Ispat at Plot no. IV/A-5 (P), Bokaro Industrial Area, Balidih, Village : Gorabali, P.S. : Jaridih, Distt. : Bokaro, Jharkhand.

(Proposal no. SIA/JH/IND1/413313/2023)

Name of the consultant : Vardan Environet, Haryana

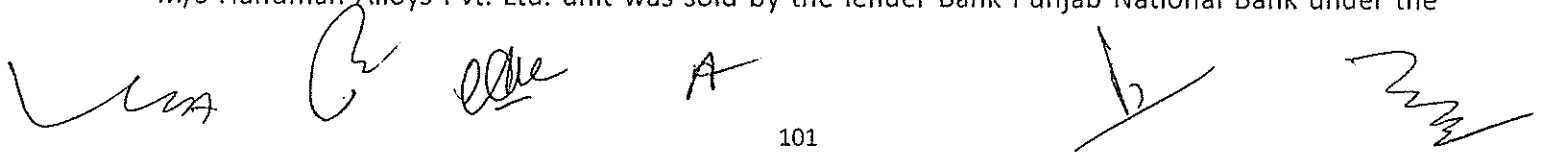
This is a case of violation which has been taken for appraisal on 11.01.2023 in the light of OM no. F.No.22-21/2020-IA.III [E 138949] dated 28.01.2022 of MoEF&CC, Govt. of India, order passed by Hon'ble Apex Court in the matter of civil appeal no. 7576-7577 of 2021 in Electrosteel Steels Ltd. vs Union of India and SOS vide OM no. F.No. 22-21/2020-IA.III dated 07.07.2021 issued by MoEF&CC, Govt. of India.

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 Mangalam Ispat is located at Plot No. IV/A-5(P), Bokaro Industrial Area, Balidih, Bokaro, Jharkhand on the total area of 3.20 Ha (7.91 Acres). This is a violation project since the company has installed Induction Furnace with a capacity of 52800 TPA (16T x 10 Heats x 330 days) M.S. Ingot without obtaining prior EC. Hence, it attracts provisions of S.O. 804 (E) issued by MoEF&CC dated 14.03.2017 and OM, dated 07.07.2021 regarding SOP for identification and handling for the projects under Violation.

M/s Mangalam Ispat is a partnership firm registered in the state of Odisha having its main object in the area of Steel and Allied products. The Registered/Head office of the Firm is situated at TTT/20, Ground Floor, Civil Township, Rourkela, Odisha – 769012.

The company has Consent to Establish (CTE) vide Ref. No. 3054, dated 17.05.2003 (in the name of M/s Hanuman Alloys Pvt. Ltd. for M.S. Rods – 50.0 MT/Day, total 90 TPD) and obtained the Consent to Operate (CTO) accordingly. The Company also obtained another Consent to Establish (CTE) vide Ref. No. 3736, dated 16.11.2006 (in the name of M/s Hanuman Alloys Pvt. Ltd. for M.S. Ingot & Pencil Ingot – 40.0 MT/Day) and obtaining the Consent to Operate (CTO) accordingly. The M/s Hanuman Alloys Pvt. Ltd. unit was sold by the lender Bank Punjab National Bank under the






SARFESI Act 2002. The unit was purchased and acquired by M/s Mangalam Ispat on 24.08.2018 and CTO obtained accordingly since 2019 onwards.

Latest CTO was obtained vide ref No. JSPCB/HO/RNC/CTO-7311239/2020/551, dated 03.03.2020 (for M.S. Ingot 40 TPD & M.S. Rod 90 TPD) for the period up to 31.12.2024. The Company has installed Induction Furnace with a capacity of 52800 TPA (16T x 10 Heats x 330 days) M.S. Ingot under violation.

The company now proposes Expansion of Existing MS Ingot/Billet production from 13200 TPA to 118800 TPA through existing 2x8T Furnace & installing additional 2x10T Furnaces along with CCM-1x2strand, Rad- 4/7 and production of 29700 TPA to 117600 TPA by increasing Rolling Mill capacity to 1x20TPH Plot No. IV/A-5(P), Bokaro Industrial Area, Balidih, Bokaro, Jharkhand within the existing plant area of 3.20Ha (7.91 Acres). After reviewing the various probable options including economic viability, power balancing, implementation schedule, it was concluded that the above set up would be best suited for the project.

Khata No.	Plot No.	Area
42	2489(P)	0.23
50	2490(P)	0.33
	2487(P)	0.10
134	2491(P)	0.34
34	2492(P)	0.34
95	2493(P)	0.22
59	2494(P)	0.41
65	2495(P)	0.46
	2488(P)	0.18
121	2496(P)	0.08
23	2497(P)	0.16
	2499(P)	0.06
21	2498(P)	0.28
	2484(P)	0.12
56	2486(P)	0.14
	2481(P)	0.57
	2502(P)	0.18
147	2482(P)	0.15
177	2483(P)	0.15



	2485(P)	0.08
120	2501(P)	0.20
	2514(P)	0.07
125	2505(P)	0.06
Total		7.91

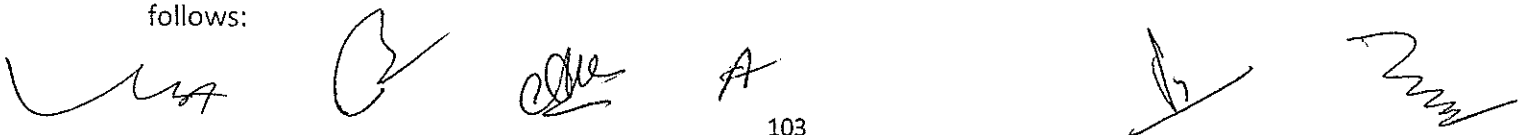
Latitude & Longitude of the project :

Corner	Latitude	Longitude
A	23°40'58.27"N	86° 03'32.11"E
B	23°40'55.51"N	86° 03'30.05"E
C	23°40'55.42"N	86° 03'30.07"E
D	23°40'54.90"N	86° 03'29.59"E
E	23°40'54.68"N	86° 03'29.44"E
F	23°40'54.50"N	86° 03'28.93"E
G	23°40'55.34"N	86° 03'27.65"E
H	23°40'55.13"N	86° 03'27.60"E
I	23°40'53.52"N	86° 03'27.96"E
J	23°40'49.23"N	86° 03'31.93"E
K	23°40'54.56"N	86° 03'35.94"E

Cost incurred under violation (existing facilities) is Rs. 13.89 Cr. The total estimated cost of the project after the proposed expansion will be Rs 22.66 Cr. (i.e. Violation project cost - Rs. 13.89 Cr. + Proposed project cost- Rs. 8.768 Cr.

Employment Generation after the proposed project will be 270 direct employment and approximately 40-50 people will be employed during the construction phase and will be recruited from the local villages surrounding the project site.

Raw material for the plant would be procured from local and other state markets depending upon the quality. The transportation of raw material and the final products will be done through NH-320 that is 1.40km to the project site. The capacity of different existing and proposed units is as follows:



S. No.	Plant Equipment	As per CTE & CTO		Implemented		Implemented under Violation		Proposed Units		Final (Exist. + Prop.)		Remarks		
		(@ 330 working days/year)				(@ 330 working days/year; Induction Furnace: 10heats/day)								
		Config (TPH)	Prod. Cap. (TPA)	Config (TPH)	Prod. Cap. (TPA)	Config. (TPH)	Prod. Cap. (TPA)	Config. (TPH)	Prod. Cap. (TPA)	Config. (TPH)	Prod. Cap. (TPA)			
1	MS Ingot	-	13200 (40 TPD)	2 x 8	52800	2 x 8T	52800	1 x 10	33000	2 x 8 + 2 x 10	118800	Unit installed in F.Y. 2007-08 without prior EC, (Well before purchase by the current PP) Installation initiated for 1 x 10 TPH induction furnace, out of the proposed 2x10 TPH Induction Furnace		
2	Rolling Mill	-	29700 (90 TPD)	1 x 10 TPH	29700	-	-	1 x 20	117600	1 x 20	117600	Modification and Expansion of Rolling Mill for Hot Charging (Billet/ Ingot).		
3	Reheating Furnace	-	29700	1 x 10 TPH	29700	-	-	1 x 10	59400	1 x 10	59400	No change. Only increase in working hrs. from 10 to 20 hrs. Will be operated only in emergency.		

Presently the unit is having a connected load of 6 MVA. Total power requirement for the project after expansion is envisaged as 13 MVA, which will be met from DVC.

Total Raw material requirement after the proposed expansion of plant is given below :

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	Local Plant in Bokaro, Ramgarh, Giridih etc.	40 to 120 Km By Road
Cast Iron/ Pig Iron	0.30	35640		
MS Scrap	0.15	17820		
Ferro Alloys	0.002	240		

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TOTAL	1.252	148740		
Rolling Mill: (Direct Hot Rolling– 117600 TPA)				
Hot M.S. Billets	1.01	118800	In-house	Direct charging from CCM

The total make-up water requirement of the plant is estimated at 182.0 cum/day. The water requirement will be met from ground water through bore well.

The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

Details of Year-Wise Production under violation from Installed Facilities

Year	MS Ingot		MS Rod	
	Total production	Production Under Violation	Total production	Production Under Violation
F.Y.2018-19	-	-	-	-
F.Y.2019-20	8,752.395 TPA	4752.40	-	-
F.Y.2020-21	22,884.455 TPA	10,884.46	-	-
F.Y.2021-22	25,400.020 TPA	13400.02	2,117.310 TPA	Nil
F.Y.2022-23	16,239.660 TPA	6022.17	4,066.050 TPA	Nil

STATUTORY CLEARANCES

1	LOI/Lease docs	:	Lease Deed.
2	CO	:	The CO, Chas (Bokaro) vide memo no. 1924, dated 12.08.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DFO Wild Life	:	DFO Wildlife, Hazaribagh vide letter no. 1290, dated 14.07.2022 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Bokaro vide letter no. 2563, dated 10.09.2022 certified that the distance of notified forest is 100 meters from project site.
5	Emission Consent Order (ECO) & Discharge Consent Order (DCO)	:	i. ECO issued by JSPCB vide Ref. no. DB/8057/N-3633, dated 12.11.2002. ii. DCO issued by JSPCB vide memo no. DB/8294/W-3794, dated 21.06.2003.
5	No Objection Certificate (NOC) & Consent to Operate	:	NOC granted by JSPCB vide : i. Ref. no. 3736, dated 16.11.2006. ii. Memo no. 3054, dated 17.05.2003.

(CTO)	<p>CTO granted by JSPCB vide :</p> <ul style="list-style-type: none"> i. Memo no. D-3194 (C), dated 15.10.2013. ii. Ref. no. PC/CTO/DHN/206359/D-965 (C), dated 08.04.2016. iii. Ref. no. JSPCB/HO/RNC/CTO-4215911/2019/403, dated 26.02.2019. iv. Ref. no. JSPCB/HO/RNC/CTO-7311239/2020/551, dated 03.03.2020.
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Public Hearing to be conducted as per EIA notification, 2006.

The Project Authorities have declared that the baseline data is being generated for the period December, 2022 to February, 2023. Additional one month study for March, 2023 is to be done.

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 09, 10, 11, 12, 13 & 14.01.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure IV.

3. Giridih Open Cast Project (0.70 MTY capacity) of M/s Central Coalfields Limited, Village : Karharbari & Dhobidih, Anchal : Giridih, Thana no. : Karharbari – 194, Dhobidih – 193, Distt. : Giridih, Jharkhand (122.70 Ha).

(Proposal No. : SIA/JH/CMIN /77491/2018)

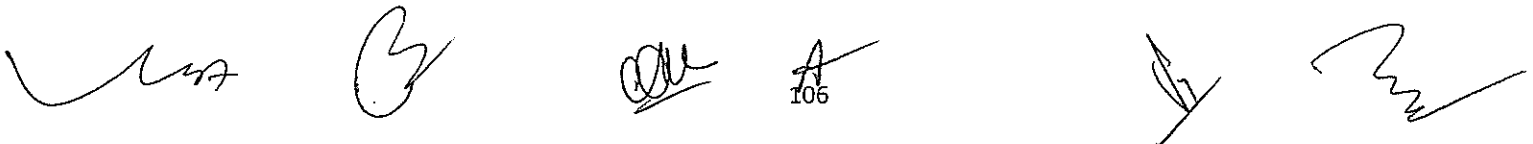
Name of the consultant : CMPDI, RI-III, Ranchi.

This is a violation project which has been taken for appraisal on 11.01.2023.

Giridih Coalfield is one of the earliest coalfields in India. Mining activity in the coalfield started as early as 1871 by M/s Bengal Coal Company & by then State Railway and subsequently transferred to National Coal Development Corporation (NCDC) about 60 years back. Later in the year 1973, it came under the control of Central Coalfields limited (CCL), a subsidiary of Coal India Limited. Presently it is under the administrative control of Giridih Area of CCL.

Giridih OCP is located in Giridih Coalfields, Giridih district, Jharkhand. The project is located within the latitude 24°10'3.62" and 24°10'42.73" N and longitude 86°14'51.63" and 86°15'41.80" E. The project is located about 6 km to the south of Giridih town.

The area is well connected by rail and road. The Giridih district town is about 5 km from the project. The nearest Railway station Giridih is about 6 km from the Project. Giridih Railway station is on the Giridih-Madhupur line of the Asansol Railway division in



the Eastern Railway Zone of Indian Railways. Giridih lies on the junction of NH-122A and State Highway-13 (SH-13). The Grand Trunk Road passes through Dumri from where the Giridih is about 45km. The block is about 182km from Ranchi via NH-20 and 122A. The nearest commercial airport is situated at Ranchi.

The area has a gentle undulating topography with occasional low humps. The isolated humps are locally known as Kamaljore, Bhadua and Bali hills. The ground elevation varies from 280m to 305m.

The general flow of the streams is towards south. Most of the streams meet Barakar River at about 7.84 km south-west of the proposed OCP. The water level is very close to the surface during rainy season and about 20m below surface during dry season

The method of mining engaged to extract coal and OB in Giridih Opencast mine has been inclined slicing with shovel-dumper combination as the gradient of the seams vary from 6-10° with an average gradient of 8°. It is proposed to mine Bali hill seams in Giridih OC as Jatkutti seam has almost been depleted and stripping ratio of underlying seams is too high to be mined out through OC mining.

Giridih OC is a brownfield project which has been operational prior to nationalization era. The coal production capacity is 0.7 MTPA over a mine leasehold area of 122.70 ha. The balance mineable reserves available in Giridih OC are estimated at 2.30 MT and the life of the project is proposed as 4 years. The grade of coal available is G10.

DVC Substation Beniadih supplies electricity via 33 kV line; out of which Giridih OC receives 11 kV power. DVC substation at Bhorandih which is at a distance of 25 km is the main source of power. The total annual power consumption is 3000 MWH.

Water requirement :

Industrial water	Domestic water	Mine discharge
237 m ³ /day	535 m ³ /day	360 m ³ /day
Industrial water demand of Giridih OCP is being fulfilled by mine water discharge. The domestic water demand is fulfilled from Giridih Colliery abandoned UG water source.		

The total project area of Giridih OCP is 122.70 Ha. The proposed land use during mining is as given below:

Land Use During Mining	
Particulars	Area (Ha.)
Quarry	56.35
External OB dump	18.68
Infrastructure, Road & others	4.80

Green Belt and Safety Zone	18.20
Vacant land	24.67
Total Area	90.84

The coal production from Giridih OCP was as given below: -

Year	Giridih OC Coal Prod. (M.te)
1993-94	0.23
1994-95	0.17
1995-96	0.20
1996-97	0.18
1997-98	0.20
1998-99	0.38
1999-00	0.26
2000-01	0.13
2001-02	0.15
2002-03	0.19
2003-04	0.32
2004-05	0.33
2005-06	0.37
2006-07	0.35
2007-08	0.35
2008-09	0.41
2009-10	0.40
2010-11	0.48
2011-12	0.49
2012-13	0.53
2013-14	0.50
2014-15	0.42
2015-16	0.45
2016-17	0.70
2017-18	0.45
2018-19	0.19
2019-20	0.13
2020-21	0.12
2021-22	0.09

*Mine operation suspended since Jan'22 due to non-renewal of CTO.

Giridih OCP: Details of Mineable Reserves and OB Removal:

Year	Coal Production (MT)	OB Removal (Mcum)	Stripping Ratio (cum/te)
1	0.70	1.76	2.52
2	0.70	1.76	2.52


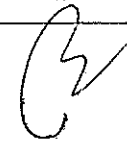




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3	0.70	1.76	2.52
4	0.20	0.51	2.52
TOTAL	2.30	5.80	2.52

Sl. No.	NAME OF MOUZA	THANA NO.	KHATA NO.	PLOT NO.	AREA IN ACRES	AREA IN Ha.
1	DHOBIDIH	193	13	247(P)	0.42	0.17
2	"	"	13	248(P)	17.62	7.13
3	"	"	14	249(P)	2.32	0.93
4	"	"		287(P)	0.05	0.02
5	"	"	8	288(P)	0.52	0.21
6	"	"		296(P)	0.12	0.05
7	"	"	7	308(P)	0.72	0.29
8	"	"	5	309(P)	0.37	0.15
9	"	"	3	310(P)	0.12	0.05
10	"	"		311(P)	0.01	0.01
11	"	"		315(P)	0.07	0.03
12	"	"	13	316(P)	2.15	0.87
13	"	"	13	317	0.02	0.01
14	"	"	7	318	0.25	0.10
15	"	"	1	319	0.25	0.10
16	"	"	13	320	0.10	0.04
17	"	"	9	321	0.19	0.08
18	"	"	13	322	0.18	0.07
19	"	"	9	323	0.15	0.06
20	"	"	13	324	0.13	0.05
21	"	"	14	325	0.36	0.14
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24	"	"	13	328	0.13	0.05
25	"	"	9	329	0.52	0.21
26	"	"	9	330	0.30	0.12
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28	"	"	11	332	0.71	0.29
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37	"	"	13	341	0.02	0.01
38	"	"	13	342	0.19	0.08
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40	"	"	12	344	0.01	0.01
41	"	"	13	345	1.45	0.58
42	"	"	12	346	0.25	0.10
43	"	"	9	347	0.24	0.10
44	"	"	5	348	0.19	0.08
45	"	"	9	349	0.41	0.17
46	"	"	13	350(P)	2.69	1.09
47	"	"	13	352	0.09	0.04
	DHOBIDIH			Total	35.08	14.20

Sl. No.	NAME OF MOUZA	THANA NO.	KHATA NO.	PLOT NO.	AREA IN ACRES	AREA IN Ha.
1	KARHARBARI	194	147	1403	0.74	0.30
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3	"	"		1405	0.01	0.01
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10	"	"		1535(P)	0.42	0.17
11	"	"	433	1536(P)	0.06	0.02
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14	"	"	437	1548	0.24	0.10
15	"	"	437	1549	0.67	0.27
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17	"	"		1551	0.53	0.21
18	"	"	512	1552(P)	0.60	0.24
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20	"	"	359	1554	0.88	0.37
21	"	"	512	1555	0.02	0.01
22	"	"		1556	0.58	0.23
23	"	"	437	1557	0.57	0.23
24	"	"	437	1558	0.01	0.01
25	"	"		1559	0.01	0.01
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47	"	"		1581	0.75	0.30
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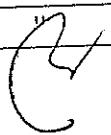




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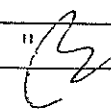
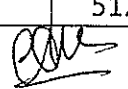



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86	"	"		1682	0.08	0.03
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149	"	"	417	1925	0.20	0.08
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151	"	"		1927	0.09	0.04
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207	"	"	512	1987	0.06	0.02
208	"	"		1988	0.26	0.11
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212	"	"	371	1992	0.54	0.22
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214	"	"	512	1994	0.17	0.07
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219	"	"	512	1999	0.90	0.36
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224	"	"	512	2004	0.05	0.02
225	"	"	512	2005	1.43	0.58
226	"	"	512	2006	0.30	0.12
227	"	"	512	2007	0.55	0.22
228	"	"	276	2008	0.28	0.12
229	"	"		2009	0.40	0.16
230	"	"		2010	0.03	0.01
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233	"	"	451	2013(P)	0.20	0.09
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243	"	"		2023	0.10	0.04
244	"	"	448	2024(P)	0.03	0.01
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252	"	"	114	2126	0.01	0.01
253	"	"	111	2127	3.58	1.45
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255	"	"	111	2129	0.94	0.39
256	"	"	114	2130(P)	7.21	2.92
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262	"	"	114	3099	6.82	2.76
263	"	"	114	3100	3.04	1.23

264	"	"		3101	0.93	0.38
265	"	"	146	3102	0.19	0.08
	KARHARBARI			Total	268.10	108.50
Total Area					303.18	122.70

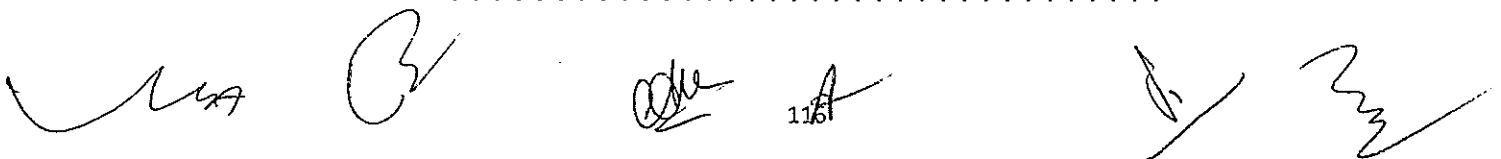
STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land has been Transferred to National Coal Development Corporation (NCDC)
2	CO	:	The CO, Giridih Sadar vide letter no. 1287, dated 23.12.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Ranchi vide memo no. 665/M, dated 18.08.2022 certified that no other mining area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1761, dated 08.09.2022 certified that the said project is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Giridih East Division vide letter no. 2915, dated 17.08.2022 certified that the distance of reserved / protected forest is less than 250 m from proposed project site.
6	Mine Plan Approval	:	Ref No.: - CS/BM/515/2022/209, Dated: - 17.06.2022.
7	Public Hearing	:	Public Hearing conducted on 26.02.2022
8	Terms of Reference (ToR)	:	Violation Terms of Reference (ToR) granted by MoEF&CC, Govt. of India vide F.No. 23-268/2018-IA.III (V), Dated 27.04.2021.

During the presentation the following documents were sought :

- i. Commitment to carry out 05 tier plantation is to be submitted.
- ii. Communication with MoEF&CC regarding submission of the project for consideration of the project by SEIAA is to be provided as the ToR was granted by MoEF&CC.
- iii. Proposed post mining land use plan is to be corrected & submitted.
- iv. Commitment to do plantation in the safety zone within the first year of operation.
- v. Site plan to be revised to include the existing settling pond.
- vi. Routine noise monitoring data is to be provided.
- vii. The revised remediation plan and natural and community resource augmentation plan is to be provided.

On submission of the above documents, the project will be taken up for reconsideration.

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4. Kabribad Opencast Coal Mine Project of M/s Central Coalfields Limited, Village : Kabribad, Chunjka, Patrodih, Khandih, Chilga, Tehsil : Giridih, Distt. : Giridih, Jharkhand (90.84 Ha).

(Proposal No. : SIA/JH/CMIN/76338/2018)

Name of the consultant: CMPDI, Kanke Road, Ranchi

This is a violation project which has been taken for appraisal on 11.01.2023.

Kabribad OC is an operating mine located in Giridih coalfields of Central Coalfields Limited, Jharkhand. Mining activity in the coalfield started as early as 1871 by M/s Bangal Coal Company & by then State Railway and subsequently transferred to National Coal Development Corporation (NCDC) about 60 years back. Later in the year 1973, it came under the control of Central Coalfields Limited (CCL), a subsidiary of Coal India Limited. Presently it is under the administrative control of Giridih Area of CCL.

The Kabribad OCP is located about 3.50 kms to the south of Giridih town and is covered in Survey of India toposheet no. 72L/8 (in 1:50,000 scale). The block boundary by latitudes 24°8'45" to 24°9'41" North and Longitudes 86°17'39" to 86°18'42" East. The nearest railway station Giridih is about 5 km from the project. Giridih railway station is on the Giridih-Madhupur line of the Asansol Railway division in the Eastern Railway Zone of Indian Railway.

The general flow of the streams is towards south. Most of the streams meet Barakar River at about 6 km south-west of the proposed OCP. The water level is very close to the surface during rainy season and about 20 m below surface during dry season.

The method of mining proposed to be adopted to extract coal and OB in Kabribad Opencast mine will be inclined slicing with shovel-dumper combination as the gradient of the seams vary from 6-10° with an average gradient of 8°. It is proposed to mine Khandiha I & II seams in Kabribad OC.

The mineable reserve of Kabribad OC is estimated as 3.60 Mte with corresponding volume of OB estimated as 5.14 Mm³ with an average stripping ratio of 1.43 cum/t. The life of proposed project is 7 years.

Kabribad OC receives power at 11 KV from Beniadih substation of CCL DVC substation at Bhandaridih at a distance of 25 kms is the main source of power. The power consumption demand is max. 4500 KVA (Total annual consumption = 18375.30 MWH).

Water requirement:

Industrial water	Domestic water	Mine discharge
225 m ³ /day	317 m ³ /day	300 m ³ /day
Industrial water demand of Kabribad OC is being fulfilled by mine water discharge. The domestic water demand is fulfilled from Giridih Colliery abandoned UG water source.		

The total project area of Kabribad OCP is 90.84 Ha. The proposed land use during mining is as given below:

Land Use During Mining	
Particulars	Area (Ha.)
Quarry	39.94

OB dump	31.95
Old mine void filled with water	3.77
Infrastructures (W/S, coal Stock, etc.)	2.62
Road	0.91
Safety zone & vacant land	11.65
Total Area	90.84

Sl. no.	Description of land	Area in Ha.
1.	Revenue land	63.47
2.	Jungle Jhari land	27.37
	Total	90.84

The Project Authorities have submitted the application for diversion of Jungle Jhari land under the Forest (Conservation) Act, 1980 vide proposal no. FP/JH/MIN/414009/2023 dated 10.01.2023 for the area 27.37 ha.

The coal production from Kabribad OC was as given below:

Year	Kabribad OC Coal Prod. (Mte)
1993-94	0.297
1994-95	0.280
1995-96	0.195
1996-97	0.288
1997-98	0.249
1998-99	0.128
1999-00	0.078
2000-01	0.104
2001-02	0.110
2002-03	0.146
2003-04	0.122
2004-05	0.150

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Year	Kabribad OC Coal Prod. (Mte)
2005-06	0.137
2006-07	0.201
2007-08	0.403
2008-09	0.415
2009-10	0.371
2010-11	0.338
2011-12	0.234
2012-13	0.310
2013-14	0.431
2014-15	0.559
2015-16	0.331
2016-17	0.188
2017-18	0.25
2018-19	0.19
2019-20	0.00
2020-21	0.00

Geological and Mining Characteristics of Kabribad OC

Sl. No.	Particulars	Unit	Value
I.	COAL SEAMS		
A.	SEAM THICKNESS		
1	Khandia III/IV seam	M	2.74-7.73
2	Upper Khandia	M	6.4-13.41
3	Lower Khandia	M	1.10-4.98
B.	GRADIENT OF THE SEAM	Degree	6-10
C	AV. SP. GRAVITY OF SEAM		1.5-1.70
1	Khandia III/IV seam	Te/Cum	1.62
2	Upper Khandia	Te/Cum	1.63
3	Lower Khandia	Te/Cum	1.62
D.	DRILLING CATEGORY	Assumed	VIII
E	EXCAVATION CATEGORY	Assumed	Cat.III
			Cat. IV
II	OVERBURDEN		
1.	OB Thickness		
i	Above Khandia III/IV	M	0-30.00
ii	Parting between Khandia III/IV and upper Khandia	M	7.99-19.94

iii	Parting between upper Khandia and Lower Khandia	M	0.61-6.50
3.	Drilling Category	Assumed	II-X
4.	Excavation Category	Assumed	Cat. III
			Cat IV
5.	O.B Volume weight	T/cum	2.40
III	QUARRY PARAMETERS		
1.	Maximum strike length along quarry floor	M	1275
2.	Maximum length of quarry along dip at quarry floor	M	435
3.	Maximum Depth of quarry	M	70
4.	Area of excavation	Sq km	0.40

Kabribad OC: Seamwise details of Geological vis-à-vis Mineable Reserves :

Seam	Avg Thickness (m)	Net Geological Reserve (MT)	Mineable reserve (MT)
Khandiha II Top	2.91	1.137	0.821
Khandiha II Bot	2.60	1.094	0.732
Khandiha I Top	4.11	2.146	1.290
Khandiha I Bot	2.40	1.373	0.757
Total		5.750	3.600

LAND DETAILS :

Khata No.:-

Chilga: - 1,21,22,29

Chunjka: -2,19,220

Akdoni Khurd: -75,145,60,204,135,216,1

Khandiha:1,2,3,5,6,7,8,9,10,11,13,14,16,17,18,19,20,21,22,23,24,25,26,28,29,30,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,90,91,92

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Plot No.:-

Chilga: - 204(P),205(P), 206, 207(P),214(P), 215(P), 240(P), 254(P), 255(P), 256(P), 257(P),258, 259(P),260 to 275, 276(P),277,278,279(P),284(P),287,289

Chunjka: - 1(P), 2(P), 222, 224(P),225(P), 226(P),227(P),1233

Akdoni Khurd: - 1426(P), 1427, 1428(P),1429, 1430(P),1431(P), 1432 to 1474, 1475(P), 1476(P), 1477(P), 1492(P), 1501(P),1502(P),1503(P)

Khandiha:- 1(P), 2(P),13(P), 14(P), 15(P), 16(P), 24(P), 27(P), 28(P), 30 to 34, 35(P), 36 to 49, 50(P),52(P), 54(P), 58(P), 60(P), 61(P), 62(P), 66(P), 74(P),75(P), 76 to 117,118(P),119(P),120(P), 121(P),125(P),127(P),128(P),130(P),132(P),133(P),134(P),135(P),136 to 149, 150(P),151 to 235, 236(P), 237,238(P), 239(P), 242(P), 243(P), 244 to 396, 400 to 409, 411, 412, 415(P), 416

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land has been Transferred to National Coal Development Corporation (NCDC)
2	CO	:	The CO, Giridih Sadar vide letter no. 726, dated 01.08.2022 has clarified that some of the plots within the project area are recorded as "Jungal - Jhari" in Khatiyani / Revenue record.
3	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1550, dated 16.08.2022 certified that the said project is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Giridih East Division vide letter no. 1922, dated 09.06.2022 certified that the distance of reserved / protected forest is less than 250 m from the existing project site. The DFO, Giridih East Division also informed vide memo no. 3401, dated 24.09.2022 that the plots belong to the Jungal - Jhari are broken prior to Forest (Conservation) Act, 1980.
5	Mine Plan Approval	:	Ref No.:- CS/BM/510/2022/62, Dated:- 22.02.2022.
6	Public Hearing	:	Public Hearing conducted on 26.02.2022
7	Terms of Reference (ToR)	:	Violation Terms of Reference (ToR) granted by MoEF&CC, Govt. of India vide F.No. 23-1/2020-IA.III, dated 27.04.2021.
8	Diversion of forest land	:	Application for diversion of forest land(GMJJ) vide proposal no. FP/JH/MIN/414009/2023, dated 10.01.2023 for area 27.37Ha.

DETAILS OF PATCH-WISE GMJJ LAND OF KABIBAD OCP					
SL. NO	PATCH NO.	MOUZA	PLOT NO.	AREA (IN HA)	TOTAL AREA (IN HA)
1	PATCH - 1	AKDONI KHURD	1492(P)	2.90	2.90
2	PATCH - 2	AKDONI KHURD	1501(P)	1.42	18.49
		KHANDIHA	1(P)	7.37	
			400	9.70	
3	PATCH - 3	KHANDIHA	239(P)	0.63	0.63
4	PATCH - 4	KHANDIHA	242(P)	1.48	1.48
5	PATCH - 5	KHANDIHA	325(P)	2.02	2.02
6	PATCH - 6	KHANDIHA	385	0.18	1.15
			390	0.97	
7	PATCH - 7	CHUNJKA	227(P)	0.43	0.43
8	PATCH - 8	KHANDIHA	130(P)	0.27	0.27
TOTAL					27.37

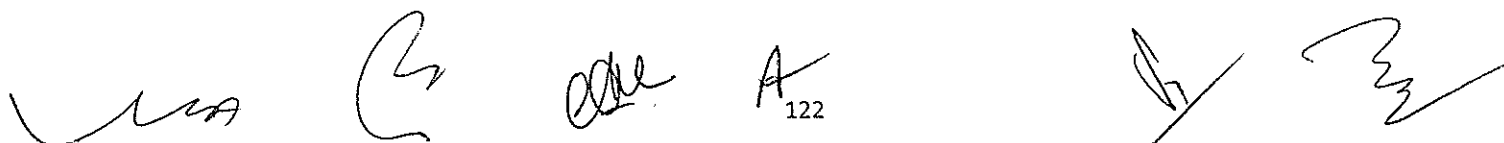
Earlier this proposal was presented in SEAC on 02 - 05.11.2022 in which requisite documents were sought are under –

- i. Clarification from DFO, Giridih East Division that Forest (Conservation) Act, 1980 is applicable or not for this project in respect of the plots which belong to the Jungal - Jhari category but are broken prior to Forest (Conservation) Act, 1980 .
- ii. Calculation of OB dump to be revised.
- iii. Land use plan to be revised.
- iv. Air quality impact should be readdressed.
- v. Water balance diagram to be revised.
- vi. Details with respect to number of RWH pits to be provided.
- vii. Proposed water pollution control measures to be revised.
- viii. Soil analysis to be reconducted.
- ix. Time bound action plan alongwith budgatory provisions for the issues raised during public hearing to be provided.
- x. Presentation to be revised as per ToR points.
- xi. Revised remediation plan and natural & community resource augmentation plan to be submitted.
- xii. Need based socio economic study to be conducted and included in revised EIA/EMP report.

The Project Authorities have submitted the above mentioned documents.

The present application for EIA / EMP has been considered under MoEF&CC, Govt. of India notification no. S.O. 804 (E), dated 14.03.2017 since MoEF&CC has granted the ToR under violation category in pursuance of the notification dated 14.03.2017.

The PAs has proposed the remediation plan and natural & community resource augmentation plan before the Committee.



On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of rupees 148 Lakh as per CPCB guidelines towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

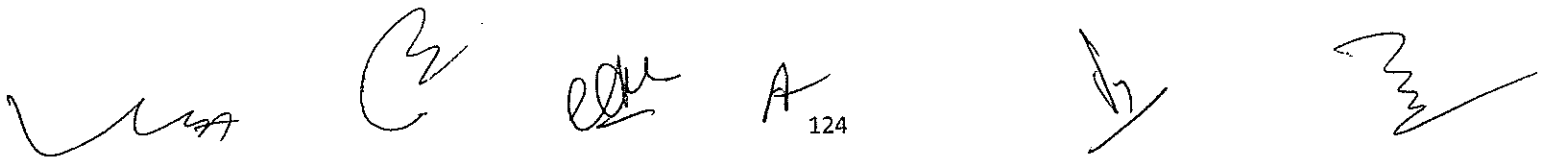
Remediation plan & budgetary provisions			
Sl NO		Activity Proposed	Total (₹)
1	Water Environment	Development and protection of banks of water body adjacent to the project.	10,00,000
2		Restoration and beautification of existing wells and water bodies in the vicinity of villages	5,00,000
3		Protection and Cleaning of local stream	10,00,000
Total Water Environment			₹ 25,00,000
1	Ecology	Additional plantation in nearby villages	10,00,000
2		Distribution of fruit bearing Saplings like Amla, Guava, Mango, Lichi etc. to nearby villagers	1,00,000
3		Development of Nursery for raising samplings, training and distribution and to nearby villagers	5,00,000
Total Ecological Environment			₹ 16,00,000
1	Air & Noise Environment	Monthly Health Camps to monitor the respiratory and E&T health status of nearby villages (Beniadih, Patrodih, Chunjka, Chilga etc.)	50,00,000
2		Additional avenue Plantation and maintenance in subsequent years on village roads adjacent to project boundary	5,00,000
Total Air Environment			₹ 55,00,000
1	Land Environment	Construction of permanent collection point for municipal solid waste from colonies nearby villages (Beniadih, Chilga etc.)	1,50,000
2		Providing colour coded bins in schools, hospitals etc	50,000
Total Land Environment			₹ 2,00,000

Remediation plan & budgetary provisions			
SI NO		Activity Proposed	Total (₹)
1	Socio-Economic	Additional Skill development training programme to the unemployed youth	5,00,000
2		Construction of additional community toilets for nearby villages	5,00,000
3		Organizing additional Sports and cultural festivals	1,00,000
4		Additional awareness programs on Environmental protection	1,00,000
Total Socio-Economic Environment			₹ 12,00,000
Total Fund for remediation measures			₹ 110,00,000.00

Table 2.0 Proposed budgetary provisions for Natural and Community Resource Augmentation Plan

SI No	Activity Proposed	Total (₹)
Natural Resource Augmentation Plan		
1	Repair and maintenance of roads in nearby villages	5,00,000
2	Development of green belt along streams, ponds etc	5,00,000
Community Resource Augmentation Plan		
3	Providing solar lamps along the roads and supply of Solar lights to households in nearby villages (50 Nos Approx.)	5,00,000
4	Training/Workshop on advance agriculture/irrigation practices	1,00,000
5	Providing Communities toilet in nearby villages/school / communities	10,00,000
6	Providing smart classes at schools	12,00,000
Total		₹ 38,00,000

- i. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. 148 Lakh.



- II. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 148 Lakh towards remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board and evidence of the same submitted to SEIAA, Jharkhand prior to grant of EC.
- III. The bank guarantee shall be released after successful completion of remediation plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.
- IV. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.
- V. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.
- VI. STP of adequate capacity shall be established within the project premises.
- VII. Energy conservation measures adhering to part of ECBC norms shall be complied with.
- VIII. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

Based on the presentation made and information provided, the Committee decided that the proposal for Kabribad Opencast Coal Mine Project of M/s Central Coalfields Limited, Village : Kabribad, Chunjka, Patrodih, Khandih, Chilga, Tehsil : Giridih, Distt. : Giridih, Jharkhand (90.84 Ha) Mining in the Jungle Jhari area (27.37 ha) will be done after obtaining Forest Diverison clearance from MoEF&CC within a period of 18 months from the date of grant of EC. In case the Forest Diversion clearance is obtained after a period of 18 months from the date of EC the project will be referred to SEAC for consideration of working in the Jungle Jhari area. The project is recommended for grant of Environmental Clearance. The various conditions for grant of EC is enclosed as Annexure – V.

5. Sarmanda Stone Block of Sri Sujit Kumar Mandal, Village : Sarmanda, P.S. : Potka, Distt. : East Singhbhum, Jharkhand (1.216 Ha).

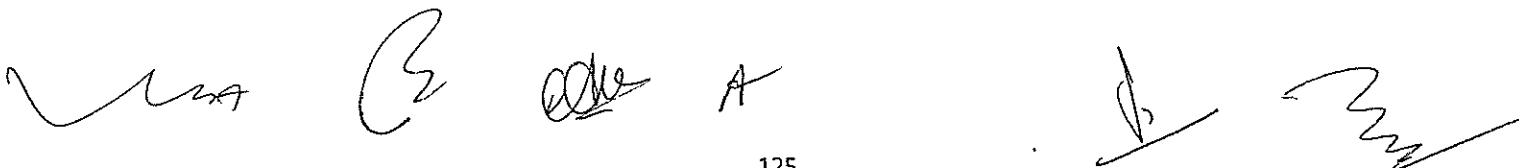
(Proposal No. SIA/JH/MIN /412640 /2022).

Name of the consultant : P & M Solution, Noida, Uttar Pradesh.

This is a new project which has been taken for appraisal on 11.01.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity-111110.85 cum/annum or 29999.29 TPA

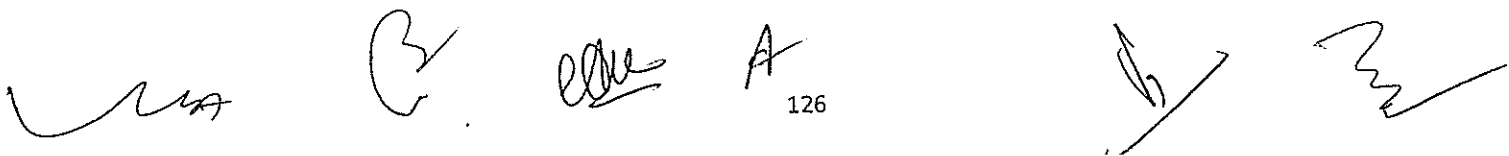


Project and Location Details :

S. No.	Parameter	Details
1	Project Name	: Sarmanda Stone Block
2	Lessee:	: Sri Sujit Kumar Mandal, Village – Sarmanda, P.O.- Juri, P.S.-Potka, District- East Singhbhum, Jharkhand
3	Lease Address	: Village – Sarmanda, P.S.-Kowali, District- East Singhbhum, Jharkhand
4	Lease Area	: 1.216 ha. Acres- 3.0 Acres
5	Type of Land	: Non Forest Land
6	Project Cost	: Rs. 30 Lakhs
7	EMP Budget	: Capital: 3.98Lakhs Recurring: 3.27 Lakh / year
8	New or Expansion	: New
9	Mineable Reserves	: 303491.90 tons
10	Mine Life	: 10 years
11	Man power	: 19
12	Water Requirement	: 8.0 KLD (Drinking: 0.19 KLD, Dust Suppression: 4.64 KLD, Plantation: 2.88 KLD)
13	Water Source	: From Nearby villages by tankers
14	DG Set / power	: NA
15	Crusher	: No crusher
16	Nearest Water Body	: Hill River, Approx. 0.45 km towards SE direction of mine site.
17	Nearest Habitation	: Sarmanda Village, approx. 0.780 km
18	Nearest Rail Station	: Haldipokhar Railway station, approx. 5.70 km towards WSW direction.
19	Nearest Air Port	: Birsa Munda Airport, approx. 118.60 km towards NW direction.
20	Nearest Forest	: Kudada RF, approx. 9.98 km in NW direction. Morchagora PF, approx. 8.50 km in North direction. Open Jungle, approx. 7.60 km in SE direction. Protected Forest, approx. 5.89 km in SE direction.
21	Road & Highways	: SH- 6, at approx. 4.10 km. in NW direction. NH- 220, Approx. 4.40 km. in West direction

CO-ORDINATES

1	Latitude	From 22°36'39.24" N	To 22°36'45.42" N
2	Longitude	From 86°11'50.74" E	To 86°11'58.79" E



LAND DETAILS :

Khata No.	Plot No.
359	1492 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	: The LOI has been issued by Director of Mines, Department of Mines & Geology, Govt. of Jharkhand vide letter no. Kha.Ni (Nilami)- 27/2022/1476, dated 15.07.2022.
2	CO	: The CO, Potka, East Singhbhum vide letter no. : 730, dated 12.11.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyen & Register II.
3	DMO	: DMO, East Singhbhum, Jamshedpur vide letter no. 915/Khanan, dated 11.11.2022 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	: DFO, Dalma Elephant Project vide letter no. : 1767, dated 05.12.2022 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary. The additional comments given by the DFO, Dalma Elephant Project is not appropriate.
5	DFO Forest Distance	: DFO, Jamshedpur Forest Division vide letter no. : 2138, dated 12.09.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	: The project is already mentioned in District Survey Report (DSR) of District East Singhbhum.
7	Gram Sabha	: BDO, Potka vide Letter no. 1769, dated 18.11.2022 informed that Gram Sabha conducted on 16.11.2022
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide letter no. G/2022-23-194/, dated 23.08.2022.

Working Details :

1	Mining Method	: Opencast other than fully mechanized (OTFM) method
2	Quarry Area	: 0.764 ha. Life of Mine – 10 years 0.764 ha.
3	Waste Generation	: 2923.88 cum or 7894.476 tons

4	Stripping Ratio	:	1:0.019
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	158 AMSL to 164AMSL
8	Ground Level Elevation	:	158AMSL
9	Ultimate Working Depth	:	139 AMSL
10	Water Table	:	133 AMSL (25 mbgl)
11	Topography of Mine	:	Area represents hillock of dolerite
12	Explosive Requirement	:	8kg/day
13	Diesel/Fuel requirement	:	90 litre/day

Production Details :

Year	Production of Stone		Intercalated waste (cum)	Total Waste in (cum)
	(cum)	(tons)		
1st	11110.73	29998.95	584.77	584.77
2nd	11110.82	29999.21	584.78	584.78
3rd	11110.73	29998.95	584.78	584.78
4th	11110.73	29998.95	584.77	584.77
5th	11110.85	29999.29	584.78	584.78
Total	55553.86	149995.35	2923.88	2923.88

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	0.590	0.764	0.764 (0.402 ha. area shall be left as water reservoir for rain water harvesting)
Waste Dump	Nil	Nil	Nil
Road	0.072	0.046	0.046
Infrastructure	---	---	---

Safety Zone Plantation	---	0.400 (Within Safety Zone)	0.400 (Within Safety Zone)
Total	0.662	1.210	1.210
Balanced Area	0.554	0.006	0.006
Total Applied Area	1.216	1.216	1.216

ENVIRONMENT MANAGEMENT

Green Belt Development

Type	Area
Safety zone plantation	0.400 ha
Approach road	0.500 km

About 1440 no. of plant of different species will be planted in five years. Plantation will be done along both sides of approach road. Therefore, total number of Plantation will be 1440 no. of plants. Hence total plantation will be done in more than 33% of the lease area. Plantation will be done in consultation with the government body/local authorities. Plantation will be done @ of 2500/ ha.

Year	Area for Greenbelt in Hectare/saplings	Plantation along both sides of Approach road	Location
1 st Year	0.400ha/1000 plants	440	Approach road – 440 nos – along both sides of approach road at spacing of 2 m.
2 nd Year	Care / Protection of Plants		
3 rd Year			
4 th Year			
5 th Year			
Total	1000	440	
Total	1440		

- 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 2923.88 cum or 7894.476 tons waste during the plan period will be generated which will be used in making and maintenance of haul road and village road, so there is no requirement of waste dumping Plan for this mining plan period.

Water Quality Management

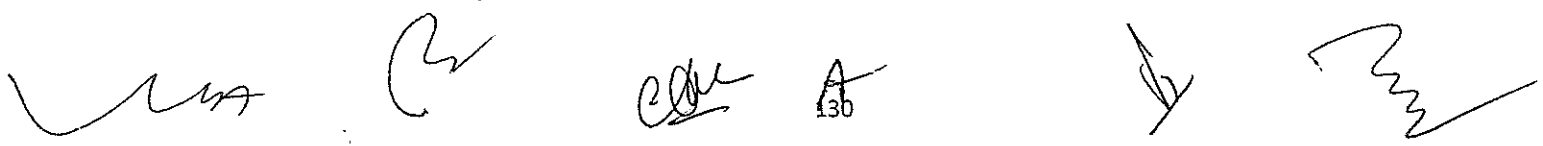
- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation.Excess water, if any shall be discharged in natural stream after settling of suspendedparticles in the pit. Pump having required capacity will be installed to liftaccumulated 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 becollected in garland drain and allowed to settle in a small pit for settling suspendedparticles 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, dischargefrom Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and goodsanitation system shall be made available.

Air Quality Management

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



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- 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.
- i. If tree falling is required a permission from computed authority should be obtained.

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 Sarmanda Stone Block of Sri Sujit Kumar Mandal, Village : Sarmanda, P.S. : Kowali, Distt. : East Singhbhum, Jharkhand (1.216 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

6. Sarmanda Stone Block - A of Sri Chittaranjan Das, Village : Sarmanda, P.S. : Potka, Distt. : East Singhbhum, Jharkhand (1.586 Ha).

(Proposal No. SIA/JH/MIN /411902 /2022).

Name of the consultant : P & M Solution, Noida, Uttar Pradesh.

This is a new project which has been taken for appraisal on 11.01.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity-14571.57cu.m/annum or 39343.25 TPA

Project and Location Details :

S. No.	Parameter	Details
1	Project Name	: Sarmanda Stone Block – A
2	Lessee:	: Sri Chitta Ranjan Das, Village – Sarmanda, P.O.- Juri, P.S.- Potka, District- East Singhbhum, Jharkhand
3	Lease Address	: Village – Sarmanda, P.S.- Potka, District – East Singhbhum, State-

			Jharkhand
4	Lease Area	:	1.586ha Acres- 3.92Acres
5	Type of Land	:	Non Forest – Raiyati Land
6	Project Cost	:	Rs. 40Lakhs
7	EMP Budget	:	Capital: 3.80Lakhs Recurring: 3.27 Lakh / year
8	New or Expansion	:	New
9	Mineable Reserves	:	cum.:72808.129 cum Tonnes: 196581.98 tons
10	Mine Life	:	4.97 ~ 5.0 years
11	Man power	:	33
12	Water Requirement	:	6.0 KLD (Drinking: 0.33 KLD, Dust Suppression: 2.77 KLD, Plantation: 2.80 KLD)
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	NA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Hill River, Approx. 0.640 km towards East direction of mine site.
17	Nearest RF/PF	:	Morchagora PF, approx. 9.50 km in North direction. Open Jungle, approx. 8.60 km in SE direction. Protected Forest, approx. 5.99 km in SE direction.
18	Nearest Habitation	:	Sarmanda village, at 850 meters
19	Nearest Rail Station	:	Haldipokhar Railway station, approx. 4.80 km towards West direction.
20	Nearest Air Port	:	Birsa Munda Airport, approx. 113.10 km towards NW direction.
21	Road & Highways	:	NH- 220, Approx. 3.70 km. in WNW direction. SH- 6, Approx. 3.90 km in NW direction.

CO-ORDINATES

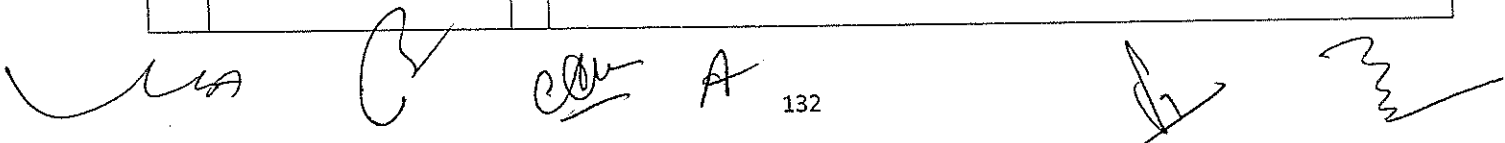
1	Latitude	From 22°36'09.68" N	To 22°36'15.19" N
2	Longitude	From 86°11'18.91" E	To 86°11'24.89" E

LAND DETAILS :

Khata No.	Plot No.
359	1178 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by Director of Mines, Department of Mines & Geology, Govt. of Jharkhand vide letter no. Kha.Ni (Nilami)- 26/2022/1477, dated 15.07.2022.
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2	CO	:	The CO, Potka, East Singhbhum vide letter no. : 732, dated 14.11.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 913/Khanan, dated 11.11.2022 certified that 01 other Lol has been issued through e-auction bearing area 8.36 acre and cumulative area exists within 500 m is 12.28 acre which is less than 5 Ha.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. : 1768, dated 05.12.2022 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary. The additional comments given by the DFO, Dalma Elephant Project is not appropriate.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. : 2139, dated 12.09.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The project is already mentioned in District Survey Report (DSR) of District East Singhbhum.
7	Gram Sabha	:	BDO, Potka vide Letter no. 1770, dated 18.11.2022 informed that Gram Sabha conducted on 17.11.2022
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. G/2022-23-195/, dated 23.08.2022.

Working Details

1	Mining Method	:	Opencast other than fully mechanized (OTFM) method
2	Quarry Area	:	5 years-1.195ha Life of Mine - 5.0 years
3	Waste Generation	:	5 years-3832.18 cum or 10346.886 tons
4	Stripping Ratio	:	1: 0.09
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	162AMSL to 168AMSL
8	Ground Level Elevation	:	162AMSL
9	Ultimate Working Depth	:	138 AMSL
10	Water Table	:	120AMSL (27mbgl)
11	Topography of Mine	:	Area represents hillock of stone

12	Explosive Requirement	:	8kg/day
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Production of stone (cum)	Production of stone (tons)	Total Waste (cum)	Bench RL in Meters
1 st	14558.75	39308.62	766.25	156mRL - 162mRL
2 nd	14561.50	39316.06	766.39	144mRL - 150mRL
3 rd	14558.75	39308.62	766.25	144mRL - 150mRL
4 th	14561.12	39315.03	766.37	144mRL - 150mRL
5 th	14751.57	39343.25	766.92	138mRL - 144mRL
Total	72811.69	196591.58	3832.18	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	1.169	1.195	1.195 (1.195 ha mined out area shall be left as water reservoir for rain water harvesting)
Waste Dump	Stack within quarry used for road maintenance	Nil used for road constructions	Nil used for road constructions
Road	0.006	0.006	Within Safety Zone
Infrastructure	---	---	---
Safety Zone Plantation	---	0.074	0.391 (Plantation)
Total	1.175	1.275	1.586
Balanced Area	0.411	0.311	---
Total Applied Area	1.586	1.586	1.586

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ENVIRONMENT MANAGEMENT

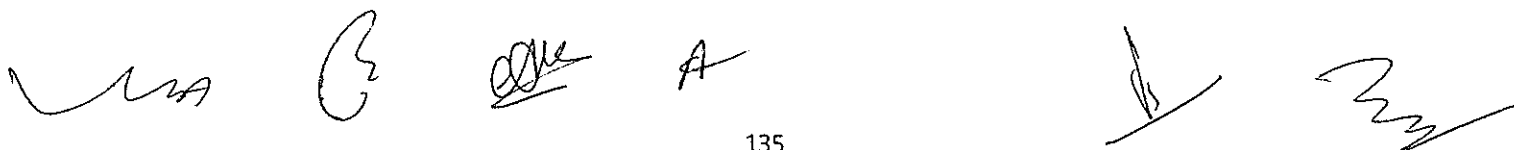
Green Belt Development

S.No.	Location	Area/Length	No. of Trees
1	Safety Zone	0.074ha	200
2	Along Approach Road	0.400 km	400

About 800 plants will be distributed in village areas like School premises, Aangawadi, Panchayat Bhavan and other places. Therefore, total number of Plantation will be 1400 no. of plants.

Year	Area for Greenbelt in Hectare/saplings	Plantation along both sides of Approach road	No. of plants in buffer zone consulting local authorities	Location
1 st Year	0.074 ha/200 plants	400	800	Approach road – 400 nos – along both sides of approach road at spacing of 2 m. 800 nos. In village area like School premises, Aangawadi, Panchayat Bhavan and other places
2 nd Year	Care / Protection of Plants			
3 rd Year				
4 th Year				
5 th Year				
Total	200	400	800	
Total	1400			

- 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 3832.18 cum or 10346.886 tons waste during the plan period will be generated which will be used in making and maintenance of haul road and village road, so there is no requirement of waste dumping Plan for this mining 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 suspendedparticles in the pit. Pump having required capacity will be installed to liftaccumulated 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 becollected in garland drain and allowed to settle in a small pit for settling suspendedparticles 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, dischargefrom Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and goodsanitation system shall be made available.

Air Quality Management

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


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- 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.
- i. If tree falling is required a permission from computed authority should be obtained.

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 Sarmanda Stone Block - A of Sri Chittaranjan Das, Village : Sarmanda, P.S. : Potka, Distt. : East Singhbhum, Jharkhand (1.586 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

7. Sarmanda Stone Block - B of Sri Chittaranjan Das, Village : Sarmanda, P.S. : Ghatsila, Distt. : East Singhbhum, Jharkhand (3.383 Ha).

(Proposal No. SIA/JH/MIN /411957 /2022).

Name of the consultant : P & M Solution, Noida, Uttar Pradesh.

This is a new project which has been taken for appraisal on 11.01.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity-63664.44cu.m/annum or 171893.988 TPA

Project and Location Details :

S. No.	Parameter	Details
1	Project Name	: Sarmanda Stone Block – B
2	Lessee:	: Sri Chitta Ranjan Das, Village – Sarmanda, P.O.- Juri, P.S.- Potka, District- East Singhbhum, Jharkhand
3	Lease Address	: Village – Sarmanda, P.S.- Ghatsila, District – East Singhbhum, State- Jharkhand

4	Lease Area	:	3.383ha	Acres- 8.36Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 70 Lakhs	
7	EMP Budget	:	Capital: 6.84Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 1.40Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	cum.:300350.31 cum or 811431.84tons	Tonnes: 811431.84tons
11	Mine Life	:	4.72 ~ 5.0 years	
12	Man power	:	22	
13	Water Requirement	:	12.435~13.0KLD(Drinking:0.22KLD,Dust Suppression: 6.615 KLD, Plantation: 5.60KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	400 KVA	
16	Crusher	:	No crusher	
17	Nearest Water Body	:	Hill River Apprx. 0.610 km towards East direction of mine site.	
18	Nearest Habitation	:	Samanda village, at 700meters	
19	Nearest Rail Station	:	Haldipokhar Railway station, approx. 5.10 km towards West direction.	
20	Nearest Air Port	:	Birsa Munda Airport, approx. 113.40 km towards NW direction.	
21	Nearest Forest	:	Morchagora PF, approx. 9.50 km in North direction. Open Jungle, approx. 8.60 km in SE direction. Protected Forest, approx. 5.99 km in SE direction.	
22	Road & Highways	:	NH- 220, Apprx. 4.10 km. in WNW direction. SH- 6, Apprx. 4.0 km in NW direction.	

CO-ORDINATES

1	Latitude	From 22°37'57.99" N	To22°38'03.04" N
2	Longitude	From 86°12'18.46" E	To86°12'27.41" E

LAND DETAILS :

Khata No.	Plot No.
359	1200 & 1261

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by Director of Mines, Department of Mines & Geology, Govt. of Jharkhand vide letter no. Kha.Ni (Nilami)- 74/2022/1481, dated 15.07.2022.
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2	CO	:	The CO, Potka, East Singhbhum vide letter no. : 733, dated 14.11.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 912/Khanan, dated 11.11.2022 certified that 01 other Lol has been issued through e-auction bearing area 3.92 acre and cumulative area exists within 500 m is 12.28 acre which is less than 5 Ha.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. : 1704, dated 28.11.2022 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary. The additional comments given by the DFO, Dalma Elephant Project is not appropriate.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. : 2211, dated 20.09.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The project is already mentioned in District Survey Report (DSR) of District East Singhbhum.
7	Gram Sabha	:	BDO, Potka vide Letter no. 1771, dated 18.11.2022 informed that Gram Sabha conducted on 17.11.2022
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. G/2022-23-193/, dated 23.08.2022.

Working Details

1	Mining Method	:	Opencast semi mechanized Mining method
2	Quarry Area	:	5 years- 2.427 Ha
3	Waste Generation	:	5 years-15037.46cum or 40601.142 tons
4	Stripping Ratio	:	1: 0.01
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	162AMSL to 168AMSL
8	Ground Level Elevation	:	168AMSL
9	Ultimate Working Depth	:	135 AMSL
10	Water Table	:	132AMSL (20mbgl)
11	Topography of Mine	:	Area represents hillock of dolerite
12	Explosive Requirement	:	15kg/day

13	Diesel/Fuel requirement	:	35litre/day
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Production Details

Year	Production of stone (cum)	Production of stone (tons)	Total Waste (cum)	Bench RL in Meters
1 st	30970.00	83619.00	1630.00	144mRL - 150mRL
2 nd	63664.25	171893.47	3350.75	138mRL - 150mRL
3 rd	63664.25	171893.475	3350.75	144mRL - 163mRL
4 th	63664.44	171893.988	3355.26	135mRL - 150mRL
5 th	63663.30	171890.91	3350.70	135mRL - 168mRL
Total	285626.24	771190.843	15037.46	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	1.966	2.427	2.427 (1.902 ha. area shall be left as water reservoir for rain water harvesting)
Waste Dump	Nil	Nil	Nil
Road	0.142	0.030	0.030
Infrastructure (Proposed Crusher)	---	0.200	0.200
Safety Zone Plantation	---	0.723 (Within Safety Zone)	0.723 (Within Safety Zone)
Total	2.108	3.380	3.380
Balanced Area	1.275	0.003	0.003
Total Applied Area	3.383	3.383	3.383

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	Location	Area/Length	No. of Trees
1	Safety Zone	0.723ha	1800
2	Along Approach Road	0.500 km	500

A 140

About 500 plants will be distributed in village areas like School premises, Aangawadi, Panchayat Bhavan and other places. Therefore, total number of Plantation will be 2800 no. of plants.

Year	Area for Greenbelt in Hectare/saplings	Plantation along both sides of Approach road	No. of plants in buffer zone consulting local authorities	Location
1 st Year	0.723ha/1800 plants	500	500	Approach road –500nos – along both sides of approach road at spacing of 2 m. 500 nos. In village area like School premises, Aangawadi, Panchayat Bhavan and other places
2 nd Year	Care / Protection of Plants			
3 rd Year				
4 th Year				
5 th Year				
Total	1800	500	500	
Total	2800			

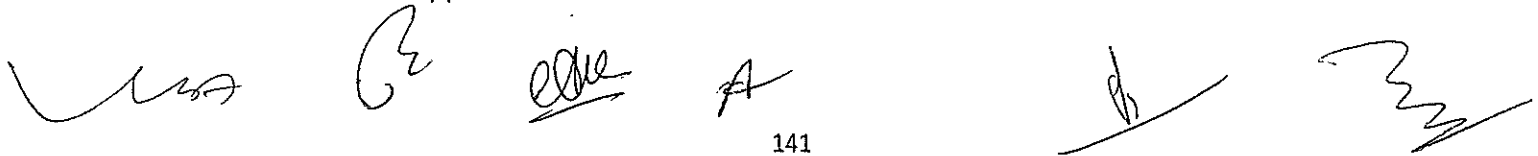
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality 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 15037.46 cum or 40601.142 tons waste during the plan period will be generated which will be used in making and maintenance of haul road and village road, so there is no requirement of waste dumping Plan for this mining 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 suspendedparticles in the pit. Pump having required capacity will be installed to liftaccumulated 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 becollected in garland drain and allowed to settle in a small pit for settling suspendedparticles 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, dischargefrom Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and goodsanitation system shall be made available.

Air Quality Management

- Dust extractor or wet drilling shall be followed to control dust at source of emissionduring drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically toreduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
- All machineries and transport vehicles shall be properly maintained and pollutioncheck will be done once in a year to keep the emissions from machineries andvehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust whiletransporting minerals and waste. Provision for water spray by tankers on 'kaccharoad 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.
- i. If tree falling is required a permission from computed authority should be obtained.

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 Sarmanda Stone Block - B of Sri Chittaranjan Das, Village : Sarmanda, P.S. : Ghatsila, Distt. : East Singhbhum, Jharkhand (3.383 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

8. Brick Soil Mining of M/s R.P.S. Bricks (Prop. : Shri Ram Prasad Sahu), Village : Fatehpur, Thana : Lapung, Thana no. : 46, Distt. : Ranchi, Jharkhand (0.971 Ha).

(Proposal No. SIA/JH/MIN/404509 /2022).

Project Category: B2 – Application for Environment Clearance

EC Application for: Soil: 1200 Cu.M. / Year i.e. Bricks 6,00,000 Numbers / year.

Name of the consultant: M/s P & M SOLUTION, NOIDA, UP 201301.

This is a new project which has been taken for appraisal on 11.01.2023

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Brick Soil Mining For M/s R.P.S. Bricks in Mouza – Fatehpur
2	Applicant Address:	: M/s R.P.S. Bricks Proprietor: Sri Ram Prasad Sahu S/o – Late Chhotku Sahu 2,1, Gaon – Fatehpur, P.O- Govindpur, P.S - Lapung, District – Ranchi, State – Jharkhand, Pin no. - 835234.
3	Lease Address :	: In Mouza – Fatehpur, Thana – Lapung, Thana No. – 46, District – Ranchi, Jharkhand
4	Applied Area	: Ha: 0.971 Hectares Acres: 2.40 Acres
5	Type of Land	: Non Forest – Rayati Land
6	Project Cost	: 10 Lakhs
7	EMP Budget	: Capital: 7.70 Lakhs Recurring: 3.17 Lakh / year
8	CSR / CER Budget	: Rs. 0.20 Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: Cu.M.: 11810 Cu. M.

11	Mine Life	:	10 years
12	Man power	:	10
13	Water Requirement	:	6.11 KLD (Dust Suppression: 4.00 KLD, Drinking: 0.40 KLD, Plantation: 1.71 KLD)
14	Water Source	:	From nearby authorized sources.
15	DG Set / power	:	No
16	Crusher	:	No
17	Nearest Water Body	:	Karo Nadi is flowing approx. 1.41 km aerial distance away in South - East direction.
18	Nearest Habitation	:	Fatehpur village is situated approx. 680m aerial distance away in East direction.
19	Nearest Rail Station	:	Govindpur Road Railway Station is situated approx. 6.43 Km aerial distance away towards South - East direction.
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi is situated approx. 42.93 Km aerial distance away towards North - East direction.
21	Nearest Forest	:	Approx 1300m away from the proposed project.
22	Road & Highways	:	Approach Road: Gumla – Khunti – Ranchi Road is approx 180m away from the applied area in south direction. Highway: NH-43 is about 18.89 Km away in North West direction.

CO-ORDINATES

1	Latitude	From N23°05'09.83"	To N23°05'14.18"
2	Longitude	From E84°59'12.06"	To E84°59'16.31"

LAND DETAILS

Khata No -	104
Plot Nos -	94(P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Land agreement made.
2	CO	:	The CO, Lapung vide letter no. 216, dated 21.07.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyon or Register II.
3	DMO	:	DMO, Ranchi, vide memo no. 216/M, dated 08.02.2019 certified that no other lease exists within 500m radius from proposed project site.
4	DFO Wild Life	:	Division Forest Officer, Wildlife Division Ranchi vide memo no. 646, dated 10.09.2020 certified that the proposed project site is outside Eco

			Sensitive Zone of Palkot Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Ranchi Forest Division vide letter no. 3924, dated 23.11.2018 certified that the distance of notified forest is 1300 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ranchi, vide letter no. 670/M, dated 12.10.2022 has informed that this project (sl no 3) 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	:	BDO, Lapung (Ranchi) vide letter no 657(ii), dated 12.11.2018 informed that Gram Sabha conducted on 14.09.2018.
8	Mine Plan Approval	:	Approved by the Dy. Director, Mines, South Chotanagpur Circle, Ranchi vide Letter no. 562, dated 26.12.2018.

Working Details

1	Mining Method	:	Opencast Manual Mining and transportation by tippers.	
2	Quarry Area	:	5 years – 0.343 Ha	Life of Mine – 0.683 Ha
3	Waste Generation	:	5 years– 686 Cu.M (Top Soil)	Life of Mine – 1366 Cu.M (Top Soil)
4	Stripping Ratio	:	1 : 0.12	
5	Working Days	:	200 Days	
6	Bench: size & No	:	Size: 1m X 1.5m, No. - 2	
7	Elevation of Mine	:	Highest RL 563m AMSL, Lowest RL 562m AMSL	
8	Ground Level Elevation	:	562m AMSL	
9	Ultimate Working Depth	:	560m AMSL	
10	Water Table	:	545m AMSL	
11	Topography of Mine	:	Flat Land.	
12	Explosive Requirement	:	No	
13	Diesel/Fuel requirement	:	4 KL/year (20 Litres/day)	

Production Details

Year	Production of Sub Soil (Cum)	Production of Bricks (Numbers)	Top Soil Generation (CuM)	Bench RL in Meters
1st Year	1200	6,00,000	137	563m – 561m
2nd Year	1200	6,00,000	137	563m – 561m
3rd Year	1200	6,00,000	138	563m – 561m
4th Year	1200	6,00,000	137	563m – 561m
5th Year	1200	6,00,000	137	563m – 561m
Total	6000	30,00,000	686	

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	Mining Area (Quarry)	Nil	0.343	0.683	0.683	Grass cultivation will be done on it
2	Road	0.001	-	-	-	-
3	Green Belt Within Safety Barrier	Nil	0.288	0.288	0.288	Plantation
4	Unutilized	0.971	0.340	Nil	Nil	
	TOTAL	0.971	0.971	0.971	0.971	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.288 Ha	720 trees @ 2500 trees per Ha
2	Haul /Approach Road	:	0.036	122 trees on both sides in single row – 3m distance
			i.e. Length 180m width 2m	

- 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 (Top soil) Generation will be 1366 Cu.M. during the life of Mine.
The fertile top soil will be preserved temporarily by dumping and then it will be spread concurrently over the excavated part of the land after the end of each year lifting up of brick soil and grass cultivation will be done on it.

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.

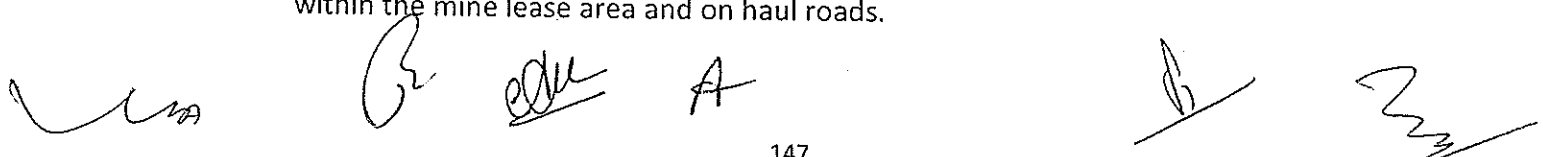
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing 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

- No drilling and blasting is proposed.
- 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 water required for the mining activities shall be supplied by the tanker from nearby authorized sources.
- c. The letter issued in respect of District Survey Report (DSR), is issued by the competent authority. I will abide by any directives issued by any court of law in future.
- d. 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
- e. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- f. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- g. 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.
- h. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

A series of handwritten signatures in black ink, including a large cursive signature on the left, a signature with a large 'B' or 'R' initial, a signature with 'edw' initials, a signature with 'A' initials, a signature with a large 'h' or 'b' initial, and a signature with 'Z' or 'J' initials on the right.

- i. All the transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- j. If any tree felling than necessary permission shall be taken from the competent authority.

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 Brick Soil Mining of M/s R.P.S. Bricks (Prop. : Shri Ram Prasad Sahu), Village : Fatehpur, Thana : Lapung, Thana no. : 46, Distt. : Ranchi, Jharkhand (0.971 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

9. Srirampur Stone Deposit of M/S Anand Stone Works at Village : Srirampur, Thana : Pakur, Distt. : Pakur, Jharkhand (1.946 Ha).

(Proposal no. : SIA/JH/MIN/271654 /2022).

Name of the consultant: M/s P & M SOLUTION, NOIDA, UP.

This is a new project which has been taken for appraisal on 11.01.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 46,420 cu.m/annum or 1,25,334 TPA

Project and Location Details :

S. No.	Parameter	Details
1	Project Name	: Srirampur Stone Deposit
2	Lessee:	: M/S Anand Stone Works Sri Swami Satyanandji Maharaj S/o Late Shivdharmanandji Maharaj) At Brahm Vidyalaya & Ashram, Hazaridanga High School, District- Pakur, State - Jharkhand
3	Lease Address	: Village – Srirampur, P.O.- Juri, P.S.- Pakur, District- Pakur, Jharkhand
4	Lease Area	: 1.946 Ha. or 4.81 Acre Acres- 3.0 Acres
5	Type of Land	: Non Forest Land
6	Project Cost	: Rs. 30 Lakhs
7	EMP Budget	: Capital: 4.89 Lakhs Recurring: 4.17 Lakh / year
8	CSR / CER Budget	: Rs. 60,000/-

9	New or Expansion	:	New
10	Mineable Reserves	:	12,00,177 tons
11	Mine Life	:	10 years
12	Man power	:	25
13	Water Requirement	:	11.40 KLD (Drinking: 0.25 KLD, Dust Suppression: 5.64 KLD, Plantation: 5.46 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	500 KVA
16	Crusher	:	No crusher
17	Nearest Water Body	:	Torai Nadi, Approx. 8 km towards NW direction of mine site.
18	Nearest Habitation	:	Pakur Village, approx. 5.50 km toward NNE Direction.
19	Nearest Rail Station	:	Ngarnabi Railway station, approx. 5.00 km towards East direction.
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Durgapur, approx. 120.0 km towards SSW direction.
21	Nearest Forest	:	Protected Forest near Mohanpur Village, Approx. 3.0 km towards SE direction of mine site. Protected Forest near Dhangora Pahar, Approx. 6.0 km towards NW direction of mine site. Protected Forest near Khutigora Village, Approx. 8.5 km towards West direction of mine site.
22	Road & Highways	:	NH-114 A, at Approx. 5.40 km. in North direction. SH-7 at Approx. 7.40 km. in SE direction.

CO-ORDINATES

1	Latitude	From 24°35'18.49"N	To 24°35'24.93"N
2	Longitude	From 87°49'00.22"E	To 87°49'07.16"E

LAND DETAILS

Khata No	Plot No
5	1076(P)
8	1063(P), 1064(P), 1065(P), 1066(P), 1067(P), 1068(P), 1073(P), 1074(P),

	1075(P),
15	1077(P), 1087, 1072
31	1070, 1071

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The LOI has been issued by DMO, Pakur vide letter no. 1611/M, dated 09.09.2021.
2	CO	:	The CO, Pakur vide letter no. 975/Ra, dated 30.06.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyar.
3	DMO	:	DMO, Pakur vide memo no. 1772/ M, dated 05.10.2021 certified that 01 other mining lease (3.66 acre) area exists within 500 m radius from proposed project and total area is 3.43 Ha.
4	DFO Wildlife	:	DFO, Wildlife Hazaribag vide letter no. 425, dated 01.03.2021 certified that the proposed project site is outside Eco Sensitive Zone of Udhawa Lake Bird Sanctuary.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 276 dated 04.02.2021 certified that the distance of reserved / protected forest is more than 250 m from the project site.
6	DSR	:	The DC-cum-District Magistrate, Pakur vide letter no. 2011/M, dated 14.09.2022 has informed that this project is included in the list of District Survey Report (DSR) of potential area / village of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Pakur vide letter no. 1320/Vi, dated 22.06.2020 informed that Gram Sabha conducted on 16.06.2020.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. G/2022-23-11, dated 09.04.2022.

WORKING DETAILS

1	Mining Method	:	Opencast mechanized Mining method
2	Quarry Area	:	At plan period -1.184 Ha. At conceptual 1.415 ha
3	Waste Generation	:	Nil
4	Stripping Ratio	:	NA
5	Working Days	:	300

6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	58 AMSL to 35 AMSL
8	Ground Level Elevation	:	20 AMSL
9	Ultimate Working Depth	:	30 AMSL
10	Water Table	:	20 AMSL (15 mbgl)
11	Topography of Mine	:	Area represents hillock of dolerite
12	Explosive Requirement	:	25 kg/day
13	Diesel/Fuel requirement	:	70 litre/day

PRODUCTION DETAILS

Year	Production of Stone		Waste (cum)
	(in Tones)	(in cum)	
1st	115830.00	42900.00	0
2nd	118503.00	43890.00	0
3rd	123255.00	45650.00	0
4th	125037.00	46310.00	0
5th	125334.00	46420.00	0
Total	607959.00	225170.00	0

Land Use

Pattern of Utilization	Existing (Ha)	Plan period (Ha)	Conceptual stage (Ha)
Quarry	Nil	1.184	1.415 (0.2281 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	Nil	Nil
Safety Zone Plantation	Nil	0.528	0.528
Total	0.014	1.715	1.946
Unused Area	1.932	0.231	0.000
Lease hold area	1.946	1.946	1.946

ENVIRONMENT MANAGEMENT

Green Belt Development

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Type	Area
Safety zone plantation	0.528 ha
Approach road	0.500 km

Year	Greenbelt development	Plantation along both sides of approach road	No. of Plants
1 st Year	Excavation for plantation		0
2 nd year	0.528 ha (safety zone) 1320 plants	500	1820
3 rd year	Care / protection of plants		
4 th year			
5 th Year			
Total	1320	500	1820

About 1820 no. of plant of different species will be planted in five years. Plantation will be done along both sides of approach road. Therefore, total number of Plantation will be 1820 no. of plants. Hence total plantation will be done in more than 33% of the lease area. Plantation will be done in consultation with the government body/local authorities. Plantation will be done @ of 2500/ ha.

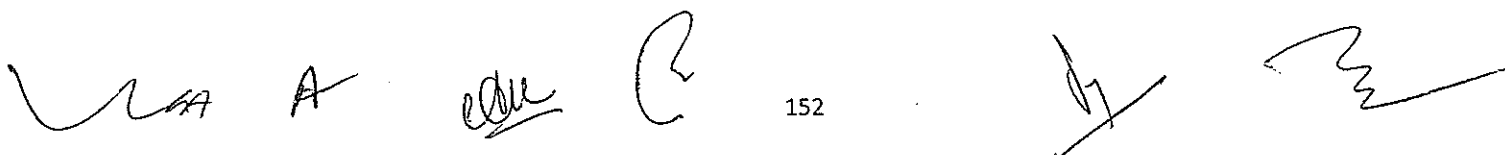
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality 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 OB generation in the project and hence no OB waste management plan is proposed.

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.

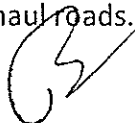
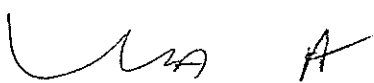
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing 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.
- i. If any tree felling than necessary permission shall be taken from the competent authority.

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 Deposit of M/S Anand Stone Works at Village : Srirampur, Thana : Pakur, Distt. : Pakur, Jharkhand (1.946 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

10. Amjhar Stone Deposit of M/S Shri Ganesh Stone at Village : Amjhar, Circle : Ganwa, Distt. : Giridih, Jharkhand (1.068 Ha).

(Proposal no. : SIA/JH/MIN/413820/2023)

Name of the consultant: M/s P & M SOLUTION, NOIDA, UP.

This is a new project which has been taken for appraisal on 11.01.2023

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 11999.92 cum/annum or 29999.8125 TPA

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Amjhar Stone Deposit
2	Lessee:	: M/S Sri Ganesh Stone Partners- 1) SRI DINESH MURMU (Partner) Address:- S/O-Mathura Murmu, At-Amjhar, P.S- Ganwa, Dist- Giridih. 2) SRI KALESHWAR MURMU (Partner) Address: - S/O- Thakur Manjhi, At-Amjhar,P.S- Ganwa, District- Giridih. 3) SRI UMESH PRASAD SAHA (Partner) Address: - S/O- Ganesh Saw, At-Jamdar, P.S-Ganwa,Dist- Giridih. 4) SRI SUNIL KUMAR (Partner) Address: - S/O- Hari Saw, At-Rajdhanwar, P.S-Rajdhanwar, Dist- Giridih.

3	Lease Address	:	Village – Amjhar, Circle- Ganwa, District – Giridih, Jharkhand
4	Lease Area	:	1.068 ha Acres- 2.64 Acres
5	Type of Land	:	Non Forest – Raiyati Land
6	Project Cost	:	Rs.20 Lakhs
7	EMP Budget	:	Capital: 5.97 Lakhs Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.40 Lakhs
9	New or Expansion	:	New
10	Mineable Reserves	:	Cu.m.: 120032.5 cum Tonnes: 300081.25 tons
11	Mine Life	:	10 years
12	Man power	:	17
13	Water Requirement	:	7.05 ~ 7.00 KLD(Drinking: 0.17 KLD, Dust Suppression: 2.53 KLD, Plantation: 4.35 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	-
16	Crusher	:	There is No Crusher.
17	Nearest Water Body	:	Barki Nadi, Approx. 2.80 km towards East direction of mine site.
18	Nearest Habitation	:	Jamdar, Approx. 2.19 km towards SE direction
19	Nearest Rail Station	:	Nawadih Railway station, approx. 14.60 km toward SSW direction.
20	Nearest Air Port	:	Birsa munda Airport, approx. 145.81 km towards SW direction.
21	Nearest Forest	:	Amjhar PF, Approx. 1.5 km towards NE direction of mine site. Dadho PF, Approx. 1.2 km towards NE direction of mine site Kailpahari PF, Approx. 3.5 km towards SE direction of mine site Jamdar PF, Approx. 2.8 km towards SE direction of mine site Palma PF, Approx. 4.5 km towards ENE direction of mine site Paisra PF, Approx. 4.8 km towards S direction of mine site
22	Road & Highways	:	SH-13, Approx.9.92 km. in S direction.

CO-ORDINATES

1	Latitude	From 24°31'52.84" N	To 24°31'56.32" N
2	Longitude	From 86°52'08.79" E	To 86°52'14.67" E

LAND DETAILS :

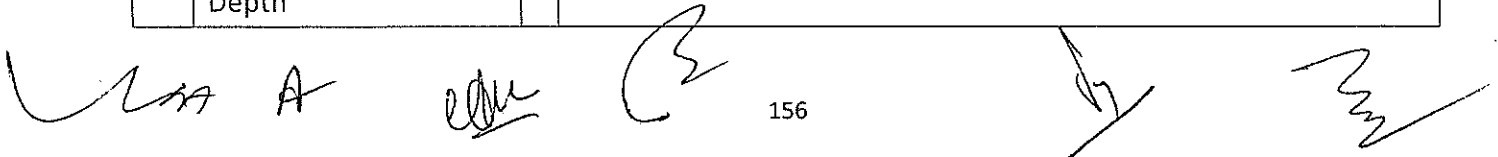
Khata No.	Plot No.
12	792, 793, 794, 796 & 798

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Giridih vide letter no. 1004/M, dated 29.10.2022
2	CO	:	The CO, Gawan vide letter no. : 442, dated 09.12.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Giridih vide memo no. 1079/M, dated 23.11.2022 certified that no other mining lease exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribag vide letter no. : 2109, dated 20.10.2022 certified that the proposed project site is outside of Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Giridih East Forest Division vide letter no. : 2327, dated 20.08.2022 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. 1054/M, dated 14.11.2022 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	:	BDO, Gawan vide Letter no. 834, dated 26.08.2022 informed that Gram Sabha conducted on 20.11.2021.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide memo no. 370, dated 30.10.2022.

Working Details

1	Mining Method	:	Opencast other than fully mechanized (OTFM) method
2	Quarry Area	:	5 years-0.490 Life of Mine - 0.20 ha
3	Waste Generation	:	5 years- 3157.875 cum or 7894.688 tons
4	Stripping Ratio	:	1: 0.021
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	282 AMSL to 276 AMSL
8	Ground Level Elevation	:	276 AMSL
9	Ultimate Working Depth	:	260 AMSL



10	Water Table	:	250 AMSL (10mbgl)
11	Topography of Mine	:	Area represents an undulating topography
12	Explosive Requirement	:	1kg/day
13	Diesel/Fuel requirement	:	70lt/day

Production Details

Year	Total Excavation	Production of Stone in in (cum)	Production of Stone in in (Tons)	Intercalated Waste in cum	Total waste in Cum	Stripping ratio t/m ³
1st	12631.50	11999.92	29999.8125	631.575	631.575	1:0.021
2nd	12631.50	11999.92	29999.8125	631.575	631.575	1:0.021
3rd	12631.50	11999.92	29999.8125	631.575	631.575	1:0.021
4th	12631.50	11999.92	29999.8125	631.575	631.575	1:0.021
5th	12631.50	11999.92	29999.8125	631.575	631.575	1:0.021
Total	63157.50	59999.60	149999.062	3157.875	3157.875	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of P lan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	--	0.490	0.64 ha (0.20 ha area shall be left as water reservoir for rain water harvesting, 0.08 ha area shall be backfilled and 0.36ha area shall be dead bench plantation)
Waste Dump	--	0.07	--
Road	--	0.02	--
Infrastructure	--	--	--

Plantation (Greenbelt)	--	0.214 (Within Safety Zone)	0.428 (Within Safety Zone)
Total	--	0.794	1.068
Balance	1.068	0.274	-
Lease Hold Area	1.068	1.068	1.068

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.428 ha	1070
2	Haul /Approach Road	:	0.65 km	1108

- Afforestation will be done along the barrier zone. Plantation will also be done along both sides of approach road. 1070 no. of trees will also be planted in buffer zone consulting local authorities. Therefore, total number of Plantation will be 2178 no. of plants.
- 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 6052.0 cum or 16340.4 tons during the plan period which will be used for maintenance of 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 suspendedparticles in the pit. Pump having required capacity will be installed to liftaccumulated 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 becollected in garland drain and allowed to settle in a small pit for settling suspendedparticles 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.



- i. If any tree felling than necessary permission shall be taken from the competent authority.

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 Amjhar Stone Deposit of M/S Shri Ganesh Stone at Village : Amjhar, Circle : Ganwa, Distt. : Giridih, Jharkhand (1.068 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

11. Govindpur Stone Deposit of M/S Shri Guru Stone at Village : Govindpur, Circle : Jamua, Distt. : Giridih, Jharkhand (1.376 Ha).

(Proposal no. : SIA/JH/MIN/413805 /2023)

Name of the consultant: M/s P & M SOLUTION, NOIDA, UP.

This is a new project which has been taken for appraisal on 11.01.2023

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 16007.50 cum/annum or 40018.75 TPA

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Govindpur Stone Deposit
2	Lessee:	: M/S SHIV GURU STONE (Partners) 1. Sri. Prakash Kumar Yadav S/O Lakhan Mahto, Chodhitand, Dhanwar District- Giridih 2. Sri Kishor Modi S/O Bhagwani Modi, Dhanwar, District- Giridih 3. Sri. Rajkishore Yadav S/O Biso Mahto, At- Govindpur, P.S.- Jamua, District Giridih
3	Lease Address	: Village – Govindpur, Circle- Jamua, District – Giridih, State :-Jharkhand
4	Lease Area	: 1.376 ha Acres- 3.40 Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: Rs. 25 Lakhs
7	EMP Budget	: Capital: 3.27 Lakhs Recurring: 3.27 Lakh / year
8	CSR / CER Budget	: Rs. 0.50 Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: Cu.m.: 160113 cum Tonnes: 400282.50 tons

11	Mine Life	:	10 years
12	Man power	:	17
13	Water Requirement	:	5.721 ~ 5.80 KLD(Drinking: 0.17 KLD, Dust Suppression: 3.275 KLD, Plantation: 2.276 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	NA
16	Crusher	:	There is No Crusher.
17	Nearest Water Body	:	Usri Nadi , Approx. 2.80 km towards East direction of mine site.
18	Nearest Habitation	:	Gobindpur, Approx. 415 meters towards WSW direction of mine site.
19	Nearest Rail Station	:	Jamua Railway station, approx. 4.80 km towards WNW direction.
20	Nearest Air Port	:	Gaya International Airport, approx. 135.70 km towards NW direction.
21	Nearest Forest	:	Kubri Jungle , Approx. 1.30 km towards East direction of mine site. Protected Forest near Naitanr, Approx 5.10 km towards South direction of mine site.
22	Road & Highways	:	SH-13, Approx. 1.70 km in West direction..

CO-ORDINATES

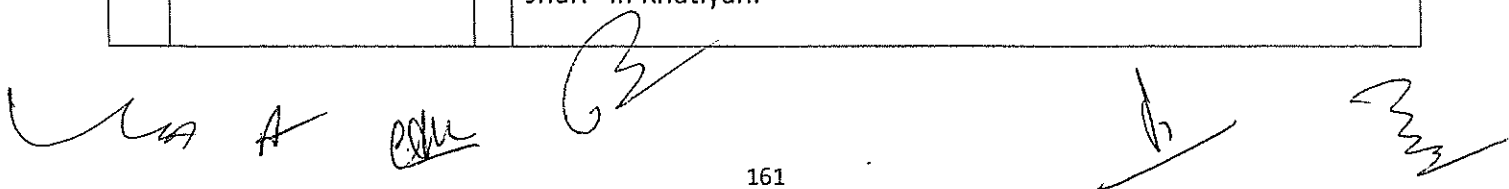
1	Latitude	From 24°20'49.22" N	To 24°20'54.73" N
2	Longitude	From 86°12'02.26" E	To 86°12'08.70" E.

LAND DETAILS :

Khata No.	Plot No.
15	415 (P)
12	417 (P)
16	418 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Giridih vide letter no. 1001/M, dated 29.10.2022
2	CO	:	The CO, Jamua (Giridih) vide letter no. : 850, dated 13.09.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyani.



3	DMO	:	DMO, Giridih vide memo no. 1038/M, dated 12.11.2022 certified that no other mining lease exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribag vide letter no. : 2108, dated 20.10.2022 certified that the proposed project site is outside of Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Giridih West Forest Division vide letter no. : 1093, dated 12.09.2022 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. 1054/M, dated 14.11.2022 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	:	BDO, Jamua (Giridih) vide Letter no. 2190, dated 01.10.2022 informed that Gram Sabha conducted on 29.09.2022.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide memo no. 369, dated 30.10.2022.

Working Details

1	Mining Method	:	Opencast other than fully mechanized (OTFM) method
2	Quarry Area	:	5 years–0.71 ha Life of Mine – 1.02 ha
3	Waste Generation	:	5 years– 19781.30 cum or 49453.25 tons
4	Stripping Ratio	:	1:0.22
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	346 AMSL to 340 AMSL
8	Ground Level Elevation	:	340 AMSL
9	Ultimate Working Depth	:	327 AMSL
10	Water Table	:	305 AMSL (22mbgl)
11	Topography of Mine	:	Area represents an undulating topography
12	Explosive Requirement	:	10kg/day
13	Diesel/Fuel requirement	:	NA

Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1 st	39999.75	15999.90	8892.10	343mRL - 339mRL
2 nd	39999.75	15999.90	2312.10	339mRL - 333mRL
3 rd	39999.75	15999.90	842.10	339mRL - 333mRL
4 th	40018.75	16007.50	6892.50	345mRL - 333mRL
5 th	40018.75	16007.50	842.50	333mRL - 327mRL
Total	200036.75	80014.70	19781.30	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	--	0.71	1.02 ha (0.442 ha area shall be left as water reservoir for rain water harvesting, 0.140 ha area shall be backfilled and 0.438 ha area shall be dead bench plantation)
Waste Dump	--	0.20	--
Road	--	0.03	--
Infrastructure	--	--	--
Plantation (Greenbelt)	--	0.175 (Within Safety Zone)	0.356 (Within Safety Zone)
Total	--	1.115	1.376
Balance	1.376	0.261	--
Lease Hold Area	1.376	1.376	1.376

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.175 ha	438
2	Haul /Approach Road	:	0.400 km	400
3	School, village panchyat		--	300

- Afforestation will be done along the barrier zone. Plantation will also be done along both sides of approach road. 438 no. of trees will also be planted in buffer zone consulting local authorities. Therefore, total number of Plantation will be of plants.
- 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 19781.30 cum or 49453.25 tons during the plan period which will be used for maintenance of Haul Road. Part of the OB shall be used in making and maintenance of haul road and village road, and part of the waste shall be temporary dump in the SE side of the applied 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 suspendedparticles in the pit. Pump having required capacity will be installed to liftaccumulated 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 becollected in garland drain and allowed to settle in a small pit for settling suspendedparticles 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, dischargefrom Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and goodsanitation 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



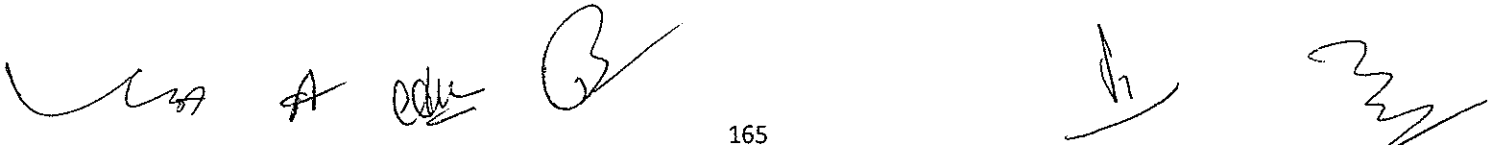


- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting 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.
- i. If any tree felling than necessary permission shall be taken from the competent authority.

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 Govindpur Stone Deposit of M/S Shri Guru Stone at Village : Govindpur, Circle : Jamua, Distt. : Giridih, Jharkhand (1.376 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.



Day 4 : January 12th , 2023 [Thursrday]

Consideration of Proposals

1. Operation of current plant of capacity 4,15,000 TPA and proposed phase-wise expansion to 1015,000 TPA capacity of Electrolytic Tinline and Tin-Free Steel material including 28,000 TPA Printed and Lacquered sheets of M/s The Tinline Company of India Limited at Golmuri Works, Jamshedpur, East Singhbhum, Jharkhand.

(Proposal No.-SIA/JH/IND1/412634/2022)

Name of the consultant : M/s M.N. Dastur & Company (P) Ltd.


This is a an expansion project which has been taken for appraisal on 12.01.2023.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the ToRs in 95th meeting held on 14th , 15th & 16th June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2021-22/2480/2021/163, date 18.06.2022. The final EIA / EMP submitted by PP to SEIAA on 04.01.2023 and which was forwarded to SEAC on 04.01.2023.

M/s The Tinline Company of India Limited (TCIL) located at Golmuri, Jamshedpur installed an Electrolytic Tinning Line (ETL-1) coupled with a shearing line in the year 1979 to produce Tinline (TP) and Tin-free steel (TFS) with imported Tin Mill Black Plate (TMBP) coils. It continued to produce ETP and TFS in various coating weight, thickness and width. A captive upstream Cold Rolling Mill Complex (CRMC) was added by TCIL in its premises in 1996 to produce the TMBP coils as required for its ETL to do away with the import of costly TMBP coils as a cost saving measure.

The installed capacity of 90,000 TPA of ETL -1 was enhanced to 180,000 TPA through operational excellence, debottlenecking and balancing of facilities. Tinline capacity has been expanded to 380,000 TPA in 2008 through installation of 200,000 TPA ETL-2. For feeding TMBP subsequently in 2010-11, CRM complex was expanded to rated capacity of 380,000 TPA through installation of CRM-2 facilities. The capacity achieved was 355,784 TPA which is almost 94% of the rated production capacity of 380,000 Ton / year. The major reason for achieving the rated production capacity is by streamlining the flow of Raw material in the form of Hot Rolled coils from Tata Steel our parent company and focus on the equipment availability and performance rate. In view of the above and improvement in operational efficiencies & better product mix, the existing infrastructure and facilities is capable to produce around 415,000 TPA for which we have Consent to Operate.

There is a proposal for expansion by 300,000 TPA in Phase 1 & 300,000 TPA in Phase 2, (additional about 600,000 TPA capacity). The total capacity post expansion would be 1,015,000 TPA of Electrolytic Tinline and Tin-Free Steel.



Executive Summary :

1.	Name of the Company	M/s The Tinplate Company of India Limited.
2.	Address of the Registered Office	4, Bankshall Street, Kolkata, West Bengal - 700001.
3.	Address of Factory	Golmuri Works, Village: Golmuri, Jamshedpur, District: East Singhbhum Jharkhand – 831003.
4.	Present Business	Manufacturer of Electrolytic Tinplate and Tin-Free Steel Sheets
5.	Area of the Plant	Total Plant area is 53.94 Ha inclusive of 8.50 Ha of land to be used forexpansion.
6.	Topo Sheet No	73 J/1
7.	Latitude	22 ^o 47' 22.77" N - 22 ^o 47' 50.57" N
8.	Longitude	86 ^o 13' 33.09" E - 86 ^o 14' 15.67" E
9.	Elevation	561 ft.
10.	Existing Production	Electrolytic Tinplate and Tin Free Steel - 4,15,000 TPA including Lacquered sheets and Printed Sheets – 28,000 TPA
11.	Proposed Expansion	Electrolytic Tinplate and Tin Free Steel - 6,00,000 TPA (Phase 1 : 300,000 TPA & Phase 2 : 300,000 TPA) Total Capacity :- Existing Production + Proposed expansion : 1,015,000 TPA
12.	Cost of the Project	Existing – Rs. 1408.78 Crores Estimated cost for Expansion – Rs. 1787 Crores (Net) for Phase 1 and Rs. 950 Crores (Net) for proposed Phase 2 expansion. The total estimated cost is Rs.2737 Crores including 100 Crores for EMP. Cost (Existing + Expansion) – Rs. 4145.78 Crores
13.	Man Power Requirement	Existing Manpower Existing Man Power (Direct) - 1380 persons. Existing Man Power (Indirect) - 800 persons. Total Existing Manpower – 2180 Proposed Expansion (Estimated) Construction phase (Proposed expansion) Direct – 100, Indirect - 2300 Operation phase (Proposed expansion) Man Power (Direct) - 761 persons Man Power (Indirect) - 200 persons Total Manpower – 961

		(Inclusive of Phase 1 & 2) Total Manpower post expansion –3141
14.	Power Requirement & DG Sets	<p>Power Requirement – Existing – 24 MVA Estimated for Expansion:55 MVA Total – 79 MVA DG Sets - Existing : 3.0 MVA DG Set for Expansion shall be at 415 V level for individual units Fuel – HSD for D.G Sets</p> <p>Presently TCIL is receiving power from Tata Steel at 33 kV level from Golmuri Sub- Station through buried cables. Present power requirement at TCIL is approx. 24 MVA which is fed through both feeders from Golmuri Sub Station. In case of outage of one of the feeders, the remaining feeder feeds the total power requirement. Considering the additional power demand of around 55 MVA, the power distribution scheme has been planned in accordance.</p>
15.	Water Requirement	<p>Existing Makeup Water – 6600 KLD from JUSCO Estimated for Expansion – 5400 KLD (Inclusive of Phase 1 & 2) Total Water Requirement post expansion- 12000 KLD</p>
16.	Waste Water Generation	<p>Domestic Waste Water (Sewage) About 96 KLD Sewage is generated in the Existing Plant. This sewage is sent to Bara STP. After Expansion about 142 KLD Sewage will be generated in the Plant. It will also be sent to Bara STP.</p> <p>Industrial Effluent after expansion From ETL Total Wastewater Generation will be 5880 KLD. From CRM Total Wastewater Generation will be 2160 KLD. From Boiler Wastewater Generation will be 120 KLD. From Water Treatment Plant & Other Generation will be 132 KLD.</p> <p>Total Industrial effluent generation after expansion will be 8292 KLD. Currently the waste water is treated in Effluent Treatment Plant and</p>

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		part of the treated water is recycled into the system and balance is discharged as per norms. It is proposed to treat the entire water in ETP with RO System and the treated Water will be recycled within the process (ZLD).
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Solid Waste Generation and Disposal

Non Hazardous Solid Waste (TPA)

Sr. No.	Type of Waste	Source	Existing	Proposed expansion	Total	Utilization
1	Red Oxide (by product of ARP)	ARP	1826	2640	4466	Sold to Competent Party
2	Steel Scrap	CRM & ETL	52416	75782	128198	Sold to Competent Party
3	Tin sludge and dross	ETL	30	42	72	To be sold out
4	Fly ash	AFBC boiler	19857	0	19857	Handed over to Fly ash Brick Manufacturers
5	Bottom Ash	AFBC boiler	2920	4867	7787	Partly used in boiler bed and remaining part is handed over to Brick Manufacturers
6	CRM Sludge	CRM WWTP	3180	4597	7777	Dumped in designated yard within the plant

Hazardous Solid Waste (Annual generation)

Sr. No.	Type of Waste	Source	Existing	Proposed expansion	Total	Utilization
1.	Waste Emulsion Oil	Plants & CRM WWTPs	500 MT	600 MT	1110 MT	Disposal to authorized vendor.
2.	ETL Sludge	ETL ETP	753MT	1088MT	1841 MT	Disposal

						through CHWTSDF (M/s Adityapur Waste Management Pvt. Ltd.)
3.	Waste Pickle Liquor (WPL)	Pickling unit	18000 KL	20000 KL	38000 KL	Regenerated at ARP and Reused in Pickling
4.	Process residue	Solution Centre	12 MT	-	12 MT	Disposal to authorized vendor
5.	Alkali residue	CRM plant	4380 KL	6332 KL	10712KL	Treatment at CRM WWTPs

Land use (Area) break-up :

The Plant area is 53.94 Ha and within the land around 8.50 Ha of the land will to be used for expansion. Further Plan is in place and area identified for extending Green Coverage by 4.75 Ha post expansion of Phase 2. Proposal for developing Water body post Phase 2 expansion is also in place.

Sr. No.	Particular	Existing land utilization (Ha.)	Land utilization post expansion (Ha.)
1.	Plant area	19.95	28.45
2.	Green belt	15	18.1
3.	Water body	0.6	0.6
4.	Open area	18.39	6.79
	Total	53.94	53.94

Khata no. & Plot no. of the project :

SN	Ward No	Khata No	Plot No	Area in Hect
1	12	61	4208 (P)	22.151

2	12	61	4209	0.842
3	12	61	4211 (P)	0.025
4	12	61	4212 (P)	0.001
5	12	61	4213	0.258
6	12	61	4336	0.115
7	12	61	4338	0.052
8	12	61	4339	0.075
9	12	61	4340	0.049
10	12	61	4341	0.014
11	12	61	4342	0.01
12	12	61	4343	0.015
13	12	61	4344	0.01
14	12	61	4345	0.013
15	12	61	4346	0.01
16	12	61	4347	0.013
17	12	61	4348	0.01
18	12	61	4349	0.013
19	12	61	4350	0.01
20	12	61	4351	0.013
21	12	61	4352	0.01
22	12	61	4353	0.012
23	12	61	4354	0.01
24	12	61	4355	0.012
25	12	61	4356	0.01
26	12	61	4357	0.012
27	12	61	4358	0.012
28	12	61	4359	0.012
29	12	61	4360	0.114
30	12	61	4361	0.068
31	12	61	4362	0.013
32	12	61	4363	0.017
33	12	61	4364	0.002
34	12	61	4365	0.018
35	12	61	4366	0.03
36	12	61	4367	0.02
37	12	61	4368	0.006
38	12	61	4369	0.017
39	12	61	4370	0.006
40	12	61	4371	0.015
41	12	61	4372	0.005
42	12	61	4373	0.015
43	12	61	4374	0.007
44	12	61	4375	0.017
45	12	61	4376	0.005
46	12	61	4377	0.017
47	12	61	4378	0.005
48	12	61	4379	0.017
49	12	61	4380	0.007

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50	12	61	4381	0.017
51	12	61	4382	0.006
52	12	61	4383	0.015
53	12	61	4384	0.005
54	12	61	4385	0.017
55	12	61	4386	0.088
56	12	61	4387	0.048
57	12	61	4388	0.075
58	12	61	4389	0.072
59	12	61	4390 (P)	0.26
60	12	61	4391	0.05
61	12	61	4392	0.133
62	12	61	4393	0.014
63	12	61	4394	0.014
64	12	61	4395	0.1
65	12	61	4396	0.047
66	12	61	4397	0.006
67	12	61	4398	0.049
68	12	61	4399	0.006
69	12	61	4400	0.049
70	12	61	4401	0.006
71	12	61	4402	0.046
72	12	61	4403	0.018
73	12	61	4404	0.058
74	12	61	4405	0.38
75	12	61	4406	0.123
76	12	61	4407	2.579
77	12	61	4408 (P)	1.817
78	12	61	4414	0.118
79	12	61	4415	0.12
80	12	61	4416	0.094
81	12	61	4417	0.012
82	12	61	4418	0.06
83	12	61	4419	0.012
84	12	61	4420	0.056
85	12	61	4421	0.012
86	12	61	4422	0.056
87	12	61	4423	0.012
88	12	61	4424	0.116
89	12	61	4425	0.061
90	12	61	4426	0.009
91	12	61	4427	0.065
92	12	61	4428	0.011
93	12	61	4429	0.063
94	12	61	4430	0.011
95	12	61	4431	0.092
96	12	61	4432	0.01
97	12	61	4433	0.044

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98	12	61	4434	0.085
99	12	61	4435	0.01
100	12	61	4436	0.056
101	12	61	4437	0.01
102	12	61	4438	0.056
103	12	61	4439	0.011
104	12	61	4440	0.058
105	12	61	4441	0.011
106	12	61	4442	0.056
107	12	61	4443	0.128
108	12	61	4444	0.006
109	12	61	4445	0.09
110	12	61	4446	0.012
111	12	61	4447	0.06
112	12	61	4448	0.011
113	12	61	4449	0.06
114	12	61	4450	0.011
115	12	61	4451	0.059
116	12	61	4452	0.011
117	12	61	4453	0.06
118	12	61	4454	0.152
119	12	61	4455	0.14
120	12	61	4456	0.071
121	12	61	4457	0.223
122	12	61	4458	0.043
123	12	61	4459	0.013
124	12	61	4460	0.27
125	12	61	4461	1.842
126	12	61	4462	0.096
127	12	61	4463	0.065
128	12	61	4464	0.042
129	12	61	4465	0.057
130	12	61	4466	0.09
131	12	61	4467	0.104
132	12	61	4468 (P)	0.232
133	12	61	4469 (P)	0.138
134	12	61	4474	0.018
135	12	61	4730 (P)	9.34
136	12	61	4731 (P)	0.216
137	12	61	4732 (P)	0.013
138	12	61	4733	0.004
139	12	61	4734	0.106
140	12	61	4735	0.013
141	12	61	4738	0.52
142	12	61	4739	0.057
143	12	61	4767	0.23
144	12	61	5243	0.482
145	12	61	6210 (P)	0.893

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146	12	61	6233 (P)	0.17
147	12	61	6234	0.044
148	12	61	6235	0.005
149	12	61	6236	0.044
150	12	61	6237	0.005
151	12	61	6238	0.044
152	12	61	6239	0.005
153	12	61	6240	0.044
154	12	61	6241	0.11
155	12	61	6242	0.057
156	12	61	6243	0.005
157	12	61	6244	0.044
158	12	61	6245	0.004
159	12	61	6246	0.045
160	12	61	6247	0.173
161	12	61	6248	0.009
162	12	61	6249	0.197
163	12	61	6250	0.046
164	12	61	6251	0.005
165	12	61	6252	0.046
166	12	61	6253	0.004
167	12	61	6254	0.046
168	12	61	6255	0.081
169	12	61	6256	0.062
170	12	61	6257	0.005
171	12	61	6258	0.041
172	12	61	6259	0.099
173	12	61	6260	0.069
174	12	61	6261	0.322
175	12	61	6262	1.35
176	12	61	6263	0.162
177	12	61	6264	0.069
178	12	61	6265	0.127
179	12	61	6266	0.112
180	12	61	6267	0.246
181	12	61	6268	0.118
182	12	61	6269	0.047
183	12	61	6270	0.009
184	12	61	6271	0.036
185	12	61	6272	0.008
186	12	61	6273	0.063
187	12	61	6274	0.009
188	12	61	6275	0.064
189	12	61	6276	0.009
190	12	61	6277	0.113
191	12	61	6278	0.01
192	12	61	6279	0.056
193	12	61	6280	0.011

194	12	61	6281	0.092
195	12	61	6282	0.01
196	12	61	6283	0.047
197	12	61	6284	0.052
198	12	61	6285	0.109
199	12	61	6286	0.093
200	12	61	6287	0.01
201	12	61	6288	0.097
202	12	61	6289	0.01
203	12	61	6290	0.061
204	12	61	6291	0.011
205	12	61	6292	0.063
206	12	61	6293	0.117
207	12	61	6294	0.063
208	12	61	6295	0.014
209	12	61	6296	0.067
210	12	61	6297	0.014
211	12	61	6298	0.095
212	12	61	6299	0.014
213	12	61	6300	0.098
214	12	61	6301	0.109
215	12	61	6304 (P)	0.267
216	12	61	6305	0.005
217	12	61	6306	0.018
218	12	61	6307	0.104
219	12	61	6308	0.014
220	12	61	6309	0.015
221	12	61	6310	0.01
222	12	61	6311	0.015
223	12	61	6312	0.03
224	12	61	6313	0.015
225	12	61	6314 (P)	0.078

STATUTORY CLEARANCES

1	DC, Jamshedpur	:	In absence of non availability of Khatiyan / Revenue record DC, Jamshedpur has given a certificate vide memo no. 270/TL, dated 30.07.2021 that if any part of land belongs to forest land / jangal jhari in future the project proponent is bound to follow the direction of Forest (Conservation) Act, 1980. This certificate was based on the directives of Revenue, Registration and Land Reforms Deptt., Govt. of Jharkand issued vide letter no. 05/संभू० लातेहार (विविध)-181/2018(छाया संचिका)4792/रा०रांची, दिनांक 04.12.2018.
2	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 1977, dated 20.12.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

3	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 3231 dated 11.12.2021 certified that the distance from the nearest Reserved Forest / Protected Forest from the project site is more than 250 m.
4	Public Hearing	:	JSPCB vide Ref. no. PC/PH/JSR/59-08/2022/B-2289, dated 03.11.2022 has informed that Public Hearing conducted on 22.09.2022.
5	Consent to Operate (CTO)	:	CTO granted by JSPCB vide : i. Ref. no. JSPCB/HO/RNC/CTO-8681379/2021/77, dated 18.01.2021. ii. Ref. no. JSPCB/HO/RNC/CTO-13999247/2022/1581, dated 10.11.2022.
6	Certified CTO Compliance Report	:	CTO Compliance Report certified by JSPCB vide memo no. B-2493, dated 28.11.2022.

During the presentation the following documents were sought :

- i. Pollution load due to emissions from the stack is to be provided for controlled and uncontrolled conditions. Pollution load also to be provided after the existing coal fired boiler is replaced by natural gas as fuel.
- ii. Details of Air Pollution control devices to be revised to include type of scrubbing system.
- iii. Details of waste water generation from different process units of the plant alongwith the corresponding effluent treatment system is to be provided.
- iv. Details of Air Emissions from different process units of the plant alongwith the corresponding Air Pollution Control system is to be provided.
- v. Details of Hazardous waste generation from different process units of the plant alongwith the corresponding handling & management system is to be provided.
- vi. The EMP table is to be revised to include budget for addressing the issues raised during the public hearing, addressing the budget to meet the socio economic needs and also to include contingency fund.
- vii. Copy of the test report of ground water sample taken from within the premises is to be submitted.
- viii. An undertaking that the proposed ETP will be designed for a capacity of 9600 KLD, which is 20 - 25% above the effluent generation capacity to be provided.
- ix. An undertaking stating that all necessary pollution control measures shall be implemented so as to maintain the AAQ within the prescribed limit at all time to be provided.

The Project Authorities have submitted the above mentioned documents.

Based on the presentation made and information provided, the Committee decided that the proposal for Operation of current plant of capacity 4,15,000 TPA and proposed phase-wise expansion to 1015,000 TPA capacity of Electrolytic Tinplate and Tin-Free Steel material including 28,000 TPA Printed and Lacquered sheets of M/s The Tinplate Company of India Limited at Golmuri Works, Jamshedpur, East Singhbhum, Jharkhand is recommended for grant of EC. The

various conditions for grant of EC is enclosed as Annexure – VI alongwith the following specific conditions :

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging points to be installed.

2. Karmahi Stone Deposit of M/S M.S.U Enterprises (Shri Mukesh Kumar & Partners) at Village : Karmahi, Thana : Hunterganj, Thana no. : Distt. : Chatra, Jharkhand (1.724 Ha).

(Proposal no. : SIA/JH/MIN/413534/2023)

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

This is a new project which has been taken for appraisal on 12.01.2023.

Applied Area :4.26 Acres (1.724 Ha)

Project Category :B2 – Application for Environment Clearance

EC Application for : 42,680 cum. / year (max), 242.26 cum. /day (max);
 Overburden : 54395 m³during plan period.
 DG Set : 20 KVA
 Crusher is Not proposed

Project and Location Details :

Sl.	Parameter	Details	
1	Project Name	: Karmahi Stone Deposit	
2	Lessee:	: M/s M.S.U. ENTERPRISES (PARTNER- SHRI MUKESH KUMAR)	
3	Lease Address	: MOUZA– Karmahi, P.S. - Hunterganj, P.S. No.- 149, DISTRICT-Chatra STATE- JHARKHAND.	
4	Lease Area	: Ha: 1.724	Acres: 4.26
5	Type of Land	: Non-Forest – Rayati Land	
6	Project Cost	: Rs. 95.00 Lakhs	
7	EMP Budget	: Capital: Rs. 21.57 Lakhs	Recurring: Rs. 2.94 Lakhs/ year Monitoring cost: Rs. 0.24 Lakhs/year
8	CSR / CER Budget	: Rs. 2,50,000/=	
9	New or Expansion	: New	
10	Mineable Reserves	: Cu.M.: 469085 Cu. M.	Tonnes: 1266550
11	Mine Life	: 7 years only	
12	Manpower	: 39 Person	
13	Water Requirement	: 31.53 KLD (Drinking:0.56 KLD, Dust Suppression: 20 KLD, Plantation: 10.97 KLD)	
14	Water Source	: Near by spring/Nala/ River	
15	DG Set / power	: 20 KVA	
16	Crusher	: Not Applicable	
17	Nearest Water Body	: Falgu Nadi 1.52 KM West direction	
18	Nearest Habitation	: Jori kalan, Village at 1.17 km WS direction	
19	Nearest Rail Station	: Katkamsandi Railway station– 45.67 km – South-East direction	
20	Nearest Airport	: Ranchi Airport 127.56 kms (South)-East	
21	Nearest Forest	: More than 250 m, as per forest division. Letter no – 486 Dt- 15-03-2022	
22	Road & Highways	: NH-22 (Chatra- Dhobi Road) – 1.27 KM; West direction	

CO-ORDINATES

Point	Latitude	Longitude
1	24°19'12.00" N	84°48'15.03" E
2	24°19'12.35" N	84°48'12.31" E
3	24°19'15.58" N	84°48'13.24" E
4	24°19'17.63" N	84°48'13.74" E

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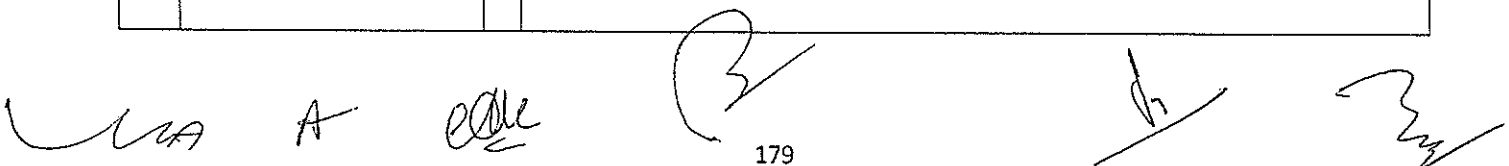
5	24°19'18.10" N	84°48'14.92" E
6	24°19'17.87" N	84°48'17.17" E
7	24°19'14.76" N	84°48'16.35" E
8	24°19'13.31" N	84°48'15.88" E
9	24°19'13.07" N	84°48'14.85" E

LAND DETAILS :

Khata No.	Plot No.
07	12

STATUTORY CLEARANCES :

1	LOI/Lease docs	: The Letter of Intent (LoI) has been issued by DMO, Chatra vide letter no. 944/Khanan, dated 28.09.2022.
2	CO	: The CO, Hunterganj (Chatra) vide letter no. : 157, dated 25.02.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	: DMO, Chatra vide memo no. 1039, dated 21.10.2022 certified that 02 other mining lease area (3.90 acre & 1.62 acre) exists within 500 m radius from proposed project site and total area is less than 5 ha..
4	DFO Wild Life	: DFO, Wildlife Hazaribagh vide letter no. : 445, dated 07.03.2022 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.
5	DFO Forest Distance	: DFO, Chatra North Forest Division vide letter no. : 486, dated 15.03.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	: The DC – cum – District Magistrate, Chatra vide letter no. 1230/Khanan, dated 14.12.2022 has informed that this project is part of District Survey Report (DSR) of Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	: Gram Sabha conducted on 20.02.2022.
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide letter no. 336, dated 27.10.2022.



WORKING DETAILS

1	Mining Method	:	Opencast Mechanized Mining
2	Quarry Area	:	5 years-1.160 ha Life of Mine – 1.160 ha
3	Waste Generation	:	5 years- 54395 cum Life of Mine –Nil
4	Stripping Ratio	:	NA
5	Working Days	:	300 days/year
6	Benches: size & No	:	5 m x 3/5 m , Bench No.- 1 to 7 (Conceptual Period)
7	Elevation of Mine	:	Maximum Elevation – 237 AMSL
8	Ground Level Elevation	:	233 AMSL
9	Ultimate Working Depth	:	202 AMSL
10	Water Table	:	233 AMSL
11	Topography of Mine	:	Gently Slop area
12	Explosive Requirement	:	7.48 Tons Per Year
13	Diesel/Fuel requirement	:	226.8 Litre per day

PRODUCTION DETAILS

Summary of Yearwise of Production						
Years	Production In Cum/Year	Production In Cum/Day	O.B Production in Cum/Year	Production In Tons/Year	Prod. In Tons./Day	Bench RL in meters
1st	66470	221.56	54395	179469	598.23	179-169
2nd	66470	221.56	-	179469	598.23	174-164
3rd	45080	150.27	-	121716	405.72	169-164
4th	72680	242.27	-	196236	654.12	164-159
5th	66815	222.72	-	180401	601.34	159-154
Total	317515		54395	857291		Depth – 25 m

LAND USE

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00

MA A

AKL

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Road	0.00
Total area in use	0.00
Balance area unused	1.724
Total Leasehold area	1.724

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.160
Infrastructure	0.010
Dump	0.050
Road	0.020
Safety Zone	0.380
Garland Drain	0.020
Unutilized	0.084
Total Leasehold area	1.724

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

Category	Area in Hectares
Quarry	1.160 Water Body
Safety Zone	0.380 (Plantation)
Office + Dump + Road	0.080 (Plantation)
Unutilized	0.084 (Plantation)
Garland Drain	0.02
Total area in use	1.724
Total Leasehold area	1.724
Plantation	0.544 (32 % of area)

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone & other reclaimed area	: 0.544 Ha	1360
2	Haul /Approach	: 1.25 meters	834 Tree both side approach road.

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Road			
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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

- Overburden Generation will be 54395 cum during the 1st Year plan period. O.B. Dump area is 0.05 ha. The O.B. shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

1. Mining operation will be restricted to the depth of 35m from surface level.
2. Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

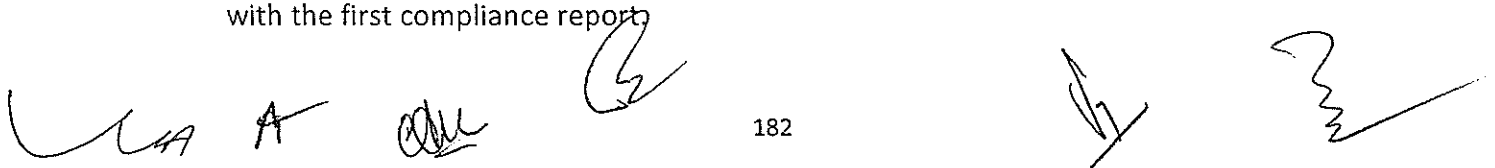
1. Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
2. Overloading of the truck / tractor trolleys will not be done.

As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

1. Carts or tractor-trolleys will be developed on village roads.
2. Tractors-trolleys will be well maintained and PUC certified.
3. Timely maintenance of vehicles and their silencers to minimize vibration and sound.
4. Minimum use of horns in the village area and silence zone (if any) as applicable.

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.
- i. If tree falling is required a permission from competent Authority should be obtained.

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 Karmahi Stone Deposit of M/S M.S.U Enterprises (Shri Mukesh Kumar & Partners) at Village : Karmahi, Thana : Hunterganj, Thana no. : Distt. : Chatra, Jharkhand (1.724 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

3. Rano Stone Deposit of M/S Maa Tara Stone Works at Mouza : Rano, Thana : Vasistnagar, Thana no. : 68, Distt. : Chatra Jharkhand. (1.214 Ha).

(Proposal no. : SIA/JH/MIN/413701/2023)

Project Category: B2 – Application

EC Applicationfor: Boulder Stone : 1,20,042 Tons (Max) per year / 44,460 Cum. (Max.) per Year

Proposed Crusher - NA

DG Set : 20 KVA

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

This is a new project which has been taken for appraisal on 12.01.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Rano Stone Deposit Project type – Stone Deposit
2	Lessee:	: M/s Maa Tara Stone Works Partners - (1) Shri Mukesh Kumar (2) Shri Jayprakash Singh (3) Shri Ranjit Singh
3	Lease Address	: Mouza – Rano, Thana no.- 68, Thana – Vasistnagar , Dist- Chatra, State-Jharkhand.

4	Lease Area	:	Ha: 1.214 ha	Acres: 3.00 Acres
	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 82.50 Lakhs	
7	EMP Budget	:	Capital: 16.66 Lakhs	Recurring: 2.74 Lakhs
8	CSR / CER Budget	:	1.75 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 2,07,195Cum.	Tonnes: 5,59,427 Tons
11	Mine Life	:	4.66 Years Say 5 Yrs	
12	Man power	:	21	
13	Water Requirement	:	15.23 KLD (Drinking:0.48 KLD, Dust Suppression: 8.48 KLD, Plantation: 6.27 KLD)	
14	Water Source	:	<ul style="list-style-type: none"> Water will be sourced from Water Tankers, to be purchased locally for Dust Suppression, Plantation, Drinking and Domestic Consumption. 	
15	DG Set / power	:	20 KVA DG Set proposed	
16	Crusher	:	NA	
17	Nearest Water Body	:	Lilajan Nadi - 5.70 km – SE direction.	
18	Nearest Habitation	:	Rano Village, Chatra – 24 KM	
19	Nearest Rail Station	:	Gaya Railway Station – 52 Km in NE direction from the ML area.	
20	Nearest Air Port	:	Birsra Munda Airport, Ranchi-132.00 Km in SE direction	
21	Nearest Forest	:	Protected Forest – 0.50 Km	
22	Road & Highways	:	Pucca Road – 530 metre in East direction. NH 22 – 6.30 KM in East direction.	

CO-ORDINATES

Geo-Coordinates of all corner points of Demarcated Block Boundary (GPS Co-ordinates) Datum: WGS 84		
Corner Point	Latitude	Longitude
1	24°23'33.66" N	84°44'55.49" E
2	24°23'33.65" N	84°44'55.30" E
3	24°23'33.87" N	84°44'55.18" E
4	24°23'34.02" N	84°44'54.28" E
5	24°23'33.86" N	84°44'53.17" E
6	24°23'34.75" N	84°44'52.99" E
7	24°23'35.11" N	84°44'52.79" E
8	24°23'36.27" N	84°44'52.89" E
9	24°23'36.57" N	84°44'52.75" E
10	24°23'38.69" N	84°44'53.02" E
11	24°23'38.47" N	84°44'55.72" E
12	24°23'38.15" N	84°44'55.68" E
13	24°23'38.11" N	84°44'55.80" E

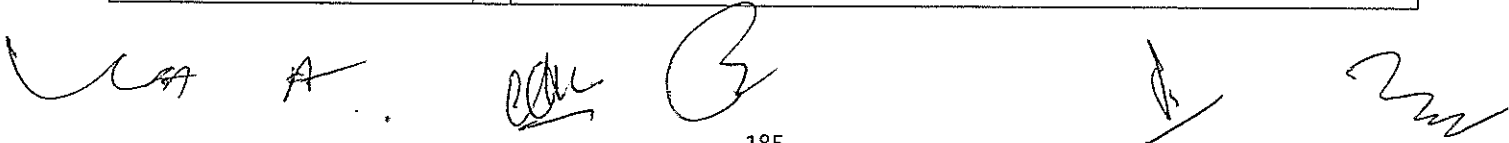
14	24°23'37.72" N	84°44'55.78" E
15	24°23'37.09" N	84°44'55.56" E
16	24°23'37.11" N	84°44'54.88" E
17	24°23'36.84" N	84°44'54.76" E
18	24°23'36.66" N	84°44'55.94" E
19	24°23'36.22" N	84°44'55.90" E
20	24°23'36.12" N	84°44'56.08" E
21	24°23'34.99" N	84°44'55.97" E

LAND DETAILS

Khata No.	Plot No.
02	96
03	97,99
04	98
07	93,120, 125,126,127,129
08	95, 100, 121, 122, 123, 128
10	124, 130,131
11	94

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Chatra vide letter no. 942/Khanan, dated 28.09.2022.
2	CO	:	The CO, Hunterganj, Chatra vide letter no. 871, dated 01.10.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar & Register II.
3	DMO	:	DMO, Chatra vide memo no. 1036, dated 17.10.2022 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1959, dated 14.11.2021 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Chatra North vide letter no. 1990, dated 27.10.2021 certified that the distance of reserved / protected forest is more than 250 metre from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Chatra vide letter no. 1230 / M, dated 14.12.2022 has informed that this project is part of District Survey Report (DSR) of Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.



7	Gram Sabha	:	Gram Sabha conducted on 09.10.2022.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter No.- 337, dated 27.10.2022

Working Details

1	Mining Method	:	Semi Mechanised. Wagon Drilling & Blasting to be used
2	Quarry Area	:	5 years-0.830 Ha End of Mine – 0.830 Ha
3	Waste Generation	:	5 years– 12,635 Cum. Life of Mine (Waste Gen.) – 12,635 Cum.
4	Stripping Ratio	:	1:0.02
5	Working Days	:	300
6	Benches: size & No	:	5 m x 3/5 m , Bench No.- 1 to 6 (Conceptual Period)
7	Elevation of Mine	:	Maximum Elevation – 274 AMSL
8	Ground Level Elevation	:	274 AMSL
9	Ultimate Working Depth	:	244 AMSL
10	Water Table	:	228 AMSL
11	Topography of Mine	:	Flat Terrain
12	Explosive Requirement	:	4.46 Tons/year
13	Diesel/Fuel requirement	:	732 liters / day (219.6 KL/year)

Production Details

Summary of Yearwise of Production						
Years	Production In Cum/Year	Production In Cum/Day	O.B Production in Cum/Year	Production In Tons/Year	Prod. In Tons./Day	Bench RL in meters
1st	39045	130.15	8835	105422	351.41	216 - 211
2nd	32015	106.71	-	86441	288.14	211-206
3rd	39045	130.15	-	105422	351.41	206-196
4th	41230	137.42	-	111321	371.07	201-186
5th	44460	148.20	3800	120042	400.14	215-201
Total	195795		12635	528648		Depth – 30 m

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.000
Road	0.000
Total area in use	0.000
Balance area unused	1.214
Total Leasehold area	1.214

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	0.830
Road	0.020
Green Belt / Safety Zone	0.340
Garland Drain/ Settling Tank	0.024
Total area in use	1.214
Unutilized	0.000
Total Leasehold area	1.214

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

Category	Area in Hectares
Quarry	0.830 Water Body
Green Belt/ Safety Zone+ Road	0.360 (Plantation)
Garland Drain/ Settling Tank	0.024
Total area in use	1.214

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone/Green Belt and other reclaimed area	: 0.36 ha	900 trees @ 2500 trees per ha.
2	Haul /Approach Road	: 0.53 KM	354 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.

Waste Generation

A total of 12,635 Cum of wastes (Over Burden) will be generated from entire Rano Stone Deposit up to conceptual stage. OB will be utilized for backfilling, internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

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

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- 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.
- i. If tree falling is required a permission from competent Authority should be obtained.

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 Rano Stone Deposit of M/S Maa Tara Stone Works at Mouza : Rano, Thana : Vasistnagar, Thana no. : 68, Distt. : Chatra Jharkhand. (1.214 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

4. Singari Stone Deposit of M/s Shristi Works Pvt. Ltd. at Village : Singari, Thana : Angara, Thana no. : 70, Distt. : Ranchi, Jharkhand. (2.94 Ha).

(Proposal no. : SIA/JH/MIN/413658/2023).

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


This is a new project which has been taken for appraisal on 12.01.2023.

Applied Area : 7.26 Acres (2.94 Ha)

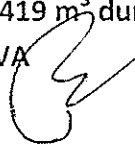
Project Category : B2 – Application for Environment Clearance

EC Application for : Overburden 8419 m³ during the plan period.

DG Set : 20 KVA

 A









Crusher is Not proposed

Project and Location Details :

Sl.	Parameter	Details	
1	Project Name	: Singari Stone Deposit	
2	Lessee:	: M/s Shrishti Works Pvt. Ltd. (Director- Abhishek Anand)	
3	Lease Address	: Mouza- Singari, Thana - Angara, Thana No.- 70, District- Ranchi, State- Jharkhand.	
4	Lease Area	: Ha: 2.94	Acres: 7.26
5	Type of Land	: Non-Forest – Rayati Land	
6	Project Cost	: Rs. 138.45 Lakhs	
7	EMP Budget	: Capital: Rs. 30.155 Lakhs	Recurring: Rs. 3.44 Lakhs/ year
8	CSR / CER Budget	: Rs. 2,80,000/=	
9	New or Expansion	: New	
10	Mineable Reserves	: Cu.M.: 450505 Cu. M.	Tonnes: 1216361
11	Mine Life	: 5.44 years say 6 years only	
12	Manpower	: 43 Person	
13	Water Requirement	: 46.65 KLD (Drinking:0.65 KLD, Dust Suppression: 27.2 KLD, Plantation: 18.80 KLD)	
14	Water Source	: <ul style="list-style-type: none"> ▪ For Dust Suppression and Plantation, water will be Sourced from Water Tabker ▪ For domestic use, water will be sourced from bore well within the lease area . 	
15	DG Set / power	: 20 KVA	
16	Crusher	: Not Applicable	
17	Nearest Water Body	: Subarnarekha River 4.21 KM North direction	
18	Nearest Habitation	: Singari Village at 0.88 km SE direction	
19	Nearest Rail Station	: Jonha Railway station- 8.88 km – South-West direction	
20	Nearest Airport	: Ranchi Airport 37.24 kms (South - West)	
21	Nearest Forest	: More than 250 m, as per forest division. Letter no – 4070 Dt- 24-09-2022	
22	Road & Highways	: SH 1 (Ranchi-Muri Road) – 6.60 KM; South direction	

CO-ORDINATES

Point	Latitude	Longitude
1	23°24'56.50" N	85°40'19.20" E
2	23°24'57.03" N	85°40'16.35" E
3	23°24'54.68" N	85°40'15.47" E
4	23°24'54.97" N	85°40'14.12" E
5	23°24'55.77" N	85°40'11.16" E
6	23°24'56.39" N	85°40'9.10" E

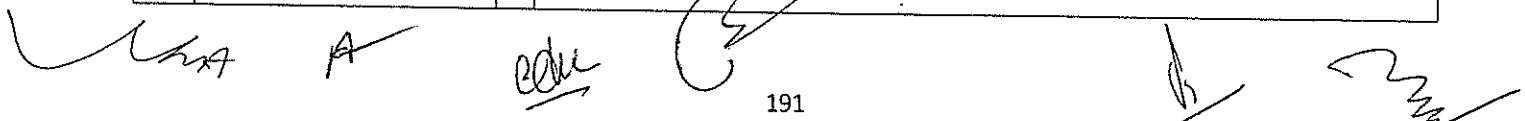
7	23°24'58.91" N	85°40'09.99" E
8	23°24'58.55" N	85°40'10.91" E
9	23°24'59.58" N	85°40'11.30" E
10	23°24'59.61" N	85°40'11.46" E
11	23°24'59.16" N	85°40'11.42" E
12	23°24'59.45" N	85°40'11.87" E
13	23°24'59.56" N	85°40'11.63" E
14	23°25'00.37" N	85°40'12.83" E
15	23°25'00.20" N	85°40'12.88" E
16	23°25'00.50" N	85°40'13.76" E
17	23°25'00.59" N	85°40'14.52" E
18	23°25'00.12" N	85°40'15.64" E
19	23°24'59.55" N	85°40'15.28" E
20	23°24'59.43" N	85°40'14.80" E
21	23°24'58.91" N	85°40'14.62" E
22	23°24'58.83" N	85°40'14.42" E
23	23°24'58.24" N	85°40'14.24" E
24	23°24'57.87" N	85°40'16.43" E
25	23°24'58.16" N	85°40'17.09" E
26	23°24'58.60" N	85°40'17.15" E
27	23°24'58.62" N	85°40'17.45" E
28	23°24'58.81" N	85°40'17.71" E
29	23°24'58.84" N	85°40'19.20" E

LAND DETAILS

Khata No.	Plot No.
36	141, 354 (P)
107	142
44	143
67	114

STATUTORY CLEARANCES

1	LOI/Lease docs	: The Letter of Intent (LoI) has been issued by District Mining Office, Ranchi vide letter no. 1094/M, dated 16.12.2022.
2	CO	: The CO, Angara, Ranchi vide letter no. 855 (ii), dated 29.11.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.



3	DMO	:	DMO, Ranchi vide memo no. 1111/M, dated 22.12.2022 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide letter no. 834, dated 10.09.2022 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Ranchi vide letter no. 4070, dated 24.09.2022 certified that the distance of reserved / protected forest is more than 250 metre from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ranchi vide letter no. 1115 / M, dated 23.12.2022 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	:	BDO, Angara, Ranchi vide letter no. 2012 (ii), dated 29.11.2022 informed that Gram Sabha conducted on 26.10.2022.
8	Mine Plan Approval	:	DMO, Ranchi vide memo no. 25, dated 06.01.2023.

WORKING DETAILS

1	Mining Method	:	Opencast Mechanized Mining
2	Quarry Area	:	5 years-1.83 ha Life of Mine - 1.85 ha
3	Waste Generation	:	5 years- 8419 cum Life of Mine -Nil
4	Stripping Ratio	:	1:0.02
5	Working Days	:	300 days/year
6	Benches: size & No	:	5m x 5m
7	Elevation of Mine	:	In 638- 633 m MSL
8	Ground Level Elevation	:	In 630 AMSL
9	Ultimate Working Depth	:	In 599 AMSL
10	Water Table	:	In 528 MSL
11	Topography of Mine	:	Undulating Terrain
12	Explosive Requirement	:	9.36 Tons Per Year
13	Diescl/Fuel requirement	:	300 litter per day

Production Details

Years	Production In Cum/Year	O.B Production in Cum/Year	Production In Tons/Year	Bench RL in meters
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1st	75182	6787	202991	577 - 571
2nd	82688	1632	223258	576 - 571
3rd	70338	-	189913	572 - 561
4th	74758	-	201847	567 - 557
5th	52869	-	142746	556 - 546
Total	355835	8419	960755	Depth 31 m

LAND USE

Existing Land Use pattern

S.no.	Category	Area in Hectares
1	Mining Area	0.00
2	Office	0.00
3	Dump	0.00
4	Road	0.00
5	Garland Drain	0.00
6	Safety Zone	0.00
7	Settling Tank	0.00
8	Unutilized	2.94
	Total	2.94

Proposed Land Use for Current Plan Period

Sl	Category	Area in Hectares
1	Mining Area	1.83
2	Office	0.08
3	Dump	0.15
4	Road	0.02
5	Safety Zone	0.70
6	Garland Drain, Settling Tank	0.04
7	Unutilized	0.12
	Total	2.94

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

Sl	Category	Area in Hectares
1	Mining Area + Road	1.85 (Water Body)
2	Safety Zone	0.70 (Plantation)
3	Office+Dump+Unutilized area	0.35 (Plantation)
4	Garland Drain/ Settling Tank	0.04
	Total	2.94
	Plantation	1.05 (35.7 % of total area)

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone and other reclaimed area	: 1.05 Ha	2625
2	Haul /Approach Road	: 1.70 meters	1134 Tree both side approach road.

- 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

- Overburden Generation will be 8419 cum during the 1st and 2nd year plan period. O.B. Dump area is 0.15 ha. The O.B. shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

1. Mining operation will be restricted to the depth of 35m from surface level.
2. Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

1. Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
2. Overloading of the truck / tractor trolleys will not be done.

As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

1. Carts or tractor-trolleys will be developed on village roads.
2. Tractors-trolleys will be well maintained and PUC certified.
3. Timely maintenance of vehicles and their silencers to minimize vibration and sound.
4. Minimum use of horns in the village area and silence zone (if any) as applicable.

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.
- i. If tree falling is required a permission from competent Authority should be obtained.

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 Singari Stone Deposit of M/s Shristi Works Pvt. Ltd. at Village : Singari, Thana : Angara, Thana no. : 70, Distt. : Ranchi, Jharkhand. (2.94 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

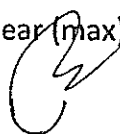
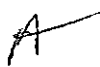
5. Purnadih Stone Deposit of M/s Jharkhand Stone Mines, Village : Purnadih, Thana : Domchanch, Thana no. : 214, Distt. : Koderma, Jharkhand (1.376 Ha.).

(Proposal no. : SIA/JH/MIN/413866/2023)

Applied Area : 3.40 Acres (1.376 Ha)

Project Category : B2 – Application for Environment Clearance

EC Application for : 36,192 cum. / year (max)



Corner Point	Latitude	Longitude
1	24°27'22.32" N	85°44'15.38" E
2	24°27'23.89" N	85°44'12.95" E
3	24°27'24.55" N	85°44'11.11" E
4	24°27'24.70" N	85°44'10.41" E
5	24°27'26.28" N	85°44'11.25" E
6	24°27'26.93" N	85°44'11.85" E
7	24°27'26.71" N	85°44'13.10" E
8	24°27'26.54" N	85°44'14.15" E
9	24°27'26.30" N	85°44'15.36" E
10	24°27'25.89" N	85°44'17.06" E
11	24°27'24.21" N	85°44'16.36" E

LAND DETAILS :

Khata No.	Plot No.
150	2740 (P) & 2741 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Koderma vide memo no. 26/M, dated 05.01.2023.
2	CO	:	The CO, Domchanch vide letter no. : 1196, dated 30.12.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar & Register II.
3	DMO	:	DMO, Koderma vide memo no. 43/M, dated 06.01.2023 certified that no other mining lease exists within 500 m radius from proposed project site and total area is less than 5 ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. : 2568, dated 22.12.2022 certified that the proposed project site is outside of Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Koderma Forest Division vide letter no. : 53, dated 03.01.2023 certified that the distance of reserved / protected forest is 405 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Koderma vide letter no. 36/M, dated 05.01.2023 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.

7	Gram Sabha	:	Gram Sabha conducted on 02.01.2023.
8	Mine Plan Approval	:	DMO, Koderma vide memo no. 44/M, dated 07.01.2023.

WORKING DETAILS

1	Mining Method	:	Opencast Mechanized Mining
2	Quarry Area	:	5 years-0.850 ha
			Life of Mine - 0.850 ha
3	Waste Generation	:	Only in first 2 years- 11808 cum
			Life of Mine - Nil
4	Stripping Ratio	:	NA
5	Working Days	:	300 days/year
6	Bench: size & No	:	5m x 5m
7	Elevation of Mine	:	In 442 AMSL to 440 AMSL
8	Ground Level Elevation	:	In 438 AMSL
9	Ultimate Working Depth	:	In 400 AMSL
10	Water Table	:	In 394 MSL and
11	Topography of Mine	:	Gently sloping area
12	Explosive Requirement	:	11.88 kg Per day
13	Diesel/Fuel requirement	:	70-80 litre per day

PRODUCTION DETAILS

Year	Production of Stone		Removal of Soil
	Cum	Tonnes	Cum
1 st Year	29952	80870	7104
2 nd Year	29952	80870	4704
3 rd Year	28800	77760	-
4 th Year	29280	79056	-
5 th Year	36192	97718	-
Total	154176	416275	11808

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	0.850	0.870	Water Body
2	Office	0.000	0.006	0.000	Plantation
3	Dump	0.000	0.043	0.000	Plantation
4	Road	0.000	0.020	0.000	
5	Garland Drain	0.000	0.351	0.351	Plantation

6	Safety Zone				
7	Settling Tank				
8	Unutilized	1.376	0.106	0.106	Plantation
	TOTAL	1.376	1.376	1.376	-

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.351 Ha	524
2	Other Reclaimed Area	:	0.000	000
3	Haul /Approach Road	:	390 meters	156 Tree both side approach road.

- 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

- Overburden Generation will be 11808 cum during the 1st and 2nd year plan period. O.B. Dump area is 0.043 ha. The O.B. shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

1. Mining operation will be restricted to the depth of 30m from surface level.
2. Quality of dug well will be monitored, in order to ensure the quality of water is not affected.

Air and Noise Pollution Control Measures:

1. Dust suppression measures like spraying / sprinkling of water to keep the surface wet.
2. Overloading of the truck / tractor trolleys will not be done.

As the only impact is due to transportation of soil through village roads, emphasis will be given on the following points:

1. Carts or tractor-trolleys will be developed on village roads.
2. Tractors-trolleys will be well maintained and PUC certified.
3. Timely maintenance of vehicles and their silencers to minimize vibration and sound.
4. Minimum use of horns in the village area and silence zone (if any) as applicable.

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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- 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.
- i. If tree falling is required a permission from competent Authority should be obtained.

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 Purnadih Stone Deposit of M/s Jharkhand Stone Mines, Village : Purnadih, Thana : Domchanch, Thana no. : 214, Distt. : Koderma, Jharkhand (1.376 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

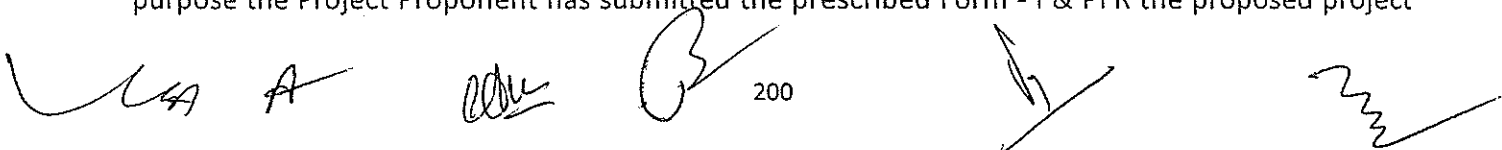
6. **Integrated Municipal Solid Waste Management Facility Project of Ranchi Municipal Corporation, Village : Jhiri, Tehsil : Kanke, Distt. : Ranchi, Jharkhand.**

(Proposal No. : SIA/JH/MIS/73513/2022)

Name of the consultant: Ascenso Enviro Pvt. Ltd. Noida, Uttar Pradesh

This is a new project which has been taken for appraisal on 12.01.2023.

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

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falls under item 7 (i) Common Municipal Solid Waste Management Facility (CMSWMF) as per EIA Notification, 2006.

Currently collection, transportation and dumping of solid waste of entire 53 wards are done by Ranchi Municipal Corporation (RMC). RMC appointed concessionaire for door-to-door waste collection and transportation of waste with mechanical sweeping of major roads. For processing of municipal waste RMC & GAIL (INDIA) Limited, A Government of India Undertaking-A Maharatna Company has signed agreement to set up Compressed Bio Gas (CBG) plant in Ranchi to produce CBG from Municipal Solid Waste.

Compressed Bio Gas (CBG) plant capacity is 2x150 TPD bio-degradable organic MSW as input and 2x5 MW is output. Plant will set up at Jhiri dumping yard. Total area of Jhiri dumping yard is approx. 42.05 acres and plant will be set up in 8 acres of land.

The proposed project comprises of daily primary and secondary collection of MSW generated within the service area, including residential (door-to-door collection), commercial, institutional, market places, etc., and transportation of MSW to the Proposed Integrated Solid Waste Management Facility for processing and disposal of waste, in compliance with Solid Waste Management Rules 2016.

The waste to energy plant will use bio methanation technology. Anaerobic co-digestion of many different substrates has achieved the most success when utilizing a Continuous Stirred-Tank Reactor (CSTR). Biogas production is a complex process resulting from incomplete anaerobic mineralization of biomass, carried out in four steps in single-phase. Organic acids formed in the hydrolysis and acidogenesis are intermediates of the biological process and can be described as nutrients for the microbes in the acetogenesis and methanogenesis.

A key design parameter for CSTR digester system is the overall loading rate. Loading rates are commonly expressed as the number of days of retention time or the quantity of organic matter applied to a given tank volume. Common detention times for farm-based waste digesters are roughly 20-30 days. Experience has shown that this time represents an optimum time where gas yield is maximized without over designing the residence time. Facilities that are co-digesting more complex wastes that include fats and proteins will commonly have retention times higher than 30 days.

The CSTR is a proven digester design consisting of an above-ground tank with a Flexible Double membrane roof. Biogas is collected at the top of the tank and is pumped to a separate gas holder. Digestate is removed from the base of the digester tank. Bio Gas will be purified (removal of Moisture) & compressed to make CNG for fuel to run automobile.

RMC proposes its Integrated Municipal Solid Waste Facility at Jhiri, Ranchi, Jharkhand. Geographically the site is located at Latitude: 23° 24' 41.10" N and Longitude: 85° 15' 21.28" E. The location is well connected by road and Rail. The site is only 1.0 km away from NH75 and is about 0.11 km from Ring Road. The nearest railway station is Ranchi Railway Junction which is about 10.5 km.

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Details of the proposed project :

Sl. no.	Information	Details
1.	Project Name	Integrated Municipal Solid Waste Management Facility Project at Village : Jhiri, Tehsil : Kanke, Distt. : Ranchi, Jharkhand.
2.	Area	Total area : 42.05 acres Area utilized for development : 23.05 acres Area for waste to CBG plant : 8 acres Sanitary landfill : 11 acres
3.	Name of the Client	Ranchi Municipal Corporation, Ranchi
4.	Water requirement and its source	20 KLD (Source : Bore Wells)
5.	Power supply and its source	20 KVA (Source : State Electricity Board)
6.	Project cost	28.19 Crore
7.	Nearest railway station	Ranchi Railway Junction is approx. 10.5 km in South East.
8.	Nearest SH/NH	NH-39 is 1 km towards SW
9.	Nearest airport	Birsa Munda Internation Airport, Ranchi is approx. 13 km in SE.

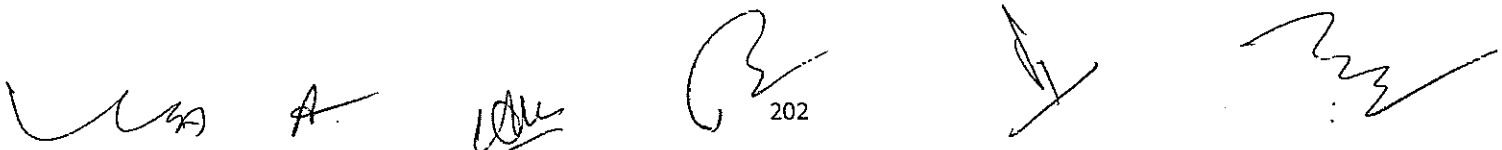
LAND DETAILS :

Khata No.	Plot No.
54	219, 251, 252 & 261
77	249, 253, 254, 255, 218 & 260
29	250
27	262

STATUTORY CLEARANCES :

1	DFO Forest Distance	DFO, Ranchi Forest division vide letter no. 3548, dated 30.10.2018 certified that the distance of Gutwa forest is 4800 m from proposed project site.
2	DFO wildlife	: DFO, Ranchi Forest division vide letter no. 3548, dated 30.10.2018 certified that the said project is outside Eco Sensitive Zone..
3	CO certificate	: The CO, Ratu (Ranchi) vide letter no. 893 (ii), dated 23.10.2018 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyon & Register II.

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 09, 10, 11, 12, 13 & 14.01.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure VII alongwith the following specific conditions :

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- I. A study on the possibility of utilization of H₂S to be carried out and included in the EIA report.
- II. The calculation of hazardous waste generation and its management in RMC area to be included in the EIA report.
- III. A study on Leachate generation and its characterization to be conducted and TCLP test report to be included in the EIA report.
- IV. A comprehensive study on surface water and ground water quality, soil quality and odor to be conducted and included in the EIA report alongwith corresponding mitigation measures.
- V. The mechanism for storm water management for project area to be provided in the EIA report.
- VI. Three row plantation plan all along the boundary of the project area to be clearly indicated on the plant layout plan.

7. Proposed Dhanbad Mall of M/s Shri Ram Multicom Pvt. Ltd., Village : Sugaidih, Sahayogi Nagar, Sector-I, Tehsil : Dhanbad, Distt. : Dhanbad, Jharkhand.

(Proposal No. : SIA/JH/INFRA2/403502/2022)

Name of the consultant: Ascenso Enviro Pvt. Ltd. Noida, Uttar Pradesh

This is a new project which has been taken for appraisal on 12.01.2023.

Project Category : 8(a) Category B2 – Application for Environment Clearance.

EC Application for: Proposed Dhanbad Mall at Plot No.-1524, 1525 & 1526, Sugiadih, Sahayogi Nagar Sector I Dhanbad, Jharkhand by M/s Shri Ram Multicom Pvt. Ltd.

Total built-up area is 25729.00 sq m.

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

Project and Location Details:

Parameters	Description
Plot Area	6461.98 sq. m.
Project Cost	INR 75 Crores
Built-up Area	25729.00 sq. m.
Green Area (@15.02 % of plot area)	971.09 sq m
Population	6000

(Handwritten signatures and marks)

Water Requirement	229 KLD
Fresh Water Requirement	103 KLD
Wastewater Generation	140 KLD
STP Capacity	170 KLD
Total Municipal Waste	1293.3 kg/day
Power Requirement	3109 KW (State Electricity board)
DG Sets	1 DG sets of 1010 kVA & 1 DG sets of 750 kVA
RWH Pits	02 no.
Parking Area	248 ECS
Connecting road	Bhiphore Hirak Road approx. 0.45 Km towards NE.
National Highway	1. NH 18 (Adjacent to project site) 2. NH19 Approx. 2.71 Km towards N.
Nearest Railway Station	Dhanbad Junction railway station (5.15 km, SW)
Airport	Ranchi Airport (129.40 km, WSW)
Nearest Hospitals	1. Balajee Children Hospital (0.13 km, NE) 2. Sadhna Hospital (0.43 km, NE) 3. Pragati Medical & Research Centre Pvt Ltd - Private hospital (1.44 km, SW) 4. J. P. Hospital and Research centre (1.44 km, SSW)
Nearest Water Bodies	1. Subalpur Pond (0.16 km, N) 2. CCWO Lake (0.70 km, SW) 3. Khudiya River (3.7 km, N)

CO-ORDINATES

	Latitude	Longitude
Corner-I	23°49'13.66"N	86°28'10.59"E
Corner-II	23°49'12.94"N	86°28'9.10"E
Corner-III	23°49'15.12"N	86°28'5.80"E
Corner-IV	23°49'16.49"N	86°28'6.46"E
Corner-V	23°49'16.31"N	86°28'7.35"E

LAND DETAILS:

Khata No	Plot No
1292	1524, 1525, 1526


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Area details of the project :

S. No.	Particulars	Area (m ²)
1.	Total Plot Area	6461.98
2.	Total Permissible FAR @ 2.50	16154.95
3.	Total FAR Proposed	15962.74
4.	Permissible Ground coverage @50%	3230.99
5.	Proposed Ground coverage @ 45.97%	2970.64
6.	Open Area (Total Plot Area – Proposed Ground Coverage)	3491.34
7.	Non-FAR Area	4334.03
	A. Basement 2	4334.03
	B. Basement 1	
	Total NON-FAR AREA	8668.06
8.	Total Service Area	1098.2
9.	Total Built-up Area (S. No. 3 +7+8)	25729.00
10.	Proposed Green Area (@15.02 of Plot Area)	971.09
11	Proposed vertical Greenery	323.00

Floor wise area details of building :

Floor Name	Gross Built-up Area	Deduction From Gross BUA (Area in Sq.mt)	Total Built-up Area (Sq.mt)	Deductions (Area in Sq.mt)			
		Cutout		Staircase	Lift	Accessory Use	Parking
Basement	4334.03	0.00	4334.03	0.00	0.00	0.00	4197.82
Second Floor	4334.03	0.00	4334.03	0.00	0.00	0.00	4000.40
Basement	4334.03	0.00	4334.03	0.00	0.00	0.00	4000.40
First Floor	4334.03	0.00	4334.03	0.00	0.00	0.00	4000.40
Ground Floor	3183.74	89.86	3093.88	123.24	0.00	20.88	0.00
First Floor	3537.82	394.89	3142.93	123.24	28.20	98.44	0.00
Second Floor	3537.82	394.89	3142.93	123.24	28.20	98.44	0.00
Third Floor	3600.31	319.44	3280.87	123.24	28.20	0.00	0.00
Fourth Floor	3463.29	1135.78	2327.51	123.24	28.20	0.00	0.00
Fifth Floor	2511.87	439.05	2072.82	123.24	28.20	0.00	0.00
Terrace Floor	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	28502.91	2773.91	25729.00	739.44	141.00	217.76	8198.22
Total Number of Same	1						

Buildings							
Total	28502.91	2773.91	25729.00		141.00	217.76	

Proposed FAR Area (Sq.mt)	Total F.A.R Area (Sq.mt)	Total Consumed Additional FAR Area (Sq.mt)	Tnmt (No.)
Commercial			
0.00	0.00	0.00	00
0.00	0.00	0.00	00
2949.76	2949.76	2949.76	01
2893.05	2893.05	2893.05	01
2893.05	2893.05	2893.05	01
3129.43	3129.43	3129.43	01
2176.07	2176.07	2176.07	01
1921.38	1921.38	1921.38	01
0.00	0.00	0.00	00
15962.74	15962.74	15962.74	06
15962.74	15962.74	15962.74	06

Area Component	Area in Sqm
Total plot area (Sqm)	6461.98
Green area required @ 15% of plot area (sqm)	969.29
Green area provided @ 15.03% of plot area (sqm)	971.09
Vertical Greenry (5% of plot area) (sqm)	323
Required no. of trees @ 1 tree as per 80sqm of plot area	80 trees
Number of trees proposed	90 trees

STATUTORY CLEARANCES:

1	DFO Forest Distance	DFO, Dhanbad Forest division vide letter no. 2757, dated 05.12.2022 certified that the distance of reserved/protected forest is 1400 m from project site.
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2	DFO wildlife	:	DFO, Wildlife Hazaribag vide letter no. 30, dated 10.01.2023 certified that proposed project is out of Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary. The Project Authorities have submitted and undertaking that due to mistake the dispatch date as mentioned in the certificate is 10.10.2023 instead of 10.01.2023. Thus 10.01.2023 should be considered as dispatch date and PAs has assured duly corrected Wildlife certificate will be submitted.
3	CO certificate	:	The CO, Dhanbad vide memo no. 1280, dated 28.11.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyani & Register II.
4	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide memo no. 3318/tech./2022 Dated:01.09.2022.
5	Building Plan	:	Building plan approved by Dhanbad Municipal Corporation vide memo no. : DMC/BP/0359/W22/2022, dated 22.11.2022

Water and waste water Requirement Details

S. No.	Description	Population/ Land Area in Sqm	Unit water consumption (litres)	Total water required (KLD)	Water requirement for domestic use/ fresh water (KLD)	Flushing water (KLD)	Total Waste water (KLD)
1	Visitors	6000	15	90	30	60	84
2	Staff	750	45	33.75	15	18.75	30.75
4	Restaurant	212	70	14.84	11.66	3.18	12.508
5	Food Court	384	35	13.44	9.6	3.84	11.52
6	Cafeteria	28	35	0.98	0.7	0.28	0.84
7	Horticulture	971.09	3	2.91			
8	Filter Backwash	.....	.....	3			
9	Cooling Towers make up water			70			

	Total Water Requirement			228.92	66.96	86.05	139.618
				says 229	says 67	says 86	says 140

Details	Water (KLD)
Water requirement for domestic purpose	67
Wastewater to be generated from domestic use (@ 80% of domestic water requirement) = 54 KLD	54
Water requirement for Flushing Purpose	86
Wastewater to be generated from Flushing (@ 100% of flushing requirement)	86
Total Wastewater to be generated (54+86) KLD = 140 KLD	140
STP Proposed (Approx. 21.4% higher than waste water)	170
Total Treated Water available after STP Treatment (@ 90% of waste water) = 126 KLD	126

Solid Waste Requirement

Category	Counts (heads)	Waste Generated (kg/day)
Visitors+ Staff	6750 @0.15 kg/day	1012.5
Restaurant + Food Court + Cafeteria	624 @0.45 kg/day	280.8
Total Waste Generated		1293.3

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Total green area provided at the site is Green belt (@15.02% of plot area) 971.09 sq m which will enhance the beauty of the site and help combat air and noise pollution.
- Besides this, the visual aesthetics of the proposed site is enhanced by developing parks/lawn with local ornamental plants in the open spaces.

Solid Waste Management

During Construction Phase

- Construction yards are proposed for storage of construction material.
- Excavated top soil will be stored in temporary constructed soil bank and will be reused for landscaping of the project.
- Remaining soil will be utilized for refilling/road work/raising of site level at locations.
- There will be "Refuse Containers" at site for the management of domestic waste generated by the construction labourers and these containers will be emptied at least once daily.
- Cement bags, waste paper and packing material (cardboard) will be sold off to recyclers.

During Operation Phase

- The solid waste will be segregated at source & collected.
- Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site.
- Bio-degradable (will be composted through organic waste converter).
- Recyclable wastes will be disposed to govt. or SPCB approved third party vendors.
- Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer.
- The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.
- Horticultural Waste is composted and used for gardening purposes.

Water Quality Management

During Construction Phase

- The site drainage will be planned in such a way that there is no accumulation of water/wastewater within the project premises or in the vicinity of the site.
- Mobile toilets to be provided for construction Laborers if required.
- Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

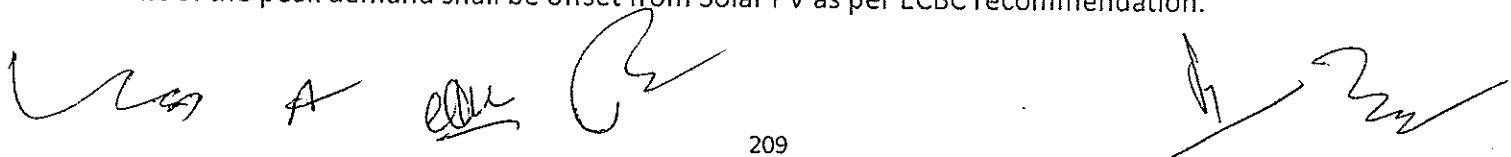
- STP of capacity i.e., 170 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, cooling, flushing, firefighting.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 103 KLD of fresh water is required during operational phase of the project.

Air Quality Management

- Warehouse/stock yard will be provided for storage of construction material
- Covering of stored construction materials with tarpaulin covers which will be resold to authorized construction material handling agency for reuse.
- Covering of trucks carrying construction materials.
- Dust suppression by water sprinkling.
- Adequate maintenance of construction equipment & vehicles.
- Wheel wash facility at the entry/exit of the site to prevent dust emissions.
- Periodical Ambient Air Quality Monitoring.
- PUC Certified vehicles.
- Glow signs Speed Limits to 20 kmph to reduce emissions on site will be displayed at the important junctions.

Energy conservation

2% of the peak demand shall be offset from Solar PV as per ECBC recommendation.



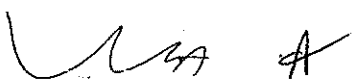
During the presentation the following documents were sought :

- i. An undertaking is to be submitted with reference to inorganic and other waste, hazardous waste, E-waste and C&D waste for proper handling & management through authorized vendor.
- ii. A detailed summary on ECBC criteria and compliances to be submitted as an undertaking.

The Project Authorities have submitted the above mentioned undertakings / document.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Dhanbad Mall of M/s Shri Ram Multicom Pvt. Ltd., Village : Sugaidih, Sahayogi Nagar, Sector-I, Tehsil : Dhanbad, Distt. : Dhanbad, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – III alongwith the following specific conditions :

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging points to be installed.



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8. Proposed production capacity 2,64,000 TPA of MS Billets unit by addition of 4x20 T Induction Furnace with CCM (2x2 strand) alongwith existing production capacity of 9000 TPA (MS Wire Chain, Link Galva Barbed Wire, Nail, Welded Mess), 3000 TPA (Karibar & Karibar Ring) and Slag crusher 60,500 TPA of M/s Anjanisuta Steels Pvt. Ltd., Village : Doiadih, Tehsil : Koderma, Distt. : Koderma, Jharkhand.

(Proposal No. : SIA/JH/IND1 /413082/2023)

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

This is a existing project which has been taken for appraisal on 12.01.2023.

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 (secondary metallurgical processing) as per EIA Notification, 2006.

S. No	Parameters	Description
1	Identification of project	Project falls under Metallurgical Industries (secondary metallurgical processing) Item 3(a) of the schedule of EIA notification of Sept 14, 2006 issued by MOEF & CC.
2	Project Proponent	M/S Anjanisuta Steels Pvt. Ltd.
3	Brief description of nature of the project	The existing industrial unit is producing MS Wire Chain, Link Galva Barbed Wire, Nail, Welded Mess 9000 TPA & Karibar & Karibar Ring 3,000 TPA. While the proposed expansion will add 4 no of induction furnace having capacity of 20 MT each for producing ~2,64,000 TPA of MS Ingot/ billets.
4	Salient Features of the Project	
4.1	Proposed production capacity	The production capacity of final/end product will be ~2,64,000 TPA of MS Ingot/ billets.
4.2	Total Plot Area	Total Plot Area -3.74Acre
4.3	Location	Doiadih, Mahto Araa, Jhumri Telaiya, Koderma Jharkhand.
4.4	Water requirement	Water requirement is fulfilled through bore well made at the plant area and from the rain water harvesting pond. Overall water requirement for the proposed expansion project will be approx. 300 KLD out of which 252 KLD will be recirculated in the process and 48 KLD will be makeup water.

S. No	Parameters	Description
4.5	Source of water	Borewell
4.6	Wastewater	The domestic water consumption will result in generation of ~2.5 m ³ /day of domestic wastewater. The wastewaters will be treated and entirely reused.
4.7	Man Power	Around 65 persons
4.8	Electricity/Power requirement	The electrical power requirement will increase to ~24000 kVA. One DG set of 500 kVA already installed (as power back-up).
4.9	Alternative site	The proposed addition will be established in the existing plant premises only.
4.10	Land form, Land use and land ownership	Private land, owned by M/S Anjanisuta Steels Pvt. Ltd

LAND DETAILS :

Khata No.	Plot No.
21	137, 146 & 149
15	145
05	136 (P) & 143

Plant obtained CTE from Jharkhand State Pollution Control Board (JSPCB) vide letter no JSPCB/HO/RNC/CTE- 13323378/2022/361 dated 02.09.2022.

Consent to operate (CTO) vide Ref No. JSPCB/HO/RNC/CTO-12786673/2022/578, dated 12.05.2022 with validity upto 31-12-2023 for the establishment of production of billets of capacity MS Wire Chain link Galva Barbed Wire, Nail, Welded Mess-9000 TPA; Karibar & Karibar Ring-3000 TPA.

Configuration and Production Capacities of the existing & Proposed Units

Sl. No	Plant Facilities	Existing Installed Units and Capacity		Proposed Units and Capacity		Total after Expansion	
		Unit	Capacity	Unit	Capacity	Unit	Capacity
1.	Wires manufacturing	MS Wire Chain, Link Galva	~ 9,000 TPA	MS Wire Chain, Link Galva Barbed Wire, Nail, Welded Mess	~ 9,000 TPA	MS Wire Chain, Link	~ 9,000 TPA

		Barbed Wire, Nail, Welded Mess				Galva Barbed Wire, Nail, Welded Mess	
2.		Karibar & Karibar Ring	~ 3,000 TPA	Karibar & Karibar Ring	~ 3,000 TPA	Karibar & Karibar Ring	~ 3,000 TPA
3.	Induction Furnace	1x10T	16,200 TPA MS Billets	Replacement of existing 1x10T by 1x20 T and additional 4x20 T	~2,64,000 TPA MS Billets	4x20T	MS Billets 2,64,000 TPA
4.	Slag Crusher	--	3,800 TPA	Replacement of existing facility by 1 x 10 TPH	60,500 TPA	--	33,000 TPA

Industrial Solid waste and Hazardous waste

Units	Solid Wastes	Qty In TPA	Disposal Practice
Induction Furnace	Slag	179MT/day	It will be supplied to Metal recovery plants and then will be used for construction filling.

There is no hazardous waste from the plant except for used oil (approx. 500kg/year) from equipment, which will be stored properly as per norms and is saleable to the registered recyclers in the market.

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Koderma Forest division vide letter no. 1736, dated 04.08.2020 certified that the distance of reserved / protected forest is 300 m from proposed project site.
2	DFO wildlife	:	DFO, Wildlife Hazaribag vide letter no. 1147, dated 29.06.2020 certified that the proposed project site is outside of Eco Sensitive Zone of Koderma Wildlife Sanctuary.
3	CO certificate	:	The CO, Koderma vide memo no. 116, dated 02.12.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.
4	Consent to Establish (CTE) & Consnet ot	:	i. CTE issued by JSPCB vide Ref. no. JSPCB /HO/RNC/CTE-13323378/2022/361, dated 02.09.2022.

Operate (CTO)	ii. CTO issued by JSPCB vide Ref. no. JSPCB /HO/RNC/CTO-12786673/2022/578, dated 12.05.2022.
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In the certificate issued by CO, Koderma vide memo no. 116, dated 02.12.2022, the plot no. 144 is missing, although the plot no. 144 is mentioned in certificate issued by Wildlife & Territorial DFO. The PAs have requested that they will submit a revised CO certificate mentioning plot no. 144 at the time of applying for final EC. Accordingly, the EC will be considered for the plot nos. mentioned in the revised CO certificate.

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 09, 10, 11, 12, 13 & 14.01.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure II alongwith the following specific conditions :

- I. Details of land to be utilized for green belt development outside the project premises is to be provided alongwith details of plantation. Atleast 10% of the project area should be utilized for green belt development within the premises and the land outside the premises to be utilized for green belt development should be atleast 30% of the project area.

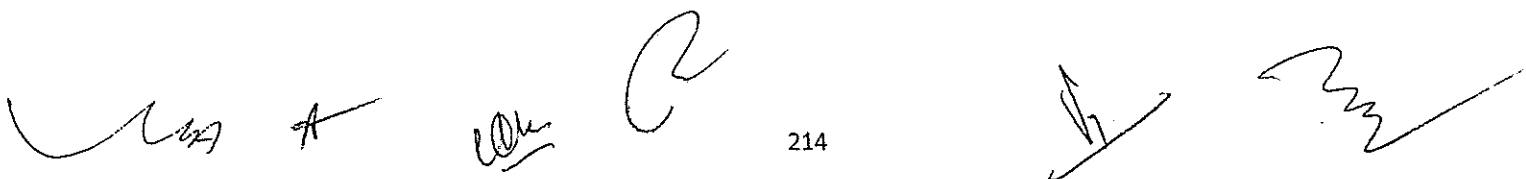
9. Enhancing the production of Angle, Flat, etc. from 13,500 TPA to 50,000 TPA by modernization of existing Re-Rolling Mill and by enhancing the production of M.S. Billets from 14,700 TPA to 60,000 TPA by installing additional 1 x 10 T induction furnace and modernization of existing induction furnace from 1x8 T to 1 x 10 T with 1x2 Strand, 4/7 Radius CCM of M/s Renuka Ispat Private Limited, Village : Saldaha, Tehsil : Baghmara, Distt. : Dhanbad, Jharkhand.

(Proposal No. : SIA/JH/IND1 / 413273/2023)

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

This is a existing project which has been taken for appraisal on 12.01.2023.

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 (secondary metallurgical processing) as per EIA Notification, 2006.



S. No	Parameters	Description
1	Identification of project	Project falls under Metallurgical Industries (secondary metallurgical processing) Item 3(a) of the schedule of EIA notification of Sept 14, 2006 issued by MOEF & CC.
2	Project Proponent	M/S Renuka Ispat Private Limited
3	Brief description of nature of the project	M/s Renuka Ispat Limited has existing setup which include Induction furnace of capacity 1x8T producing MS Billet 14,700 TPA and Rolling mill engaged in the production of Angle, Flat etc 13,500 TPA.
4	Salient Features of the Project	
4.1	Proposed production capacity	MS Billet – 60,000 TPA Angle Flat Etc.- 50,000 TPA
4.2	Total Plot Area	Total Plot Area –3.3Acre
4.3	Location	Saldaha, P.S- Rajganj, Block Baghmara, District-Dhanbad.
4.4	Water requirement	Water requirement is fulfilled through bore well made at the plant area and from the rain water harvesting pond. Overall water requirement for the proposed expansion project will be approx. 70 KLD out of which 58 KLD will be recirculated in the process and 12 KLD will be makeup water
4.5	Source of water	Borewell
4.6	Wastewater	The domestic water consumption will result in generation of ~2.4 m ³ /day of domestic wastewater. The wastewaters will be treated and entirely reused.
4.7	Man Power	Existing: 50 Total after expansion: 70
4.8	Electricity/Power requirement	The electrical power requirement will increase to ~8000 kVA. One DG set of 250 kVA already installed (as power back-up).

LAND DETAILS

Sl. No.	Khata No.	Plot No.
1	02	303, 304, 305, 306, 307, 308 & 376

Plant obtained CTE from Jharkhand State Pollution Control Board (JSPCB) vide letter no JSPCB/HO/RNC/CTE-6060248/2019/574 dated 01.10.2019.

Consent to operate (CTO) vide Ref No. JSPCB/HO/RNC/CTO-9904232/2021/978, dated 06.09.2021 with validity upto 31-12-2023 for the establishment of production of M.S. Angle- 13500 TPA.

Sl. No	Plant Facilities	Existing Installed Units and Capacity		Proposed Units and Capacity		Total after Expansion	
		Unit	Capacity	Unit	Capacity	Unit	Capacity
1.	Induction Furnace	1x8 T	14700 TPA	Addition of of 1x10 T & Modernization of Existing 1x8 T to 1x10 T	60,000 TPA MS Billets	2x10T	60,000 TPA MS Billets
2.	Continuous Casting Machine	1x2 Strand, 4/7 Radius CCM				-	
3.	Rolling Mill	1x5TPH Will be modernized	13500 TPA	Modernization of existing 1x5TPH capacity Rolling Mill To 1x10TPH capacity)	50,000 TPA Angle Flat Etc.	1x10TPH	50,000 TPA Angle Flat Etc.
4.	Slag Crusher	--	3000 TPA	By 1x10 TPH	13,530 TPA	1x10 TPH	13,530 TPA

Industrial Solid waste and Hazardous waste :

Units	Solid Wastes	Qty In TPA	Disposal Practice
Induction Furnace	Slag	13530 TPA	It will be supplied to Metal recovery plants and then will be used for construction filling.
Rolling Mill	Mill Scale & cuttings	495 TPA	Will be charged back as scrap in the induction furnace for In-House Reuse

Bag Filter Dust from process	Dust from process	500kg/day	Low Landfilling or supplied to construction contractors for use in construction fillings.
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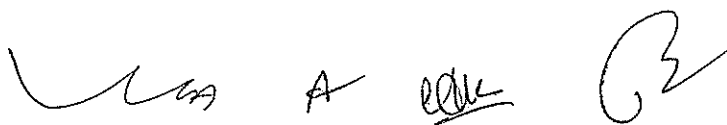
There is no hazardous waste from the plant except for used oil (approx. 100 kg/Year) from equipment, which will be stored properly as per norms and is saleable to the registered recyclers in the market.

STATUTORY CLEARANCES

1	LOI/Lease docs	:	Private land, owned by M/S Anjanisuta Steels Pvt. Ltd
2	CO	:	The CO, Baghmara (Dhanbad) vide letter no. 860, dated 12.11.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DFO Wild Life	:	DFO Wildlife, Hazaribagh vide letter no. 2495, dated 10.12.2022 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Dhanbad vide letter no. 2645, dated 17.11.2022 certified that the distance of reserved / protected forest is 750 metre from project site.
5	Consent to Establish (CTE) & Consnet ot Operate (CTO)	:	<ul style="list-style-type: none"> i. CTE issued by JSPCB vide Ref. no. JSPCB /HO/RNC/CTE-6060248/2019/574, dated 01.10.2019. ii. CTO issued by JSPCB vide Ref. no. JSPCB /HO/RNC/CTO-9904232/2021/978, dated 06.09.2021.

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 09, 10, 11, 12, 13 & 14.01.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure II alongwith the following specific conditions :

1. Details of land to be utilized for green belt development outside the project premises is to be provided alongwith details of plantation. Atleast 10% of the project area should be utilized for green belt development within the premises and the land outside the premises to be utilized for green belt development should be atleast 30% of the project area.





10. Proposed Residential Building "Resizone Elanza" of M/s Resizone Buildwell Pvt. Ltd., Mauza : Hotwar, Village : Gari, Thana no. : 180, Thana : Sadar, Distt. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/INFRA2/413061/2023)

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

This is a case of violation which has been taken for reappraisal on 12.01.2023

The project is a violation case since the project proponent has started the construction without prior Environmental Clearance from State Environment Impact Assessment Authority (SEIAA), Jharkhand.

However, The Honourable Supreme court in its order dated 9th December 2021 In the matter of the Civil appeal No 7576-7577 of 2021 in the Electro steel Steels Limited Vs Union of India and Ors in its para 93 has inter- alia observed the following :

"The interim order passed by the Madras high Court appears to be misconceived. However, this court is not hearing an Appeal from that interim order. The interim stay passed by the Madras High court can have no application of operations of the Standard Operating Procedure to the projects in territories beyond the territorial jurisdiction of Madras High court. However, final decision may have been taken in accordance with the Orders/ Rules prevailing prior to 7th July, 2021."

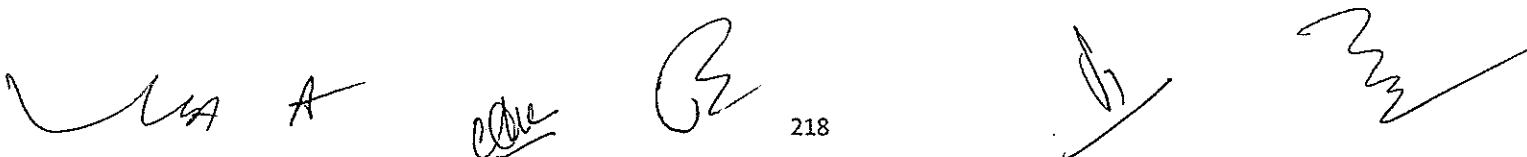
Thus, the SEIAA, Jharkhand, in the light of Ho'ble Supreme Court order dated 9th December 2021, Office Memorandum no. F.No.22-21/2020-IA.III[E 138949] dated 28.01.2022 of MoEF&CC, Govt. of India and Standard Operating Procedure (SOP) issued by MoEF&CC, Govt. of India vide its file number 22-21/2020-IA-III, dated 07.07.2021, the matter has been taken for consideration & recommendation of EC for violation projects.

Project Category: 8 (a) Category B2 – (at par with B1 being violation case)

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 98th meeting held on 02-05.11.2022 and SEIAA, Jharkhand has approved the violation ToRs in 99th meeting held on 28th & 29th November, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2665/2022/294, date 12.12.2022. The final EIA / EMP submitted by PP to SEIAA on 11.01.2023 and which was forwarded to SEAC on 11.01.2023.

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.

Application for Residential building: Total built-up area of 36020.08 Sqm. (Approx. 35% part of the project has already been constructed).

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Project and Location Details :

Sl. no.	Parameters	Description
1.	Latitude	23°22'39.92"N
2.	Longitude	85°23'00.37"E
3.	Plot Area	6526.30 Sqm. (Or 0.65263 Ha.)
4.	Project Cost	INR 40 Crores
5.	Built-up Area	36020.08 m ²
6.	Greenbelt Area (@15 % of plot area)	979 Sqm.
7.	Population	Residential: 1043 Nos. Visitors: 156 Nos.
8.	Water Requirement	109 KLD
9.	Fresh Water Requirement	74 KLD
10.	Reuse of Recycled Water	35 KLD
11.	Wastewater Generation	91 KLD
12.	STP Capacity	110 KLD
13.	Total Municipal Waste	493 kg/day Biodegradable Waste: ~ 296 Kg/day Non-Biodegradable Waste: ~197 Kg/day
14.	Power Requirement	1100 KW (Jharkhand State Electricity board)
15.	DG Sets	400 KVA 2 x 200 KVA
16.	RWH Pits	2 (28 Cumec / hour)
17.	Parking	227 (Four-wheeler), 452 (Two-wheeler) 21 (Visitors car Parking), 2 (Ambulance)
18.	Basement	02
19.	Connecting road	Project site is well connected with road. Site is well connected with Khelgaon- Tatisilwai Road, NH 20, Ranchi- Purulia Road.
20.	National Highway	Khelgaon- Tatisilwai Road (Approx. 0.49 km, NW) NH-20 (Approx. 1.65 km, WNW) Ranchi- Purulia Road (Approx. 2.74 km, SSE)
21.	Nearest Railway Station	Namkon Railway Station, (3.00 km, SW)

Sl. no.	Parameters	Description
22.	Airport	Birsa Munda Airport, (Approx. 8.90 km, SW)
23.	Nearest Hospitals	Samford Hospital, Kokar (Approx. 2.29 km, West) Sadar Hospital (Approx. 5.97 km, WSW)
24.	Nearest Water Bodies	Subarnarekha River- Approx. 1.38 km, SSW Ranchi Lake- Approx. 6.75 km, WSW Boreya Pond- Approx. 6.18 km, NW Kanke Dam - Approx. 8.28 km, NW
25.	EMP Budget	During Construction: Capital: 18 Lakhs Recurring: 20.25 Lakhs
		Operational Cost: Capital: 88 Lakhs Recurring: 22 Lakhs
26.	Construction Phase:	Power Back-up: 50 KVA each Water Requirement & Source: Fresh water – 9 KLD Treated wastewater-12 KLD Source: Tanker Water STP (Modular): 20 KLD
27.	Connectivity	Namkon Railway Station: Approx. 3.00 km, SW Birsa Munda Airport: Approx. 8.90 km, SW

Area Summary

S. No.	Description	Area (Sq.m.)
1.	Plot Area at Site	6526.30
2.	Green Belt Area @ 15%	979
3.	Open Area	3300.3
4.	Proposed Ground Coverage (@34.44% of net plot area)	2247.86
5.	Proposed FAR (@3.43 of plot area)	22355.04
6.	Parking and Non-FAR Area (Strain case, Lift, Balcony, Ramp, Accessory Use)	13,665.04
7.	Built-Up Area	36020.08
8.	Dwelling Units/Units Residential	Block F-110 Block G-88
9.	Height	Approx. 40 m

USA A

2020

220

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Co-Ordinates:

1	Latitude	23°22'39.92"N
2	Longitude	85°23'00.37"E

LAND DETAILS :

Khata No.	Plot No.
19	508/P, 509/P, 511/P & 514/P
44	507/P

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Ranchi Forest division vide letter no. 2719, dated 27.06.2022 certified that the distance of reserved / protected forest is more than-250-m-from-proposed-project-site.
2	DFO wildlife	:	DFO, Wildlife Ranchi vide letter no. 606, dated 04.07.2022 certified that the proposed project site is outside Eco Sensitive Zone.
3	CO certificate	:	The CO, Baragai, Ranchi vide memo no. 703 (ii), dated 24.08.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyon & Register II.
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID RANC/EAST /B/030718/285187, dated 07.03.2018.
5	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide vide memo no. 975/Tech., dated 26.06.2018.
6	Building Plan	:	Conceptual Plan submitted.

Water and waste water Requirement Details :

S. No.	Description	No. of units	Unit Population	Population	Unit water consumption (LPCD)	Total water required (KLD)	Fresh water required (KLD)	Flushing (KLD)	Total Waste water (KLD) (80% of domestic +100% Total flushing)
1	Main Dwelling Units (Residential)	198	4 for 1 BHK 5 for 2 BHK 6 for 3 BHK 7 for 4 BHK	1043	100	104	73	31	89.4

3	Visitors (15% of the residential population)	.....	.....	156	15 (5+10)	2.34	0.78	1.56	2.184
Subtotal -I						106.34	74	32.56	91.58
Reuse of treated water									
1	Horticulture	979 Sq.m.	3 liter/ sqm. of Landscape area	...	...	3			
Subtotal II						3			
Grand Total I+II						109			

Category	Total Quantity (KLD)
Fresh water Req. for domestic purpose	74
Flushing water Req.	32
Sewage generation (@80% of the fresh water consumption + 100% flushing water)	91 (59+32)
Capacity of STP	110
Recovered water from STP (80% of Waste water)	73
1. Flushing	32
2. Landscaping	3
3. Discharge to Sewer	38

Solid Waste Requirement

S. No.	Category of Solid Waste	Waste Generation Rate	Formula	Total Population	Waste Generated	Bio-degradable	Non-biodegradable
1	Main Dwelling Units (Residential)	0.3 to 0.6 kg/cap/day	Total Population *0.45	1043	469.35	281.61	187.74
2	Visitors (15% of the residential population)	0.1 to 0.3 kg/cap/day	Total Population *0.15	156	23.4	14.04	9.36
	Total			1199	493	296	197

ENVIRONMENT MANAGEMENT

Green Belt Development

- a. Combination of local trees and shrubs are planned within the project site.

- b. Green belt will be provided in 979 sqm. (@15% of plot area), which will enhance the beauty of the site and help combat air and noise pollution.
- c. The plant species will be selected on the basis of Guidelines for Developing Green Belts, CPCB March 2000.

Solid Waste Management

During Construction Phase

- a. Construction yards are proposed for storage of construction material.
- b. Excavated top soil will be stored in temporary constructed soil bank and will be reused for landscaping of the project.
- c. Remaining soil will be utilized for refilling/road work/raising of site level at locations.
- d. There will be "Refuse Containers" at site for the management of domestic waste generated by the construction labourers and these containers will be emptied at least once daily.
- e. Cement bags, waste paper and packing material (cardboard) will be sold off to recyclers.

During Operation Phase

- a. The solid waste will be segregated at source & collected.
- b. Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site.
- c. Bio-degradable (will be composted through organic waste converter).
- d. Recyclable wastes will be disposed to govt. or SPCB approved third party vendors.
- e. Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer.
- f. The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.
- g. Horticultural Waste is composted and used for gardening purposes.

Water Quality Management

During Construction Phase

- a. The site drainage will be planned in such a way that there is no accumulation of water/wastewater within the project premises or in the vicinity of the site.
- b. Mobile toilets to be provided for construction Labourers.
- c. Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- a. STP of capacity i.e. 110 KLD is proposed for treatment of wastewater.
- b. Treated waste water would be reused for Horticulture, DG cooling, flushing and in nearby construction site/sewer.
- c. Use of water efficient plumbing fixtures to conserve water.
- d. Approx. 74 KLD of fresh water is required during operational phase of the project.

Air Quality Management

- a. Warehouse/stock yard will be provided for storage of construction material
- b. Covering of stored construction materials with tarpaulin covers which will be resold to authorized construction material handling agency for reuse.
- c. Covering of trucks carrying construction materials.
- d. Dust suppression by water sprinkling.
- e. Adequate maintenance of construction equipment & vehicles.
- f. Wheel wash facility at the entry/exit of the site to prevent dust emissions.
- g. Periodical Ambient Air Quality Monitoring.
- h. PUC Certified vehicles.
- i. Glow signs Speed Limits to 20 kmph to reduce emissions on site will be displayed at the important junctions.

Energy conservation

Solar Panels will be used in Street Lights, Common area, Pumping area.

The PAs has proposed the remediation plan and natural & community resource augmentation plan before the Committee.

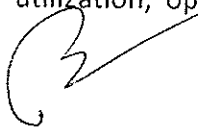

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of rupees 76,50,000 as per CPCB guidelines towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

Sl. No.	Environmental Component	Description	Location	Cost in Rs.
1.	Environmental Activities	➤ For environmental and allied activities in Ranchi Area in consultation with DFO Ranchi	Territorial division of Ranchi	15,00,000
2.	Community augmentation	➤ Construction of road with consultation of local authorities. ➤ Installation of Street lights with consultation of local authorities.	In impact area	55,00,000
3.	Greenbelt Development	Development of greenbelt with consultation of local authorities.	In impact area	6,50,000
		Total	--	76,50,000

- I. The Committee visited the project site on 09.01.2023 to verify the details submitted by PAs. During inspection, Committee saw that the STP is installed and is operational, RWH has been installed with 02 no. of pits, dedicated solid waste handling site was in place and green belt has been developed. Fly ash dump site was existing before initiation of the project. It has been stabilized by development of green belt & green cover on the entire fly ash dump site and has improved aesthetic of the area.
- II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. 76,50,000.
- III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 76,50,000 towards remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board and evidence of the same submitted to SEIAA, Jharkhand prior to grant of EC.
- IV. The bank guarantee shall be released after successful completion of remedition plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.
- V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.
- VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.
- VII. STP of adequate capacity shall be established within the project permises.
- VIII. Energy conservation measures adhearing to part of ECBC norms shall be complied with.
- IX. The penalty of Rupees 6,65,000 being 1% of the project cost incurred till date (Rs. 6,65,00,000) shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft and evidence of the same to be submitted to SEIAA, Jharkhand prior to grant of EC.
- X. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Residential Building "Resizone Elanza" of M/s Resizone Buildwell Pvt. Ltd., Mauza : Hotwar, Village : Gari, Thana no. : 180, Thana : Sadar, Distt. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – III alongwith the following specific conditions :

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.



- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging points to be installed.

11. Expansion of cement production capacity of Bokaro Cement manufacturing Works, a standalone Grinding Unit from 2.0 Million TPA to 3.1 Million TPA of M/s Dalmia Cement (Bharat) Limited, Village : Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase – 4, Tehsil : Chas, Dist. : Bokaro, Jharkhand.

(Proposal No. : SIA/JH/IND1/413722/2023)

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

This is a new project which has been taken for appraisal on 17.09.2022.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 97th meeting held on 14-18.09.2022 and SEIAA, Jharkhand has approved the ToRs in 98th meeting held on 17th & 18th October, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2646/2022/274, date 27.10.2022. The final EIA / EMP submitted by PP to SEIAA on 10.01.2023 and which was forwarded to SEAC on 10.01.2023.

Brief Summary :

- M/s. Dalmia Cement (Bharat) Limited is Proposing Expansion of Cement Production Capacity of Bokaro Cement Manufacturing Works, A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Project lies between Latitude 23.6949533° N to 23.6978843° N and Longitude 86.0628558° E to 86.0661843° E. Falls on SOI Toposheet number F45C2.

- **Environmental Clearance** of Existing Grinding unit has been obtained from SEIAA, Jharkhand for production of 2.0 MTPA PSC cement vide letter EC/SEIAA/2021-22/2534/2022, EC identification no EC22B009JH152802 dated 21.04.2022. Consent to Establish has been obtained for existing GU from Jharkhand State Pollution Control Board vide letter no JSPCB/HO/RNC/CTE-12699959/2022/195 dated 28.04.2022. Construction of the unit is under progress.
- It is Proposed to manufacture Portland Composite Cement (PCC) / Portland Slag Cement (PSC) / Portland Pozzolana Cement (PPC) using various waste products such as fly ash, slag etc. Expansion is proposed within the same premises with the same equipment mainly by change in product mix and increasing the number of working days & operating hours of the mill.
- No major construction is involved. However, in order to accommodate the additional storage and associated facilities, existing plant layout has been optimized based on detailed engineering.
- As per EIA Notification dated 14th Sept., 2006, as amended from time to time; this project falls in Category "B" under S. No. 3 (Material Production), Project Activity '3 (b)' Cement Plants.
- Baseline data for Ambient Air, Soil, Noise, Ground and Surface water has already been collected for Summer Season (from March, 2022 – May, 2022).

Plant configuration of existing EC and Proposed expansion

S. No.	Particulars (Units)	Details		Total quantity after expansion
		As per EC	Proposed	
1	Cement (Million TPA)	2.0	1.1	3.1 (PSC/PCC/PPC)
2.	DG set (KVA)	2x 500	--	2x 500 KVA
3.	Area (Acres)	15.75	No additional land	15.75
4.	Greenbelt /Plantation	5.2	No Change	5.2 (33% of total land area)
5.	Water requirement (KLD)	150	No Change	150
6.	Power requirement (MW)	12	No Change	12
7.	Project Cost (Rs in Cr)	576	35.5	611.5
8	EMP (Capital cost)	31.6	0.85	32.45
9	EMP (Recurring Cost)	1.1	No Change	No Change

Salient Features of the Project :

S. No.	PARTICULARS	DETAILS
A.	Area Details	
	Total Project Area	Plant area- 15.75 Acres (6.374 ha). No additional

S. No.	PARTICULARS	DETAILS
		Land is required for proposed expansion.
	Greenbelt area	5.2 Acres (33% of total land area)
B.	Environmental Setting Details (with approximate aerial distance & direction from proposed project site)	
1.	Nearest Village	Village Gorabali (0.5 km in SW)
2.	Nearest Town	Phusro (9.8 km in North-West direction)
3.	Nearest City	Bokaro (9.9 km in South-East direction)
4.	Nearest National Highway / State Highway	<ul style="list-style-type: none"> ○ NH – 320 (earlier NH-23) 4 km in South direction ○ NH – 18 (15 km in South-East direction)
5.	Nearest Railway station	<ul style="list-style-type: none"> ○ Bokaro Steel City Railway Station (4.4 km in SSE direction) ○ Tupkadih Railway Station (1.4 km in North direction)
6.	Nearest Airport	Ranchi Airport (~86 km in South-West direction)
7.	National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserve Forest (RF) / Protected Forest (PF) within 10 km radius.	<p>No National Park, Wildlife Sanctuary, Biosphere Reserve, Reserve Forest (RF) falls within 10 km radius of the project site. However, few patches of PF and open jungle exist within study area. NOC DFO Territorial & DFO Wildlife has been obtained in this regard vide Letter no. 3546 dated 21.12.2021 and 2058 dated 28.11.2021 respectively. These are</p> <ol style="list-style-type: none"> 1. Dakbera Open Jungle- 3.5km W 2. Barwapani Fairly dense jungle-7.5kmW 3. PF in North Direction – 6.3 km 4. Chiubera PF -4.7km NE
8.	Water Bodies (within 10 km radius)	<ol style="list-style-type: none"> 1. Damodar River (5.15 km in NE direction) 2. Garga Dam (6.4 km in South direction) 3. KhanjoNadi (5.5 km in West direction)
9.	Archaeological Sites	No Archaeological Sites Within 10 km radius
10.	Seismic Zone	The project site lies in Zone – III of Seismic Zoning Map of India, Bureau of Indian Standards.
G.	Basic Requirements for the project	
	Water Requirement	<p>150 KLD</p> <p>Source: JIADA water supply.</p> <p>Rain water harvesting plan will be adopted to reduce fresh water demand.</p> <p>No additional water for proposed expansion.</p>

S. No.	PARTICULARS	DETAILS
	Power Requirement	12 MW <i>Source:</i> DVC and D.G. Set for emergency back-up. Roof Top Solar Panels will also be installed within plant premises. No additional power for proposed expansion.
	Manpower Requirement (Persons):	
	Construction/Implementation phase (no.)	64
	Operation phase (no.)	
	Regular	39
	Contractual	250
	Total	289
	Total (no.)	353
	Locals will be given preference in employment as per their eligibility. No additional Manpower for proposed expansion.	

The details of composition required for the cement manufacturing have been envisaged as below:

Capacities and sizing of major equipment's proposed

S. No.	Plant/Equipment /Facility	Existing Configuration submitted for 2 MTPA	Total Configuration after 3 MTPA
(1.)	Truck Loaders	2x120 TPH	9x120 TPH
(2.)	Truck Tippler & Box Feeder	3x300 TPH	2x300 TPH
(3.)	Stacker Reclaimer	1800/300 TPH	1800/300 TPH
(4.)	Cement Mill(VRM)	2 Million TPA	3.1 Million TPA
(5.)	Coal Crusher (Hammer/Roll Crusher)	50 TPH	Removed (crushed coal will be used)
(6.)	Packer	2 x 240 TPH	3 x 240 TPH
(7.)	Wagon Tippler	1800 TPH	1800 TPH
(8.)	Startup FBC/HAG	25 Mkal/hr	30 Mkal/hr
(9.)	Coal Hopper	-	2X75 Tonnes

Proposed Storage Capacities

S. No.	Materials detail	Storage Capacity (Tonnes)		Storage Type
		Earlier	After detailed Engineering	
1.	Clinker	1 x 50,000	1 x 30000	RCC Silo
2.	Gypsum	1 x 5000	1 x 5000	Covered Shed
3.	Slag	1 x 25000	1 x 13000	Covered Shed
4.	Dry Fly ash	00	1x 3000	RCC Silo
5.	Pond Ash	00	1x 3300	Covered Shed
6.	Cement	2 x 5000	2 x 5000	RCC Silo
7.	LSHS/ HSD	1x30 KL	1x30 KL	Container/ Drum
8.	Coal	1 x 4500	0 Utilized for pond ash	Replaced with Coal hopper

Raw Material Requirement

S. No.	Raw material	Quantity (MTPA)*				Source	Mode of Transportation	Distance (Kms.)	
		PSC		PPC	PCC			Earlier	After Expansion
		Earlier	After Expansion						
1.	Clinker	0.66	1.09	1.92	1.02	Unit of DCBL at Rajgangpur, Odisha	Rail/Road	323	323
2.	Gypsum	0.04	0.06	0.09	0.06	Paradip, Odisha	Rail/Road	500	500
3.	Slag	1.30	1.95	0	0.93	BSL /RSP/TATA STEEL	Rail/Road	287	287
4.	Fly Ash	0	0	1.09	1.09	BTPS, Vedanta	Road	NA	80-100

STATUTORY CLEARANCES :

1	CO	:	The CO, Chas (Bokaro) vide letter no. 2436, dated 29.11.2021 has mentioned the plot no. of the project is recorded as "Kadim / Dhan / Parti Jadid" in Khatiyani.
2	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 2058, dated 28.11.2021 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
3	DFO Forest	:	DFO, Bokaro Forest Division vide letter no. 3546 dated 21.12.2021

	Distance	certified that the distance of Reserved Forest / Protected Forest from the project site is more than 250 m.
4	Previous Environmental Clearance	Previous Environmental Clearance granted by SEIAA vide letter no. EC/SEIAA/2021-22/2534/2022/27, dated 16.04.2022.
5	Consent to Establish	Consent to Establish (CTE) (Earlier) vide Ref. no. JSPCB/HO/RNC /CTE-12699959/2022/195 dated 28/04/2022
6	Land allotment letter	Land Allotment letter from JIADA vide allotment order No. LA/BO/SW/00771/2021 dated 20/10/2021
7	Water approval	Water Approval from Sub – Divisional Officer, Drinking Water and Sanitation Sub-Division, Bokaro vide letter no. 36, dated 13.04.2022
8	Public Hearing	Public Hearing conducted on 29.12.2022.
9	Site Inspection / Monitoring report	Site inspection / monitoring report issued by MoEF&CC, Integrated Regional Office, Govt. of India, Ranchi vide no. 111-11/ROR-2022/832, dated 12.01.2023.

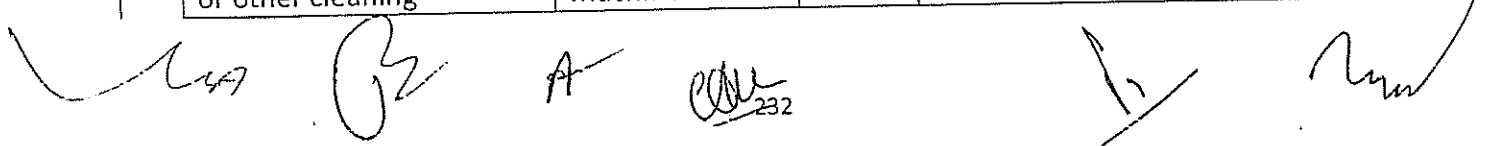
Land Schedule: Details of land/Plot/Plots/Shed to be leased out

S. No.	Khata No.	Survey Plot No.	Area in Sq.ft/Acre
1	134	781P	0.14
2	76	779P	0.26
3	134	777F	0.40
4	76	778P	0.07
5	76.00	782P	0.24
6	134.00	784P	0.05
7	76.00	783P	0.02
8	177.00	880P	1.31
9	46.00	850P	0.02
10	45.00	884F	0.04
11	177.00	852P	0.19
12	171.00	776P	0.37
13	76.00	887P	0.06
14	47.00	882F	0.42
15	145.00	881F	0.29
16	145.00	879F	0.74
17	78.00	878F	0.61
18	177.00	891F	1.13
19	171.00	883F	0.18
20	47.00	875F	0.09
21	65.00	874F	0.16
22	65.00	863F	0.48

S. No.	Khata No.	Survey Plot No.	Area in Sq.ft/Acre
23	135.00	861F	0.15
24	47.00	862F	0.44
25	160.00	960P	0.31
26	65.00	866F	0.90
27	72.00	867P	0.48
28	46.00	893P	0.52
29	76.00	890F	0.47
30	134.00	892F	0.50
31	45.00	885F	0.13
32	45.00	886F	0.04
33	65.00	873F	0.77
34	65.00	864F	0.47
35	72.00	865F	0.14
36	45.00	851P	0.19
37	76.00	888P	0.12
38	65.00	868P	0.13
39	46.00	858P	0.27
40	47.00	876F	0.22
41	46.00	871F	0.14
42	46.00	957P	0.55
43	46.00	870P	0.65
44	46.00	958F	0.89
Total			15.75

Production of wastes during construction or operation or decommissioning

	Name of the waste	Source	Qty (TPA)	Mode of disposal
1.	Municipal Solid Waste	Plant office, canteen etc.	20	Biodegradable waste will be composted and non-degradable wastes shall be disposed off suitably
2.	Plastic bags & other packing material	Plant & other	690	To authorized vendor
3.	Used lead acid batteries	Plant/vehicles/Solar	150 nos	Authorised vendor/buy back
4.	Hazardous wastes			
	Used or spent oil (Cat. 5.1)		13	Authorised vendor
	Wastes or residues containing oil (Cat. 5.2)	Plant, Machineries & Vehicles	15	Authorised vendor
	Contaminated cotton rags or other cleaning	Plant, Machineries &	0.2	Authorised vendor



	Name of the waste	Source	Qty (TPA)	Mode of disposal
	materials (Cat. 33.2)	Vehicles		
	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes (Cat. 33.1)	Plant	2 TPA/100 nos	Authorised vendor
5.	E-waste	Office, machineries	1	Authorised vendor
6.	APCD Dust	All APCEs		Dust collected in air Pollution Control Equipment will be recycled back to process.

During the presentation the following documents were sought :

- i. A revised material balance flow diagram to be provided.
- ii. A list of authorized vendors identified for hazardous waste handling and disposal to be provided.

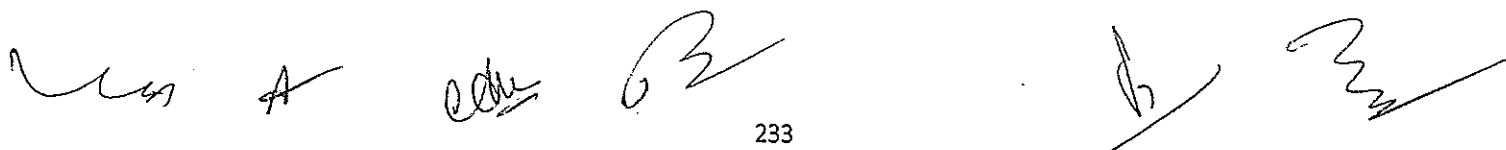
The Project Authorities have submitted the above mentioned documents.

Based on the presentation made and information provided, the Committee decided that the proposal for Expansion of cement production capacity of Bokaro Cement manufacturing Works, a standalone Grinding Unit from 2.0 Million TPA to 3.1 Million TPA of M/s Dalmia Cement (Bharat) Limited, Village : Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase – 4, Tehsil : Chas, Dist. : Bokaro, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – VIII.

12. Shrachi Greens Project of M/s Shrachi Realty Pvt. Ltd., Village : Tamulia, Tehsil : Chandil, Distt. : Seraikela Kharsawan, Jharkhand.

(Proposal No. SIA/JH/INFRA2/ 403087 /2022)

The PAs vide letter dated 12.01.2023 have requested for deferring the presentation as they are not able to attend the meeting due to unavoidable circumstances. In this regard the Committee recommends deferment of appraisal of the project.



13. Selected Dhori (Lower) Open Cast Mine of M/S Central Coalfield at Village : Turio, Makoli, Tarmi, Tehsil : Bermo, Distt. : Bokaro, Jharkhand .

(Proposal no. : SIA/JH/CMIN/413519/2023)

Name of the consultant: CMPDI, Kanke Road, Ranchi

This is a violation project which has been taken for appraisal on 12.01.2023.

Background and Executive Summary :

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 98th meeting held on 02-05.11.2022 and SEIAA, Jharkhand has approved the ToRs in 99th meeting held on 28th & 29th November, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2655/2022/290, date 12.12.2022. The final EIA / EMP submitted by PP to SEIAA on 10.01.2023 and which was forwarded to SEAC on 10.01.2023.

Name of the consultant: CMPDI, Kanke Road, Ranchi

This is a new project which has been taken for appraisal on 12.01.2023.

Background and Executive Summary :

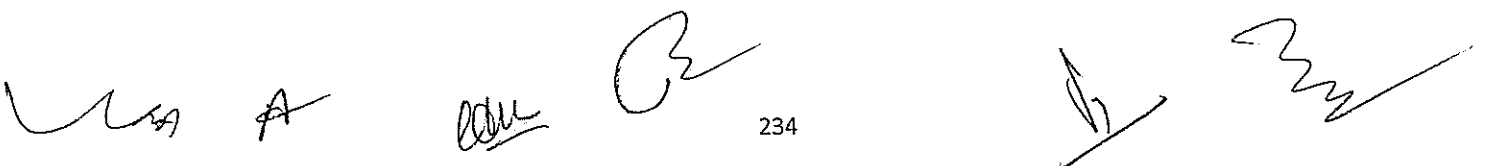
The State Expert Appraisal Committee, Jharkhand deliberated the project during its 98th meeting held on 02-05.11.2022 and SEIAA, Jharkhand has approved the ToRs in 99th meeting held on 28th & 29th November, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2655/2022/290, date 12.12.2022. The final EIA / EMP submitted by PP to SEIAA on 10.01.2023 and which was forwarded to SEAC on 10.01.2023.

Selected Dhori GoM is a brown field project which has been under operation since nationalization. The project was accorded EC vide letter no. F.No. 23-80/2018-IA.III (M) dated 27.04.2020 for a mine life of 02 years involving extraction of coal reserves from upper seams i.e. Seam VI to X, which are on the verge of exhaustion.

Therefore, it is proposed to tap the lower Karo V and Karo III seams of Selected Dhori Project. The lower seams (Karo-V and Karo-III) have an estimated coal reserve of around 10.72 Mte, which can add eight years to the life of mine at rate of proposed production capacity of 2 MTPA within the project area of 211.82 Ha. Accordingly, the Mining plan and Mine closure plan of Selected Dhori (Lower) OCM within the project area of 211.82 Ha has been prepared and was approved by CCL Board in its 509th Meeting held on 09.12.2021.

The mineable reserves available in Selected Dhori GoM (Lower Seams) is a high-grade coking coal of washery grade-III. Extracting coal from this mine would help in bridging gap between the energy needs and the supply of coal.

This project has been a major economical source to the nearby villagers. This project, when in operation, provides direct employment to around 1038 people and indirect employment to 1500 villagers. Thus, this project has been playing a major role in the socio-economic upliftment of the nearby villagers.



The project falls in the East Bokaro Coalfields, Bermo CD Block located in Bokaro District of Jharkhand. The project falls within latitudes 23° 45' 30.50"N to 23° 46' 33.91"N and longitudes 86° 01' 35.77"E to 86° 02' 43.64"E and falls in the Survey of India Toposheet no. 73 I/1.

The Gomoh-Barkakana loop line of the Eastern Railway passes adjacent to the area. The nearest railway Station 'Phusro' on the Barkakana-Gomoh loop line is about 2 km to the west of the area. The area is well connected by an all-weather Phusro-Dumri metalled road up to the existing Tarmi opencast project of CCL. The block is about 30km from Bokaro, about 80km from Dhanbad & about 110 km from Ranchi. The nearest commercial airport is situated at Ranchi.

The Selected Dhori block represents rugged topography being traversed by a major flat-topped hill, some isolated hillocks and dumps of existing and old quarries. The general elevation within the block lies between 213 m to 326 m above mean sea level. The ground slopes generally from north to south in the project area.

The balance mineable reserve of project within the quarry area of 179.44 Ha is 10.72 Mte for life of 8 years. The mineable reserves available is a high-grade coking coal of washery grade-III. Proposed seams to be worked in the project are Karo VI to X combined, Karo V and Karo III. Final depth of the quarry will be 120 meters.

Total overburden quantities estimated for the proposed project is 66.00 Mcum of OB. Out of which about 9.72 Mcum of OB has been proposed to be rehandled from 4th year onwards. All the OB removed will be backfilled within the quarry itself. The proposed dump height is maximum 60m from immediate surface level. Total two decks of height 30m each leaving 30m wide berms on each deck have been proposed and the final stage dump will attain a maximum RL of 270m. Coal produced from the project is transported to nearby Tarmi railway siding for onward transportation to projects.

The proposed Pre-mining & Post-Mining Land Use is given below:

SN	Land Use	Area in Ha	Post Mining Land Use	Area in Ha
1	Quarry	179.44	Internal dump reclaimed with Plantation	151.51
			void filled with water	27.93
2	Tisri Nala and Joria Nala	1.48	Tisri Nala and Joria Nala	1.48
3	Road & Infrastructure	5.06	Infrastructure for future use	5.06
4	Embankment	1.69	Plantation on Embankment	1.69
5	Green Belt & Safety Zone	24.15	Plantation on Green Belt & Safety Zone	24.15
Total		211.82	Total	211.82

The peak industrial water demand for the project was projected as 1013 cum/day. The domestic water demand (colony + industrial buildings) was projected as 870 cum/day. Thus, the total water requirement is 1883 cum/day.

The capital investment for the project is approximately Rs. 197.71 Crore.

This project has been a major economical source to the nearby villagers. This project, when in operation, provides direct employment to around 1038 people and indirect employment to 1500 villagers. Thus, this project has been playing a major role in the socio-economic upliftment of the nearby villagers. Further, this project has been effectively contributing to the developmental activities in nearby villages through CSR and other means.

LAND DETAILS :

Mouza	Thana no.	Khata No.	Plot No.
Makoli	69	1	114/119
		12	114/118
Turio	70	34	1 & 289
Tarmi	71	52	1

The Mining plan and Mine closure plan of Selected Dhori (Lower) OCM within the project area of 211.82 Ha has been prepared and was approved by CCL Board in its 509th Meeting held on 09.12.2021. The existing & proposed configuration of the project is summarized below :

Sl. No.	Particular	Existing Configuration as per EC dated: 27.04.2022	Proposed Configuration as per Present Proposal	Remarks
1	Peak Capacity	11 MTPA	2 MTPA	--
2	Seams Proposed to be mined out	Seam VI to Seam X	Seam III to Seam X	Inclusion of lower seams from Seam III to Seam V
3	Balance Life	2 Years	8 Years	Increase in balance life due to reduction in peak capacity & addition of lower Seam
4	Overburden	3.04 Mcum	66 Mcum	Increase in Total OB due to addition of lower Seam
5	Mineable Reserve	12.32 MT	10.72 MT	--
6	Project Area	264.85	211.82	Reduction in area due to removal of un-diverted forest land
7	Stripping Ratio	0.25 Cum/T	6.16 Cum/T	

In addition, it is also proposed to amend condition no. 5 (i) of the Environmental Clearance of Selected Dhori GoM (11 MTPA/ 264.85 Ha) related to NCRAP of the project.

[Handwritten signatures and initials]

Sl. No.	Existing Condition as per EC dated: 27.04.2022	Proposed Configuration as per Present Proposal	Remarks
1	Drinking Water Facility (Construction of bore wells with pressure filters and water towers) in 20 villages at a cost of Rs 40 Crores	The fund will be diverted into a corpus for sustainability of Sports and Educational Complex (30 Crores and beautification of three ponds in Dhori Area (Site Name: Pichri North, Pichri South & Bhola Nagar) (10 Crores)	The said activity needs to be removed as the said work is already being undertaken by Jharkhand State Govt. under the scheme of Jal Jivan Mission. In view of this, the said amount that is Rs 40 Crores is to be diverted into a corpus for sustainability of Sports and Educational Complex (30 Crores and beautification of three ponds in Dhori Area (Site Name: Pichri North, Pichri South & Bhola Nagar) (10 Crores) under Natural and Community Resource Augmentation Plan

Description of Seams:

Karo VI to X combined has been considered for mining. This seam forms the topmost seam in the proposed mining area. The seam has been mined extensively with an occurrence of fire in the area. Presence of this seam is possible in patches in the proposed mining area. Since its extent and quantity could not be ascertained due to past mining, its reserve has not been assessed. However, the same needs to be mined out along with the underlying seams. Seam IV, Seam II and Seam I. These seams are not mineable due to very low thickness.

Sl.No.	Seam Name	Avg Thickness considered (m)	Thickness range (m)	Geological Reserve (MT)	Mineable Reserve (MT)
1	Karo VI to X	-	57.33-69.28	-	-
2	Karo V	3.00	2.92-4.93	7.01	4.51
3	Karo IV	-	0.18-1.15	-	-
4	Karo III	4.00	3.25-7.66	12.75	6.21
5	Karo II	-	0.17-1.25	-	-
6	Karo I	-	0.30-0.40	-	-
	TOTAL			19.76	10.72

Proposed Calendar Programme of Production:

The summarized mining schedule for coal extraction and corresponding overburden load for the project, annual coal & OB production schedule has been provided in the table below:

Period	Year	Coal Production (Mt)	OB Removal (Mcum)	Stripping Ratio (cum/te)
Capacity built-up	1	0.50	3.70	7.41
	2	1.00	7.41	7.41
	3	1.50	10.18	6.79
Production	4	2.00	12.36	6.18
	5	2.00	11.40	5.70
	6	2.00	11.43	5.72
Tapering	7	1.20	6.66	5.55
	8	0.52	2.85	5.49
TOTAL		10.72	66.00	6.16

Power Requirement:

It is envisaged that this project will receive power at 33 kV from Bokaro Thermal Power Station (BTPS) of DVC. For this, two nos. existing 33 kV overhead lines from BTPS to B&K Main-sub-station shall be extended up-to proposed quarry. A 33 kV energy meter shall be installed for recording its energy consumption. Approximate distance of the quarry from B&K Sub-station is approximately 5 km.

Further, it is proposed to establish 1 no 2 X 5 MVA, 33/6.6 kV sub -station with provision for 2 nos. incoming 33 kV feeders and 12 nos. outgoing 6.6 kV feeders for supply of power to different power consuming equipment of the project.

Water Requirement:

The peak industrial water demand for Selected Dhori GoM (Lower Seams) was projected as 1013 cum/day. The domestic water demand (colony + industrial buildings) was projected as 870 cum/day. Thus, the total water requirement is 1883 cum/day.

Proposed source of water is from mine water of Selected Dhori Quarry & from Integrated Water Supply System (IWSS). NOC from CGWA has been granted vide no: CGWA/NOC/MIN/ORIG/2021/13591 Dated:01.11.2021 for a permitted quantity of 2841 KLD.

The proposed land use for the project is given below:

Sl. No.	Land Use	Area in Ha
1	Quarry	179.44
2	Tisri Nala and Joria Nala	1.48
3	Road & Infrastructure	5.06
4	Embankment	1.69
5	Green Belt & Safety Zone	24.15
Total (in Ha)		211.82 Ha

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land of SDOCM has been partially vested through Coal Mines Nationalization Act and Partially acquired through CBA Act.
2	CO	:	The CO, Chandrapura (Bokaro) vide letter no. 875, dated 09.09.2022 and CO, Bermo (Bokaro) vide letter no. 556, dated 05.09.2022 have mentioned the plot nos. of the project are recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1906, dated 24.09.2022 certified that the said project is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Bokaro Forest Division vide letter no. 2788, dated 30.09.2022 certified that the applied plots of proposed project site is forest land.
5	Mine Plan Approval	:	Ref No.: - CS/BM/509/2022/32, Dated: - 03.01.2022.
6	CGWA	:	NOC for Ground Water Abstraction vide NOC no. CGWA/NOC/ORIG /2021/13591, dated 01.11.2021.
7	Public Hearing	:	The Project Authorities have requested for waiver of Public Hearing. The present EC dated 27.04.2020 has been granted by MoEF&CC, Govt. of India based on Public Hearing conducted on 27.08.2016. After due deliberations that the present proposal is for lesser production capacity and area thus Public Hearing is waived as per the decision of SEIAA. This was based on recommendation of SEAC.
8	Diversion of forest land	:	<ul style="list-style-type: none"> i. Stage-I granted MoEF, Govt. of India vide F. no. 8-122/90-FC, dated 03.01.1992 for area 143.05 ha. ii. Stage-II granted MoEF, Govt. of India vide F. no. 8-122/90-FC, dated 01.07.1996 for area 143.05 ha. iii. Stage-I granted MoEF, Govt. of India vide F. no. 8-69/2004-FC, dated 10.09.2004 for area 69.183 ha. iv. Stage-II granted MoEF, Govt. of India vide F. no. 8-69/2004-FC, dated 02.03.2009 for area 69.183 ha. v. Re-application for diversion of forest land vide proposal no. FP/JH/MIN/40575/2019, dated 17.05.2021 for area 143.05 ha.

The PAs have requested for diversion of fund (40 crores earlier allocated for supply of drinking water is now proposed to be utilized for Rain Water Harvesting construction and sports activities) due to avoiding the duplicacy of the work w.r.t. remediation plan and natural & community resource augmentation plan as prescribed by MoEF&CC vide Environmental Clearance letter F. no. 23-80/2018-IA.III(M), dated 27.04.2020. This will be spent within a span of 03 years.

The PAs have further requested that due to Covid Pandemic the funds could not be utilized within stipulated 03 years period and requested that utilization period of the funds may be extended by another 02 years.

The SEAC has examined the request of PAs in this regard and accordingly remediation plan and natural & community resource augmentation plan is to be diverted as table given below within a extended period of 02 years i.e. 2025 :

SN	Head	Activity Approved in Damage Remediation Plan in Existing EC	Total Fund allocated in existing EC (Rs in Lakhs)	Proposed Modification in Fund (Rs in Lakhs)	Fund after proposed Modification (Rs in Lakhs)
1	Water Environment	Construction of check dam across Tisri Nallah for ground recharge and other community purposes	100	-	100
2		Rainwater Harvesting by construction & beautification of ponds, wells etc. in nearby villages	100	+ 1000	1100
Total Water Environment			200	+ 1000	1200
1	Ecology	Plantation in nearby villages along community buildings & barren lands (20 villages)	100	-	100
Total Ecological Environment			100	-	100
1	Air & Noise Environment	Additional Health Camps to monitor the respiratory and health status of nearby villages (20 villages * 2 Camps/Year * Rs 2 Lakh)	80	-	80
2		Road Sweeping Machine for nearby villages (5 Machines * Rs 55 Lakhs)	275	-	275
Total Air & Noise Environment			355	-	355
1	Land Environment	Community Solid waste collection bins in 20 villages	30	-	30
2		Providing colour coded bins in	5	-	5

		schools, hospitals etc (100 Numbers)			
Total Land Environment			35	-	35
1	Socio-Economic	Establishment of 5 Kayakalp schools for peripheral villages and corpus for sustainability of educational initiatives	4800	-	4800
Total Socio-Economic Environment			4800	-	4800
Total Cost			5490	+ 1000	6490

SN	Activity Approved in NCRAP in Existing EC	Total Fund allocated in existing EC (Rs in Lakhs)	Proposed Modification in Fund (Rs in Lakhs)	Fund after proposed Modification (Rs in Lakhs)
	Natural Resource Augmentation plan			
1	Drinking Water Facility (Construction of bore wells with pressure filters and water towers) in 20 villages	4000	- 4000	00.00
	Community Resource Augmentation Plan			
2	Establishment of Sports and Educational Complex			
	a. Establishment and operation of a Sports Academy (Archery, shooting, swimming, athletics, cycling, boxing & Hockey)	3800	+ 3000	6800
	b. Construction of School for sports academy cadets and other students	800	-	800
Total		8600	-	7600

Summary of DRP & NCRAP (Approved & Proposed)

SN	Activity Approved in DRP & NCRAP in Existing EC	Total Fund allocated in existing EC (Rs in Lakhs)	Proposed Modification in Fund (Rs in Lakhs)	Fund after proposed Modification (Rs in Lakhs)
1	Cost of Damage Remediation Plan	5490	+ 1000	6490
2	Cost of Natural Resources Augmentation Plan	4000	- 4000	0.0
3	Cost of Community Resources Augmentation	4600	+ 3000	7600

	Plan			
	Total	14090	00.00	14090

Based on the presentation made and information provided, the Committee decided that the proposal for Selected Dhori (Lower) Open Cast Mine of M/S Central Coalfield at Vill-Turio, Makoli, Tarmi, Tehsil- Bermo, Dist- Bokaro, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – V.

14. Karmahi Stone Deposit of M/s A and P Stone Works, Village : Karmahi, Thana : Hunterganj, Thana no. : 149, Distt. : Chatra, Jharkhand (1.58 Ha) .

(Proposal no. : SIA/JH/MIN/413963/2023)

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 42,814 Cu.M. / year i.e 1,19,880 Tonnes / year

Name of the Consultant: M/s P & M Solution, Noida -201301 UP.

This is a new project which has been taken for appraisal on 12.01.2023

Project and Location Details :

Sl	Parameter	Details	
1	Project Name	: Karmahi Stone Deposit	
2	Applicant Address:	: M/s A and P Stone Works Partners 1): Sri Arun Kumar Singh At Vill. – Nagar, P.O. + Thana - Hunterganj, District – Chatra, State – Jharkhand. 825403 2): Sri Prem Chand Singh At Vill. – Arya Nagar, Ranchi- Patna Road, Near Patratu Chowkj, P.S. – Sadar Hazaribag, District – Hazaribag, State – Jharkhand.	
3	Lease Address :	: In Mouza - Karmahi, Thana - Hunterganj, Thana No. – 149, District - Chatra, Jharkhand.	
4	Applied Area	: Ha: 1.58 Hectares	Acres: 3.90 Acres
5	Type of Land	: Non Forest – Ralyati Land	
6	Project Cost	: 58 Lakhs	
7	EMP Budget	: Capital: 19.75 Lakhs	Recurring: 5.85 Lakh / year
8	CSR / CER Budget	: Rs. 1.16 Lakhs	
9	New or Expansion	: New	
10	Mineable Reserves	: Cu.M.: 2,99,700 Cu. M.	Tonnes: 8,39,160 Tonnes
11	Mine Life	: 7 years	

12	Man power	:	33
13	Water Requirement	:	21.67 KLD Dust Suppression: 16.5 KLD, Drinking: 1.32 KLD, , Plantation: 3.85 KLD
14	Water Source	:	From nearby authorized sources.
15	DG Set / power	:	60 KVA
16	Crusher	:	No
17	Nearest Water Body	:	Lilajan River is flowing approx. 1.40 Km aerial distance away towards West direction.
18	Nearest Habitation	:	Jori Kalan village is approx. 1.12Km aerial distance away in West direction.
19	Nearest Rail Station	:	Gaya Railway Station is approx. 57.18 Km aerial distance away in North direction.
20	Nearest Air Port	:	Gaya International Airport, Bihar is approx. 49.46 Km aerial distance away in North direction.
21	Nearest Forest	:	More than 250m away from the proposed project.
22	Road & Highways	:	Highway: NH-22 is about 1.15 Km aerial distance away in West direction.

CO-ORDINATES

1	Latitude	:	From N24°19'06.87"	To N24°19'11.61"
2	Longitude	:	From E84°48'11.91"	To E84°48'16.82"

LAND DETAILS

Khata No. -	2
Plot Nos -	13

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Chatra vide letter no. 941/Khanan, dated 28.09.2022.
2	CO	:	The CO, Hunterganj (Chatra) vide letter no. 120, dated 12.02.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani or Register II.
3	DMO	:	DMO, Chatra vide memo no. 18, dated 09.01.2023 certified that there are two other lease area exists within 500m radius from proposed project site & total lease area is (3.90+1.62+4.26) = 9.78 acres / 3.96 Ha, which is not more than 5 Ha.

4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 515, dated 15.03.2022 certified that the proposed project site is outside Eco Sensitive Zone of Lawalong Wildlife Sanctuary.
5	DFO Forest Distance	:	Division Forest Officer, Chatra North Forest Division vide letter no. 339, dated 24.02.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Chatra vide letter no. 1230 / Khanan, dated 14.12.2022 has informed that this project is part of District Survey Report (DSR) at Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 14.11.2021.
8	Mine Plan Approval	:	Approved by the Additional Director, Geology, Hazaribagh vide memo no. 305/G dated 17.10.2022

Working Details

1	Mining Method	:	Opencast Mechanized Mining.
2	Quarry Area	:	5 years – 1.20 Ha Life of Mine – 1.20 Ha
3	Waste Generation	:	5 years– 15,856 Cu.M (Gritty Soil) Life of Mine – 15,856 Cu.M (Gritty Soil)
4	Stripping Ratio	:	1 : 0.03
5	Working Days	:	300 Days
6	Benches: size & No	:	Size: 6m x 6m, No. - 5
7	Elevation of Mine	:	Highest RL 212m AMSL, Lowest RL 210m AMSL
8	Ground Level Elevation	:	210m AMSL
9	Ultimate Working Depth	:	176m AMSL
10	Water Table	:	161m AMSL
11	Topography of Mine	:	Gently sloping land.
12	Explosive Requirement	:	20.79 Tons/year
13	Diesel/Fuel requirement	:	42 KL/year (140 Litres/day)

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste (gritty soil) Generation (CuM)	Bench RL in Meters
1st Year	42,814	1,19,880	5,080	212m – 206m
2nd Year	42,812	1,19,874	Nil	206m – 194m
3rd Year	42,814	1,19,880	5,646	212m – 194m

4th Year	42,812	1,19,874	2,550	206m – 194m
5th Year	42,814	1,19,880	2,580	200m – 188m
Total	2,14,066	5,99,388	15,856	

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	Mining Area (Quarry)	Nil	1.20 (including backfilling 0.08 Ha)	1.20 (including backfilling 0.08 Ha)	0.08	Backfill
					1.12	Water body
2	Green Belt Within Safety Barrier	Nil	0.35	0.35	0.35	Plantation
3	Road	0.01	Nil	Nil	Nil	-
4	Blocked area due to road safety	0.03	0.03	0.03	0.03	Plantation
5	Unutilized	1.54	Nil	Nil	Nil	-
	TOTAL	1.58	1.58	1.58	1.58	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.35 Ha	875 trees @ 2500 trees per Ha
2	Blocked Area	:	0.03 Ha	75 trees @ 2500 trees per Ha
3	Haul /Approach Road	:	0.26 Ha	870 trees on both sides – 3m distance
			i.e. Length 1300 width 2m	

- 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 (gritty soil) Generation will be 15,856 Cu.M. during the life of Mine.

- The area is covered with a layer of gritty soil. During quarry development in 1st year gritty soil will be removed and this soil will be temporarily dumped at the north-east part of the area with suitable precautions like constructing parapet wall and garland drain and in 3rd year removed soil & existing dump soil will be backfilled within the exhausted quarry.

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 applied 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 water required for the mining activities shall be supplied by the tanker from nearby authorized sources.
- c. The letter issued in respect of District Survey Report (DSR), is issued by the competent authority. I will abide by any directives issued by any court of law in future.

6	Project Cost	:	Rs. 30 Lakhs
7	EMP Budget	:	Capital: 2.818 Lakhs Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.60 Lakhs
9	New or Expansion	:	New
10	Mineable Reserves	:	cum.: 96105.77 cum Tonnes: 240264.43 tons
11	Mine Life	:	10 years
12	Man power	:	28
13	Water Requirement	:	3.85 ~ 4.00 KLD(Drinking: 0.28 KLD, Dust Suppression: 2.00 KLD, Plantation: 1.57 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	200 KVA
16	Crusher	:	No crusher
17	Nearest Water Body	:	Hill Nadi, at approx. 2.34 km towards E direction of mine site. Naga Nadi, at approx. 2.15 km towards N direction of mine site.
18	Nearest Habitation	:	Chhotahariyan village, at 680 meters
19	Nearest Rail Station	:	Haldipokhar Railway station, approx. 9.92 km towards N direction.
20	Nearest Air Port	:	Birsa Munda Airport, approx. 118.50 km towards NW direction.
21	Nearest Forest	:	Open Mixed Jungle, at approx. 5.70 km towards SW direction of mine site.
22	Road & Highways	:	NH- 220, at approx. 3.89 km. in NW direction.

CO-ORDINATES

1	Latitude	From 22°33'19.08" N	To 22°33'24.15" N
2	Longitude	From 86°09'04.82" E	To 86°09'08.66" E

LAND DETAILS

Khata No.	Plot No.
234	152(P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The LOI has been issued by Director of Mines, Deptt. of Mines & Geology, Govt. of Jharkhand vide letter no. Kha.Ni(Nilami)-70/2022/2037/M/Ranchi, dated 23.09.2022.
2	CO	:	The CO, Potka, East Singhbhum vide letter no. 807, dated 17.12.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.

3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 871/khanan, dated 02.11.2022 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Dalma Elephant Project	:	DFO, Dalma Elephant Project vide letter no. 1710, dated 28.11.2022 certified that proposed project site is outside Dalma Wildlife Sanctuary of Eco Sensitive Zone. The additional comments given by the DFO, Dalma Elephant Project is not appropriate.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 2658 , dated 03.11.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The project is already mentioned in page no. 27 of District Survey Report (DSR) of District East Singhbhum.
7	Gram Sabha	:	Gram Sabha conducted on 15.02.2015.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. G/2022-23-320, dated 20.10.2022.

Working Details

1	Mining Method	:	Opencast other than fully Mechanized Mining method
2	Quarry Area	:	5 years – 0.95 ha Life of Mine – 10 year
3	Waste Generation	:	NIL
4	Stripping Ratio	:	0:00
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	196 AMSL to 208 AMSL
8	Ground Level Elevation	:	106 AMSL
9	Ultimate Working Depth	:	166 AMSL
10	Water Table	:	106 AMSL
11	Topography of Mine	:	Area represents flat land with rock mass of dolerite
12	Explosive Requirement	:	8kg/day
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Production of stone (cum)	Production of stone (tons)	Bench RL in Meters
1 st	9610	24025	208mRL - 202mRL
2 nd	9610	24025	202mRL - 196mRL

3 rd	9610	24025	202mRL - 196mRL
4 th	9610	24025	196mRL - 190mRL
5 th	9610	24025	196mRL - 190mRL
Total	48050	120125	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	0.08	0.67	0.67 (0.67 ha area shall be left as water reservoir for Rainwater Harvesting)
Waste Dump	-	-	-
Road	--	-	-
Infrastructure	-	-	-
Safety Zone	-	0.28	0.28
Total	0.08	0.95	0.95
Balanced Area	0.87	--	-
Total Applied Area	0.95	0.95	0.95

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No. of Trees
1	Safety Zone	: 0.28 ha	700
2	Along Approach Road	0.100 km	20

About 784 plants will be distributed in village areas like School premises, Aangawadi, Panchayat Bhavan and other places. Therefore, total number of Plantation will be 784 no. of plants.

- 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 4169.08 cum or 10422.7 tons waste during the plan period will be generated which shall be used in making and maintenance of haul road and village road, so there is no requirement of waste dumping Plan for this mining plan period.

Water Quality Management

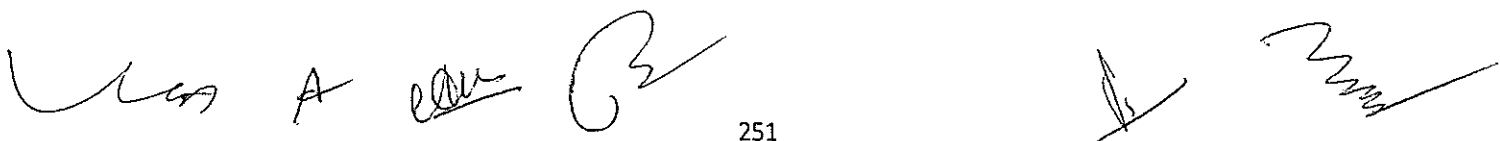
- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall 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 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.
- i. If any tree felling than necessary permission shall be taken from the competent authority.

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 Chhotahariyan – A Stone Block of M/s Kiran Enterprises (Prop.: Sri Balbinder Singh), Village : Chhotahariyan, Thana : Ghatsila, Distt. : East Singhbhum, Jharkhand (0.95 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

16. Hatnabera Stone Deposit of M/s Deep Enterprises (Prop. : Shri Sanjay Sardar), Village : Hatnabera, P.S. : Ghatsial, Distt. : East Singhbhum, Jharkhand (0.890 Ha) .

(Proposal no. : SIA/JH/MIN/413859/2023)

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity-14817.50 cu.m/annum or 40007.25 TPA

Name of the consultant: P & M Solution, Noida, UP.

This is a new project which has been taken for appraisal on 12.01.2023.

Project and Location Details :

S. No.	Parameter	Details
1	Project Name	: Hatnabera Stone Deposit
2	Lessee:	: M/s Deep Enterprises Proprietor: Shri Sanjay Sardar, S/O – Shri Chaitan Sardar

3	Lease Address	:	Village+ P.O.- Chakri, P.S.- Potka, District- East Singhbhum, Jharkhand
4	Lease Area	:	0.890 ha Acres- 2.20 Acre
5	Type of Land	:	Non Forest – Raiyati Land
6	Project Cost	:	Rs 20 Lakhs
7	EMP Budget	:	Capital: 6.18 lakh/year Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.40 Lakhs
9	New or Expansion	:	New
10	Mineable Reserves	:	200032.20 tons
11	Mine Life	:	4.99 ~ 5.0 years
12	Man power	:	17
13	Water Requirement	:	6.05 ~ 6.0 KLD (Drinking: 0.17 KLD, Dust Suppression: 3.50 KLD, Plantation: 2.38 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	400 KVA
16	Crusher	:	No crusher
17	Nearest Water Body	:	Hill River Apprx. Approx. 4.50 km towards S direction of mine site.
18	Nearest Habitation	:	Hatnabera village, at 140 meters
19	Nearest Rail Station	:	Haldipokhar Railway station, approx. 5.10 km towards West direction.
20	Nearest Air Port	:	Birsa Munda Airport, approx. 116 km towards NW direction
21	Nearest Forest	:	Protected Forest near morchagora rf, at approx. 5.0 towards N direction of mine site.
22	Road & Highways	:	NH- 220, Approx. 6.60 km. in SW direction. SH- 6, Approx. 4.0 km. in W direction.

CO-ORDINATES

1	Latitude	From 22°39'00.68" N	To 22°39'06.12" N
2	Longitude	From 86°12'40.75" E	To 86°12'46.21" E

LAND DETAILS

Khata No.	Plot No.
100	549 (P)



STATUTORY CLEARANCES

1	LOI/Lease docs	:	The LOI has been issued by DMO, East Singhbhum, Jamshedpur vide letter no. 1242/Khanan, dated 23.09.2021.
2	CO	:	The CO, Potka, East Singhbhum vide letter no. 58, dated 28.01.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 1027/khanan, dated 14.12.2022 certified that total lease within 500 m radius from proposed project is less than 5 Ha.
4	DFO Dalma Elephant Project	:	DFO, Dalma Elephant Project vide letter no. 1985, dated 23.12.2021 certified that proposed project site is outside Dalma Wildlife Sanctuary of Eco Sensitive Zone. The additional comments given by the DFO, Dalma Elephant Project is not appropriate.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 1320, dated 24.06.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, East Singhbhum, Jamshedpur vide letter no. 1498/Khanan, dated 06.12.2021 has informed that this project is part of District Survey Report (DSR) at East Singhbhum district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Potka, East Singhbhum vide letter no. 1311, dated 12.08.2021 informed that Gram Sabha conducted on 10.06.2021.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide mem no. 780/G, dated 23.11.2021

WORKING DETAILS

1	Mining Method	:	Opencast other than fully mechanized (OTFM) method
2	Quarry Area	:	5 years-0.575ha Life of Mine - 5 YEAR
3	Waste Generation	:	5 year Total 11667.60 cum OB
4	Stripping Ratio	:	1: 0.01
5	Working Days	:	300
6	Bench: size & No	:	6m to 6m

7	Elevation of Mine	:	153 AMSL to 150 AMSL
8	Ground Level Elevation	:	133 AMSL
9	Ultimate Working Depth	:	135 AMSL
10	Water Table	:	133 AMSL (20mbgl)
11	Topography of Mine	:	Area represents hillock of dolerite
12	Explosive Requirement	:	12kg/day
13	Diesel/Fuel requirement	:	80 litre/day

PRODUCTION DETAILS :

Year	Production of Stone		O.B waste (cum)	Total Waste in (cum)
	(cum)	(tons)		
1st	14817.30	40006.71	4053.55	4053.55
2nd	14816.55	40004.69	1219.05	1219.05
3rd	14817.50	40007.25	2600.00	2600.00
4th	14817.00	40005.90	2508.00	2508.00
5th	14817.40	40006.98	1287.00	1287.00
Total	74085.75	200031.53	11667.60	11667.60

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	Nil	0.53	0.53 (0.115 area shall be left as water reservoir for rain water harvesting)
Road	Nil	Nil	Nil
Waste Dump	Nil	Nil	Nil
Safety Zone (Green Belt)	---	0.36 (Within Safety Zone)	0.36 (Within Safety Zone)
Total	0.890	0.890	0.890

ENVIRONMENT MANAGEMENT

Green Belt Development

Type	Area
Safety zone plantation	0.36 ha

Approach road	0.283 km
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About 1190 no. of plant of different species will be planted in five years. Plantation will be done along both sides of approach road. Therefore, total number of Plantation will be 900 no. of plants.

Year	Area for Greenbelt in Hectare/saplings	Plantation along both sides of Approach road	Location
1 st Year	0.36ha/900 plants	290	Approach road – 500 nos – along both sides of approach road at spacing of 2 m.
2 nd Year	Care / Protection of Plants		
3 rd Year			
4 th Year			
5 th Year			
Total	900	290	
Total	1190		

About 1190plants will be distributed in village areas like School premises, Aangawadi, Panchayat Bhavan and other places. Therefore, total number of Plantation will be 1190 no. of plants.

- 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

It is proposed that the total wastes will be used in making and maintenance of haul road and village road, so there is no requirement of waste dumping Plan for this mining 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 suspendedparticles In the pit. Pump having required capacity will be installed to liftaccumulated 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 becollected in garland drain and allowed to settle in a small pit for settling suspendedparticles 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.

- i. If any tree felling than necessary permission shall be taken from the competent authority.

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 Hatnabera Stone Deposit of M/s Deep Enterprises (Prop. : Shri Sanjay Sardar), Village : Hatnabera, P.S. : Ghatsial, Distt. : East Singhbhum, Jharkhand (0.890 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

17. Proposed New Campus of Shri Krishna Institute of Public Administration (ATI) of M/s Building Construction Department, Special Works Division, Mouza : Kute & Labeled, Tehsil : Nagri, Distt. : Ranchi, Jharkhand.

(Proposal no. : SIA/JH/INFRA2/ 409138/2022)

Project Category: 8(a) Category B2 – Application for Environment Clearance

EC Application for: Proposed Residential project: Total built-up area is 44,199.12sq m.

Name of the consultant: P & M SOLUTION, Noida

Project and Location Details :

Parameters	Description
Plot Area	99512.19sq. m. (approx. 24.58 acre)
Project Cost	INR 161.13 Crores
Built-up Area (@ 2.87 F.A.R)	44,199.12 sq. m.
Green Area (@ 45.28 % of plot area)	45,058.00sq m
Population	4316
Water Requirement	372KLD
Fresh Water Requirement	132 KLD
Wastewater Generation	171 KLD
STP Capacity	205 KLD
Total Municipal Waste	364kg/day
Power Requirement	DEMAND LOAD IS 2,720.94KW. Total required transformer

	shall 2 Nos. 1250KVA, 1Nos 400KVA & 100KVA 11 KV / 0.433KV, 3 Phase, ONAN indoor Dry Type Distribution Transformers for PSS with off Load tap Changer to cover our entire project demand. Source of power will be JBVNL.
DG Sets	4*625 KVA; 2*400KVA, 1*125KVA
RWH Pits	20 no.
Parking Area	202 ECS
Connecting road	Jagannathpur Mandir Road (Adjacent of the site)
National Highway	NH-39 (1 km, W) NH-43 (4 km, NW)
Nearest Railway Station	Ranchi Junction Railway Station (8.5 km, ENE)
Airport	Birsa Munda Airport (7.2 km, ESE)
Nearest Hospitals	Urban Primary Health Center (7 km, SE)
Nearest Water Bodies	Chota Dam (1.9 km, SSE) Subarnareka River (2.3 km, NE) Dhurwa Dam (3 km, S) Ranchi Lake (7.5 km, ENE) Kanke Dam (9 km, NE) Jumar River (15 km, NNE)

CO-ORDINATES

Point	Latitude	Longitude
A	23°19'39.78"N	85°15'23.77"E
B	23°19'39.36"N	85°15'22.38"E
C	23°19'37.15"N	85°15'21.51"E
D	23°19'33.87"N	85°15'16.08"E
E	23°19'25.68"N	85°15'21.82"E
F	23°19'20.29"N	85°15'21.16"E
G	23°19'19.14"N	85°15'25.43"E
H	23°19'24.11"N	85°15'25.74"E
I	23°19'29.45"N	85°15'24.85"E
J	23°19'30.90"N	85°15'30.69"E

LAND DETAILS

Khata No.-	Plot No.
8	36P,37,38
10	39P,40P,41P,42,43
17	27P,28P,29P,30P,45P,46P,47P,48P
44	33,33/76,34

53	35,44P
73	31P,32P
5	10,11,12P,88
13	86P,87P
14/27	85
16	7,22
19	23,24
27	34,84P
31	4P,13P,21
32	14,15,16,17,18,19,20
37	33P,37
39	5,8,9,89
48	25P
49	6

STATUTORY CLEARANCES

1	DFO Territorial	DFO, Ranchi Forests divisions vide letter no.4286 dated 12.10.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO wildlife	: DFO, Wildlife division vide letter no.1070, dated 03.12.2022 and letter no. 48, dated 11.01.2023 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
3	CO certificate	: The CO certificate issued vide letter no. 1255(ii) dated 30.09.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar & Register II.
4	FIRE ADVISORY	: PAs has submitted the application vide letter dated for Fire Advisory and requested that after obtaining Fire Advisory it will be submitted to SEIAA/SEAC, Jharkhand.
5	Building Plan	: Conceptual plan submitted.

Water and waste water Requirement Details

Sl.No.	Description	Total Population/Area in (m ²)	Unit water Consumption (LPCD)	Total Water Requirement (KLD)
A.	Main Uses (Domestic)			
1.	Residential & Hostel	325	86	27.95
2.	Admin & Academic Block	2785	45	125.325
3.	Sports Complex	561	45	25.245

4.	Auditorium & OAT	590	15	8.85
5.	Shopping Complex (Staff)	6	45	0.27
6.	Staff (Residential)	16	45	0.72
7.	Visitors (Residential)	33	15	0.5
Sub-Total of mainuses			188.86 KLD say 189 KLD	
B.	OtherUses			
5.	Horticulture	45,058 m ²	3lit/ m ²	135.17
6.	Water body (pond)			20
7.	Swimming pool			20
8.	Filtration back wash			8
9.	Sub-Total (KLD) of other Uses			183KLD
10.	Total Water demand Calculated for Proposed area (A+B)			372KLD

S.No.	Description	Quantity (KLD)
01	Fresh water requirement- (@70% of Domestic water)	132
02	Flushing water requirement (@30% of Domestic water)	57
03	Filtration back wash	08
04	Waste water Generation (@80% of Fresh water +100% of Flushing +100% filter back wash)	171
05	STP Capacity Proposed	205 KLD

Solid Waste Requirement.

Category	Counts (heads)	Waste Generated (kg/day)
Residential & Hostel refuse	325 @ 0.4kg/day	130
Institutional	3942 @ 0.05kg/day	196.8
Staff & Visitors	55 @ 0.15kg/day	8.25
Landscape Waste (@11.13acres)	@0.2kg/acre/Day	2.23
STP Sludge	--	15
Total Waste Generated		352.28 kg/day

Total Municipal Waste generation	353 kg/day
Biodegradable waste (60%)	approx.212 kg/day
Non-Biodegradable waste(30%)	approx.141kg/day

AREA DETAILS

S.No.	Particulars	Total Area (m ²)
1.	Total Plot area (PA)	99,512.199 (24.59Acres)
2.	Permissible Ground Coverage (@35% of PA)	34,829.269
3.	Proposed Ground coverage (@14.47% of PA)	14,660.00

4.	Permissible FAR (@2.25 of PA)	223,902.447
5.	Proposed FAR(@0.3 of PA)	30,410.133
6.	Proposed Green area (@45.28% of PA)	45,058.00
7.	Road Area	14,070.31
8.	Footpaths, Ramps, Entrances	6,309.1
9.	BUILT UP AREA	44,199.12
10.	Max. Height of Building	25.8 mtrs

BLOCK WISE DWELLING UNIT DETAILS

S.No.	Building Type	Unit	Area(in Sqm.)	
			No. of Floors	F.A.R.	Non F.A.R.
1.	Administration and Academic Block	L.G.+G+2	11,142	5,643
2.	Auditorium Block	G	1,027.72	573.08
3.	Sports Complex	G+1	2,243.46	673.64
4.	Shopping Complex	G	122.1	163.9
5.	Guest House Block	G+2	1,119.821	399.179
6.	Girls Hostel Block	G+5	4,536.92	1,805.08
7.	Boys Hostel Block	G+5	4,536.92	1,805.08
8.	Director's General Residence	G+1		
	• Residential block		535.97	210.75
	• Garage block		98.56	63.44
9.	Officer's Residence	G+1	1,411.52	840.48
10.	Type-3 Housing	G+3	830.18	373.82
11.	Type-4 Housing	G+3	1,039.04	313.96
12.	Dining, & Kitchen Block	G+1	1,332.012	366.488
13.	Amphitheatre (OAT)	G	198.91	107.09
14.	Service Blocks	G		450
15.	Connecting Passage (Audi & Academic)		235	
16.	Total		30,410.133	13,788.987

POPULATION DETAILS

S. No.	Description	Area (m ²) /DU	Occupant Load, Floor Area in m ² /Person, Per./DU	Total Population
A.	Residential Blocks			

WA A edu C

B.	<ul style="list-style-type: none"> • Guest House • Girls Hostel • Boys Hostel • Director Residence • Officer's Residence • Class-3 housing • Class-4 housing 	<ul style="list-style-type: none"> • 16 Beds • 89 Beds • 89 Beds • 1 • 4 • 8 • 16 	<ul style="list-style-type: none"> • 4.5 Pers/DU • 4.5 Pers/DU • 4.5 Pers/DU • 4.5 Pers/DU 	<ul style="list-style-type: none"> • 16 • 89 • 89 • 4.5 • 18 • 36 • 72
	Staff (5%)			16
	Visitors (10%)			33
	Total			374
C.	Non-Residential Blocks			
D.	<ul style="list-style-type: none"> • Admin & Academic Block • Sports Complex • Auditorium • OAT • Shopping Complex 	11142sqm. 2243.46sqm. 340 Seats 250 Seats 286 m ²	11142/4 2243.46/4	<ul style="list-style-type: none"> • 2785.5 • 560.865 • 340 • 250 • 6
	Total			3942
	Total Population			4316

ENVIRONMENT MANAGEMENT

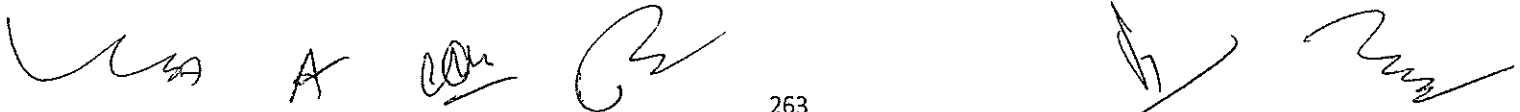
Green Belt Development

- a. Combination of local trees and shrubs are planned within the project site.
- b. Total green area provided at the site is 45,058.00 sq m (45.28 % of the net plot area). which will enhance the beauty of the site and help combat air and noise pollution.
- c. The plant species will be selected on the basis of Guidelines for Developing Green Belts, CPCB March 2000.

Solid Waste Management

During Construction Phase

- a. Construction yards are proposed for storage of construction material.
- b. Excavated top soil will be stored in temporary constructed soil bank and will be reused for landscaping of the project.
- c. Remaining soil will be utilized for refilling/road work/raising of site level at locations.
- d. There will be "Refuse Containers" at site for the management of domestic waste generated by the construction labourers and these containers will be emptied at least once daily.
- e. Cement bags, waste paper and packing material (cardboard) will be sold off to recyclers.



During Operation Phase

- a. The solid waste will be segregated at source & collected.
- b. Adequate number of colored bins (green, white & Black) separate for bio-degradable, non-biodegradable and Hazardous waste are proposed to be provided at the strategic location within site.
- c. Bio-degradable (will be composted through organic waste converter).
- d. Recyclable wastes will be disposed to govt. or SPCB approved third party vendors.
- e. Dewatered sludge can be buried underground in a sanitary landfill. It also may be spread on agricultural land in order to make use of its value as a soil conditioner and fertilizer.
- f. The Hazardous waste generated will be managed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.
- g. Horticultural Waste is composted and used for gardening purposes.

Water Quality Management

During Construction Phase

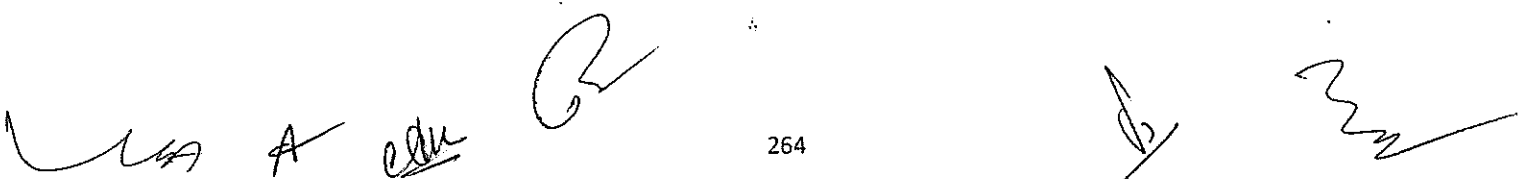
- a. The site drainage will be planned in such a way that there is no accumulation of water/wastewater within the project premises or in the vicinity of the site.
- b. Mobile toilets to be provided for construction Laborers.
- c. Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- a. STP of capacity i.e. 205 KLD is proposed for treatment of wastewater.
- b. Treated waste water would be reused for Horticulture, DG/HVAC cooling, flushing, fire fighting.
- c. Use of water efficient plumbing fixtures to conserve water.
- d. Approx. 132 KLD of fresh water is required during operational phase of the project.

Air Quality Management

- a. Warehouse/stock yard will be provided for storage of construction material
- b. Covering of stored construction materials with tarpaulin covers which will be resold to authorized construction material handling agency for reuse.
- c. Covering of trucks carrying construction materials.
- d. Dust suppression by water sprinkling.
- e. Adequate maintenance of construction equipment & vehicles.
- f. Wheel wash facility at the entry/exit of the site to prevent dust emissions.
- g. Periodical Ambient Air Quality Monitoring.
- h. PUC Certified vehicles.
- i. Glow signs Speed Limits to 20 kmph to reduce emissions on site will be displayed at the important junctions.

Handwritten signatures and initials are present at the bottom of the page, including a large stylized 'R' and several other illegible marks.

Energy conservation

Energy will be conserved via solar power & LED of at least 5 % of the total power requirement.

Undertaking

1. An affidavit stating that no construction work.
2. An undertaking that 171 m³/day recycles waste water generated at Proposed New Campus of Shri Krishna Institute of Public Administration (ATI) Ranchi located at Village- Kute & Labeled, Tehsil-Nagri, Thana-Nagri, District-Ranchi, Jharkhand.
3. An undertaking that 2720.94 KVA Power requirement in Proposed New Campus of Shri Krishna Institute of Public Administration (ATI) Ranchi located at Village- Kute & Labeled, Tehsil-Nagri, Thana-Nagri, District-Ranchi, Jharkhand.

During the presentation the following documents were sought :

- i. The details regarding energy generation using solar panel (2%) to be provided.
- ii. Demarcation of MSW-segregation-points on-site-plan-to-be-provided.
- iii. Road diversion to be done by permission from the competent authority.

The Project Authorities have submitted the above mentioned documents.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed New Campus of Shri Krishna Institute of Public Administration (ATI) of M/s Building Construction Department, Special Works Division, Mouza : Kute & Labeled, Tehsil : Nagri, Distt. : Nagri, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – III alongwith the following specific conditions :

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto 20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.

- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging points to be installed.

18. Group Housing Building Project of M/s Shanti Hari Realty Pvt. Ltd., Village : Pundag, Distt. : Ranchi, Jharkhand.

(Proposal No : SIA/JH/INFRA2/ 408944/2022)

Name of the consultant : Geo-green Enviro House Pvt. Ltd.

This is a new project which has been taken for reappraisal on 12.01.2023.

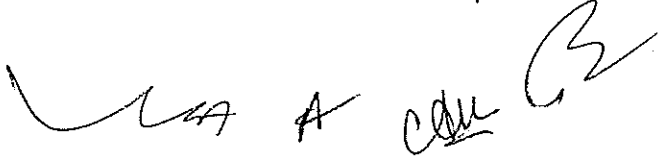
Earlier this proposal was presented in SEAC on 07 - 11.12.2022 in which requisite documents were sought are under –

- i. Basis of calculation of water requirement for the project to be provided.
- ii. Water balance diagram to be provided.
- iii. Water requirement during the construction phase to be provided.
- iv. Building height should be corrected.
- v. Stack emission details should be revised.
- vi. One day monitoring data to be provided.
- vii. Water and ambient air quality test report should be submitted.
- viii. Proposal for handling and disposal of MSW and hazardous waste to be provided.
- ix. Site plan to be submitted showing all the facilities including green belt within the premises.
- x. Coordinates of Rain Water Harvesting pit to be provided.
- xi. Traffic survey study should be provided.
- xii. Evacuation plan to be provided.

The Project Authorities have submitted reply of ADS on PARIVESH portal.

During the presentation of the reply of ADS it was found that the following ADS points have not been complied properly.

- a. The water balance diagram has not been provided with quantification of the usage of STP treated water.
- b. There was no justification for the quantity of water to be utilized during construction phase.
- c. Stack emission details were provided arbitrarily. The consultant could not explain the basis or source of data provided.



- d. Test reports were provided for AAQ, Ground Water, Surface Water, Noise Quality and Soil Quality. The Ground Water quality test report stated that the water sample was collected for the project site on 01st November, 2022. However, during the course of presentation it was revealed that there is no existence of any tube well / dug well on the project site. Hence it was obviously taken the test report submitted is false and baseless. The surface water sample was collected from Potato Nadi as mentioned in the test report submitted. It is seen that there is no existence of Potato Nadi and hence this report was also taken to be false and baseless.
- e. The credibility of all the test reports submitted have now become doubtful.
- f. The fresh samples to be taken for testing should be done after prior intimation to SEIAA/SEAC.
- g. No justification was provided or could be explained regarding the quantity and nature of MSW generation & disposal during the operation of the project.

The Committee has taken a very serious view of such false and baseless submissions by the PAs and their consultants.

The Committee recommends to provide one last chance to submit appropriate compliance report of the queries raised during the meeting held on 07 - 11.12.2022.

Day 5 : January 13th , 2023 [Friday]

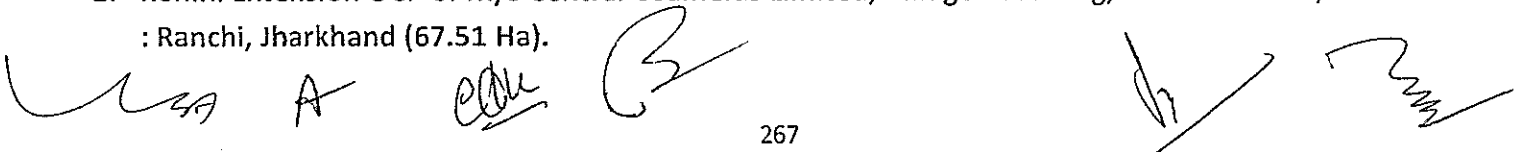
Consideration of Proposals

1. Jitpur Under Ground Mine of M/s Steel Authority of India Limited – Collieries Division, Village : Noonudih & Jitpur, Block : Jharia, P.S. : Jorapokhar, Distt. : Dhanbad, Jharkhand (163.69 Ha).
(Proposal no. : SIA/JH/CMIN/82988/2021)

The proposal submitted did not contain compliances to all the ToR conditions issued by MoEF&CC, Govt. of India vide no. IA-J-11015/66/2015-IA-II(M), dated 27.04.2021. This was revealed during the course of presentation.

The project will be taken up for reconsideration after compliance of all the ToR conditions.

2. Rohini Extension OCP of M/s Central Coalfields Limited, Village : Tumang, Tehsil : Khalari, Distt. : Ranchi, Jharkhand (67.51 Ha).



(Proposal no. : SIA/JH/CMIN/409326/2022)

The PA's has requested for withdrawal of the proposal vide letter no. PO/Rohini/2022-23/1565, dated 13.01.2023 citing the reason that there are some technical errors in the submitted application. The PAs also requested to consider the scrutiny fee submitted for this proposal to be considered for the revised proposal to be submitted in due course. Since, the appraisal of this project has not been done yet by SEAC, so the scrutiny fees of this project may not be charged for revised proposal which has to be submitted by PA's later at SEIAA.

The Committee is of the view that this project is recommended for delisting to SEIAA with intimation that the appraisal of this project has not been done by SEAC. Hence, the Committee is requesting SEIAA that the scrutiny fee deposited for this project may be adjusted for revised application and accordingly, this project proposal is recommended for delisting to SEIAA.

3. Murgadanga Stone Mine of M/s J.Z. Stone Works (Partners : Md Jafar Abbas And Md Zubair Alam) at Village : Murgadanga, Thana no. : 117, Anchal : Hiranpur, Distt. : Pakur, Jharkhand (2.80 Ha).

(Proposal no. : SIA/JH/MIN/413470/2023)

Project Category: B1 – Application for TOR

EC Application for: Boulder Stone: 42908 Cum Per Annum /120142 Tonnes Per Annum

DG Set: 100 KVA

Mobile Crusher: Proposed

Name of the consultant: Rian Enviro Private Limited

This is a new project which has been taken for appraisal on 13.01.2023.

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Murgadanga Stone Mine	
2	Lessee:	: Partner's- MD JAFAR ABBAS AND MD ZUBAIR ALAM	
3	Lease Address	: Mauza- Murgadanga, Thana No.-117, Anchal- Hiranpur, District- Pakur, Jharkhand	
4	Lease Area	: Ha: 2.80	Acres: 6.92 Acres
5	Type of Land	: Non-Forest – Rayati Land	
6	Project Cost	: 52 Lakhs	
7	EMP Budget	: Capital: 7.70 Lakhs	Recurring: 3.0 Lakh / year
8	CSR / CER Budget	: Rs. 0.0 Lakhs	
9	New or Expansion	: New Project	
10	Mineable Reserves	: Cu.M.: 4,51,178.92 Cu. M.	Tonnes: 1263301 Tonnes
11	Mine Life	: 10 years five months	
12	Man power	: 23	

13	Water Requirement	:	7.69 KLD=0.69 KLD (Drinking & Domestic Uses) + 4 (Plantation) KLD + 3.0 KLD (Dust Suppression).
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	100 KVA
16	Crusher	:	Not Present
17	Nearest Water Body	:	Ganga River, approx. 19.0 Km towards East Direction
18	Nearest Habitation	:	Bishunpur Village: Appox.0.9 KM;
19	Nearest Rail Station	:	Tilbhita Railway Station is about approx. 7.5 km in East direction
20	Nearest Air Port	:	Deoghar Airport is approx. 110 km in WSW direction. (Source: Google earth & Aerial Distance)
21	Nearest Forest	:	NIL
22	Road & Highways	:	NH 133A About 2.15 km in WSW direction

CO-ORDINATES

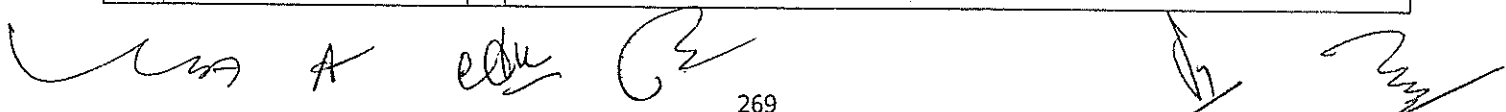
1	Latitude	From 24°41'2.426"N	To 24°40'57.368"N
2	Longitude	From 87°46'5.179"E	To 87°45'59.707"E

LAND DETAILS

Mouza	J.B. NO.	PLOT NO.
Murgadanga	77	157
	80	102,103
	55	101,148,106/P
	54	77/P
	07	94/P,104
	29	109/P,147
	112	97/P,156
	06	96/P

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 833/M, Dated 19.06.2021.
2	CO	:	The CO, Hiranpur vide letter No. 108, Dated 04.03.2021 has mentioned the plot nos. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.
3	DMO	:	DMO, Pakur vide memo No. 1184/M, dated 17.07.2021 certified that four lease (6.92 Acres, 5.15 Acres, 5.21 Acres & 2.00 Acres) exists within 500 m radius from proposed project site & Total lease area is 10.32 Ha.



4	DFO Wild Life	:	DFO, Wildlife Hazaribag vide letter no. 1953, dated 14.11.2021 certified that the proposed project site is outside Eco Sensitive Zone of Udhawa Lake Bird Wildlife Sanctuary.
5	Territorial DFO Letter	:	DFO, Pakur Forest Division vide letter no. 747, dated 06.05.2021 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	:	BDO, Hiranpur vide letter no. 264/Vi, dated 03.04.2021 informed that Gram Sabha conducted on 24.03.2021.
8	Mine Plan Approval	:	DMO, Pakur vide memo no. 2096/M, dated 07.12.2021

Working Details

1	Mining Method	:	Opencast Method, Mechanized Mine, Wagon Drilling & Control Blasting will be deploy
2	Quarry Area	:	1.32 ha. Life of Mine – 5 years
3	Waste Generation	:	19093 cum Life of Mine – 2 Years
4	Stripping Ratio	:	1:0.01
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	67 m AMSL to 66 m AMSL
8	Ground Level Elevation	:	67 In AMSL
9	Ultimate Working Depth	:	19 m bgl (67 m AMSL to 48 m AMSL)
10	Water Table	:	26 m
11	Topography of Mine	:	Flat, milled and undulatory
12	Explosive Requirement	:	50 Kg/Day
13	Diesel/Fuel requirement	:	612 Litres/day

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Generation of Waste/O.B in cum	Bench Amsl
1 st	42840	119952	15242	67-60
2 nd	42908	120142	3851	66-60
3 rd	42822	119902	00	60-54
4 th	42891	120095	00	60-54

5 th	42636	119381	00	66-60
Total	214097	599472	19,093	

Land Use

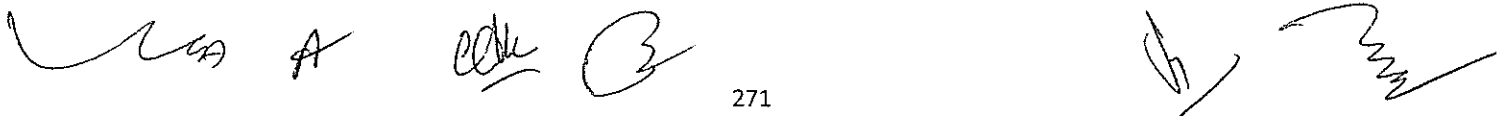
	Existing	First to Fifth Years	After Life of Mine
Category	Area in Hectares	Area in Hectares	Area in Hectares
Quarry	0.00	1.32	2.14 ha (area will be used as water reservoir)
Haul Road	0.00	0.03	0.02
Proposed Crusher	0.00	0.12	Remove from lease area
Green belt in Safety Barrier	0.00	0.64	0.64
Dump with Parapet wall & Garland drain	0.00	0.21	Nil (Waste dump to be removed and backfilled)
Total area in use	0.00	2.32	2.80
Balance unused area	2.80	0.48	00
Total Applied Lease Area	2.80	2.80	2.80

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No. of Trees
1	Safety Zone	:	0.64 ha	1568/0.98=1600 trees per Ha
2	Other Reclaimed Area	:	NIL	NIL
3	Haul /Approach Road	:	640m	256 i.e.s 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 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 19093 Cum during the life of mine. During Plan period gritty soil removed will be dumped at north- east side with suitable precaution. Some quantity of the removed gritty soil would also be used for road dressing and plantation. After conceptual period de- stoned area quarry will be reclaimed to the extent possible.

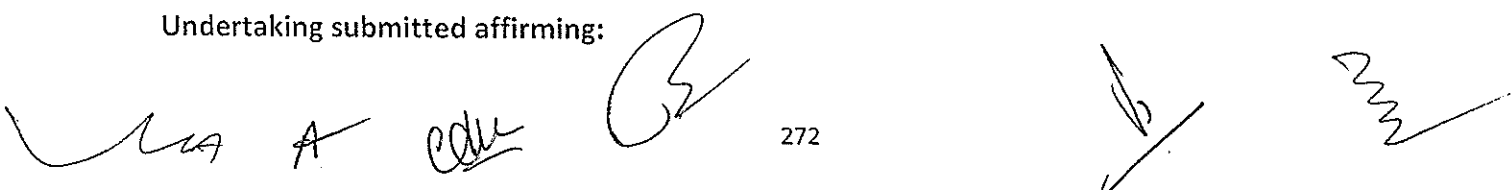
Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 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.
 - i. If any tree felling than necessary permission shall be taken from the competent authority.

Quantity of HSD/ Fuel consumption per day of Murgadanga Stone Mining

S. No	Machine	Details of fuel (Diesel) requirements	Consumption of Diesel (in liters/day.)
1	Wagon Drill	Number of Machine=1 Diesel consumption in one shift working. (i.e-10 liters) $=1*8*10=80$ liters	80 liters
2	Excavator	Number of Machine=2 Diesel consumption in one shift working. (i.e- 07 litre/hr) $=2*8*7=112$ liters	112 liters
3	Tippers	Number of Tippers=03 Diesel consumption in one shift working. (i.e-4ltr/hr.) $=03*10*4=120$	120 liters

4	DG Set	Number of DG Set =1(100 KVA) Diesel consumption by one in one shift working. (i.e-16 liter/hr) =1*10*16=220 liters	160 liters
5	Water Sprinkler	Number of Sprinkler=02 Diesel consumption by Sprinkler in one shift working.(i.e-2ltr/hr). =2*10*2=40 liters.	40 liters
6	Extra	Transport vehicle, super vision vehicle, maintenance vehicle	100 liters
Total			612

The Project Authorities have declared that the baseline data is being generated for the period December, 2022 to February, 2023.

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 09, 10, 11, 12, 13 & 14.01.2023, 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 to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure IX.

4. Basmata Stone Mine of M/s Otan Das & Company (Mining) Pvt. Ltd, Mouza : Basmata, P.S. : Pakur, Dist. : Pakur, Jharkhand (1.64 Ha).

(Proposal No. : SIA/JH/MIN/413885/2023)

This is a new project which has been taken for appraisal on 13.01.2023.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 93rd meeting held on 18-27.02.2022 and SEIAA, Jharkhand has approved the violation ToRs in 94th meeting held on 13th, 14th & 15th April, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2021-22/2545/2021/87, date 16.04.2022. The final EIA / EMP submitted by PP to SEIAA on 11.01.2023 and which was forwarded to SEAC on 11.01.2023.

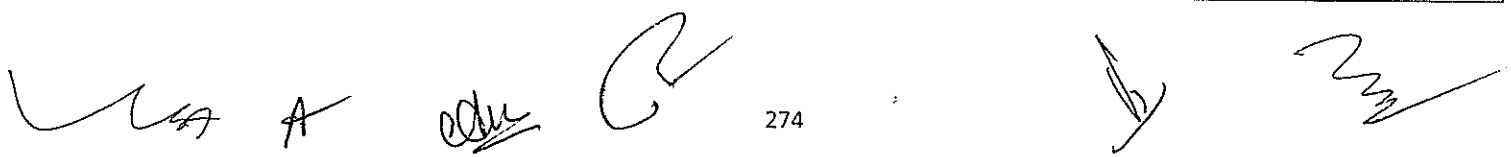
EC Application for: Boulder Stone 55,460 Cu.M. / year i.e. 1,60,834 TPA

DG Set : 20 KVA

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

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Basmata Stone Mine Project Type – Stone Mine



2	Lessee:	:	M/s Otan Das and Company (Mining) Pvt. Ltd. Director – Shri Ashok Kumar Mandhyan
3	Lease Address	:	Mouza – Basmata, P.S. – Pakur, Thana No.-112 Dist. – Pakur, State – Jharkhand.
4	Lease Area	:	Ha: 1.64 ha Acres: 4.06 Acres
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	Capital Cost – 74.85 Lakhs
7	EMP Budget	:	Capital Cost – 20.88 Lakhs (Proposed) Recurring – 3.77 Lakhs
8	CSR / CER Budget	:	2.20 Lakhs (Proposed)
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 3,24,854 Cu. M. Tonnes: 9,42,077 Tonnes
11	Mine Life	:	7 years
12	Man power	:	37
13	Water Requirement	:	13.53 KLD (Drinking:0.56 KLD, Dust Suppression: 4 KLD, Plantation: 8.97 KLD)
14	Water Source	:	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 for Dust Suppression and Plantation.
15	DG Set / power	:	20 KVA DG Set proposed
16	Crusher	:	NA
17	Nearest Water Body	:	Bansloi River – 13.20 km- SW
18	Nearest Habitation	:	Basmata Village – 0.38 km - SW, Presence of habitation in more than 500m
19	Nearest Rail Station	:	Nagarnabi at a distance of 1.9 km in NE
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Andal, Paschim Bardhaman– 124 km- SW
21	Nearest Forest	:	Protected Forest – 2.70 Km
22	Road & Highways	:	Malpahari Road – 0.55 Kms. – East Dhulian Pakur Road – 5.60 Km - North

CO-ORDINATES

Point	Latitude	Longitude
1	24°35'01.08" N	87°51'00.28" E
2	24°35'01.01" N	87°50'57.54" E
3	24°35'02.20" N	87°50'58.22" E
4	24°35'02.26" N	87°50'58.50" E

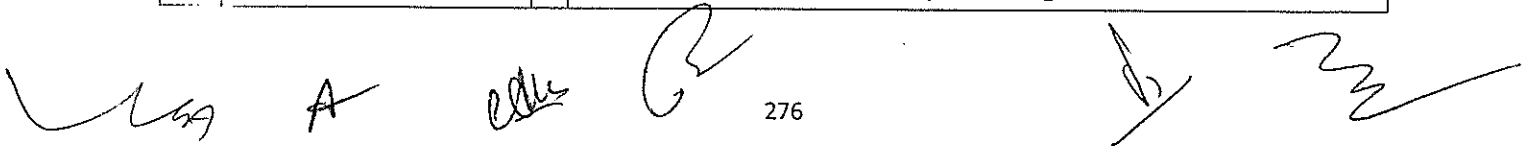
5	24°35'02.57" N	87°50'58.53" E
6	24°35'02.96" N	87°50'57.19" E
7	24°35'04.63" N	87°50'56.16" E
8	24°35'05.25" N	87°50'55.57" E
9	24°35'05.96" N	87°50'55.02" E
10	24°35'06.29" N	87°50'55.81" E
11	24°35'04.96" N	87°50'58.37" E
12	24°35'04.39" N	87°51'01.09" E
13	24°35'04.00" N	87°51'01.89" E
14	24°35'03.67" N	87°51'01.72" E
15	24°35'03.44" N	87°51'02.16" E
16	24°35'03.48" N	87°51'02.72" E
17	24°35'03.35" N	87°51'02.85" E
18	24°35'03.38" N	87°51'03.15" E
19	24°35'03.02" N	87°51'03.20" E
20	24°35'02.90" N	87°51'02.71" E
21	24°35'02.65" N	87°51'02.67" E
22	24°35'01.59" N	87°51'01.31" E

LAND DETAILS :

Mouza	Khata No.	Plot No.
Basmata	22	180 (P), 181 (P), 182 (P), 198 (P), 199 (P), 200, 201, 202 (P), 203 (P), 204, 205 (P), 207, 208, 211, 212, 213 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 2038/M dated 18.11.2020.
2	CO	:	The CO, Pakur vide letter no. 793/Ra, dated 12.06.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.


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3	DMO	:	DMO, Pakur vide memo no. 187/M, dated 20.02.2021 certified that six lease areas (4.42 acre, 6.37 acre, 3.13 acre, 4.95 acre, 4.094 acre & 11.78 acre) exist within 500 m radius from proposed project site & Total lease area is 13.92 Ha, i.e. more than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 106, dated 10.01.2020 certified that the proposed project site is outside Eco Sensitive Zone of Udhawa Lake Bird Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Pakur Division vide letter no. 301, dated 04.02.2020 certified that the distance of reserved / protected forest is more than 250 metre.
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	:	BDO, Pakur vide letter no. 1851/Vi, dated 31.07.2020 informed that Gram Sabha conducted on 22.07.2020.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribagh vide letter no. 52/G dated 15.02.2022.
9	Public Hearing	:	JSPCB, Regional Office, Dumka vide letter no. 2438, dated 30.12.2022 informed that Public Hearing conducted on 24.12.2022

Working Details

1	Mining Method	:	Semi Mechanised. Wagon Drilling & Blasting to be used
2	Quarry Area	:	5 years – 0.89 Ha End of Mine – 0.91 Ha
3	Waste Generation	:	5 years– 27,376 Cu.M Life of Mine (Waste Gen.) – 27,376 Cu.M
4	Stripping Ratio	:	1:0.04
5	Working Days	:	300
6	Bench: size & No	:	6 m x more than 6 , Bench No.- 1 to 4
7	Elevation of Mine	:	Maximum Elevation – 90 AMSL Minimum Elevation – 88 AMSL
8	Ground Level Elevation	:	88 AMSL
9	Ultimate Working Depth	:	68 AMSL
10	Water Table	:	66 AMSL (13 m bgl)

11	Topography of Mine	:	Undulating Terrain
12	Explosive Requirement	:	25.05 kg/day
13	Diesel/Fuel requirement	:	151.2 KL/year (504 Litres/day)

Production Details

Year	Production of Stone		Over Burden (OB)	Bench RL in meters
	Cubic meters	Tons	Cubic meters	
1st Year	49,796	1,44,408	15,340	37 – 35 (O.B.) 35 – 30 (Stone)
2nd Year	55,460	1,60,834	12,036	36.5 – 35 (O.B.) 35 – 30 (Stone)
3rd Year	46,846	1,33,853	0	30 – 25 (Stone)
4th Year	47,318	1,37,222	0	30 – 25 (Stone)
5th Year	49,796	1,44,408	0	25 – 20 (Stone)
Total	2,49,216	7,22,726	27,376	Depth- 17 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	1.64
Total Leasehold area	1.64

Land Use Pattern after Proposed Plan Period of Five Years:

Category	Area in Hectares
Quarry	0.89
Office	0.01
Dump	0.04
Mining Road	0.02

Safety Zone/ Garland Drain/ Settling Tank	0.52
Total area in use	1.48
Unutilized	0.16
Total Leasehold area	1.64

Land Use Pattern after Life of the Mine:

Category	Area in Hectares
Quarry + Road	Water Body – 0.91 (To be Converted to Water Body after reducing the depth partially)
Safety Zone/ Garland Drain/ Settling Tank	0.52 (Plantation)
Dump +Office	0.05 (Plantation)
Unutilized	0.16
Total Leasehold area	1.64

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone	: 0.52 ha	1,300 trees @ 2500 trees per ha
2	Other Reclaimed Area	: 0.05 Ha.	125 trees @ 2500 trees per Ha.
3	Haul /Approach Road	: 0.55 KM	368 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

A total of 27,376 cum of wastes (Over Burden) will be generated from entire Basmta Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

Table 3.7: Generation of Waste during Planned Period

Year	Waste Generation, In Cum
1 st Year	15,340
2 nd Year	12,036

3 rd Year	0
4 th Year	0
5 th Year	0
Total	27,376

Source: Mining Plan

Disposal of Waste from the Quarry

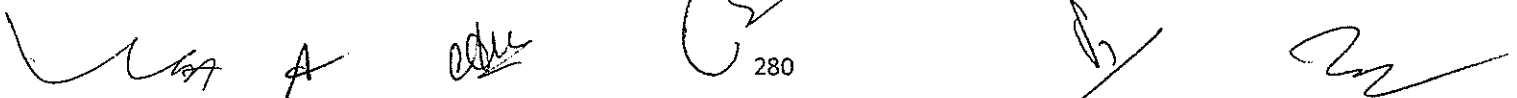
There is only 9,790 cum overburden will be generated in mining plan period which will be used in construction and maintenance of internal mine road and berm along the approach road.

Water Quality Management

- Mining is planned to be 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 a natural stream after settling of suspended particles in the pit. A pump having required capacity will be installed to lift accumulated rain water from the working pit and pumped to the settling tank.
- A garland drain shall be made around the waste dump and the rain water shall be collected in the garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to the 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, a Septic Tank with Soak Pit shall be provided, discharge from the Soak Pit, if any, shall be used for plantation.
- It shall be ensured that the 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 vehicles under control. Records for same to be maintained.
- Water sprinkling will be done on haul roads 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 the 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.


280

Undertaking submitted affirming:

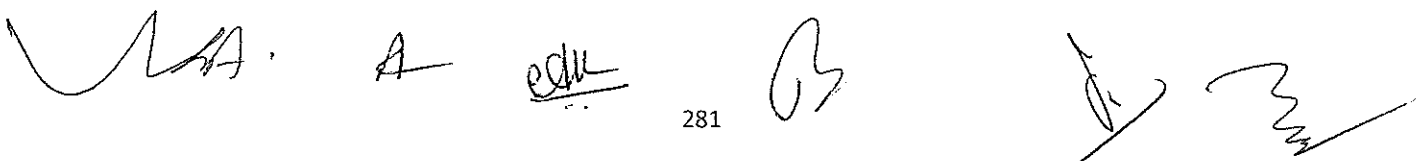
- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are 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.
- i. If any tree felling is required permission should be taken from competent authority.

During the presentation the following documents were sought :


- i. The time bound action plan with budget of issues raised during public hearing to be submitted and the budget to be included in the EMP.

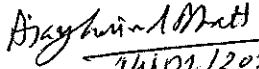
The Project Authorities have submitted the above mentioned documents.

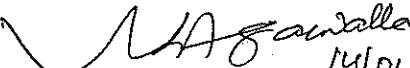
Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Basmata Stone Mine of M/s Otan Das & Company (Mining) Pvt. Ltd, Mouza : Basmata, P.S. : Pakur, Dist. : Pakur, Jharkhand (1.64 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

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The meeting concluded with thanks to all present.



(Dr. Raju Kumar)
Member


14/01/2023
(Dr. Ajay Govind Bhatt)
Member

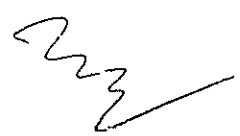

(Niranjan Lal Agarwalla) 14/01/2023
Member


14/1/23
(Dr. Kirti Avishek)
Member


(Srikant Verma) 14/01/2023
Secretary


(Ashok Kumar Singh) 14/01/2023
Chairman





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. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- iii. 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.
- iv. 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.

- v. 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.
- vi. 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.
- vii. 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.
- viii. 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.
- ix. 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.

- x. 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.
- xi. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-11013/57/2014-IAJI (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- xii. 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.
- xiii. 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.
- xiv. 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.
- xv. 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.
- xvi. 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 ail 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 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 wall 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 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-IAJI (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,



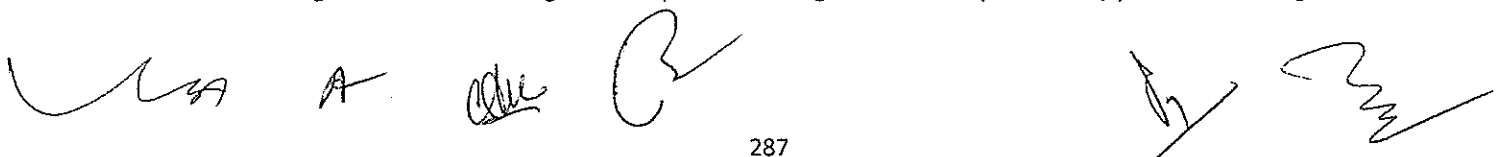
awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

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 of 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



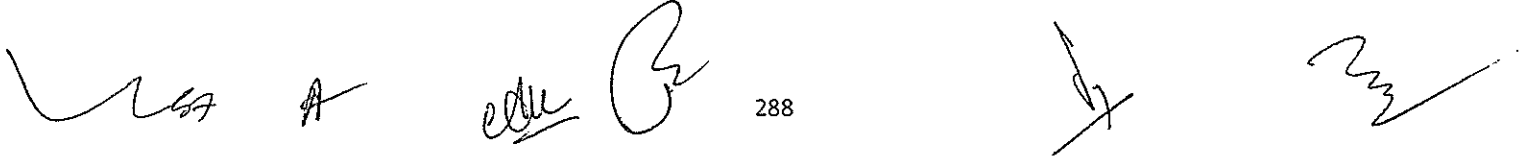
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per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.

- 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 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

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- 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 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.

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 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-IA. II (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.



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

A. Standard Terms of Reference

1. Executive Summary

2. Introduction

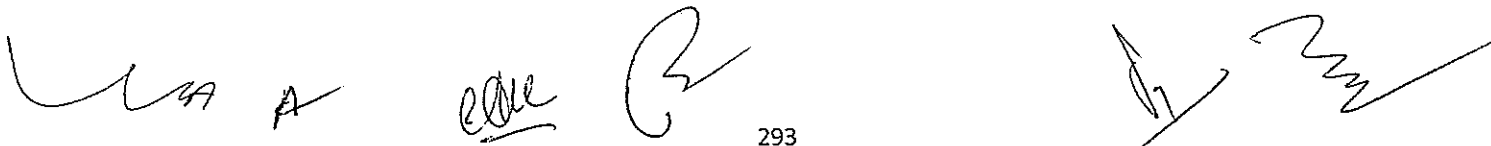
- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent
- iii. Importance and benefits of the project

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.



- ii. A topsheet 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, PM2.5, SO2, NOX, 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 NAQQM 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.

Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

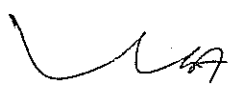

- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement 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 aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium
- 11. Details on solvent recycling

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.

 A





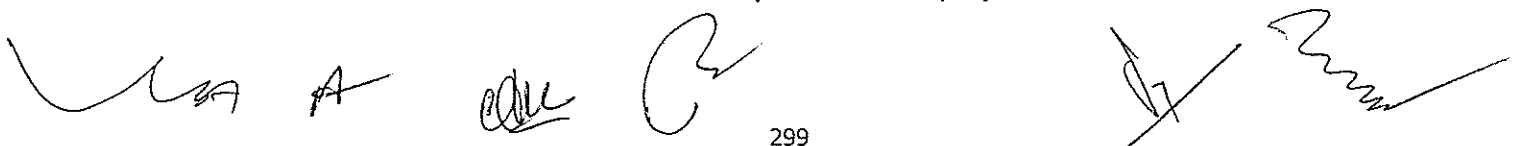
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I. Statutory Compliance

- 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, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- v. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi. 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.
- vii. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- viii. 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.
- ix. 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.
- x. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- xi. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii. 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.



- xiii. 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.
- xiv. 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.
- xv. 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-peaking hours.
- xvi. Accumulation/stagnation of water shall be avoided ensuring vector control.
- xvii. Water during construction phase should be preferred from Municipal supply.
- xviii. Unskilled construction labourers shall be recruited from the local areas.
- xix. 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.
- xx. 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.
- xxi. Rest room facilities shall be provided for service population.
- xxii. 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.
- xxiii. 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.

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 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, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, 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 as per 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 proposed requirement as provided in the project details.

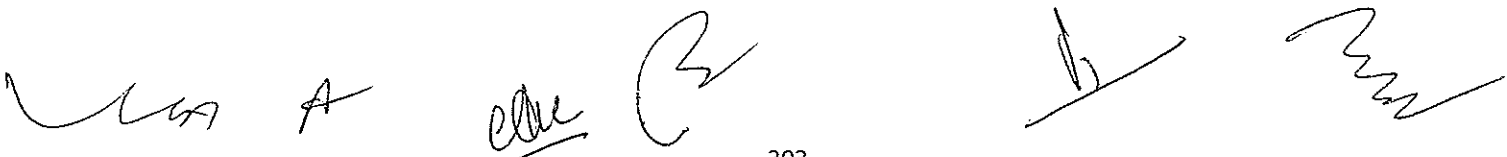


- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate 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 sources, 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 aerators 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.

- 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 based on the MBBR/MBR/SBR technology. 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.

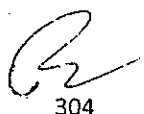

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V. Energy Conservation measures

- 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.
- 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.



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- 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. 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



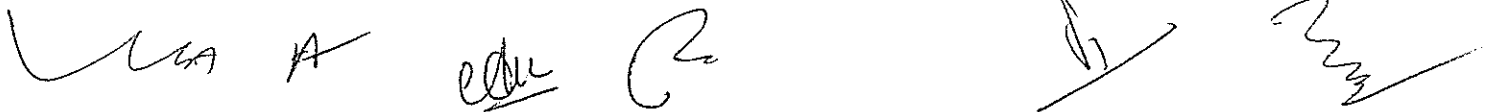
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- infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / 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.
- 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.

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- 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).
- 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) 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.
- 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.
- xvi. In view of MoEF & CC O.M. No.- 22-27/2015-IA-III, dated- 12.04.2016 The Environmental Clearance accorded shall be valid for a period of Seven (07) years. The PP shall not increase production rate and make modifications in process during the validity of Environmental Clearance.



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

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A. Standard Terms of Reference

1. Executive Summary

2. Introduction

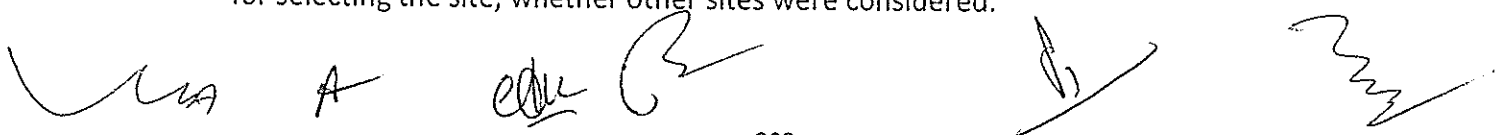
- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent
- iii. Importance and benefits of the project

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.



- 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):

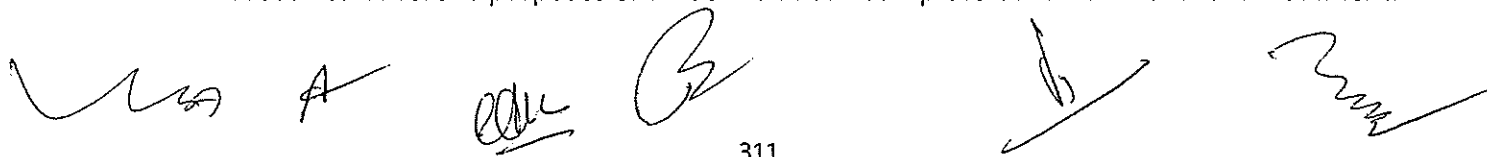
- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest 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, PM2.5, SO2, NOX, 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 NAQQM 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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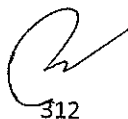
- Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
 - vi. Measures for fugitive emission control.
 - vii. Details of hazardous waste generation and 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.



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- 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)

- ii. 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 aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium
11. Details on solvent recycling

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. Specific Conditions :

1. The State Govt. / SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986.
2. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the SEAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority.
3. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
4. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
5. An assessment of the cumulative impact of all development and increased in habitation being carried out or proposed to be carried out by the project or other agencies in the core area, shall be made for traffic densities and parking capabilities in a 2 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA and the plan to be implemented to the satisfaction of all the concerned state departments and implementing agencies".
6. Management of solid waste and the Construction & Demolition waste for the project vis- a-vis the Solid Waste Management Rules, 2016 and the Construction & Demolition Rules, 2016.
7. Details of all construction Input should be furnished for assessment of Ecological damage/Environmental damage.
8. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.

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9. Funds allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/ 2017-IA.III dated May, 2018 for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
10. 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.

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Annexure V

I. Statutory compliance

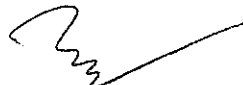
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- 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 from the Central Ground Water Authority.
- vii. Solid waste/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended



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from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.

- iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water / mist sprinkling / rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM2.5) such as haul road, loading/ unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- iv. The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- v. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- vi. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- vii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

III. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The

ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

- iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change / Regional Office.
- v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- vi. Catch and or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
- vii. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- viii. Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP / STP needs to be provided.
- ix. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- x. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Govt Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.

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- xi. The project proponent shall take all precautionary measures to ensure reversion/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A reversion /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention


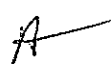



- i. Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs / muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
- ii. Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.
- iii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

V. Mining Plan

- i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- ii. Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- iii. No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980
- iv. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

VI. Land reclamation

- i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEF&CC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- ii. The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural /forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines

for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.

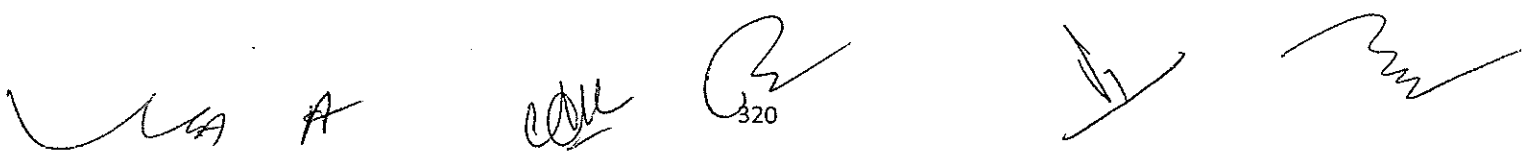
- iii. The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining" / "post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
- iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- v. Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
- vi. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Green Belt

- i. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- ii. Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

VIII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six- monthly basis.

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- ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any. as amended time to time.
- iii. Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- v. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.


IX. 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.
- 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 report 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.

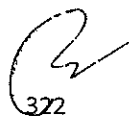
- v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- 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 monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. 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.
- vi. 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.
- vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIAIEMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.






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- x. 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).
- xi. 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.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- xv. 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 Trans boundary 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.
- xvi. 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
- xvii. 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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Annexure – VI

I. Statutory compliance:

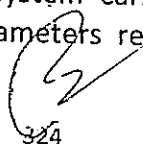
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- 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 from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015(Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released






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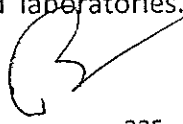


(e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six- monthly monitoring report.
 - v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
 - vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
 - vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
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- viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after *briquetting*/ agglomeration.
 - ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
 - x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.
 - xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
 - xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF / EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.



- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. 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.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB (A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- ii. Practice hot charging of slabs and billets/blooms as far as possible.
- iii. Ensure installation of regenerative type burners on all reheating furnaces.
- iv. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- v. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management



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- i. Used refractories shall be recycled as far as possible.
- ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The waste oil, grease and other hazardous waste shall be disposed of as per the
- v. Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- vi. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- ~~i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant~~
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.


IX. 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 approve 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.
- 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.
 - v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
 - vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.
 - vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

X. **Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- 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 monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. 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.

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- vi. 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.
 - vii. 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.
 - viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - ix. 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.
-
- x. 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).
 - xi. 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.
 - xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
 - xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
 - xv. 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.
 - xvi. 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.



C. Other Conditions:

- i. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority or for that matter for any other Administrative reason.
- ii. In view of MoEF & CC O.M. No.- 22-27/2015-IA-III, dated- 12.04.2016 The Environmental Clearance accorded shall be valid for a period of Seven (07) years. The PP shall not increase production rate and make modifications in process during the validity of Environmental Clearance.
- iii. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.

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

1. The project should be designed based on the population projections as by Master Plan.
2. Submit a 10 km. radius map (on survey of India toposheet) showing co-ordinates of project site, national highway, state highway, district road/approach road, river, canal, natural drainage; protected areas, under Wild Life (Protection) Act, archaeological site, natural lake, flood area, human settlements (with population), industries, high tension electric line, prominent wind direction (summer and winter), effluent drain, if any and ponds etc. should be presented and impacts assessed on the same.
3. Examine and submit details of alternative technologies viz. RDF shall also be evolved.
4. Examine and submit details of storm water/ leachate collection from the composted area.
5. Examine and submit details of monitoring of water quality around the landfill site. Water analysis shall also include for nitrate and phosphate.
6. Examine and submit details of the odour control measures.
7. Examine and submit details of impact on water bodies/rivers/ ponds and mitigative measures during rainy season.
8. Submit the criteria for assessing waste generation. Any segregation of hazardous and bio-medical wastes.
9. Submit a copy of the layout plan of project site showing solid waste storage, green belt (width & length, 33% of the project area), all roads, prominent wind direction, processing plant & buildings etc. should be provided.
10. Submit a copy of the land use certificate from the competent authority.
11. NOC from local or nearest airport within 20 km and any flight funnel restrictions.
12. Submit a copy of the status of ambient air quality and surface and ground water quality, soil type, cropping pattern, land use pattern, population, socio-economic status, anticipated air and water pollution.
13. Submit a copy of the topography of the area indicating whether the site requires any filling, if so, the details of filling, quantity of fill material required, its source and transportation, etc.
14. Examine and submit the details of impact on the drainage and nearby habitats/settlements (surroundings).
15. Examine and submit the details of surface hydrology and water regime and impact on the same.
16. Examine and submit the details of one complete season AAQ data (except monsoon) with the dates of monitoring, impact of the project on the AAQ of the area (including H₂S, CH₄).
17. Submit a copy of detailed plan of waste management.
18. Submit the details of sanitary land fill site impermeability and whether it would be lined, if so details thereof.
19. Examine and submit the details of impact on environmental sensitive areas.

20. Examine and submit the details of rehabilitation/compensation package for the project - effected people, if any.
21. Submit Environmental Management Plan and Environmental Monitoring Plan with costs and parameters.
22. Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
23. A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
24. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
25. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
26. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Common Municipal Solid Wastes>".
27. 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.
28. 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.



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Standard EC condition

I. Statutory compliance

- i. 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.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- 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 from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. no. 612 (E) dated 25 August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.



- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
 - iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common / criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120⁰ each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)
 - iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six- monthly monitoring report.
 - v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
 - vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
 - vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
 - viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
 - ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
 - x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
 - xi. Have separate truck parking area and monitor vehicular emissions at regular interval.
 - xii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
 - xiii. Ventilation system shall be designed for adequate air changes as per ACGIH Document for all tunnels, motor houses, cement bagging plants
- III. Water quality monitoring and preservation
- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th

August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.

- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- ix. The project proponent shall make efforts to minimise water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. 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.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservations measures

- i. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- ii. Provide the project proponent for LED lights in their offices and residential areas.
- iii. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS Standards.

VI. Waste management

- i. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & other waste (Management & Trans boundary Movement) Rules, 2016.
- ii. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. -Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation.


VIII. Public hearing and Human health issues

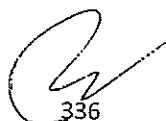
- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of factory Act.
- iii. Provision shall be made for the housing of construction 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. 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 approve 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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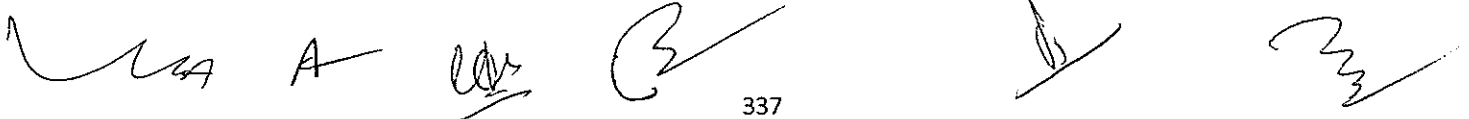




- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility 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.
- v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- 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 monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. 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.
- vi. 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

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Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vii. 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.
 - a. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - b. 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.
- viii. 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).
- ix. 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.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- xiii. 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 Trans boundary 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.
- xiv. 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
- xv. This environmental clearance is valid for seven years from the date of issue.



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

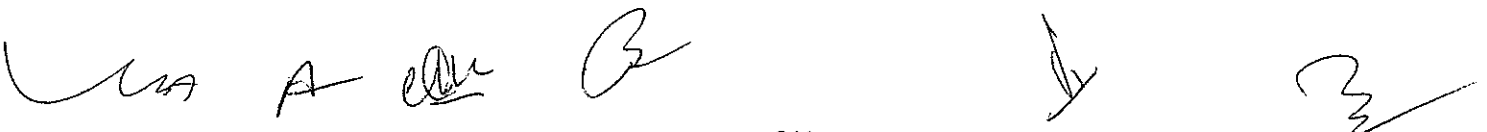
- i. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production 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

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



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.
- xlv. 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.

