

MINUTES OF THE 103RD MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 14TH, 15TH, 16TH 17TH and 18TH APRIL, 2023.

The 103rd meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 14th, 15th, 16th 17th and 18th April, 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 21st, 22nd, 23rd, 24th and 25th March, 2023. 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 : April 14th, 2023 [Friday]

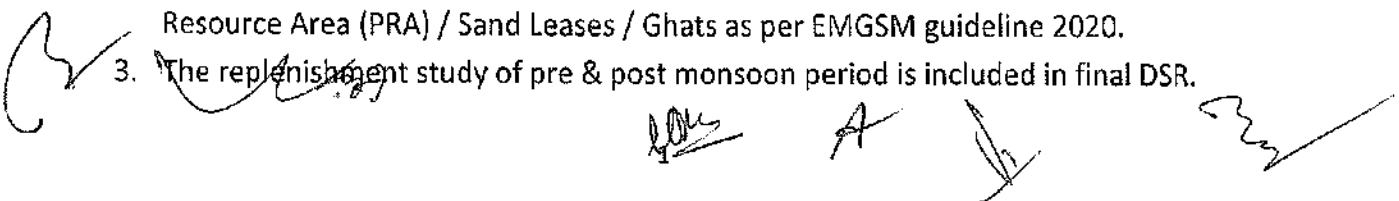
A. District Magistrate –cum- Deputy Commissioner, Bokaro or through authorized representative and M/s Sathi Planners Pvt. Ltd.

i. Final District Survey Report (DSR) of Sand, Bokaro.

The Final DSR was submitted by District Magistrate –cum- Deputy Commissioner, Bokaro. He was represented by District Mining Officer, Bokaro Shri Ravi Kumar Singh at the SEAC meeting on 14.04.2023.

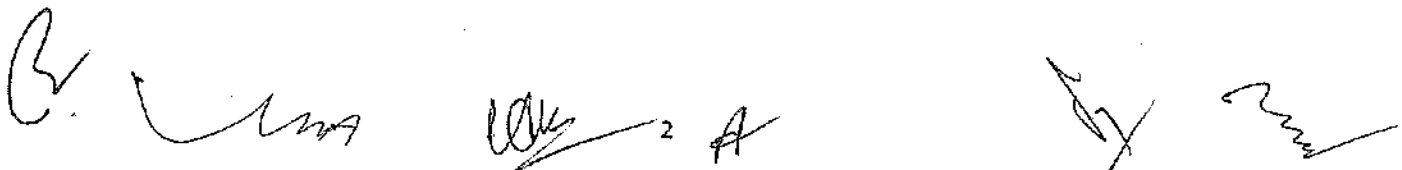
During the meeting the consultant M/s Sathi Planners Pvt. Ltd., Ranchi in the presence of DMO, Bokaro presented the DSR before the Committee. The DSR was appraised considering the following aspects alongwith other conditions of Enforcement and Monitoring Guidelines for Sand Mining (EMGSM), 2020 / Hon'ble 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 they have affirmed the following :

1. The final DSR submitted is duly signed by all members of the Sub Divisional Committee and the Consultant. All the pages of the DSR are signed by the authorized officer of the Sub Divisional Committee.
2. The final DSR consists of the complete potential area and is demarcated as Potential Resource Area (PRA) / Sand Leases / Ghats as per EMGSM guideline 2020.
3. The replenishment study of pre & post monsoon period is included in final DSR.



4. The final DSR had been placed in the public domain for 01 (One) month from the 31.01.2023. As per the Sub Divisional Committee no comments / observations were obtained.
5. Demand and supply of the river bed material has been provided. The future demand for next 05 years is included in the final DSR.
6. The PRA / Sand Leases / Ghats have not been proposed on the confluence / meanders / concavities / active channels of the river.
7. Khata & Khasra numbers of the lease area certified by the concerned Circle Officer (CO) are incorporated in the final DSR.
8. The distance of PRA / Sand Leases / Ghats from the Forest / Wildlife Protected area / Birds Sanctuary/ Wildlife Sanctuary / National Park / Eco Sensitive Zone has been verified and certified by the concerned DFOs of the respective Territorial and Wildlife division.
9. A report detailing the presence of aquatic animal in the river in proximity of the proposed PRA / Sand Leases / Ghats is included in the final DSR.
10. The proposed PRA / Sand Leases / Ghats meet the siting criteria of State Pollution Control Board / SEIAA.
11. High resolution color satellite images of the proposed potential sand mining areas are included in final DSR.
12. Bulk density and specific gravity of sand sample data has been provided by NABL accredited laboratory.
13. Cluster and contiguous cluster formation as per EMGSM guidelines, 2020 has been included in the Annexures.
14. Mining is restricted to 3/4th of the river width and 60% of the mineable reserve.
15. Transportation routes for movement of sand are provided in the final DSR.
16. All the annexures as per EMGSM guidelines, 2020 are included in the final DSR.
17. An undertaking with reference to Point no. 9.3 of the EMGSM guidelines, 2020 regarding monitoring of mining near inter-district or inter-state boundary has been provided.
18. The representative of the Sub Divisional Committee along with the Consultants have affirmed that all the guidelines of EMGSM guidelines, 2020 / 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 have been followed in preparation of the final DSR.

The final DSR (sand) of District Bokaro is recommended to SEIAA for approval.

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II. Final District Survey Report (DSR) for Minor Minerals other than Sand Mining or River Bed Mining (Stone), Distt. Bokaro .

The Final DSR was submitted by District Magistrate –cum- Deputy Commissioner, Bokaro. He was represented by District Mining Officer, Bokaro Shri Ravi Kumar Singh at the SEAC meeting on 14.04.2023.

During the meeting the consultant M/s Sathi Planners Pvt. Ltd., Ranchi in the presence of DMO, Bokaro presented the DSR before the Committee. The DSR was appraised in light of S.O. no. 3611 (E), dated 25.07.2018 of MoEF&CC, Govt. of India.

The final DSR had been placed in the public domain for 01 (One) month from the 23.02.2023. As per the Sub Divisional Committee no comments / observations were obtained.

The DSR submitted is as per the format provided in the above notification. All the aspects of the notification dated 25.07.2018 were addressed in the DSR and found satisfactory.

Hence, the final DSR for Minor Minerals other than Sand Mining or River Bed Mining (Stone) of District Bokaro is recommended to SEIAA for approval.

B. Deputy Commissioner, Garhwa or through authorized representative and M/s Rian Enviro Pvt. Ltd.

i. Final District Survey Report (DSR) of Sand, Garhwa.

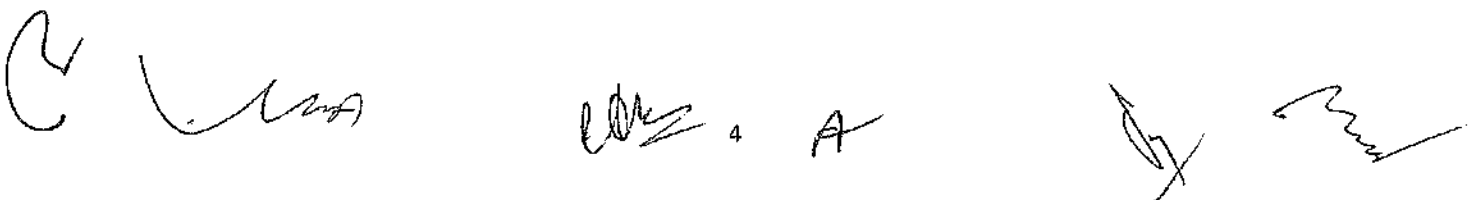
The Final DSR was submitted by Deputy Commissioner, Garhwa. He was represented by District Mining Officer, Garhwa Shri Nand Dev Baitha at the SEAC meeting on 14.04.2023.

During the meeting the consultant M/s Rian Enviro Pvt. Ltd., Patna, Bihar in the presence of DMO, Garhwa presented the DSR before the Committee. The DSR was appraised considering the following aspects alongwith other conditions of Enforcement and Monitoring Guidelines for Sand Mining (EMGSM), 2020 / 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 they have affirmed the following :

1. The final DSR submitted is duly signed by all members of the Sub Divisional Committee and the Consultant. All the pages of the DSR are signed by the authorized officer of the Sub Divisional Committee.
2. The final DSR consists of the complete potential area and is demarcated as Potential Resource Area (PRA) / Sand Leases / Ghats as per EMGSM guideline 2020.

3. The replenishment study of pre & post monsoon period is included in final DSR.
4. The final DSR had been placed in the public domain for 01 (One) month from the 10.09.2022. As per the Sub Divisional Committee no comments / observations were obtained.
5. Demand and supply of the river bed material has been provided. The future demand for next 05 years is included in the final DSR.
6. The PRA / Sand Leases / Ghats have not been proposed on the confluence / meanders / concavities / active channels of the river.
7. Khata & Khasra numbers of the lease area certified by the concerned Circle Officer (CO) are incorporated in the final DSR.
8. The distance of PRA / Sand Leases / Ghats from the Forest / Wildlife Protected area / Birds Sanctuary/ Wildlife Sanctuary / National Park / Eco Sensitive Zone has been verified and certified by the concerned DFOs of the respective Territorial and Wildlife division.
9. A report detailing the presence of aquatic animal in the river in proximity of the proposed PRA / Sand Leases / Ghats is included in the final DSR.
10. The proposed PRA / Sand Leases / Ghats meet the siting criteria of State Pollution Control Board / SEIAA.
11. High resolution color satellite images of the proposed potential sand mining areas are included in final DSR.
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14. Mining is restricted to 3/4th of the river width and 60% of the mineable reserve.
15. Transportation routes for movement of sand are provided in the final DSR.
16. All the annexures as per EMGSM guidelines, 2020 are included in the final DSR.
17. An undertaking with reference to Point no. 9.3 of the EMGSM guidelines, 2020 regarding monitoring of mining near inter-district or inter-state boundary has been provided.
18. The representative of the Sub Divisional Committee along with the Consultants have affirmed that all the guidelines of EMGSM guidelines, 2020 / 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 have been followed in preparation of the final DSR.

The final DSR (sand) of District Garhwa is recommended to SEIAA for approval.

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C. Corrigendum EC letter for Shrachi Greens Project of M/s Shrachi Realty Pvt. Ltd., Village : Tamulia, Tehsil : Chandil, Distt. : Seraikela Kharsawan, Jharkhand.

(Proposal no. : SIA/JH/MIS/ 299143 /2023).

The PA's vide online application no. SIA/JH/MIS/ 299143 /2023 has requested for necessary correction in Environmental Clearance issued vide letter no. EC/SEIAA/2022-23/2694/2022/456, dated 24.03.2023 with regard to incorporation correct Plot numbers, the revised details is being given below :

LAND DETAILS :

Khata No.	29	156	64	66	195	162
Plot No.	807,808, 809, 810,811,812, 818, 820, 830	813	817	816	819	761,764,766,767,768,769, 770,771,772,821,822,823, 824,825,826,827,828,829

The SEAC considered the same and recommends for issuance of corrigendum EC with corrected details as stated above. Rest other terms & conditions mentioned in the previous EC letter no. EC/SEIAA/2022-23/2694/2022/456, dated 24.03.2023 shall remain the same.

Day 2 : April 15th , 2023 [Saturday]

Consideration of Proposals

1. Expansion of existing Rolling Mill from Production Capacity of TMT Bars – 28,800 TPA to TMT Bars & Rolled Products – 2,50,000 TPA with Coal / Oil Fired Re-heating furnace & Coal Pulverizer by M/s Rebanta Steels Pvt. Ltd., Mauza : Bhorandiha & Bishwasdih, Thana no. : 275 & 278, Thana : Giridih, P.O. : Gadi Srirampur, Distt. : Giridih, Jharkhand.

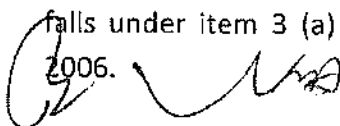
(Proposal No : SIA/JH/IND1/425536/2023)

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

This is an expansion project which has been taken for appraisal on 15.04.2023.

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 Rebanta Steels Pvt. Ltd. is an existing steel plant at Mauza - Bhorandiha & Bishwasdih, Thana No. 275 & 278, P.O.- Gadi Srirampur, District- Giridih, Jharkhand. Total area of 17.10 acres (6.92 ha.) is proposed for the current project.

Company proposes to modify the existing mill to a High-Speed Rolling Mill with changing the required motors, gears and number of rolls, strands – as per requirement.

The project will procure the raw materials from open market and 4TPH coal pulverizer will be installed for uniform feed to reheating furnace with increased number of burners and rate of fuel charging.

The company installed the unit and came into production of 28800 TPA Rolling Mill (TMT Bars) vide CTE ref. no JSPCB/HO/RNC/CTE-10398945/2021/244, dated 28.09.2021 and CTO vide ref. no JSPCB/HO/RNC/CTO-13684762/2023/82, dated 11.01.2023 valid upto 30.06.2023.

The application for EC is also in compliance to the requirements of EIA Notification (Amendment) number S.O 3250 (E), dated 20.07.2022, regarding obtaining environmental clearance by all the existing rolling mills with capacity greater than 5000 TPA.

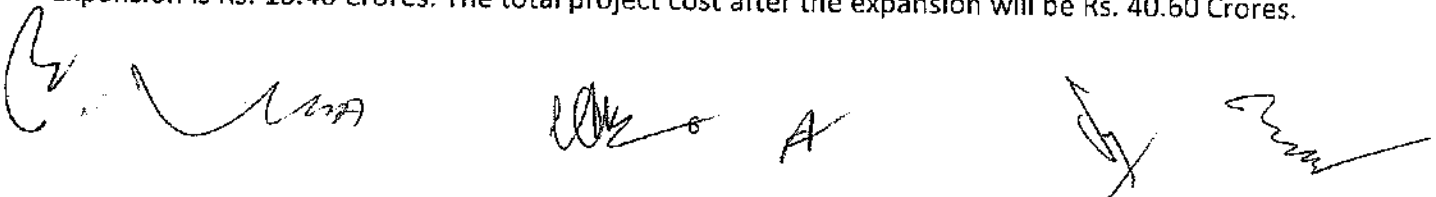
Land Details :

Khata no.	Plot no.	Khata no.	Plot no.
14	696	15	698, 692, 695
72	700	128	707, 722
51	712, 718	103	703, 714
122	707	16	901
2	902	103	701, 898
77	710, 921, 715	11	697, 690, 693
17	699, 691, 694	57	716
83	714	34	221, 220, 222
29	218, 219	37	211, 212
167	688	94	689
190	903	177	719

Latitude & Longitude of the project :

Latitude	Longitude
24° 08' 46.63"N to 24° 08' 32.75"N	86° 19' 42.10"E to 86° 20' 7.77"E

The existing project cost is Rs. 30.20 Crores. The estimated project cost for the proposed expansion is Rs. 10.40 Crores. The total project cost after the expansion will be Rs. 40.60 Crores.



Employment Generation after the proposed project will be 209 direct employment and approximately 150 - 170 people will be employed during the construction phase and will be recruited from the local villages surrounding the project site.

The capacity of different existing and proposed units is as follows:

Sl. No	Plant Facilities	Existing Installed Units and Capacity		Proposed Units and Capacity	Total after Expansion	
		Unit	Capacity		Unit	Capacity
1	Rolling Mill	1x5TPH	28,800 TPA TMT Bars	Modernization & expansion for additional 250000 TPA TMT Bars & Rolled Products	1x42TPH	250000 TPA TMT Bars & Rolled Products
2.	Reheating Furnace (Coal/Oil Fired)	1x5TPH	30,000 TPA Heated Billets	Modernization & enhancement for additional capacity of 230000 TPA	1x43TPH	258000 TPA Heated Billets
3.	Coal Pulverizer	1x4TPH	2400 TPA Pulverized Coal	Addition of 1x4TPH Pulverizer	2x4TPH	20640 TPA Pulverized Coal

Presently the unit is having a connected load of 3.0 MW from DVC. Total power requirement for the project after expansion is envisaged as 7.0 MW, which will be met from DVC.

The total requirement of makeup water for industrial and domestic purposes after the proposed expansion will be 267.5 KLD. The water requirement will be met from ground water through bore wells. NOC for the proposed ground water withdrawal will be obtained from CGWA.

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 SH-13 that is nearby the project site. Total Raw material requirement after the proposed expansion of plant is given below:

Proposed Rolling Mill: TMT Bars – 834 TPD = Final 2,50,000 TPA			
Raw Material	Existing requirement	Final Capacity	Source
MS Billets	30,000 TPA	2,58,000 TPA	Giridih, Durgapur, Ramgarh etc.
Fuel for Reheating Furnace: Coal or Oil			
Coal Or F. Oil	Coal – 2,400 TPA	Coal – 20,640 TPA Or Oil – 8,300 KL/Year	Imported coal through Haldia port F. Oil local IOCL/HPCL

Raw Materials	Required materials for Per Ton of product	Total Raw materials required After Expansion	Source location & distance	Mode of transportation
M.S. Billets	1.032	258000 TPA	Giridih, Durgapur, Ramgarh area Within 120 Km	Trucks/Trailers
Coal / or Furnace Oil	0.08/0.032 KL	20640 TPA Or 8300 KL	Imported coal via Haldia port – 376 Km F. Oil local market IOCL/HPCL	Covered Trucks Tankers

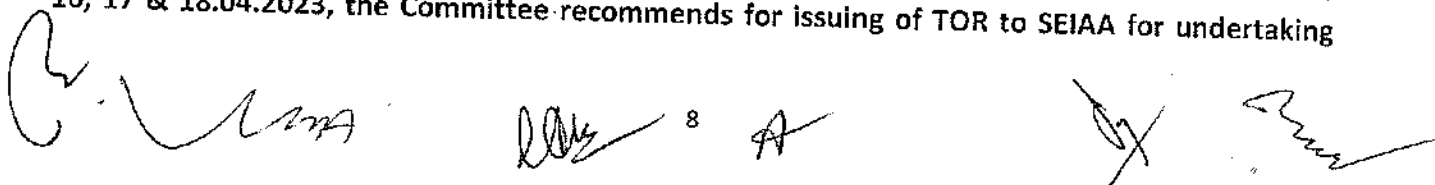
The proponent has mentioned that there is no court case or violation under EIA Notification to the project or related activity.

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Lease Deed.
2	CO	:	The CO, Giridih Sadar vide letter no. 395, dated 23.03.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyon & Register II.
3	DFO Wild Life.	:	DFO, Wildlife Hazaribagh vide letter no. 620 & 621, dated 25.03.2023 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Giridih East Forest Division vide letter no. 1356 & 1357, dated 10.04.2023 certified that the distance of notified forest is more than 500 meters from project site.
5	Consent to Establish (CTE)	:	CTE issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-10398945 /2021/244, dated 28.09.2021.
6	Consent to Operate (CTO)	:	CTO granted by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO-13684762/2023/82, dated 11.01.2023.

Baseline data collection for 3 month (one season) – 1st March to 31st May 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 14, 15, 16, 17 & 18.04.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking

 8 A

detailed EIA / EMP study as mentioned in Annexure I alongwith the following specific conditions :

- I. Low Sulfur Fuel shall be used to minimize the absolute quantity of Sulfur Di-Oxide emissions.
- II. The proposed Fuel i.e. Coal/Oil will be replaced by clean fuel as soon as it becomes available.

2. Jitpur Under Ground Coal Mine of 0.6 / 0.7 MTPA (Normative / Peak) 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)

Project Category: B – Application for grant of Environment Clearance
 EC Application for: Coking Coal Production: 0.6/0.7 Million Tons (Normative/Peak)
 Waste: NIL
 Mobile Crusher: Nil (No Crushing is required)

Name of the consultant: M/s CIMFR, Dhanbad.

This is a violation project which has been taken for appraisal on 15.04.2023.

The project is a violation case since the project had come in to operation without obtaining prior Environmental Clearance. The project was considered by MoEF&CC, Govt. of India under the notification no. 804(E), dated 14.03.2017 and has approved the violation ToR vide letter no. IA-J-11015/66/2015-IA-II(M), dated 27.04.2021. The final EIA / EMP submitted by PP to SEIAA in the light of notification no. S.O. 1886 (E), dated 20th April, 2022 on 13.01.2023, which was forwarded to SEAC on 13.01.2023 for appraisal.

The matter has been taken for consideration & recommendation of EC for violation projects.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Jitpur Under Ground Mine, Collieries Division, STEEL AUTHORITY OF INDIA LIMITED (Lease Area-163.69 ha)
2	Lessee:	: Collieries Division, Steel Authority of India Limited
3	Lease Address	: Chief General Manager (C&J) Collieries Division, SAIL-Chasnalla (Dhanbad), Jharkhand-828135 E-mail gmchasnalla@gmail.com
4	Lease Area	: Ha: 163.69 ha Acres:404.31
5	Type of Land	: Private & Govt. land. There is no forest land.

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6	Project Cost	:	222.69 Crores
7	EMP Budget	:	Capital: 50.Lakh Recurring: 22. Lakh / year
8	CSR / CER Budget	:	Rs. 1 Crore
9	New or Expansion	:	Expansion of production capacity 0.6/0.7 Million Tons (Normative/Peak)
10	Mineable Reserves	:	21.10 Million Ton
11	Mine Life	:	23 years (as per the Mining plan)
12	Man power	:	Total manpower 347.
13	Water Requirement	:	1510 KLD
14	Water Source	:	Domestic water requirement is 1110 KLD source- MADA supply. Industrial water requirement is 400 KLD source-Mine water.
15	DG Set / power	:	4800 KVA. (Source-DVC and JSEB)
16	Crusher	:	Not Applicable as no crushing is involved.
17	Nearest Water Body	:	Damodar River
18	Nearest Habitation	:	Jitpur and Noonudih village.
19	Nearest Rail Station	:	Bhaga Railway Station-3 Km and Dhanbad Railway Station-13 Km from Jitpur Mining Lease
20	Nearest Air Port	:	Ranchi Airport- 150 km
21	Nearest Forest	:	1596m away from project.
22	Road & Highways	:	NH-19 (Old NH-2): About 16 km away passes through Dhanbad

CO-ORDINATES

1	Latitude	Latitudes 23°42'32" to 23°43'14" N
2	Longitude	Longitude 86°23'05" to 86°24'14"E.

LAND DETAILS

Total land 163.69 ha of Mining Lease area.	
<ul style="list-style-type: none"> • SAIL land: 35.35 ha • Private land: 103.82 ha • Government land:24.52 ha • Forest land : Nil 	
Plot wise details - Mouza : Jitpur (Thana No. 108)	
1	Khata No.- 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13,14,15 , 16, 17 ,18, 19, 20, 21 , 22, 23, 24, 25, 26, 27, 28,29, 30, 31 32, 33, 34, 35, 36,37, 38, 39.
	Plot No. : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13,14,15 , 16, 17 ,18, 19, 20, 21 , 22, 23, 24, 25, 26, 27, 28,29, 30, 31 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, 89, 90, 91, 92, 93, 94,95,96,97,98,99,100,101,102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116 ,117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135 , 136, 137, 138, 139, 140, 141, 142,143, 144, 145, 146, 147,148, 149 ,

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Noonudih - (Thana No. 109)

Khata No.- 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 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, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149.

Plot No. :- 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 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, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346,

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STATUTORY CLEARANCES

1	LOI/Lease docs	<p>: The total Lease hold area of Jitpur is 163.69 Ha, containing two mouzas namely Jitpur (87.31 Ha) and Noonudih (76.38 Ha). Lease was granted in the year 1902 for a period of 991 years.</p> <p>The Ministry of Coal issued notification dated 1st October, 2021 regarding amendment of Mineral concession Rule and called Mineral Concession (Amendment) Rules, 2021. As per 24C (2) (Period of mining lease granted to Government companies or</p>
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		corporation) all subsisting mining leases vested or granted to Government companies or corporation before commencement of Mineral Concession (Amendment) Rules,2021 for coal or lignite shall be deemed to have been granted for fifty years or till 31 st March 2030, whichever is later. In pursuance to the Mineral Concession (Amendment) Rules, 2021 application submitted to DMO, Dhanbad on 06.12.2021 for lease validity as applicable under 24C (2).
2	CO	: The CO, Jharia vide letter no. 1736, dated 28.12.2022 has mentioned the plot nos. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.
3	DFO Wild Life	: DFO, Wildlife Hazaribag vide letter no. 23 & 24, dated 09.01.2023 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	Territorial DFO	: DFO, Dhanbad Forest Division vide letter no. 2342 & 2343, dated 11.10.2022 and letter no. 90 & 91, dated 11.01.2023 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
5	Consent to Operate (CTO)	: CTO granted by JSPCB vide Ref. no. : JSPCB/HO/RNC/CTO-1174113/2017/1550, dated 07.11.2017.
6	Terms of Reference (ToR)	: Violation ToR granted by MoEF&CC, Govt. of India vide Letter no. : IA-J-11015/66/2015-IA-II(M), dated 27.04.2021.
7	Public Hearing	: Public Hearing conducted on 05.07.2022.
8	Mine Plan	: JHJH004/APP0068/2021, dated 18.08.2022.

Working Details

1	Mining Method	: Underground Mine. Longwall panel with hydraulic Sand/Bottom Ash stowing method.
2	Quarry Area	: NA
3	Waste Generation	: 5 years– Nil Life of Mine –23 years
4	Stripping Ratio	: Not Applicable
5	Working Days	: 300
6	Bench: size & No	: NA
7	Elevation of Mine	: 170.835 MRL
8	Ground Level Elevation	: 158m to 177m (Lowest and Highest contour)
9	Ultimate Working	: 543m

	Depth		
10	Water Table	:	5.85 to 9.87 m
11	Topography of Mine	:	Undulating, slopes slightly from North to South.
12	Explosive Requirement	:	22394 kg /Yearly (Permitted-5)
13	Diesel/Fuel requirement	:	2.15 KL/year (For DG set)

Production Details for first five year as per Approved Mining plan

Year	Production of coal (Million Ton)
1 st	0.12
2 nd	0.12
3 rd	0.17
4 th	0.36
5 th	0.32

Solid Waste Management

- Waste Generation will be Nil during the life of mine. It is an underground mine, stone generated during coal mining utilised for side wall packing of the u/g mine galleries.

Water Quality Management

- Underground Mining is planned below the ground water table.
- The rain water during rainy season will be collected in a rain water harvesting pit. Mine water is used for dust suppression and plantation. Garland drain has been made around working shaft.
- Retaining walls along the jore/nalla constructed to prevent water flowing into the lease area
- 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

- Being an underground mine, drilling at surface is not required. Moreover, drilling of roof rock at underground for installation of supports is done in conjunction with water spraying. Drilling of coal hole at underground is undertaken after the complete face has been wetted with water.
- Water sprinkling will be done on the roads of Jitpur
- Water sprinkling at loading area not required since the mode of transport of coal is through aerial ropeways.
- Use of personal protective equipment like dust mask etc shall be put in practice
- Monitoring of the ambient air quality is being carried out as per norm.

Undertakings affirming the following have been submitted:

- No ground water is used for domestic purpose, any mining activities or any other use and therefore undertakes that no ground water will be used for domestic purpose, any mining activities or any other use.
- The Boundary Pillars of the Noonodih & Jitpur mining lease area will be maintained properly.

- c. One season post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- d. The plantation work will be done as per the approved Mining Plan / Review of Mining plan of Noonodih & Jitpur mining lease area.
- e. Sufficient water spray using water tankers will be done for effective dust suppression within the Noonodih & Jitpur mining lease area.
- f. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records will be maintained.
- g. If any tree felling than necessary permission shall be taken from the competent authority.

PROJECT SUMMARY

The ToR/EC proposal for Jitpur Underground Mine of 0.7 MTPA capacity in mine lease area of 163.69 ha of M/s SAIL located in village Noonudih Jitpur, Tehsil Jharia cum Jorapokhar cum Sindri, District Dhanbad (Jharkhand) was granted by MoEF&CC on 27.04.2021.

Details of project are given as under:

- i. The project area is covered under Survey of India Topo Sheet No. 731/6 and is bounded by the geographical coordinates ranging from Latitudes 23°42'32" to 23°43'14" N and longitudes 86°23'05" to 86°24'14"E.
- ii. Coal linkage of the project is proposed for Captive use for various Steel plants.
- iii. Employment generation: employment to 347 persons will be provided from the project.
- iv. The project is reported to be beneficial in terms of : The project will further improve the living condition of the people. The project will generate direct as well as indirect employment. The income thus generated will thus improve the beneficiaries living conditions.
- v. Total mining lease area as per block allotment is 163.69 Ha. Mining Plan (Including Progressive Mine Closure Plan) has been approved by the MoC.
- vi. The land usage pattern of the project is as follows:

Land use details (Area in Ha)

S. No.	Landuse	Within ML Area (ha)	Outside ML Area (ha)	TOTAL
1.	Agricultural land	21.34	Nil	21.34
2.	Forest land	Nil	Nil	Nil
3.	Wasteland	37.08	Nil	37.08
4.	Grazing land	Nil	Nil	Nil
5.	Surface water bodies	2.30	Nil	2.30
6.	Settlements	30.01	Nil	30.01
7.	Others (specify) Mining Area	5.49		5.49

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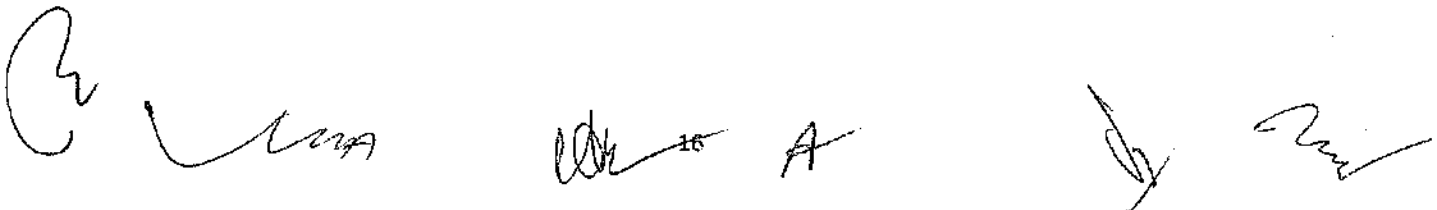
	• Railway Area	54.30		54.30
	• Other Infrastructure	12.12		12.12
	• Lawn Area	1.05		1.05
	TOTAL	163.69	Nil	163.69

- i. Total geological reserve reported in the mine lease area is 19.33 MT with 16.59MT mineable reserve. Percent of extraction is 49-50%.
- ii. XVA, XIV, XII seams with thickness ranging from 0.9m to 10.36m are workable. Grade of coal is W-III, stripping ratio NA, while gradient is 1 in 6 to 1 in 7.5.
- iii. Method of mining operations envisages by Underground method
- iv. Life of mine is 23 years @ nominal 0.6 MTPA / peak 0.7 MTPA.
- v. Transportation of coal has been proposed by Aerial ropeway from mine to Chasnalla washery.
- vi. No National Parks, Wildlife Sanctuaries and Eco-Sensitive Zones have been reported with 10 km boundary of the project.
- vii. The ground water level has been reported to be varying between 5.85m to 9.87m during pre-monsoon and between 3.12m to 6.43m during post-monsoon. Total water requirement for the project is 1510 KLD.
- viii. Public hearing for the project of 0.6/0.7 million ton capacity in an area of 163.69 Ha was conducted on 05.07.2022. Major issues raised in the public hearing included in the Final EIA-EMP report
- ix. Consent to Operate for the existing capacity was obtained from the State PCB on 07.11.2017 and was valid till 31.03.2022 (for production capacity of 11700 T / month)
- x. Kari Jore nalla is flowing along western boundary of lease and no diversion is involved.
- xi. Regular monitoring of ambient air quality is being carried out. The documented report is submitted to JSPCB and also to MoEF&CC along with half yearly EC compliance report. In general, the results of ambient air quality monitoring data were found within prescribed limits except few aberrations which can be attributed to the specific local conditions during the day of sampling.
- xii. **Total capital cost** of the project is Rs. 222.69 Crores, **CSR cost** to be incurred as per the guidelines. As it is an existing mine, most of the area under reference is developed with surface constraints of colliery complex and no R&R is involved. **Environment Management Cost:** Capital provisions for environmental control measures, which includes pollution control arrangement.

Earlier this proposal was presented in SEAC on 20 - 24.02.2023 in which requisite documents were sought are under –

- i. ToR points no. 4 (i), (v), (x) (xi) (xv), (xix), (xxi), (xxii), (xxviii).
- ii. ToR point no. 5 (i).

The Project Authorities have submitted the above mentioned documents.



On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of rupees 59.855 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 :-

Sl. No.	Major Environment	Details	Cost (Rs. in Lakhs)
1.	Air Environment	Plantation along the road at Bhutgoria Area	5.0
2.	Water Environment	Construction of borewell/ handpump: 10 nos. in 05 villages in buffer zone	10.0
		Construction of rainwater harvesting in schools/community water distribution in buffer zone	5.0
3.	Socio-economic environment	Construction of bathroom/toilet in three schools	5.0
		Establishment of two Computer Lab in two schools	5.0
		Skill development training including women empowerment	5.0
		Renovation of ponds and construction of ghats	14.855
4.	Energy Conservation	Installation of solar street light	10.0
Total Cost Rs. In Lakhs			59.855

- I. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. 59.855 Lakh.
- II. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 59.855 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 permises.
- VII. Energy conservation measures adhearing to part of ECBC norms shall be complied with.

VI
VII









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 Jitpur Under Ground Coal Mine of 0.6 / 0.7 MTPA (Normative / Peak) of M/s Steel Authority of India Limited – Collieries Division, Village : Noonudih & Jitpur, Block : Jharia, P.S. : Jorapokhar, Distt. : Dhanbad, Jharkhand (163.69 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II 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. 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. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr. management.



3. Residential Cum Commercial Project "Fai Residency" of M/s R.K. Builder and Developers, Village : Bhitha, Thana : Gonda, Tehsil : Ranchi, Thana no. : 187, Distt. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/INFRA2/ 422229/2023)

Name of the consultant : P & M Solution, Noida

This is a case of violation which has been taken for appraisal on 15.04.2023

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 96th meeting held on 16-19.08.2022 and SEIAA, Jharkhand has approved the violation ToRs in 97th meeting held on 25th & 26th August, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2624/2022/253, date 02.09.2022. The final EIA / EMP submitted by PP to SEIAA on 17.03.2023 and which was forwarded to SEAC on 18.03.2023.

Application for: Commercial buildings : Total built-up area is 23030.51 sq m.

M/s RK Builder and Developers has planned to develop a residential cum commercial project "Fai Residency" located at Village Bhitha, Thana No. 187, Thana Gonda, District Ranchi, Jharkhand. Project site is spread on area of 6935.96 sq m. Project involves development of 3 nos. of residential blocks (Block B: LG+G+6, C:G+7 & D: G+6) and 1 No of residential cum commercial block (Block A: B+LG+G+8) along with the allied facilities like waste management system, storm water management system, water supply system, sewerage system, adequate parking facility and green area. Commercial area is available only in Block A. Built-up area of project after development will be approx. 23030.51 sq m (Existing-1151.52 sq.m + Proposed-21878.99 sq.m).

Project and Location Details :

Parameters	Description
Plot Area	6935.96 m ² (approx. 1.71 Acre/0.69 Ha)
Project Cost	Project cost : Rs. 22 Crore EMP cost : Rs. 57.25 Lakh (capital cost) CSR cost : Rs. 0.44 Crors.
Built-up Area	23030.51 m ²
Green Area (@16 % of plot area)	1103.65 sq m
Population	1352
Water Requirement	160 KLD
Fresh Water Requirement	77 KLD
Wastewater Generation	103 KLD
STP Capacity	110 KLD
Total Municipal Waste	452 kg/day
Power Requirement	Maximum power demand for the project during construction and operation phase is estimated to be 50 kVA and 400 kVA respectively. Power supply will be taken from Jharkhand State Power Corporation Limited.
DG Sets	DG set of 125 kVA
No. of RWH Pits	09 pits
Parking	Area - 7786.9 m ² , 507 parking space Car - 240(218 residents and 22 Visitor's) Two- wheeler - 261, Other - 6
Connecting road	Kanke Patratu road/SH-2 (Abuts site, W)
National Highway	NH-75 (4 km, S)
Nearest Railway Station	Ranchi Junction Railway Station (8 km, SSE)
Airport	Birsa Munda Airport (11 km, S)
Nearest Hospitals	Hill View Hospital & Research Centre (3.8 km, SE) Vivekanand Hospital (3.6 km, S)
Nearest Water Bodies	Ranchi Lake (5.4 km, S) Kanke Dam (1.5 km, SSW)

CO-ORDINATES

Point	Latitude	Longitude
1	23°24'54.84"N	85°19'7.43"E
2	23°24'54.06"N	85°19'6.97"E
3	23°24'54.52"N	85°19'3.05"E
4	23°24'53.56"N	85°19'2.86"E
5	23°24'53.88"N	85°19'1.48"E
6	23°24'54.73"N	85°19'1.39"E
7	23°24'55.04"N	85°18'59.75"E
8	23°24'55.34"N	85°18'59.74"E
9	23°24'55.25"N	85°19'1.96"E
10	23°24'55.68"N	85°19'1.94"E

Area Summary :

S. No.	Description	Area (sq m)
1.	Plot Area	6935.96
2.	Surrendered for road widening	38.11
3.	Net Plot Area	6897.85
4.	Common Plot	720.32
5.	Balance plot area (1-2-4)	6177.53
6.	Permissible Ground Coverage (@35% of net plot area)	2414.24
7.	Proposed Ground Coverage (@33.96% of net plot area)	2342.22
8.	Permissible FAR (@3.0 of plot area)	20807.0
9.	Proposed FAR (@2.47 of plot area)	17164.86
10.	Non FAR Area	5,865.65
11.	Built-up Area	23030.51
12.	Green Area (@16 % of plot area)	1103.65
13.	Height	29.35
14.	No of Dwelling Units	131

Land Details :

Khata No.	Plot No.
18	30 & 31
83	34
110	32 & 33

STATUTORY CLEARANCES

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no. 5055, dated 28.12.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO Wild Life	:	DFO, Wildlife Ranchi Division vide memo no. 763, dated 27.10.2020 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
3	CO certificate	:	The CO, Hehal, Ranchi vide letter no. 848(ii), dated 31.10.20 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
4	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi vide memo no. 1920/tech. dated 26.04.2019
5	Building Plan	:	Ranchi Municipal Corporation has approved building plan vide memo no. RMC/BP/1647/W01/2019, dated 31.03.2022
6	AAI	:	Project Authority has undertaken that building height is below of 30 m. Hence approval of Airport Authority of India (AAI) is not required. In future if it is required the same will be obtained from Airport Authority of India.

Water and waste water Requirement Details

Category	Population/Area (sq m)/Capacity	Standard (LPCD)	Water Requirement	Fresh Water Requirement	Recycled Water requirement
Domestic					
Residents	655	135	88	62	26
Staff	78	45	4	2	2
Visitors	619	15	19	13	6
Total Domestic Water Demand			111	77	34

Landscape	308.9 sq m	1 l/day	1	0	1
HVAC Cooling	--	--	48	0	48
Total		-	160	77	83

Wastewater Calculations

Category	Total Quantity (KLD)
Fresh water Req.	77
Flushing water Req.	34
Sewage generation (@80% of the water consumption)	103
Capacity of STP	110
Recovered water from STP (80% of Waste water)	83
1. Flushing	34
2. Landscaping	1
3. HVAC Cooling	48

Solid Waste Requirement

S. No	Description	Occupancy /Area	kg/capita/ day	Total Solid Waste Generation (kg/day)	Recyclable (kg/day)	Non Recyclable (kg/day)
1.	Residents	655	0.5	328	98	230
2.	Staff	78	0.25	20	6	14
3.	Visitors	619	0.15	93	28	65
4.	Landscape waste	0.07 acres	0.2 kg/acres	1	0	1
5.	STP sludge	103 KLD	--	10	0	10
Total Waste Generated				452	132	320

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 1103.65 sq m (16 % of the net 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.
- 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

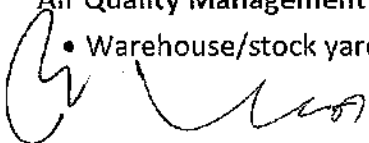
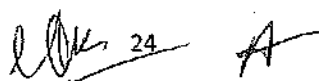
- The site drainage will be planned in such a way that there is no accumulation of water/wastewater within the project premises or in the vicinity of the site.
- Mobile toilets to be provided for construction Laborers.
- Generated waste water will be collected through tankers and dispose to septic tank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

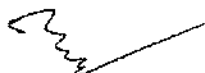
During Operation Phase

- STP of capacity i.e. 110 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Landscaping, Flushing, and HVAC Cooling.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 77 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

Energy will be conserved via solar power & LED of at least 5 % of the total power requirement.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of rupees 27,37,500 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 :-

Sr. No.	Major Environment	Details	Cost Rs in Lacs
1	Air Environment	To Repair road in nearby area	12.23500
2	Water Environment	Repairing of embankments, Beautification of ponds	3
3	Social Environment	Provide equipments and kits to the nearby village area and to schedule environment awareness program me and complain in school and nearby areas	3
4	Soil Environment	Green belt development	3
5	Energy conservation	Providing solar lights	6.14
TOTAL COST RS.			27,37,500/-

- The Committee visited the project site on 20.02.2023 to verify the details submitted by PAs. During inspection, Committee saw that the STP is installed and is operational, RWH has been installed with 09 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. 27,37,500.

- III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 27,37,500 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 6,93,000 being 1% of the project cost incurred till date (Rs. 6,93,00,000) 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.

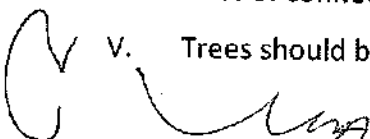
During the presentation the following document were sought :

- i. The appointment letter of consultant for the preparation of EIA is to be submitted.

The Project Authorities have submitted the above mentioned document.

Based on the presentation made and information provided, the Committee decided that the proposal for Residential Cum Commercial Project "Fail Residency" of M/s R.K. Builder and Developers, Village : Bhitha, Thana : Gonda, Tehsil : Ranchi, Thana no. : 187, 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.



6	Project Cost	:	Rs 20 Lakhs
7	EMP Budget	:	Capital: 1.575 Lakhs Recurring: 3.27 Lakh / year
8	New or Expansion	:	New
9	Mineable Reserves	:	Cum: 223980 cum Tonnes: 604746.0 tons
10	Mine Life	:	10 years
11	Man power	:	20
12	Water Requirement	:	2.50 KLD (Drinking: 0.20 KLD, Dust Suppression: 1.209 KLD, Plantation: 1.10 KLD)
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	200 kVA
15	Crusher	:	Nil
16	Nearest Water Body	:	Hurrahi Nadi, 1.50 km, SSW direction.
17	Nearest Habitation	:	Purnadih, 0.60 km
18	Nearest Rail Station	:	Maheshpur Halt Railway station, approx. 2.50 km towards West direction.
19	Nearest Air Port	:	Birsa Munda Airport, approx. 167.0 km towards South direction.
20	Nearest Forest	:	Phulwariya Protected Forest, Approx. 4.10 km towards East direction of mine site. Masmohana Protected Forest, Approx 4.85 km towards SSW direction of mine site. Partango Protected Forest, Approx 3.95 km towards SW direction of mine site.
21	Road & Highways	:	SH- 13, Approx. 0.20 km. in South direction.

CO-ORDINATES

1	Latitude	From 24°27'54.51"N	To 24°27'57.80"N
2	Longitude	From 85°43'23.91"E	To 85°43'26.41"E

LAND DETAILS :

Khata No.	Plot no.
144	268 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Koderma vide memo no. 474/M, dated 06.03.2023.
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2	CO	:	The CO, Domchanch vide letter no. : 74, dated 11.01.2023 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. 491/M, dated 09.03.2023 certified that 01 other mining lease area (1.51 acre) exists within 500 m radius from proposed project site.
4	DFO Wildlife	:	DFO, Wildlife Hazaribagh vide letter no. : 2299, dated 17.11.2022 certified that the proposed project site is outside Eco Sensitive Zone of Koderma Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Koderma Forest Division vide letter no. : 5026, dated 22.12.2022 certified that the distance of reserved / protected forest is 280 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Koderma vide letter no. 480/M, dated 06.03.2023 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 26.11.2022.
8	Mine Plan Approval	:	DMO, Koderma vide memo no. 591/M, dated 18.03.2023.

Working Details

1	Mining Method	:	Opencast semi mechanized Mining method
2	Quarry Area	:	5 years– 0.368 ha Life of Mine – 10 years
3	Waste Generation	:	5 years– 3289.0 cum or 8880.3 tons
4	Stripping Ratio	:	1: 0.1
5	Working Days	:	300
6	Bench: size & No	:	6m x 6m
7	Elevation of Mine	:	375 AMSL to 374 AMSL
8	Ground Level Elevation	:	374 AMSL
9	Ultimate Working Depth	:	350 AMSL
10	Water Table	:	340 AMSL (15 mbgl)
11	Topography of Mine	:	Area represents a flat topography.
12	Explosive Requirement	:	70 kg/day
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Production of stone (cum)	Production of stone (tons)	Waste Generation (Cum)	Bench in mRL
1 st	21000.00	56700.00	1091.00	375 mRL – 368 mRL
2 nd	21480.00	57996.00	1095.00	374 mRL – 368 mRL
3 rd	21780.00	58806.00	1103.00	374 mRL – 368 mRL
4 th	22500.00	60750.00	-	368 mRL – 362 mRL
5 th	22500.00	60750.00	-	368 mRL – 362 mRL
Total	109260.00	295002.00	3289.00	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	-	0.368	0.368
Road	0.008	comes under quarry	comes under quarry
Safety Zone	-	0.219	0.219
Total	0.008	0.587	0.587
Balance	0.579	-	-
Lease Hold Area	0.587	0.587	0.587

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.219 ha	500
2	Haul /Approach Road	:	0.190 km	50

- About 550 no. of plant of different species will be planted.
- 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 3289.0 cum or 8880.3 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 Purnadih Stone Deposit of M/s Hill View Mining (Prop. : Sri Nilesh Ranjan), Village : Purnadih, Thana : Nawalsahi, Distt. : Koderma, Jharkhand (0.587 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure - IV.

5. Mahajori Stone Mine of Partners : (1) Sri Shatrughan Mandal (2) Sri Manoj Kumar Mandal & (3) Sri Raghunandan Sah, Village : Mahajori, P.S. : Margomunda, Distt. : Deoghar, Jharkhand (0.963 Ha).

(Proposal No. : SIA/JH/MIN/422710/2023).

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

This is an expansion project which has been taken for appraisal on 15.04.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 46666.67 cu.m/annum or 126000 TPA

Project and Location Details :

S No.	Parameter		Details
1	Project Name	:	Mahajori Stone Deposit
2	Lessee:	:	Partners- Sri Shatrughan Mandal, Sri Manoj Kumar Mandal, Sri Raghunandan Sah

(Handwritten signatures and marks)

3	Lease Address	:	Partners- Sri Shatrughan Mandal, Sri Manoj Kumar Mandal, Sri Raghunandan Sah	
4	Lease Area	:	0.963 ha	Acres- 2.38 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 30 Lakhs	
7	EMP Budget	:	Capital: 3.99 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.60 Lakhs	
9	New or Expansion	:	Expansion	
10	Mineable Reserves	:	cum.: 466195 cum	Tonnes: 1258726.50 tons
11	Mine Life	:	10.06 or 10 years	
12	Man power	:	20	
13	Water Requirement	:	8.81~ 8.80 KLD(Drinking: 0.20 KLD, Dust Suppression: 6.37 KLD, Plantation: 2.24KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	200 KVA	
16	Crusher	:	No crusher	
17	Nearest Water Body	:	Jainti River - Approx 2.90 km towards North direction of mine site. Baghdaru Nadi - 0.62 Km East Direction.	
18	Nearest Habitation	:	Nawadih, at 1.02 Km, SW	
19	Nearest Rail Station	:	Madankata Railway station, approx. 9.70 km towards East direction.	
20	Nearest Air Port	:	Birsa Munda Airport, approx. 162.80 km towards SW direction.	
21	Nearest Forest	:	Protected Forest near Tikopahari - Approx. 4.90 km towards NW direction of mine site. Protected Forest near Bhatupur Village - Approx. 5.60 km towards SW direction of mine site.	
22	Road & Highways	:	Deoghar-Sarwan Road - Deoghar-Sarwan Road, Approx. 0.54 km. in SSW direction.	

CO-ORDINATES

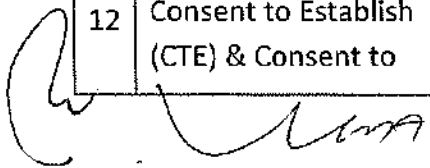
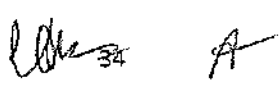
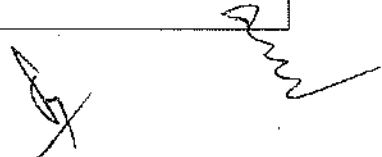
1	Latitude	From 24°09'56.83"N	To 24°10'01.49"N
2	Longitude	From 86°36'24.40"E	To 86°36'32.74"E

LAND DETAILS :

Plot No.
1255 (P), 1256 (P), 1257 (P), 1259 (P) & 1261 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Lease deed (valid from 08.08.2020 to 07.08.2030)
2	CO	:	The CO, Margomunda vide memo no. : 89/Ra, dated 16.03.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyari.
3	DMO	:	DMO, Deoghar vide memo no. 154/M, dated 10.02.2023 certified that 03 other mining lease area (0.52 acre, 2.00 acre & 2.42 acre) exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. : 175, dated 24.01.2023 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Deoghar Forest Division vide letter no. : 3712, dated 17.12.2016 certified that the distance of forest is 740 m from proposed project site.
6	DSR	:	The project is already mentioned in District Survey Report (DSR) of District Deoghar.
7	Gram Sabha	:	Gram Sabha conducted on 02.01.2017.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribagh vide memo no. 312/G, dated 18.10.2022.
9	Previous EC	:	Previous EC granted by DEIAA, Deoghar vide letter no. 50/M, dated 25.10.2017.
10	Compliance report	:	The PAs requested IRO, Ranchi MoEF&CC vide letter dated 29.07.2022 to certify the compliance status of EC conditions. As no response was received from IRO, Ranchi MoEF&CC, the compliance status of the conditions of EC has been certified by Regional Officer, Dumka, Jharkhand State Pollution Control Board vide compliance report dated 02.11.2022.
11	Production Figures	:	DMO, Deoghar vide memo no. 155/M, dated 10.02.2023.
12	Consent to Establish (CTE) & Consent to	:	i. CTE issued by JSPCB vide Ref. no. : JSPCB/HO/RNC/CTE-8828853 /2020/367, dated 25.09.2020.

Operate (CTO)	ii. CTO issued by JSPCB vide Ref. no. : JSPCB/RO/DMK/CTO-9079370 /2020/165, dated 16.12.2020.
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Working Details

1	Mining Method	:	Opencast semi mechanized method
2	Quarry Area	:	0.963 ha. Or 2.38 Acres
			Life of Mine – 10.06 or 10 years
3	Waste Generation	:	5015.00 cum or 13540.5 tons
4	Stripping Ratio	:	1: 0.10
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	240 AMSL to 225 AMSL
8	Ground Level Elevation	:	240AMSL
9	Ultimate Working Depth	:	215 AMSL
10	Water Table	:	205 AMSL (20 mbgl)
11	Topography of Mine	:	Area represents undulating topography
12	Explosive Requirement	:	90 kg/day
13	Diesel/Fuel requirement	:	100 litre/day

Production Details

Year	Production of stone (cum)	Production of stone (tons)	Waste (cum)	Bench RL in Meters
1 st	44444.44	120000	1500.00	221mRL - 230mRL
2 nd	45555.56	123000	-	221mRL - 227mRL
3 rd	46666.67	126000	3515.00	221mRL - 227mRL
4 th	46666.67	126000	-	215mRL - 221mRL
5 th	46666.67	126000	-	215mRL - 221mRL
Total	230000.01	621000	5015.00	

Land Use

Type of Land Use	Existing (ha)	During Plan Period (ha)	During Conceptual Period/after closure of mines (ha)
Quarry	0.253	0.324	0.531
Road	0.008	0.004	0.004

Safety Zone Plantation	--	0.428	0.428
Total area in use	0.261	0.756	0.963
Unused Area	0.702	0.207	--
Total Lease Hold Area	0.963	0.963	0.963

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.428 ha	1070
2	Along Approach Road	0.705 km	50

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

Solid Waste Management

Total 5015.00 cum or 13540.5 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 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 Mahajori Stone Mine of Partners : (1) Sri Shatrughan Mandal (2) Sri Manoj Kumar Mandal & (3) Sri Raghunandan Sah, Village : Mahajori, P.S. : Margomunda, Distt. : Deoghar, Jharkhand (0.963 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.




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6. 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 /424331 /2023).

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

Expansion has been proposed to an existing project which has been taken for appraisal on 15.04.2023.

Project Category: B2 – Application for Environment Clearance (Expansion)

EC Application for: Existing Capacity - 26838.14 cum/annum or 72463 MTPA

After Expansion Capacity - 75582.95 cu.m/annum or 204074.0 MTPA

The Medki Stone Mine has been previously granted for Environment clearance on 30.11.2015 with production capacity 26838.14 cum/annum or 72463 MTPA. Now, the proposal has been applied for the Environment clearance (Expansion, Category B2) under production capacity of 75582.95 cu.m/annum or 204074.0 MTPA within same mining lease area.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Medki Stone Mine (2.024 ha. or 5.00 Acre)
2	Lessee:	: M/S BHAGWATI STONE CRUSHER Partner- Sri Manoj Kumar S/O Late Shri Danbir Prasad New Colony Nimdih, Chaibasa District- West Singhbhum, State- Jharkhand
3	Lease Address	: Village – Medki, P.O.- Dholadih, P.S.- Rajnagar, District – Saraikela-Kharsawan, Jharkhand
4	Lease Area	: 2.024 ha Acres- 5.0 Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: Rs. 40 Lakhs
7	EMP Budget	: Capital: 6.25 Lakhs Recurring: 3.27 Lakh / year
8	New or Expansion	: Expansion
9	Mineable Reserves	: Cum.: 302256.74 cum Tonnes: 816093.22 tons
10	Mine Life	: 04 years
11	Man power	: 29
12	Water Requirement	: 9.90 KLD(Drinking: 0.29 KLD, Dust Suppression: 5.64 KLD, Plantation: 3.90 KLD)
13	Water Source	: From Nearby villages by tankers
14	DG Set / power	: 500 kVA
15	Crusher	: With crusher
16	Nearest Water Body	: Kharkai River, 0.12 km, West direction

(Handwritten signatures and initials are present below the table)

17	Nearest Habitation	:	Medki, 0.800 km
18	Nearest Rail Station	:	Chaibasa Railway station, approx. 11.70 km towards SW direction.
19	Nearest Air Port	:	Birsa Munda Airport Ranchi, approx. 97.30 km towards NW direction.
20	Nearest Forest	:	Fairly Dense Mixed Jungle, approx. 0.25 km, East direction Protected Forest near Khunti, approx. 4.80 km, West direction Protected Forest near Village Soso, approx. 4.90 km, SSW direction
21	Road & Highways	:	NH- 220, Approx. 2.50 km, SE direction

CO-ORDINATES

1	Latitude	From 22°36'11.05" N	To 22°36'16.86" N
2	Longitude	From 85°54'53.15" E	To 85°55'03.32" E

LAND DETAILS :

Khata No.	Plot No.
55	703 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Lease deed (valid from 16.12.2021 to 18.06.2026)
2	CO	:	The CO, Rajnagar vide letter no. : 1172, dated 02.12.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatyan & Register II and also mentioned that the distance of River is 170 m from proposed project site, accordingly PP has submitted in the EMP that Check Dam, Siltation Ponds, Garlain Drains will be constructed to prevalent any effluent or storm water going from the mine site to any water body out side of the mine lease area.
3	DMO	:	DMO, Seraikela Kharsawan vide letter no. 845/M, dated 19.11.2022 certified that 01 other mining lease area (4.08 acre) exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. : 1699, dated 26.11.2022 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.

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5	DFO Forest Distance	:	DFO, Seraikela Forest Division vide letter no. : 2340, dated 26.11.2022 certified that the distance of notified forest is more than 250 m from proposed project site.
6	DSR	:	The project is already mentioned in District Survey Report (DSR) of District Seraikela Kharsawan.
7	Gram Sabha	:	Gram Sabha conducted on 18.11.2021.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide memo no. 90/G, dated 20.06.2022.
9	Previous EC	:	Previous EC granted by SEIAA, Jharkhand vide letter no. EC/SEIAA/2015-16/1181/2015/2003, dated 30.11.2015.
10	Consent to Establish (CTE) Consent of Operate (CTO)	:	i. CTE granted by JSPCB vide Memo No. : 3269, dated 01.07.2008. ii. CTO granted by JSPCB vide Ref. No. : JSPCB/HO/RNC/CTO-12713086 /2022/530, dated 28.04.2022.
11	Compliance report	:	The PAs requested IRO, Ranchi MoEF&CC vide letter dated 29.07.2022 to certify the compliance status of EC conditions. As no response was received from IRO, Ranchi MoEF&CC, the compliance status of the conditions of EC has been certified by Regional Officer, Dumka, Jharkhand State Pollution Control Board vide compliance report dated 28.11.2022.
12	Production Figures	:	DMO, Seraikela-Kharsawan vide letter no. 909/M, dated 29.12.2022
13	Transfer of EC	:	Transfer of EC granted by SEIAA vide letter no. : 466, dated 24.03.2023.

- 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.

Working Details

1	Mining Method	:	Opencast other than fully Mechanized Mining method
2	Quarry Area	:	5 years- 1.424 ha Life of Mine - 04 years
3	Waste Generation	:	5 years- 15908.25 cum or

(Handwritten signatures and initials are present below the table)

			42952.275 tons
4	Stripping Ratio	:	1: 0.05
5	Working Days	:	300
6	Benches: size & No	:	9m
7	Elevation of Mine	:	192 AMSL to 201 AMSL
8	Ground Level Elevation	:	192 AMSL
9	Ultimate Working Depth	:	175 AMSL
10	Water Table	:	152 AMSL (40mbgl)
11	Topography of Mine	:	Area represents a hillock of stone
12	Explosive Requirement	:	90 kg/day
13	Diesel/Fuel requirement	:	130 litre/day

Production Details

Year	Production of stone (T)	Production of stone (Cum)	Waste Generation (Cum)	Bench RL in Meters
7 th	203940.60	75533.55	3975.45	193mRL - 197mRL
8 th	204045.80	75572.50	3977.50	181mRL - 187mRL
9 th	204032.90	75567.75	3977.25	181mRL - 187mRL
10 th	204074.00	75582.95	3978.05	175mRL - 181mRL
Total	816093.30	302256.75	15908.25	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan Period (Ha)	At Conceptual Period (Ha)
Excavation	0.847	1.424	1.424
Waste Dump	0.140	0.000	0.000
Road	0.007	0.000	0.000
Infrastructure	0.030	0.000	0.000
Plantation (Green Belt)	0.600	0.600	0.600
Total Area	1.624	2.024	2.024
Balanced Unused area	0.400	0.000	0.000
Total	2.024	2.024	2.024

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.600 ha	1750
2	Approach Road		0.940 km	200

Solid Waste Management

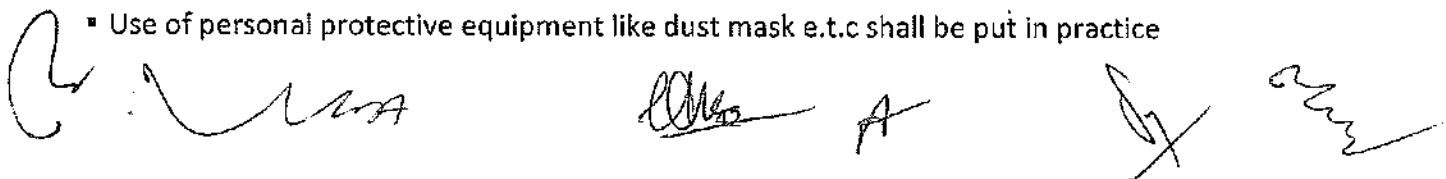
- Waste Generation will be 15908.25 cum or 42952.275 tons during the plan period. After plan period the proposed waste shall be backfilled on the South-Eastern side of mined out quarry. The Waste available for backfilling will cover 0.100 ha of exhausted area.

Water Quality Management

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

Air Quality Management

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



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

Undertaking submitted affirming:

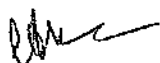
- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are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

During the presentation the following documents were sought :

- i. Detail EMP was asked for protection of the Kharkai River, Risk & Hazards involved in the mining process.

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 Medki Stone Mine of M/s Bhagwati Stone Crusher, Village : Medki, P.O. : Dholadih, P.S. : Rajnagar, Distt. : Saraikela-Kharsawan, Jharkhand (2.024 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.



17	Nearest Habitation	:	Medki, 0.800 km
18	Nearest Rail Station	:	Chaibasa Railway station, approx. 11.70 km towards SW direction.
19	Nearest Air Port	:	Birsa Munda Airport Ranchi, approx. 97.30 km towards NW direction.
20	Nearest Forest	:	Fairly Dense Mixed Jungle, approx. 0.25 km, East direction Protected Forest, approx. 4.80 km, West direction Protected Forest, approx. 4.90 km, SSW direction
21	Road & Highways	:	NH- 220, Approx. 2.50 km, SE direction

CO-ORDINATES

1	Latitude	From 22°36'11.30" N	To 22°36'14.54" N
2	Longitude	From 85°54'54.18" E	To 85°55'04.37" E

LAND DETAILS :

Khata No.	Plot No.
55	703 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Lease deed (valid from 16.12.2021 to 11.10.2027).
2	CO	:	The CO, Rajnagar vide letter no. : 1171, dated 02.12.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II and also mentioned that the distance of River is 170 m from proposed project site, accordingly PP has submitted in the EMP that Check Dam, Siltation Ponds, Garlain Drains will be constructed to prevalent any effluent or storm water going from the mine site to any water body out side of the mine lease area.
3	DMO	:	DMO, Seraikela Kharsawan vide letter no. 846/M, dated 19.11.2022 certified that 01 other mining lease area (5.00 acre) exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. : 1696, dated 26.11.2022 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.

5	DFO Forest Distance	:	DFO, Seraikela Forest Division vide letter no. : 2339, dated 26.11.2022 certified that the distance of notified forest is more than 250 m from proposed project site.
6	DSR	:	The project is already mentioned in District Survey Report (DSR) of District Seraikela Kharsawan.
7	Gram Sabha	:	Gram Sabha conducted on 18.11.2021.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide memo no. 92/G, dated 20.06.2022.
9	Previous EC	:	Previous EC granted by DEIAA, Seraikela vide letter no. EC/DEIAA/Seraikela/ 2017-2018/75/DEIAA, dated 26.08.2017.
10	Consent to Establish (CTE) & Consent of Operate (CTO)	:	<ul style="list-style-type: none"> i. CTE granted by JSPCB vide Ref. No. : JSPCB/HO/RNC/CTE-2122580 /2018/453, dated 28.04.2018. ii. CTO granted by JSPCB vide Ref. No. : JSPCB/HO/RNC/CTO-13293437 /2022/1090, dated 03.08.2022.
11	Compliance report	:	The PAs requested IRO, Ranchi MoEF&CC vide letter dated 29.07.2022 to certify the compliance status of EC conditions. As no response was received from IRO, Ranchi MoEF&CC, the compliance status of the conditions of EC has been certified by Regional Officer, Dumka, Jharkhand State Pollution Control Board vide compliance report dated 28.11.2022.
12	Production Figures	:	DMO, Seraikela Kharsawan vide letter no. 910/M, dated 29.12.2022
13	Transfer of EC	:	Transfer of EC granted by SEIAA vide letter no. : 455, dated 24.03.2023.

Working Details

1	Mining Method	:	Opencast other than fully Mechanized Mining method
2	Quarry Area	:	5 years– 1.131 ha
3	Waste Generation	:	5 years– 8194.75 cum or 22125.825 tons
4	Stripping Ratio	:	1: 0.05
5	Working Days	:	300
6	Benches: size & No	:	9m
7	Elevation of Mine	:	192 AMSL to 201 AMSL
8	Ground Level Elevation	:	192 AMSL
9	Ultimate Working	:	175 AMSL

	Depth		
10	Water Table	:	152 AMSL (40mbgl)
11	Topography of Mine	:	Area represents a hillock of stone
12	Explosive Requirement	:	80 kg/day
13	Diesel/Fuel requirement	:	110 litre/day

Production Details

Year	Production of stone (T)	Production of stone (Cum)	Waste Generation (Cum)	Bench RL in Meters
6 th	84267.95	31210.35	1642.65	199mRL - 201.6mRL
7 th	84273.06	31212.25	1642.75	193mRL - 198mRL
8 th	84423.13	31267.83	1645.67	193mRL - 196.20mRL
9 th	84198.69	31184.70	1641.30	187mRL - 192.6mRL
10 th	83227.84	30825.13	1622.38	181mRL - 187mRL
Total	420390.67	155700.26	8194.75	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan Period (Ha)	At Conceptual Period (Ha)
Excavation	0.194	1.131	1.131
Waste Dump	0.196	0.000	0.000
Road	0.050	0.000	0.000
Infrastructure	0.000	0.000	0.000
Plantation (Green Belt)	0.520	0.520	0.520
Total Area	0.960	1.651	1.651
Balanced Unused area	0.691	0.000	0.000
Total	1.651	1.651	1.651

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.629 ha	1573
2	Approach Road		0.940 km	200

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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 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

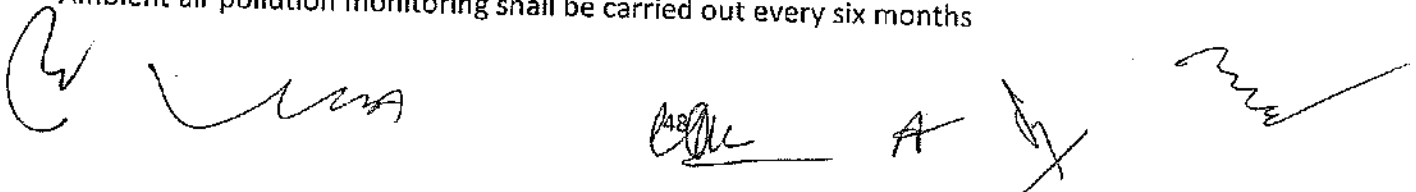
- Waste Generation will be 8194.75 cum or 22125.825 tons during the plan period. After plan period the proposed waste shall be backfilled on the Eastern side of mined out quarry. The Waste available for backfilling will cover 0.109 ha of exhausted area.

Water Quality Management

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

Air Quality Management

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

During the presentation the following documents were sought :

- i. Detail EMP was asked for protection of the Kharkai River, Risk & Hazards involved in the mining process.

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 Medki Stone Mine of M/s Bhagwati Stone Crusher, Village : Medki, P.O. : Dholadih, P.S. : Rajnagar, Distt. : Saraikela-Kharsawan, Jharkhand (1.651 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.



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8. Mahuari Stone Deposit of Sri Lav Kumar Singh, Village : Mahuari, Thana : Naudiha Bazar, Thana no. : 180, Distt. : Palamu, Jharkhand (0.64 Ha).

(Proposal No. : SIA/JH/MIN/ 424205/2023).

Name of the Consultant: M/s P & M Solution, Noida, Uttar Pradesh.

This is a new project which has been taken for appraisal on 15.04.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 4503 Cu.M. / year i.e 12,158.10 Tonnes / year

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Mahuari Stone Deposit
2	Applicant Address:	: Sri Lav Kumar Singh S/o – Late Jagpat Singh At Village – Sultani, P.O. – Babhandi, P.S. – Hariharganj, District - Palamu, State – Jharkahnd, Pin Code – 822 113
3	Applied Lease Address :	: In Mouza- Mahuari, Thana - Naudiha Bazar, Thana Number - 180, District - Palamu, Jharkhand.
4	Applied Area	: Ha: 0.64 Hectares Acres: 1.60 Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: 60 Lakhs
7	EMP Budget	: Capital: 15.98 Lakhs Recurring: 4.72 Lakh / year
8	CSR / CER Budget	: Rs. 1.20 Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: Cu.M.: 44,069.55 Cu. M. Tonnes: 1,18,987.79 Tonnes
11	Mine Life	: 9.8 years
12	Man power	: 23
13	Water Requirement	: 35.73 KLD Dust Suppression: 29 KLD, Drinking: 0.92 KLD, Plantation: 5.81 KLD
14	Water Source	: From nearby authorized sources.
15	DG Set / power	: 60 KVA
16	Crusher	: No
17	Nearest Water Body	: Batane River is flowing near about 0.70 Km away in the West direction from the applied area.
18	Nearest Habitation	: Mahuari village is situated approx. 0.74 Km aerial distance away in South East direction.
19	Nearest Rail Station	: Japla Railway Station is situated approx. 29.92 Km aerial distance away in West direction.
20	Nearest Air Port	: Gaya International Airport, Gaya, Bihar is situated approx. 76.08 Km aerial distance away in North East direction.
21	Nearest Forest	: More than 400m away from the proposed project.
22	Road & Highways	: Approach Road: Naudiha – Pathra Road is approx. 2.68 Km away in

(Handwritten signatures and initials)

		East direction. Highway: NH-139 is about 5.27 Km aerial distance away in West direction.
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CO-ORDINATES

1	Latitude	:	From N 24°26'02.3650"	To N 24°26'05.6267"
2	Longitude	:	From E 84°16'31.5668"	To E 84°16'35.0858"

LAND DETAILS :

Khata No.	Plot no.
34	31

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Palamu vide letter no. 254/M, dated 28.02.2019.
2	CO	:	The CO, Naudiha Bazar (Palamu) vide letter no. : 18, dated 17.03.2018 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyon.
3	DMO	:	DMO, Palamu vide memo no. 1561/M, dated 17.10.2019 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wildlife	:	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. : 2039, dated 06.09.2019 certified that the proposed project site is outside Eco Sensitive Zone of Palamau Wildlife Sanctuary, Betla National Park and Mahuadanr Wolf Sanctuary.
5	DFO Forest Distance	:	DFO, Medininagar Forest Division vide letter no. : 1635, dated 03.04.2018 certified that the distance of notified forest is 400 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Palamu, Medininagar vide letter no. 384/M, dated 17.02.2023 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	:	Gram Sabha conducted on 10.04.2018.

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8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide letter no. 353/G, dated 14.01.2021.
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Working Details

1	Mining Method	: Opencast Semi-Mechanized Mining.
2	Quarry Area	: 5 years – 0.36 Ha Life of Mine – 0.393 Ha
3	Waste Generation	: 5 years– 6,162.15 Cu.M (Gritty Soil & Intercalated Waste) Life of Mine – 8,895.3 Cu.M (Gritty Soil & Intercalated Waste)
4	Stripping Ratio	: 1 : 0.10
5	Working Days	: 300 Days
6	Benches: size & No	: Size: (3m x 3m 1st bench) (6m x 6m – next 2 benches)
7	Elevation of Mine	: Highest RL 235m AMSL, Lowest RL 225m AMSL
8	Ground Level Elevation	: 225m AMSL
9	Ultimate Working Depth	: 220m AMSL
10	Water Table	: 207m AMSL
11	Topography of Mine	: Sloping land.
12	Explosive Requirement	: 6.38 Tons/year
13	Diesel/Fuel requirement	: 42 KL/year (140 Litres/day)

Production Details

Year	Production of stone		Removal of Gritty Soil (Cum)	Intercalated Waste Generation (CuM)	Bench RL in Meters
	(Cum)	(Tonne)			
1st Year	4503.00	12158.10	1557.00	237.00	235m – 226m
2nd Year	4451.70	12019.59	1122.00	234.30	232m – 226m
3rd Year	4414.65	11919.56	1173.00	232.35	232m – 226m
4th Year	4488.75	12119.63	Nil	236.25	232m – 226m
5th Year	4488.75	12119.63	1134.00	236.25	232m – 220m
Total	22346.85	60336.51	4986.00	1176.15	

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	0.36	0.393	0.087	Backfill
					0.194	Water body
					0.112	Dead bench Plantation

2	Green Belt Within Safety Barrier	Nil	0.245	0.245	0.245	Plantation
3	Road	0.03	0.002	0.002	0.002	Public Use
4	Dumping	Nil	0.030	Nil	--	--
5	Unutilized	0.61	0.003	Nil	Nil	-
	TOTAL	0.64	0.64	0.64	0.64	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.245 Ha	613 trees @ 2500 trees per Ha
2	Dead Bench	:	0.112 Ha	280 trees @ 2500 trees per Ha
3	Haul /Approach Road	:	0.536 Ha i.e. Length 2.68km width 2m	2460 trees on both sides – 3m distance

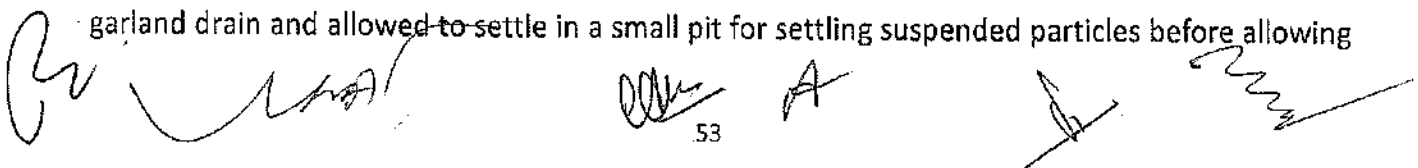
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, 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 (Gritty Soil & Intercalated Waste) Generation will be 8,895.3 Cu.M. during the life of Mine.
- The area is covered with a layer of gritty soil. During quarry development in plan period gritty soil and intercalated waste materials will be removed and this will be temporarily dumped at the North East part of the applied area with suitable precautions & in conceptual period total removal gritty soil, intercalated waste and existing dumped materials 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

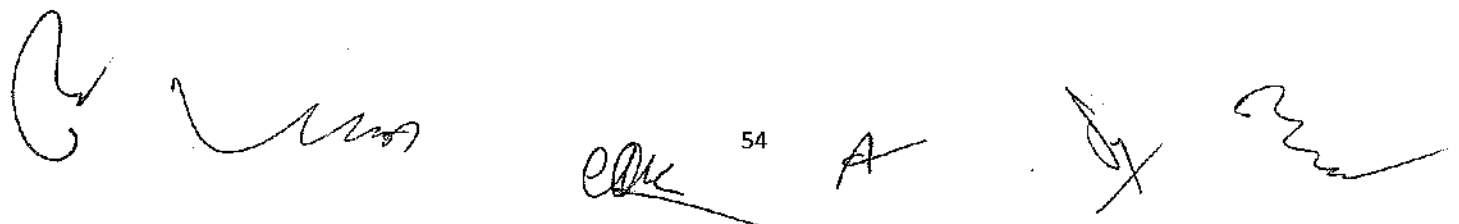
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

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 District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
- d. The Boundary Pillars of the proposed mine lease area will be maintained properly.
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

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- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. 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 Mahuari Stone Deposit of Sri Lav Kumar Singh, Village : Mahuari, Thana : Naudiha Bazar, Thana no. : 180, Distt. : Palamu, Jharkhand (0.64 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

9. Kadaiya Stone Deposit of M/s S.B.A Minerals, Village : Kadaiya, Circle : Tundi, Distt. : Dhanbad, Jharkhand (2.306 Ha).

(Proposal No. : SIA/JH/MIN/ 425397/2023).

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 55555.80 cu.m/annum or 150000.68 TPA

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

This is a new project which has been taken for appraisal on 15.04.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Kadaiya Stone Deposit
2	Lessee:	: M/s S.B.A Minerals (Partners- Sri Santosh Kumar Munshi, Sri Binod Kumar & Sri Ankit Kumar Singh)
3	Lease Address	: M/S S.B.A. MINERALS Partner- 1. Sri Santosh Kumar Munshi, S/O- Rajendra Prasad Munshi, AT/P.O-Dalludih, P.S-Rajganj, District-Dhanbad. 2. Sri Binod Kumar, Ward no-04, Nagarkhara Jalwabad, P.O/P.S-Koderma, District-Koderma. 3. Sri Ankit Kumar Singh, S/O-Sri Manoj Kumar Singh Plot no-9D, Co-operative colony, Anand Clinic, Kalakusuma, District-Dhanbad.
4	Lease Area	: 2.306 ha Acres- 5.70 Acres

5	Type of Land	:	Non Forest – Raiyati Land
6	Project Cost	:	Rs. 40Lakhs
7	EMP Budget	:	Capital: 4.8875 Lakhs Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.80 Lakhs
9	New or Expansion	:	New
10	Mineable Reserves	:	cum.: 272988.8 cum Tonnes: 737069.76 tons
11	Mine Life	:	4.91 ~ 05 years
12	Man power	:	22
13	Water Requirement	:	10 KLD(Drinking: 0.22 KLD, Dust Suppression: 4.95 KLD, Plantation: 4.78 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	200 KVA
16	Crusher	:	No crusher
17	Nearest Water Body	:	Khudia Nadi at a distance of 5.73 Km in SE direction.
18	Nearest Habitation	:	Kadaiya, at 490 meters
19	Nearest Rail Station	:	Dhanbad Railway station, approx. 12.40 km towards S direction.
20	Nearest Air Port	:	Dhanbad Airport, approx. 7.60 km towards S direction.
21	Nearest Forest	:	Reserve Forest - Approx. 4.60 km towards NE direction of mine site. Simra Hill - Approx. 3.70 km towards North direction of mine site.
22	Road & Highways	:	SH – 13 - Approx. 8.50 km in East direction NH – 19 Approx. 5.75 km in South direction.

CO-ORDINATES

1	Latitude	From 23°54'10.60" N	To 23°54'18.13" N
2	Longitude	From 86°26'02.79" E	To 86°26'15.54" E

LAND DETAILS :

Khata No	Plot No
23	223, 224, 225, 226, 227, 479 & 480
24	472
189	478

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Dhanbad vide letter no. 22/M, dated 05.01.2023.
2	CO	:	The CO, tundi (Dhanbad) vide letter no. : 587, dated 18.11.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Dhanbad vide memo no. 218/M, dated 14.02.2023 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. : 1749, dated 03.09.2022 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Forest Distance	:	DFO, Dhanbad Forest Division vide letter no. : 1971, dated 30.08.2022 certified that the distance of reserved / protected forest is 1600 m from proposed project site.
6	DSR	:	The DC, Dhanbad vide letter no. 205/M, dated 13.02.2023 has informed that this project is part of District Survey Report (DSR) of Dhanbad district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 22.11.2022.
8	Mine Plan Approval	:	Disstrict Mining Office, Koderma vide memo no. 583/M dated 18.03.2023.

Working Details

1	Mining Method	:	Opencast other than fully mechanized (OTFM) Method
2	Quarry Area	:	2.306 ha. Or 5.70 Acres Life of Mine – 4.91 ~ 05 years
3	Waste Generation	:	23346 .19 cum or 63034.713 tons
4	Stripping Ratio	:	1: 0.034
5	Working Days	:	300
6	Benches: size & No	:	6m to width not less than 10m
7	Elevation of Mine	:	346 AMSL to 332 AMSL
8	Ground Level Elevation	:	312 AMSL
9	Ultimate Working Depth	:	222 AMSL
10	Water Table	:	212 AMSL (20 mbgl)

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11	Topography of Mine	:	Area represents undulating topography
12	Explosive Requirement	:	110 kg/day
13	Diesel/Fuel requirement	:	110 litre/day

Production Details

Year	Production of stone (cum)	Production of stone (tons)	Total Waste in (cum)	Bench RL in Meters
1 st	55555.80	150000.68	5133.79	228mRL - 240mRL
2 nd	55555.80	150000.68	3693.79	222mRL - 240mRL
3 rd	55555.31	149999.36	4983.78	222mRL - 234mRL
4 th	55555.22	149999.09	5133.78	222mRL - 234mRL
5 th	50766.45	137069.42	4401.05	222mRL - 234mRL
Total	272988.58	737069.23	23346.19	

Land Use

Type of Land Use	Existing (ha)	During Plan Period (ha)	During Conceptual Period/after closure of mines (ha)
Excavation	--	1.366	1.366 (0.1 ha area shall be Backfilled, 0.715 Ha. Converted in to water Reservoir for Rain Water Harvesting, 0.551 ha. shall be left as dead bench)
Road	--	--	--
Waste Dump	--	--	--
Safety Zone (Plantation)	--	0.94 (Within Safety Zone)	0.94 (Within Safety Zone)
Total	--	2.306	2.306
Untouched Area	2.306	-	-
Total Lease Hold Area	2.306	2.306	2.306

ENVIRONMENT MANAGEMENT
Green Belt Development

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S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.94 ha	2350
2	Along Approach Road	0.043 km	43

- 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 23346.19 cum or 63034.713 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 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 Kadaiya Stone Deposit of M/s S.B.A Minerals, Village : Kadaiya, Circle : Tundi, Distt. : Dhanbad, Jharkhand (2.306 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

10. Hathigarh Stone Mine of M/s Jharkhand Stone Works (Prop. : Md. Zahoor Alam), Village : Hathigarh, P.S. : Littipara, Distt. : Pakur, Jharkhand (2.14 Ha).

(Proposal No. : SIA/JH/MIN/ 425158/2023).

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

This is a new project which has been taken for appraisal on 15.04.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 77550.0 cum/annum or 209385 TPA

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Project and Location Details :

S. No.	Parameter	Details	
1	Project Name	: Hathigarh Stone Mine	
2	Lessee:	: M/S JHARKHAND STONE WORKS (Prop.- Md. Zahoor Alam)	
3	Lease Address	: At + PO - Haridanga Bazar, District- Pakur, State – Jharkhand	
4	Lease Area	: 2.14 ha	Acres- 5.28 Acres
5	Type of Land	: Non Forest – Raiyati Land	
6	Project Cost	: Rs 40 Lakhs	
7	EMP Budget	: Capital: 5.0 Lakhs	Recurring: 3.27 Lakh / year
8	New or Expansion	: New	
9	Mineable Reserves	: Cum: 772500 cum	Tonnes: 2085750.0 tons
10	Mine Life	: 10 years	
11	Man power	: 20	
12	Water Requirement	: 10.50 KLD (Drinking: 0.20 KLD, Dust Suppression: 6.67 KLD, Plantation: 3.60 KLD)	
13	Water Source	: From Nearby villages by tankers	
14	DG Set / power	: 500 kVA	
15	Crusher	: Nil	
16	Nearest Water Body	: Torai Nadi, 4.80 km, S direction. Gumani Nadi 9.50 km, N direction.	
17	Nearest Habitation	: Hathigarh, 0.60 km	
18	Nearest Rail Station	: Pakur Railway station, approx. 18.0 km in South East direction	
19	Nearest Air Port	: Deoghar Airport, Deoghar approx. 108.0 km in SW direction	
20	Nearest Forest	: Guma Pahar Protected Forest, Approx. 5.50 km. in NW direction. Protected Forest, Approx. 1.50 km. in ESE direction. Protected Forest, Approx. 3.50 km. in ESE direction.	
21	Road & Highways	: NH-133A, Approx. 0.40 km. in East direction.	

CO-ORDINATES

1	Latitude	From 24°43'58.64"N	To 24°44'02.37"N
2	Longitude	From 87°42'30.34"E	To 87°42'35.87"E

LAND DETAILS :

Khata No.	Plot No.
14	623 (P)
78	624 (P)
90	625 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Pakur vide memo no. 89/M, dated 21.01.2022.
2	CO	:	The CO, Littipara vide letter no. : 478/Ra, dated 24.09.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar.
3	DMO	:	DMO, Pakur vide memo no. 401/M, dated 11.03.2022 certified that there are two other mining lease area (2.50 acre & 3.00 acre) exists within 500 m radius from proposed project site and total area is 10.78 acre / 4.36 ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribag vide letter no. : 1896, dated 01.11.2021 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. : 818, dated 28.05.2021 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. 573/M, dated 18.03.2023 has informed that this project is identified as a potential resource area for stone mining on page no. 82, Serial no. 13 of District Survey Report (DSR) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Littipara vide letter no. 1154/Vi, dated 03.11.2021 has informed that Gram Sabha conducted on 29.10.2021.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. 259/G, dated 27.09.2022.

Working Details

1	Mining Method	:	Opencast semi mechanized Mining method
2	Quarry Area	:	5 years-- 0.818 ha Life of Mine – 10 years
3	Waste Generation	:	5 years-- 4397.0 cum or 11871.90 tons
4	Stripping Ratio	:	1: 0.05
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	89 AMSL to 86 AMSL
8	Ground Level Elevation	:	86 AMSL
9	Ultimate Working Depth	:	60 AMSL
10	Water Table	:	50 AMSL (15 mbgl)
11	Topography of Mine	:	Area represents an undulating topography.
12	Explosive Requirement	:	80 kg/day
13	Diesel/Fuel requirement	:	110 litre/day

Production Details

Year	Production of stone (Tons)	Production of stone (Cum)	Waste Generation (Cum)	Bench Amsl in Meters
1 st	200475.00	74250.00	2147.00	89 mRL – 84 mRL
2 nd	202500.00	75000.00	2250.00	89 mRL – 84 mRL
3 rd	208575.00	77250.00	--	84 mRL – 78 mRL
4 th	209385.00	77550.00	--	84 mRL – 78 mRL
5 th	209385.00	77550.00	--	78 mRL – 72 mRL
Total	1030320.00	381600.00	4397.00	

Land Use

Pattern of Utilization	Existing (Ha)	During Plan Period (ha)	After Life of Mine (ha)
Quarry	--	0.818	1.478
Road	0.010	(Comes under quarry)	(Comes under quarry)
Safety Zone Plantation	--	0.662	0.662

Total area in use	0.010	1.480	2.14
Unused Area	2.13	0.660	--
Lease hold area	2.14	2.14	2.14

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.662 ha	1655
2	Haul /Approach Road	:	0.560 km	145

- About 1800 no. of plant of different species will be planted.
- 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 4397.0 cum or 11871.90 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

A

prevent water flowing into the lease area from outside or from inside the lease area to the outside

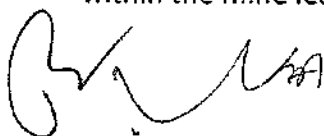
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

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.



11	Man power	:	30
12	Water Requirement	:	7.70 KLD
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	500 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Torai River , Approx. 5.0 km towards SW direction of mine site.
17	Nearest Habitation	:	Gumani, Approx. 7.80 km towards NNE direction.
18	Nearest Rail Station	:	Kotalpukur Railway station, approx. 7.70 km toward ENE direction.
19	Nearest Air Port	:	Birsa Munda Airport, approx. 292.0 km towards SW direction
20	Nearest Forest	:	Dense Mixed Forest near Gumani- Approx. 6.50 km towards N direction of mine site Protected Forest near Bhandaro Village- Approx. 1.60 km towards W direction of mine site
21	Road & Highways	:	NH-114 A- NH-114A, Approx. 4.20 km. in West direction

CO-ORDINATES

1	Latitude	From 24°43'00.34 N	To 24°43'07.53" N
2	Longitude	From 87°45'04.11" E	87°45'06.69" E

LAND DETAILS

Khata No.	Plot No.
12	106(P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The LOI has been issued by DMO, Pakur vide letter no. 651/M, dated 11.04.2022.
2	CO	:	The CO, Hiranpur vide letter no. 483/Ra, dated 21.09.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.
3	DMO	:	DMO, Pakur vide memo no. 2182/M, dated 14.10.2022 certified that there are no other lease area exists within 500 m radius from proposed project area.

4	DFO Wildlife	:	DFO –cum- Incharge Wildlife Sanctuary, Udhwa Sahibganj vide letter no. 1938, dated 23.07.2022 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. 1052 dated 14.07.2021 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 573/M, dated 18.03.2023 has informed that this project is identified as a potential resource area for stone mining on page no. 118, Serial no. 28 of District Survey Report (DSR) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Hiranpur vide letter no. 731/VI, dated 07.10.2021 informed that Gram Sabha conducted on 01.10.2021.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide memo no. 209/G, dated 29.08.2022.

WORKING DETAILS

1	Mining Method	:	Opencast Semi - Mechanized method
2	Quarry Area	:	At plan period - 1.036 Ha. At conceptual 1.906 ha
3	Waste Generation	:	4800.00 Cum
4	Stripping Ratio	:	1:0.02
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	55 AMSL to 53 AMSL
8	Ground Level Elevation	:	43 AMSL
9	Ultimate Working Depth	:	47AMSL
10	Water Table	:	43 AMSL (10 mbgl)
11	Topography of Mine	:	Undulating topography
12	Explosive Requirement	:	70 kg/day
13	Diesel/Fuel requirement	:	110 litre/day

PRODUCTION DETAILS

Year	Production of Stone		Waste (cum)	Bench RL in Meters
	(in Tones)	(in cum)		
1st	124200.0	46000.0	48*100= 4800.0	53 mRL – 49 mRL

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2nd	129600.0	48000.0	-	49 mRL – 43 mRL
3rd	130950.0	48500.0	-	49mRL – 37 mRL
4th	131085.0	48550.0	-	43 mRL – 31 mRL
5th	130950.0	48500.0	-	37 mRL – 25 mRL
Total	646785.0	239550.0	4800.0	

Land Use

Pattern of Utilization	Existing (Ha)	During Plan Period (Ha)	After Life of Mine (Ha)
Quarry	--	1.036	1.906
Road	0.012	0.003	0.003 (0.009 comes under quarry)
Safety Zone Plantation	--	0.474	0.474
Total area in use	0.012	1.513	2.383
Unused Area	2.371	0.870	--
Lease hold area	2.383	2.383	2.383

ENVIRONMENT MANAGEMENT

Green Belt Development

Type	Area	No of Trees
Safety zone plantation	0.474 Ha	1185
Approach road	0.18 km	180
Buffer Zone consulting local authorities.	-	600

- About 1965 no. of plant of different species will be planted.
- 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 dumped at site & will be used in maintenance of village

& haul road.

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Water Quality Management

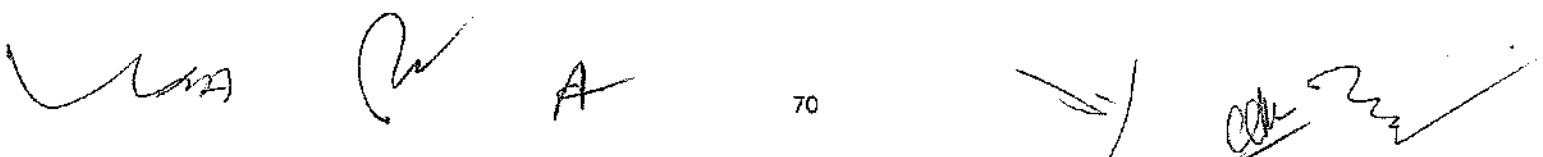
- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 2m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall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

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12	Man power	:	30
13	Water Requirement	:	9.60 KLD (Drinking: 0.30 KLD, Dust Suppression: 5.30 KLD, Plantation: 4.0 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	500 KVA.
16	Crusher	:	There is No Crusher.
17	Nearest Water Body	:	Kanli Nadi, Approx. 2.0 km towards N direction of mine site. Canal, Approx. 0.40 km towards S direction of mine site.
18	Nearest Habitation	:	Fatehpur, Approx. 0.30 km
19	Nearest Rail Station	:	Kotalpakur Railway station, approx. 4.10 km towards SE direction.
20	Nearest Air Port	:	Netaji Subhash Chandra Bose International Airport, approx. 242.0 km towards SSE direction.
21	Nearest Forest	:	Protected Forest, Approx. 1.0 km towards E direction of mine site. Protected Forest Approx. 1.5 km towards NE direction of mine site. Protected Forest Approx. 4.0 km towards ENE direction of mine site. Protected Forest Approx. 3.9 km towards SW direction of mine site
22	Road & Highways	:	NH-114A , Approx. 5.20 km. in West direction.

CO-ORDINATES

1	Latitude	From 24°44'57.27"N	To 24°45'05.42"N
2	Longitude	From 87°46'58.22" E	To 87°47'06.13" E

LAND DETAILS :

Khata No	Plot No
02	275
10	260(P), 261(P)
11	274, 279(P)
14	265(P), 263(P)
18	258(P)
20	257(P)
23	278, 277, 276(P)
24	264(P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Pakur vide letter no. 619/M, dated 06.04.2022.
2	CO	:	The CO, Hiranpur, vide letter no. : 59, dated 01.02.2022 has

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		mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	: DMO, Pakur vide memo no. 817/M, dated 02.05.2022 certified that 01 other mining lease area (5.25 acre) exists within 500 m radius from proposed project site and total area is 4.94 Ha.
4	DFO Wild Life	: DFO, Wildlife Hazaribag vide letter no. : 1923, dated 02.11.2021 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Forest Distance	: DFO, Pakur Forest Division vide letter no. : 155, dated 22.01.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	: The DC – cum – District Magistrate, Pakur vide letter no. 573/M, dated 18.03.2023 has informed that this project is identified as a potential resource area for stone mining on page no. 157, Serial no. 29 of District Survey Report (DSR) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	: BDO, Hiranpur vide memo no. 53, dated 20.01.2022 informed that Gram Sabha conducted on 28.01.2022.
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide letter no. 353/G, dated 28.10.2022.

Working Details

1	Mining Method	: Opencast other than fully mechanized (OTFM) method
2	Quarry Area	: 2.82 Ha Life of Mine – 9.93 or 10.00 years
3	Waste Generation	: 5 years– 2781.00 cum or 7,508.7 tons
4	Stripping Ratio	: 1: 0.01
5	Working Days	: 300
6	Bench: size & No	: 6m x 6m
7	Elevation of Mine	: 41 AMSL to 43 AMSL
8	Ground Level Elevation	: 10 AMSL
9	Ultimate Working Depth	: 15 AMSL
10	Water Table	: 10 AMSL
11	Topography of Mine	: Area represents almost flat terrain.
12	Explosive Requirement	: 80 kg/day

13	Diesel/Fuel requirement	:	110 Liter/day
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Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (Cum) in Plan Period	Bench RL in Meters
1st	113724.00	42120.00	2781.00	43mRL - 39mRL
2nd	117234.00	43420.00	-	39mRL - 33mRL
3rd	118638.00	43940.00	-	39mRL - 27mRL
4th	119761.20	44356.00	-	33mRL - 27mRL
5th	119761.20	44356.00	-	27mRL - 21mRL
Total	589118.40	218192	2781.00	

Land Use

Pattern of Utilization	Existing (Ha)	Plan period(Ha)	Conceptual stage (Ha)
Quarry	Nil	1.243	2.138 (Entire area will be converted into Rain water harvesting)
Road	0.006	Comes under mining	Comes under mining
Plantation	Nil	0.682	0.682
Balance	2.814	0.895	-
Total	2.82	2.82	2.82

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.682 ha	1705
2	Haul /Approach Road	:	0.32 km	320

Afforestation will be done along the barrier zone. Plantation will also be done along both sides of approach road. 2025 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.

WA *B* *A*

CAK *W*

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 2781.00 cum or 7,508.7 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

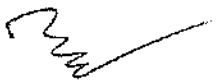
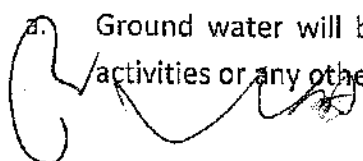
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- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be 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
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- 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 Fatehpur Stone Deposit of M/s Amar Inframech Solutions Pvt. Ltd., Village : Fatehpur, Thana : Hiranpur, Distt. : Pakur, Jharkhand (2.82 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

13. Brahmandiha Stone Deposit of M/s Jai Maa Mansa Stone Mines, Village : Brahmandiha, Circle : Topchanchi, Distt. : Dhanbad, Jharkhand (1.36 Ha).

(Proposal No. : SIA/JH/MIN/ 425734/2023).

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

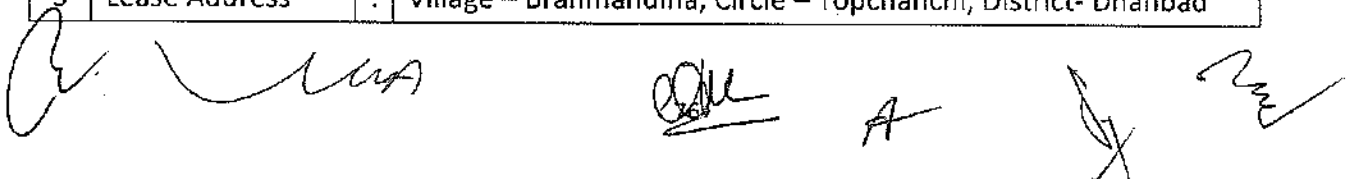
This is a new project which has been taken for appraisal on 15.04.2023.

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 22230.3 cum/annum or 60021.86 TPA

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Brahmandiha Stone Deposit
2	Lessee:	: M/S Jai Maa Mansa Stone Mines (Partners - Sri Niwas Kumar Tiwari, & Sri Shiv Ratan Sangai)
3	Lease Address	: Village – Brahmandiha, Circle – Topchanchi, District- Dhanbad



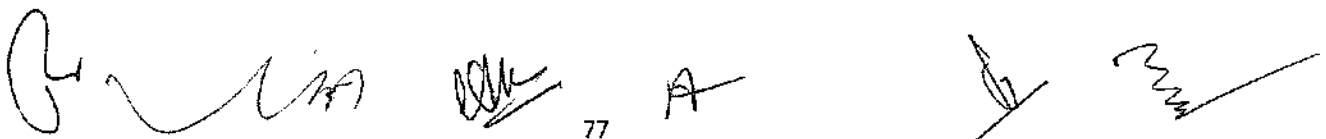
			Jharkhand
4	Lease Area	:	1.36 ha Acres- 3.37 Acres
5	Type of Land	:	Non Forest – Raiyati Land
6	Project Cost	:	Rs. 30 Lakhs
7	EMP Budget	:	Capital: 5.10 Lakhs Recurring: 3.27 Lakh / year
8	New or Expansion	:	New
9	Mineable Reserves	:	cum.: 217266.0 cum Tonnes: 586618.20 tons
10	Mine Life	:	9.77 ~ 10 years
11	Man power	:	17
12	Water Requirement	:	9.73 ~10.0 KLD(Drinking: 0.17 KLD, Dust Suppression: 6.06 KLD, Plantation: 3.5 KLD)
13	Water Source	:	From Nearby villages by tankers
14	DG Set / power	:	200 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Katri Nadi, Approx. 0.32 km towards SW direction of mine site
17	Nearest Habitation	:	Brahmandiha, at approx 0.68 km towards North direction.
18	Nearest Rail Station	:	Matari Railway station, approx. 5.33 km towards SW direction.
19	Nearest Air Port	:	Dhanbad Airport, approx.16.30 km towards ESE direction.
20	Nearest Forest	:	Tundi RF - Approx. 2.89 km towards NE direction of mine site. Nara RF - Approx. 3.67 km towards North direction of mine site.
21	Road & Highways	:	NH - 19, Approx. 0.90 km in North direction.

CO-ORDINATES

1	Latitude		From 23°52'37.69" N	To 23°52'42.55" N
2	Longitude		From 86°16'18.93" E	To 86°16'25.18" E

LAND DETAILS :

Khata No.	Plot No.
67	1113, 1114, 1115
135	1109, 1118, 1125, 1127
108	1116, 1117, 1126



 77

STATUTORY CLEARANCES :

1	LOI/Lease docs	: The Letter of Intent (LoI) has been issued by DMO, Dhanbad vide letter no. 179/M, dated 09.02.2023.
2	CO	: The CO, Topchanchi (Dhanbad) vide letter no. : 723, dated 23.12.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	: DMO, Dhanbad vide memo no. 234/M, dated 20.02.2023 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. : 1660, dated 26.08.2022 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Forest Distance	: DFO, Dhanbad Forest Division vide letter no. : 1655, dated 19.07.2022 certified that the distance of reserved / protected forest is 260 m from proposed project site.
6	DSR	: The DC, Dhanbad vide letter no. 205/M, dated 13.02.2023 has informed that this project is part of District Survey Report (DSR) of Dhanbad district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	: Gram Sabha conducted on 19.12.2022.
8	Mine Plan Approval	: District Mining Officer Lohardaga vide memo no. 293/M dated 06.04.2023.

Working Details

1	Mining Method	: Opencast other than fully mechanized (OTFM) Method
2	Quarry Area	: 0.918 ha. Or 2.26 Acres
		Life of Mine – 9.77 ~ 10 Years
3	Waste Generation	: 6287.98 cum or 16977.54 tons
4	Stripping Ratio	: 1: 0.007
5	Working Days	: 300
6	Bench: size & No	: 6m to 6m
7	Elevation of Mine	: 244 AMSL to 250 AMSL
8	Ground Level Elevation	: 244 AMSL
9	Ultimate Working Depth	: 226 AMSL
10	Water Table	: 211 AMSL (15 mbgl)
11	Topography of Mine	: Area represents hillock topography

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

Production Details :

Year	Production of stone (cum)	Production of stone (tons)	Total Waste in (cum)	Bench RL in Meters
1 st	22222.48	60000.69	2773.50	244 mRL – 244 mRL
2 nd	22226.40	60011.28	2153.60	238 mRL – 244 mRL
3 rd	22226.40	60011.28	453.60	238 mRL – 238 mRL
4 th	22226.40	60011.28	453.60	232 mRL – 238 mRL
5 th	22230.32	60021.86	453.68	232 mRL – 236 mRL
Total	111132.00	300056.39	6287.98	

Land Use

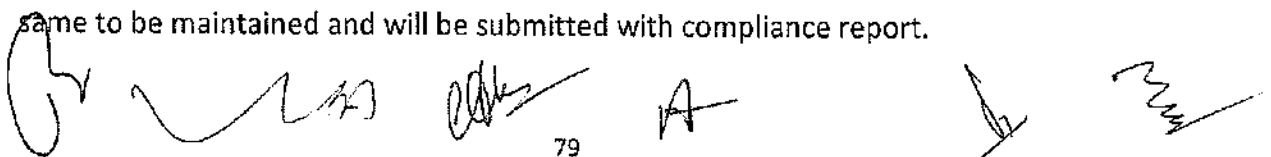
Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	-	0.646	0.918
Road	-	0.005	-
Waste Dump	-	0.067	-
Plantation (Green Belt)	-	0.445 (Within safety zone)	0.445 (Within safety zone)
Total Applied Area	-	1.36	1.36

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.445 ha	1112
2	Along Approach Road	0.640 km	640

- 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 6287.98 cum or 16977.54 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 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 Brahmandiha Stone Deposit of M/s Jai Maa Mansa Stone Mines, Village : Brahmandiha, Circle : Topchanchi, Distt. : Dhanbad, Jharkhand (1.36 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

14. Dhowadangal & Bhimpur Stone Deposit of M/s M.M. Mining (Partners : (1) Sri Kader Hossain (2) Sri Uday Kumar Singh (3) Sri Parwez Alam), Village : Dhowadangal & Bhimpur, Thana : Maheshpur, Distt. : Pakur, Jharkhand (2.97 Ha).

(Proposal No. : SIA/JH/MIN/425219/2023).

Project Category: B1 – Terms of Reference

EC Application for: Proposed Capacity- 70,110.00 cu.m/annum or 2,10,330.00 TPA

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

This is a new project which has been taken for appraisal on 15.04.2023.

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Dhowadangal & Bhimpur Stone Deposit
2	Lessee:	: M/S M.M. Mining Partners - Kader Hossain, Sri Uday Kumar Singh & Parwez Alam
3	Lease Address	: Village – Dhowadangal & Bhimpur, Thana - Maheshpur, District- Pakur, Jharkhand

4	Lease Area	:	2.97 ha	Acres- 7.35 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 50 Lakhs	
7	EMP Budget	:	Capital: 5.07 Lakhs	Recurring: 3.27 Lakh / year
8	New or Expansion	:	New	
9	Mineable Reserves	:	cum.: 698970.0 cum	Tonnes: 2096910.0 tons
10	Mine Life	:	9.96 ~10 years	
11	Man power	:	20	
12	Water Requirement	:	9.89 ~ 10.0 KLD (Drinking: 0.20 KLD, Dust Suppression: 4.79 KLD, Plantation: 4.90 KLD)	
13	Water Source	:	From Nearby villages by tankers	
14	DG Set / power	:	500 KVA	
15	Crusher	:	With crusher	
16	Nearest Water Body	:	Bansoli River, Approx. 10.0 km towards S direction of mine site.	
17	Nearest Habitation	:	Dowadangal, Approx. 1.0 km towards W direction.	
18	Nearest Rail Station	:	Ngarnabi Railway station, approx. 14.38 km toward ENE direction.	
19	Nearest Air Port	:	Deoghar Airport, approx. 104.50 km towards W direction.	
20	Nearest Forest	:	Protected Forest at approx. 2.30 km towards E direction of mine site. Protected Forest at approx. 2.50 km towards W direction of mine site Protected Forest at approx. 3.4 km towards NE direction of mine site. Open Scrub at approx. 4.50 km towards N direction of mine site.	
21	Road & Highways	:	NH-133 A, Approx. 8.60 km. in North direction. SH-18, Approx. 14.00 km. in WNW direction.	

CO-ORDINATES

1	Latitude	From 24°34'42.37"N	To 24°34'54.10"N
2	Longitude	From 87°43'29.75"E	To 87°43'42.72"E

LAND DETAILS :

Khata No.	Plot No.
13	622(P), 657(P), 658
24	661
29	03, 04, 05, 06, 07, 08, 09 (P), 10(P), 11(P), 12, 13, 17 (P), 24(P), 25, 26, 27, 28, 29(P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	: The LOI has been issued by DMO, Pakur vide letter no. 527/M, dated 25.03.2022.
2	CO	: The CO, Maheshpur vide letter no. 481/Ra, dated 05.08.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyani.
3	DMO	: DMO, Pakur vide memo no. 1319/M, dated 12.07.2022 certified that 04 other mining lease area (3.50 acre, 6.47 acre, 3.71 acre & 5.71 acre) exists within 500 m radius from proposed project area and total area is 10.82 Ha or 26.74 Acres.
4	DFO Wildlife	: DFO, Wildlife Hazaribag vide letter no. 1882, dated 01.11.2021 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Forest Distance	: DFO, Pakur Forest Division vide letter no. 1313, dated 27.08.2021 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 573/M, dated 18.03.2023 has informed that this project is part of District Survey Report (DSR) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	: BDO, Maheshpur vide letter no. 859/Vi, dated 19.07.2021 informed that Gram Sabha conducted on 17.07.2021.
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide letter no. 82/G, dated 11.06.2022.

Working Details

1	Mining Method	:	Opencast other than fully mechanized (OTFM) Method
2	Quarry Area	:	2.096 ha. or 5.17 Acres
3	Waste Generation	:	2810.00 cum or 8430.0 tons
4	Stripping Ratio	:	1:0.002
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	135 AMSL to 132 AMSL
8	Ground Level Elevation	:	132 AMSL
9	Ultimate Working Depth	:	105 AMSL
10	Water Table	:	100 AMSL (15 mbgl)
11	Topography of Mine	:	Undulating topography
12	Explosive Requirement	:	80 kg/day
13	Diesel/Fuel requirement	:	100 litre/day

Production Details

Year	Production of stone (cum)	Production of stone (tons)	Waste (cum) in plan period	Bench RL in Meters
1 st	67050.00	201150.00	1401	129mRL - 135mRL
2 nd	68850.00	206550.00	1409	129mRL - 135mRL
3 rd	69300.00	207900.00	-	123mRL - 129mRL
4 th	70110.00	210330.00	-	123mRL - 129mRL
5 th	70110.00	210330.00	-	117mRL - 123mRL
Total	345420.00	1036260.00	2810	

Land Use

Pattern of Utilization	Existing (Ha)	Plan period (Ha)	Conceptual stage (Ha)
Quarry	-	1.368	2.096
Road	0.013	-	-
Safety Zone Plantation	-	0.874	0.874

Total	0.013	2.242	2.97
Unused Area	2.957	0.728	-
Lease hold area	2.97	2.97	2.97

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	Location	Area/Length	No of Trees
1	Safety Zone	0.874 ha	2185
2	Along Approach Road	0.070 km	70

- 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 2810.00 cum or 8430.0 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 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.

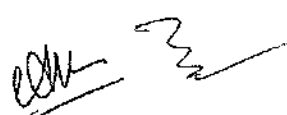
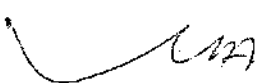
Air Quality Management

- 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 information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 14, 15, 16, 17 & 18.04.2023, 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 V.



Day 3 : April 16th , 2023 [Sunday]

Consideration of Proposals

1. Amendment of ToR for 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 1x10 T Induction Furnace and Modernization of Existing Induction Furnace from 1x8 T to 1x10 T with 1x1 Strand, 3/6 Radius CCM and now proposed to include Electroplating Machine (10 TPD x 4) by M/s Renuka Ispat Pvt. Ltd., Village : Saldaha, Tehsil : Baghmara, Distt. : Dhanbad, Jharkhand.

(Proposal No : SIA/JH/IND/298694/2023)

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

This project was granted ToR on vide letter no. EC/SEIAA/2022-23/2715/2023/368, dated 30.01.2023. Now additional **Electroplating Machine (10 TPD x 4)** have been proposed to be added and hence this proposal was appraised for amendment of ToR on 16.04.2023.

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.

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. Now the company has proposed for 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 1x 10T Induction Furnace and Modernization of Existing Induction Furnace from 1x8 T To 1x10 T With 1x1 Strand, 3/6 Radius CCM and addition of Electroplating Machine (10 TPD X 4)

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S. No	Parameters	Description
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 m3/day of domestic wastewater. The wastewaters will be treated and entirely reused. ETP capacity – 10 KLD for Electro Plating
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 125 kVA already installed (as power back-up).
4.9	Land form, Land use and land ownership	Private land, owned by M/S Renuka Ispat Private Limited

Land Details :

Sl. No.	Khata No.	Plot No.
1	02	303, 304, 305, 306, 307, 308 & 376

Latitude & Longitude of the project :

Latitude	Longitude
23° 51'32.453"N and 23°51'37.690"N	86°20'13.184"E and 86°20'19.204"E

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 31-03-2023 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		Addition of of 1x10 T & Modernization of Existing 1x8 T to 1x10 T	60,000 TPA	2x10T	60,000 TPA
2.	Continuous Casting Machine	1x1 Strand, 3/6 Radius CCM	14700 TPA		-		
						1x2 Strand, 4/7 Radius CCM	
3.	Rolling Mill	1x10TPH	13500 TPA	Rolling Mill (1x10TPH capacity)	50,000 TPA	1x10TPH	50,000 TPA
					Angle Flat Etc.	Angle Flat Etc.	Angle Flat Etc.
4.	Slag Crusher	--	3000 TPA	By 1x10 TPH	13,530 TPA	1x10 TPH	13,530 TPA
5.	Electroplating machine	--	--	10 TPD x 4		10 TPD x 4	

Note- Raw material Source in open market Mainly Zinc and HCL are Used for Electroplating.

Zinc- 35 Kg /day.

HCL- 200 lpd

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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.
Hazardous waste Generation-	ETP sludge	5Kg/day	ETP Sludge of 5 kg/day send to TSDF.

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.

Cost of the existing facilities is Rs. 4.0 Crore, the total estimated cost of the project after the proposed expansion will be Rs. 19.35 Crore.

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Private land, owned by M/S Renuka Ispat Private Limited
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)	:	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 14, 15, 16, 17 & 18.04.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I alongwith the following specific conditions :

- I. Material balance alongwith storage facilities, permission for storage necessary for use of Zinc and Hydrochloric Acid in the process of Electorplating.
- II. Detail design of effluent treatment process for presence of Zinc and Hydrochloric Acid in the effluent streams.
- III. Hazard and Operability Study (HAZOP) and Hazard Identification Risk & Assessment (HIRA) studies shall be conducted.

2. Enhancing the production of TMT bars from 27,000 TPA to 1,44,210 TPA by modernization the existing re-rolling mill and proposed production of 1,48,500 TPA of M.S. Billet by addition of 3 nos. of induction furnace of capacity 15 ton each with CCM – 2x2 strand & slag crusher 29,700 TPA by M/s Shailputri Iron and Steels Pvt. Ltd., Mauza : Ajidih, Distt. : Giridih, Jharkhand.

(Proposal No : SIA/JH/IND1 /412914/2023)

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

This is an expansion project which has been taken for appraisal on 16.04.2023.

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.

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 Shailputri Iron and Steels Private Limited
3	Brief description of nature of the project	Enhancing the production of TMT bars from 27000 TPA to 144,210 TPA by modernizing the existing re-rolling mill and proposed production of ~148500 TPA of M.S billet by addition of 3 nos. of induction furnace of capacity 15 ton each with CCM-2x2strand & slag crusher 29700 TPA .
4	Salient Features of the Project	

S. No	Parameters	Description
4.1	Proposed production capacity	The production capacity of final/end product will be 148500 TPA MS Billets 144,210 TPA TMT Bars & Rolled Products/Rods etc. Slag Crusher 29700 TPA
4.2	Total Plot Area	Total Plot Area –2.76 Acre
4.3	Location	At - Mauza -Ajidih , P S -Ajidih , District -Giridih, State- 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. 167 KLD out of which 140 KLD will be recirculated in the process and 27 KLD will be makeup water.
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 76 person
4.8	Electricity/Power requirement	The electrical power requirement will increase to ~12000 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 Shailputri Iron and Steels Private Limited

Land Details :

Khata No.	Khesra No.
28	474, 475, 476, 477, 469, 470, 471, 472 & 473
21	421
51	480
25	478
70	457
71	419, 409, 410, 411, 412, 417 & 418

Note – Additional Land Khata no. 76 , Plot no 535.

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Latitude & Longitude of the project :

Latiude	Longitude
24° 09'09.387"N and 24°09'14.525"N	86°20'25.759"E and 86°20'30.540"E

Cost of the existing facilities is Rs. 20 Crore, the total estimated cost of the project after the proposed expansion will be Rs. 80 Crore.

The unit has obtained its Consent to establish (CTE) vide ref. no. JSPCB/HO/RNC/CTE-9729779/2021/115, Dated: 31-03-2021 & Consent to operate (CTO) vide Ref No. JSPCB/HO/RNC/CTO-12796754/2022/579 Dated: 12-05-2022.

Configuration- Existing & Proposed

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	--	NIL	Installation of 3x15 T	148500 TPA MS Billets	3x15T	148500 TPA MS Billets
2.	Continuous Casting Machine	--					
3.	Rolling Mill	1x5TPH Will be modernized	27000 TPA	Modernization of existing 1x5TPH capacity Rolling Mill To 1x25TPH capacity)	144,210 TPA TMT Bars & Rolled Products/Rods etc.	1x25TPH	144,210 TPA TMT Bars & Rolled Products/Rods etc.
4.	Reheating Furnace (Coal Fired)	--	50 TPH	--	--	50TPH (Will be operated only in the case of Emergency)	50TPH (Will be operated only in the case of Emergency)
4.	Slag Crusher	--	-	By 1x10 TPH	29700 TPA	--	29700 TPA

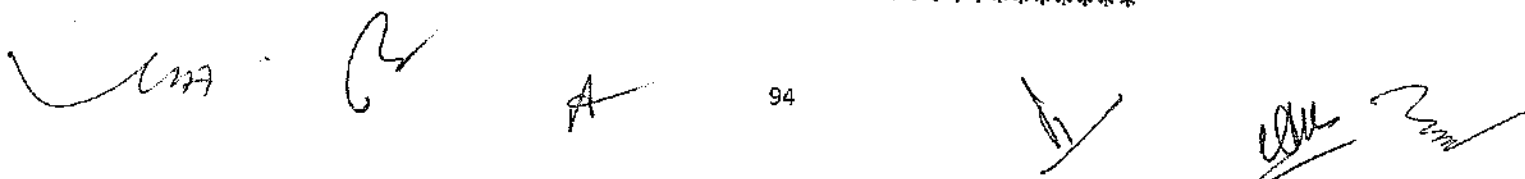
Solid waste management

Units	Solid Wastes	Qty In TPA	Disposal Practice
Induction Furnace	Slag	29,700 TPA	It will be supplied to Metal recovery plants and then will be used for construction filling.
Rolling Mill	Mill Scale & cuttings	1320 TPA	Will be charged back as scrap in the induction furnace for In-House Reuse
Bag Filter Dust from process	Dust from process	1200 kg/day	Low Landfilling or supplied to construction contractors for use in construction fillings.

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Private land, owned by M/s Shailputri Iron and Steels Private Limited.
2	CO	:	The CO, Giridih Sadar vide letter no. 293, dated 06.03.2023 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. 2338 , dated 21.11.2022 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Giridih East vide letter no. 3627, dated 17.10.2022 certified that the distance of reserved / protected forest is more than 250 m from project site.
5	Consent to Operate (CTO)	:	CTO issued by JSPCB vide Ref. no. JSPCB /HO/RNC/CTO-12796754/2022/579, dated 12.05.2022.
6	Consent to Establish (CTE)	:	CTE issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-9729779/2021/115, Dated: 31.03.2021

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 14, 15, 16, 17 & 18.04.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I.



3. Proposed 350 bedded Hospital along with Oxygen Plant for M/s. Netaji Subhas Medical College and Hospital a unit of Sitwanto Devi Mahila Kalyan Sansthan at Village: Bhatia & Halthiadih, District: Saraikela Kharsawan, Jharkhand.

(Proposal No : SIA/JH/INFRA2 /425232/2023)

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

This is a case of violation which has been taken for appraisal on 16.04.2023

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 101st meeting held on 20-24.02.2023 and SEIAA, Jharkhand has approved the violation ToRs in 102nd meeting held on 17th & 18th March, 2023. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2763/2023/468, date 24.03.2023. The final EIA / EMP submitted by PP to SEIAA on 11.04.2023 and which was forwarded to SEAC on 12.04.2023.

EC Application for Hospital building: Total built-up area of 52184.06 Sqm. (Approx. 9.5% part of the project has already been constructed).

Project and Location Details:

Sl. No.	Parameters	Description
1.	Plot Area	19243.20 Sqm. (Or 4.8 acres.)
2.	Project Cost	INR 130 Crores

3.	Built-up Area	52184.06 Sqm.
4.	Green Belt Area	5578.91 Sqm. (~28.9% of the plot area)
5.	Population	Hospital bed: 350 Nos. Attendant with patient (24 hours): 350 Nos OPD Visitors:1225 Nos All Staffs (Doctors, Nurses, Staff):210 Nos Kitchen & Pantry: 297 Nos. Oxygen Plan Capacity: 650 LPM
6.	Water Requirement	255 KLD
7.	Fresh Water Requirement	155 KLD
8.	Reuse of Recycled Water	100 KLD
9.	Wastewater Generation	203 KLD
10.	STP Capacity	245 KLD
11.	ETP Capacity	25 KLD
12.	Total Municipal Waste	~418 kg/day Biodegradable Waste: ~ 167 Kg/day Non-Biodegradable Waste: ~251 Kg/day
13.	Power Requirement	3 MVA (JBVNL)
14.	DG Sets	750 KVA 2x125 KVA + 2x250 KVA
15.	RWH Pits	6 (11117.89 Cumec / hour)
16.	Parking	10,000 Sqm.
17.	Connecting road	NH-118: Approx. 0.27 km, towards SSE
18.	National Highway	NH-118: Approx. 0.27 km, towards SSE SH-5: Approx. 0.60 km, towards SW
19.	Nearest Railway Station	Adityapur Railway Station, (2.86 km, SE)
20.	Airport	Birsa Munda Airport, (Approx. 100 km, NW)
21.	Nearest Hospitals	ESI Hospital (Approx. 1.70 km, ESE) TMH Hospital (Approx. 4.36 km, East) Govt, Hospital Gamharria (Approx. 2.89 km, WNW)
22.	Nearest Water Bodies	Sitarampur Reservoir: Approx. 3.73 km, WSW. Kharkai River: Approx. 0.92 km, East. Subarnarekha River: Approx. 3.57 km North
23.	EMP Budget	During Construction: Capital: 33 Lakhs Recurring: 20.5 Lakhs

		Operational Cost: Capital: 195 Lakhs Recurring: 41.5 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	Adityapur Railway Station: Approx. 2.86 km SE. Birsa Munda Airport: Approx.100 km, West.

Area Summary

S. No.	Description	Area (Sqm.)
1.	Plot Area at Site	19243.20
2.	Green Cover Area (@28.9 % of the plot area)	5578.91
	Green belt area (@15% of Plot area)	2886.48
	Other Green area (@ 13% of Plot area Park, Lawn etc.)	2692.43
3.	Open Area and Paved Area	3162.8
4.	Proposed Ground Coverage (@ 41.87% of net plot area)	8056.49
5.	Proposed FAR (@ 2.24 of plot area)	43106.04
6.	Built-Up Area	52184.06
7.	Height	Approx. 18 m

Co-Ordinates:

1	Latitude	22°48'6.97"N
2	Longitude	86° 8'17.18"E

Land Details:

1	Village- Bhatia & Hathiadih Tehsil-Adityapur Thana No. 60 Dist.- Saraikela-Kharsawan State- Jharkhand	Khata no. 81	Plot No. 301 (P)
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Statutory Clearances:

1	Land Allotment Letter	The land has been allotted by JIADA vide Allotment order no. LA/AD/SW/00860/200 dated 10/03/2022.
2	DFO Certificate	Divisional Forest Officer (DFO), Seraikela Forest Division vide letter no. 32, dated 07.01.2023 certified that the distance of forest boundary from proposed project is less than 250 m as the applied area is notified forest land, which has been transferred to AIADA, Adityapur for non – forestry work vide notification no. वनभूमि-47/2006-1910 व०प०, dated 01.07.2009 of Department of Forest & Environment, Govt. of Jharkhand.
3	DFO wildlife	DFO, Dalma Elephat Project vide letter no. 83, dated 07.01.2023 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
4	CO certificate	The CO, Gamharia Seraikela vide letter no. 1153 dated 30.12.2022 has certified that proposed project site belongs to forest land, for which Department of Forest & Environment, Govt. of Jharkhand has been transferred the said land to AIADA, Adityapur for non – forestry work vide notification no. वनभूमि-47/2006-1910 व०प०, dated 01.07.2009. CO has also informed that proposed project site has been transferred to M/s Nataji Subhas Hospital vide allotment order no. LA/AD/SW/00860/2022, dated 10.03.2022 for the period of 30 years.
5	Building Plan	Conceptual Plan submitted.

Water and waste water Requirement Details

Sl. No.	Hospital Block	Total Population	LPCD	Domestic	Flushing	Total Domestic water	Total Flushing water	Total Water requirement	Total waste water
1	Hospital Bed	350	450	300	150	105000	52500	157500	136500
2	Attendant with patient (24 hours)	350	100	66	34	23100	11900	35000	30380
3	OPD Visitors	1225	15	10	5	12250	6125	18375	15925
4	All Staffs (Doctors, Nurses, Paramedical & non Paramedical staff)	210	45	20	25	4200	5250	9450	8610

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5	Kitchen & Pantry	297	35	25	10	7425	2970	10395	8910	
6	Laundry	3500	3500	2450	
						155475	78745	234220	202775	
ETP & STP Requirement										
	Effluent generation @10% of total wastewater	20 KLD	Capacity of ETP (20% higher than total effluent generation)							25 KLD
	Sewage generation @ 90% of total wastewater	203 KLD	Capacity of STP (20% higher than total Sewage generation)							245 KLD
Total treated water generation						162 KLD (@ 80% of total waste water)				
	DG Cooling	750 KVA		4500						
	Irrigation water	5578.91 Sqm @3 l/sqm.		16737						
	Total water requirement (One Time)			255457						

Category	Total Quantity (KLD)
Fresh water Req. for domestic purpose	155
Flushing water Req.	79
Sewage generation (@80% of the fresh water consumption + 100% flushing water)	203
Capacity of STP	245
Recovered water from STP (80% of Waste water)	162
1. Flushing	79
2. Landscaping	16
3. Discharge to Sewer	66

Solid Waste

Sl. No	Type of waste	Proposed Quantity (Kg/day)	Handling Method / Storage	Disposal
	Bio-degradable Sludge	167 50	Green Bins Green Bins	Inhouse OWC of capacity 200 kg/day will be installed. Sludge will be used as manure in greenbelt development.

99

2.	Non-biodegradable	251	Blue Bins	Will be handed over to following local authorized waste recyclers as per Solid waste management rules, 2016 and Plastic waste management rules, 2016. Adityapur Waste Management Pvt Ltd Ukri Road, Seraikela, Seraikela Kharsawan - 833219
3.	Bio-Medical for 24 Beds	385	Yellow (Non Chlorinated plastic bags) Red (Non Chlorinated plastic bags /container) White (Puncture, Leak, tamper proof container) Blue (Card board boxes with blue coloured marking)	Will be handed over to CBMWTF for treatment & disposal as per Bio-Medical Waste Management Rules, 2016.
5.	E-waste	1	Designated Covered area	Authorized recyclers as per E-Waste (Management) Rules, 2016.
6.	Hazardous waste (ETP Sludge)	1	Black Bins	TSDf as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green belt will be provided in 5578.91 sqm. (@28.90% 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.
- 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 Labourers.
- Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- STP of capacity i.e. 245 KLD & ETP of capacity 25 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, DG cooling, flushing and in nearby construction site/sewer.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 155 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.

Socio Economic Benefits

Sl. No.	Proposed Activities	Year wise Commitment after Obtaining EC		
		1 st Year	2 nd Year	3 rd Year
1.	Infrastructure development <input type="checkbox"/> Drinking Water Infrastructure development in nearby villages <input type="checkbox"/> Free Health Check -up Camps yearly	1 No.	1 No.	1 No.

	once	1 No.	1 No.	1 No.
2.	Medical Facility: Renovation / upgradation of primary health center nearby Villages Bhatia & Hatiadih			
3.	Provision of street lights in the nearby villages Bhatia & Hatiadih	50 Nos.	50 Nos.	50 Nos.
4.	Generation of Employment During Construction Direct Employment Indirect Employment	100 20	100 20	100 20
5.	Generation of Employment During Operation Direct employment Indirect employment	200 50	100 50	100 50
6.	Plantation (Fruit bearing) around the nearby villages Bhatia & Hatiadih	50	50	50

Energy conservation

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

S. No.	Net Energy saved (weighted Average Calculation)	
1.	Solar Based lighting will be done in the common areas, Signages, entry gates and boundary walls etc.	240 KVA
2.	LED Based lighting will be done in the dwelling units	52 KVA
3.	Usage of energy efficient Lift (VVVF non gear lifts)	18 KVA
	Total Energy saved	310 KVA
	Total Energy consumption	3000 KVA
	Total Energy saving	10.3 % Say 10%

During the presentation the following documents were sought :

- Site plan to be revised clearly indicating the location of STP, ETP, Oxygen plan, Solid Waste Handling & Treatment area (OWC).
- Detail Rain Water Harvesting plan.
- Evacuation plan

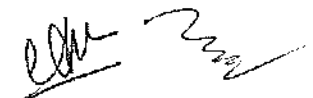
The Project Authorities have submitted the above mentioned documents.











During appraisal the PAs and their consultants were asked provide the calculation of the damage assessment as per the new norms of CPCB dated December, 2022.

The PAs have submitted this calculation of damage assessment which comes to Rs. 2,21,000. In the final EIA report submitted the PAs have proposed remediation plan and natural & community resource augmentation plan of Rs. 8,50,000.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommends the amount proposed in the final EIA report i.e. Rs. 8,50,000 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 Jamshedpur Area in consultation with DFO Jamshedpur	Territorial division of Jamshedpur	4,00,000
2.	Community augmentation	➤ Installation of Street lights with consultation of local authorities.	Bhatia & Hatiadih Villages	4,50,000
		Total	--	8,50,000

- I. The Committee visited the project site on 14.04.2023 to verify the details submitted by PAs. During inspection, Committee saw that the STP is installed and is operational, RWH has been installed with 06 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. 8,50,000.
- III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 8,50,000 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 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 premises.
- VIII. Energy conservation measures adhering to part of ECBC norms shall be complied with.
- IX. The penalty of Rupees 106952.46 being 0.5% (Sou Moto) of the project cost incurred till date (Rs. 2,13,90,492) 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 350 bedded Hospital along with Oxygen Plant for M/s Netaji Subhas Medical College and Hospital a unit of Sitwanto Devi Mahila Kalyan Sansthan at Village: Bhatia & Halthiadih, District: Saraikela Kharsawan, 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.

9	New or Expansion	:	Expansion Project
10	Mineable Reserves	:	Cu.M.:4,48,073 Cum Tonnes:12,99,412 Tons
11	Mine Life	:	3.57 years Say 4 years
12	Man power	:	41
13	Water Requirement	:	12.7 KLD (Drinking: 1.02 KLD, Dust Suppression: 3.76 KLD, Plantation:7.92 KLD)
14	Water Source	:	Water will be sourced from abandoned Mine at a distance of 150 m through Water Tanker for Dust Suppression and Plantation.
15	DG Set / power	:	20 KVA DG Set proposed
16	Crusher	:	NA
17	Nearest Water Body	:	Tripita or Triaghana Nadi- 5.4 km – South
18	Nearest Habitation	:	Rambani– 0.60 km, Dumka – 35 KM
19	Nearest Rail Station	:	Dumka Railway station – 32.5 km in SW direction
20	Nearest Air Port	:	Ranchi Airport, Ranchi – 242 Km- SW
21	Nearest Forest	:	Protected Forest - 0.6 Km
22	Road & Highways	:	SH-18 -2 Km in west direction from project site

CO-ORDINATES

Sl.No.	Latitude	Longitude
1.	24° 26' 50.18 N	87° 31' 45.69" E
2.	24° 26' 49.96 N	87° 31' 43.67" E
3.	24° 26' 49.55 N	87° 31' 42.63" E
4.	24° 26' 50.19 N	87° 31' 41.53" E
5.	24° 26' 50.29 N	87° 31' 41.20" E
6.	24° 26' 50.97 N	87° 31' 41.60" E
7.	24° 26' 51.24 N	87° 31' 41.31" E
8.	24° 26' 50.41 N	87° 31' 40.73" E
9.	24° 26' 50.40 N	87° 31' 40.38" E
10.	24° 26' 50.75 N	87° 31' 40.00" E
11.	24° 26' 52.12 N	87° 31' 40.79" E
12.	24° 26' 53.24 N	87° 31' 40.49" E
13.	24° 26' 56.38 N	87° 31' 42.24" E
14.	24° 26' 55.01 N	87° 31' 43.82" E
15.	24° 26' 53.28 N	87° 31' 44.91" E
16.	24° 26' 53.87 N	87° 31' 45.69" E
17.	24° 26' 54.14 N	87° 31' 45.24" E
18.	24° 26' 53.48 N	87° 31' 46.01" E
19.	24° 26' 53.41 N	87° 31' 46.89" E
20.	24° 26' 52.96 N	87° 31' 47.47" E
21.	24° 26' 52.78 N	87° 31' 47.19" E
22.	24° 26' 52.34 N	87° 31' 46.98" E
23.	24° 26' 51.34 N	87° 31' 46.70" E
24.	24° 26' 50.90 N	87° 31' 45.86" E

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Land Details :

Mouza	Khata No.	Plot No.
Rambani	20	36
	10	38,59 (P)
	26	39

STATUTORY CLEARANCES :

1	LOI/Lease docs	: i. The Letter of Intent (LoI) has been issued by DMO, Dumka vide letter no. 1271/M, dated 30.07.2020. ii. Lease deed (Lease period for 02.12.2021 to 05 years).
2	CO	: The CO, Gopikandar vide letter no. 251, dated 10.07.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S Khatiyar & Register II.
3	DMO	: DMO, Dumka vide memo no. 1275/M, dated 31.07.2020 certified that 01 other mining lease area (6.25 acre) exists within 500 m radius from proposed project site.
4	DFO Wildlife	: DFO, Wildlife Hazaribag vide letter no. 1607, dated 07.09.2020 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Forest Distance	: DFO, Dumka Division vide letter no. 1310, dated 01.07.2020 certified that the distance of Reserved / Protected forest is more than 250 m from proposed project site.
6	DSR	: The District Magistrate – cum –DC, Dumka vide letter no. 683/Khanan, dated 19.04.2021 has informed that this project is part of District Survey Report (DSR) of Dumka district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	: Gram Sabha conducted on 21.06.2020.
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide letter no. G/2022-23/263, dated 29.09.2022
9	Previous EC	: Previous EC granted by SEIAA vide letter no. EC/SEIAA/2021-22/2348/2021/59, dated 15.07.2021.

10	Compliance Report	: The PAs requested IRO, Ranchi MoEF&CC vide letter dated 10.09.2022 to certify the compliance status of EC conditions. As no response was received from IRO, Ranchi MoEF&CC, the compliance status of the conditions of EC has been certified by Regional Officer, Dumka, Jharkhand State Pollution Control Board vide compliance report dated 03.04.2023.
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Working Details :

1	Mining Method	: Semi Mechanised. Wagon Drilling & Blasting to be used
2	Quarry Area	: 5 years-1.20 Ha End of Mine - 1.65 Ha
3	Waste Generation	: 5 years- 17,670 Cum. Life of Mine (Waste Gen.) - 17,670 Cum.
4	Stripping Ratio	: 1:001
5	Working Days	: 300
6	Benches: size & No	: 5 m x 5 m, Bench No.- 1 to 8 (Conceptual period depth)
7	Elevation of Mine	: Maximum Elevation - 226 AMSL Minimum Elevation - 191 AMSL
8	Ground Level Elevation	: 226 AMSL
9	Ultimate Working Depth	: 191 AMSL
10	Water Table	: 183 AMSL
11	Topography of Mine	: Flat Terrain
12	Explosive Requirement	: 15.03 Tons/year
13	Diesel/Fuel requirement	: 246 KL/year (820 Litres/day)

Production Details

Year	Production of Stone in Cum.	Production of Stone in Tonnes	O.B. (In Cum.)
Development Year (2023)	1,07,706	3,12,347	17,670
Development Year (2024)	89,178	2,58,616	-
Development Year (2025)	1,05,800	3,06,820	-
Development Year (2026)	75,900	2,20,110	-
Total	3,78,583	10,97,893	17,670

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Land Use

Existing Land Use pattern

SL	Pattern	Existing land use (Ha.)
1	Mining area	0.45
2	Office	0.01
3	Dump	0.05
4	Road	0.02
5	Green Belt/ Safety Zone	0.49
6	Garland drain/ Settling Tank	0.05
7	Unutilized	1.36
	Total	2.43

Proposed Land Use for Current Plan Period

SL	Pattern	Existing land use (Ha.)
1	Mining area	1.20
2	Office	0.01
3	Dump	0.05
4	Road	0.02
5	Green Belt/ Safety Zone	0.49
6	Garland drain/ Settling Tank	0.05
7	Unutilized	0.61
	Total	2.43

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

SL	Pattern	Proposed land use at End of life of mine (ha)
1	Mining area	1.65 (Water Body)
4	Road	0.02 (Water Body)
6	Green Belt/ Safety zone + Dump	0.54 (Plantation)
8	Unutilized	0.22
	Total	2.43

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone/Green Belt and other reclaimed area (Infrastructure, Approach Roads, Garland Drain area)	: 0.54 ha	1,350 trees @ 2500 trees per ha.

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2	Haul /Approach Road	:	0.46 KM	234 trees on both sides – 3 m distance
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- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road 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.

Waste Generation

Very minimal O.B. 17,670 Cum. will be generated. OB will be utilized for 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 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 '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 Rambani Stone Mine of M/s Tridev Engicom Pvt. Ltd., Village : Rambani, Thana : Gopikandar, Distt. : Dumka, Jharkhand (2.43 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

5. Shivam Stone Mine of Partners : Shri Umakant Prasad Jaiswal & Shri Nitin Gupta, Mouza : Jaura, Thana : Chhatarpur, Distt. : Palamu, Jharkhand (2.87 Ha).

(Proposal No. : SIA/JH/MIN/425337 /2023).

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

This is a new project which has been taken for appraisal on 16.04.2023.

Project Category : The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10.05.2022 to 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,



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CO-ORDINATES

Sl.No.	Latitude	Longitude
1	24°16'26.01"N	84°10'34.07"E
2	24°16'26.55"N	84°10'32.50"E
3	24°16'27.09"N	84°10'32.59"E
4	24°16'26.59"N	84°10'26.79"E
5	24°16'27.55"N	84°10'26.07"E
6	24°16'28.26"N	84°10'26.39"E
7	24°16'28.20"N	84°10'27.52"E
8	24°16'28.97"N	84°10'28.05"E
9	24°16'29.26"N	84°10'33.13"E
10	24°16'30.22"N	84°10'33.92"E
11	24°16'30.39"N	84°10'33.56"E
12	24°16'31.11"N	84°10'32.89"E
13	24°16'31.21"N	84°10'33.85"E
14	24°16'31.08"N	84°10'34.76"E
15	24°16'31.16"N	84°10'35.51"E
16	24°16'31.79"N	84°10'37.67"E
17	24°16'31.60"N	84°10'39.14"E
18	24°16'30.36"N	84°10'38.85"E
19	24°16'29.58"N	84°10'37.00"E
20	24°16'27.33"N	84°10'34.90"E
21	24°16'26.42"N	84°10'34.71"E

Land Details :

Mouza	Khata No.	Plot No.
JAURA	23	414, 417
	08	421 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	: The Letter of Intent (Loi) has been issued by District Mining Office, Palamau, Medininagar vide letter no. 1124 /M dated 23.09.2021
2	CO	: The CO, Chhatarpur, Palamu, vide letter no. 806, dated 11.09.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyon & Register II.
3	DMO	: DMO, Palamu, Medninagar vide memo no. 1180/M, dated 06.10.2021 certified that two more lease area (6.08 acre & 3.03 acre) exists within 500 m radius from proposed project site & Total

		lease area is more than 5 Ha.
4	DFO Wild Life	: Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 187 , dated 08.03.2022 certified that the proposed project site is outside Eco Sensitive Zone of Palamau Wildlife Sanctuary, Betla National Park and Mahuadanr Wolf Sanctuary.
5	DFO Forest Distance	: DFO, Medninagar Division vide letter no. 4276, dated 12.09.2018 certified that the distance of notified forest is 260 meter from proposed project site.
6	DSR	: The DC-cum-District Magistrate, Palamu, Medninagar vide letter no. 1276/ M, dated 16.10.2021 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	: Gram Sabha conducted on 05.11.2018.
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide Letter No. 699/G dated 29.09.2021
9	Public Hearing	: Public Hearing conducted on 27.02.2023.

Working Details

1	Mining Method	: Semi Mechanised. Wagon Drilling & Blasting to be used
2	Quarry Area	: 5 years – 2.87 Ha End of Mine – 2.87 Ha
3	Waste Generation	: 5 years– 29,629.68 Cu.M Life of Mine (Waste Gen.) – 29,629.68 Cu.M
4	Stripping Ratio	: 1:0.02
5	Working Days	: 300
6	Benches: size & No	: 6 m x 6/7 m , Bench No.- 1 to 6 (Conceptual period depth)
7	Elevation of Mine	: Maximum Elevation – 401 AMSL Minimum Elevation – 393 AMSL
8	Ground Level Elevation	: 393 AMSL
9	Ultimate Working Depth	: 365 AMSL
10	Water Table	: 344 AMSL (49 m bgl)
11	Topography of Mine	: Undulating Terrain
12	Explosive Requirement	: 82.8 Tons/year
13	Diesel/Fuel requirement	: 154.80 KL/year (516 Litres/day)

Production Details

Year	Production of Stone		O.B.	Bench RL in meters
	Cubic meters	Tons	Cubic meters	
1st Year	88,888.88	2,40,000	14,814.84	339 – 334
2nd Year	88,888.88	2,40,000	Nil	334 – 328
3rd Year	88,888.88	2,40,000	14,814.84	345 – 340
4th Year	88,888.88	2,40,000	Nil	340 – 334
5th Year	88,888.88	2,40,000	Nil	334 – 328
Total	4,44,444.40	12,00,000	29,629.68	Depth – 11 m

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	Nil
Road	0.01
Total area in use	Nil
Balance area unused	2.86
Total Leasehold area	2.87

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.96
Crusher	0.12
Road	0.01
Green Belt / Safety Zone	0.70
Garland Drain / Settling Tank/ Infrastructre	0.08
Total area in use	2.87
Balance area unused	0.00
Total Leasehold area	2.87

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

Category	Area in Hectares
Quarry	1.96 (Water Body)
Green Belt/ Safety Zone	0.70 (Plantation)
Road + Crusher+ Infrastructure+ Garland Drain / Settling Tank	0.21 (Plantation)

Total area in use	2.87
Total Leasehold area	2.87
Plantation	0.90 (31.5 % of area)

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone	: 0.70 ha	1750 trees @ 2500 trees per ha.
2	Haul /Approach Road	: 0.52 KM	348 trees on both sides – 3 m distance
3	Conceptual period (Road, Crusher area, Garland drain / Settling Tank)	: 0.20 Ha.	500 trees @ 2500 trees per ha.

- 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 29,629.68 Cum of wastes (Over Burden) will be generated from entire Shivam 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	14,814.84
2 nd Year	Nil
3 rd Year	14,814.84
4 th Year	Nil
5 th Year	Nil
Total	29,629.68

Source: Mining Plan

Disposal of Waste from the Quarry

OB will be utilized for backfilling, internal mine road construction & berm along the approach road construction & maintenance.

Water Quality Management

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

Air Quality Management

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

Undertaking submitted affirming :

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

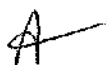
- e. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water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

During the presentation the following documents were sought :

- i. Undertaking from mines owners for employment of suitably qualified persons.
- ii. Name of the licensed Agencies who will be engage for blasting using explosive.
- iii. Details of waste generation & its management.
- iv. Details of impact & its mitigative measures.
- v. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the project should be provided.
- vi. Occupational health impact of project should be anticipated and the proposed preventive measures spelt out in details. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP.
- vii. Provide the reference Secondary Data source for Flora & Fauna details.
- viii. Clarification regarding AAQ modelling considering the impacts of all 3 mines.
- ix. Permission from Panchayat for use of water from abandon mines.
- x. Table for EMP budget to be revised to include the details of all the activities for which funds will be utilized.

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 Shivam Stone Mine of Partners : Shri Umakant Prasad Jaiswal & Shri Nitin Gupta, Mouza : Jaura, Thana : Chhatarpur, Distt. : Palamu, Jharkhand (2.87 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.



6. Stone Mine of M/s Jai Sri Sokha Baba Stone Works, Mouza : Jaura, Thana : Chhatarpur, Distt. : Palamu, Jharkhand (1.22 Ha).

(Proposal No. : SIA/JH/MIN/ 425402 /2023).

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

This is a new project which has been taken for appraisal on 16.04.2023.

Project Category : The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10.05.2022 to 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/2022-23/2580/2022/125, date 18.06.2022. The final EIA / EMP submitted by PP to SEIAA on 12.04.2023 and which was forwarded to SEAC on 12.04.2023.

EC Application for: Boulder Stone : 45,555.55 Cu.M. / year i.e. 1,23,000 TPA

DG Set : 10 KVA

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: M/S Jai Sri Sokha Baba Stone Works Project type – Stone Mine
2	Lessee:	: M/S Jai Sri Sokha Baba Stone Works, Signatory Partner – Sri Sankat Mochan Jha.
3	Lease Address	: Mouza – Jaura, Thana - Chhatarpur, Dist - Palamu, State- Jharkhand.
4	Lease Area	: Ha: 1.22 ha. Acres: 3.03 Acres
	Type of Land	: Non Forest – Rayati Land
6	Project Cost	: Capital Cost – 66.50 Lakhs
7	EMP Budget	: Capital: 43.0435 Lakhs (including CER) Recurring: 1.64 Lakhs
8	CSR / CER Budget	: 30.80 Lakhs (as per public hearing)
9	New or Expansion	: New Project
10	Mineable Reserves	: Cu.M.: 4,67,210 Cum Tonnes: 12,61,467 Tons
11	Mine Life	: 10.25 years
12	Man power	: 15
13	Water Requirement	: 15.75 KLD (Drinking:0.23 KLD, Dust Suppression: 6.80 KLD, Plantation:8.72 KLD
14	Water Source	: Water will be sourced from abandoned Mine through Water Tanker for Dust Suppression and Plantation. Water will be sourced from Bore Well within the lease area for Drinking and Domestic Consumption.
15	DG Set power	: 10 KVA DG Set proposed

16	Crusher	:	Nil
17	Nearest Water Body	:	Sadabah River 7 13 km – SW
18	Nearest Habitation	:	Jaura – 0.75 km, Daltonganj – 27.50 KM
19	Nearest Rail Station	:	Japla Railway station – 34 km , NW
20	Nearest Air Port	:	Gaya Airport– 93.60 km, NE
21	Nearest Forest	:	Protected Forest - 0.80 Km- SE
22	Road & Highways	:	Patan Chhatarpur road - 0.85 Km in East National Highway (NH 139) - 8 Km in West

CO-ORDINATES

Sl.No.	Latitude	Longitude
1	24° 16' 31.27" N	84° 10' 43.05" E
2	24° 16' 31.92" N	84° 10' 41.58" E
3	24° 16' 32.62" N	84° 10' 41.71" E
4	24° 16' 32.01" N	84° 10' 40.64" E
5	24° 16' 32.25" N	84° 10' 39.87" E
6	24° 16' 32.82" N	84° 10' 38.92" E
7	24° 16' 33.92" N	84° 10' 39.15" E
8	24° 16' 35.61" N	84° 10' 44.14" E
9	24° 16' 35.23" N	84° 10' 44.45" E
10	24° 16' 32.03" N	84° 10' 43.70" E

LAND DETAILS

Mouza	Khata No.	Plot No.
JAURA	07	376 (P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Palamu, Medninagar vide letter no. 1123 /M dated 23.09.2021.
2	CO	:	The CO, Chhatarpur, Palamu vide letter no. 630, dated 16.09.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyari
3	DMO	:	DMO, Palamu, Medninagar vide memo no. 1178 /M, dated 06.10.2021 certified that two other lease area (6.08 acre & 7.10 acre) exists within 500 m radius from proposed project site & Total

		lease area is 16.21 Acre (6.563 Ha).
4	DFO Wild Life	: Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 908, dated 05.10.2021 certified that the proposed project site is outside Eco Sensitive Zone of Palamau Wildlife Sanctuary & Betla National Park.
5	DFO Forest Distance	: DFO, Medninagar Division vide letter no. 3796, dated 04.08.2018 certified that the distance of notified forest is 270 meter from proposed project site.
6	DSR	: The DC-cum-District Magistrate, Palamu, Medninagar vide letter no. 1276/ M, dated 16.10.2021 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	: Gram Sabha conducted on 11.06.2019.
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide Letter No. 700/G dated 29.09.2021
9	Public Hearing	: Public Hearing conducted on 27.02.2023.

Working Details

1	Mining Method	: Semi Mechanised. Wagon Drilling & Blasting to be used
2	Quarry Area	: 5 years – 1.22 Ha End of Mine – 1.22 Ha
3	Waste Generation	: 5 years– 1625 Cu.M Life of Mine (Waste Gen.) – 1625 Cu.M
4	Stripping Ratio	: 1:0.002
5	Working Days	: 300
6	Bench: size & No	: 6 m x 6/7 m , Bench No.- 1 to 5 (Conceptual period depth)
7	Elevation of Mine	: Maximum Elevation – 402 AMSL Minimum Elevation – 398 AMSL
8	Ground Level Elevation	: 398 AMSL
9	Ultimate Working Depth	: 366 AMSL
10	Water Table	: 354 AMSL (44 m bgl)
11	Topography of Mine	: Undulating Terrain
12	Explosive Requirement	: 41.40 Tons/year
13	Diesel/Fuel requirement	: 154.8 KL/year (516 Litres/day)

Production Details

Year	Production of Stone		Over Burden (OB)	Bench RL in meters
	Cubic meters	Tons	Cubic meters	
1st Year	45,555.55	123,000.00	1625	346-340
2nd Year	45,555.55	123,000.00	0	340-334
3rd Year	45,555.55	123,000.00	0	334-328
4th Year	45,555.55	123,000.00	0	328-322
5th Year	45,555.55	123,000.00	0	328-322
Total	227,777.75	615,000.00	1625	Depth – 24 m

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.01
Total area in use	0.00
Balance area unused	1.21
Total Leasehold area	1.22

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	0.59
Road	0.02
O.B. Dump	0.16
Infrastructure	0.02
Green Belt / Safety Zone	0.37
Garland Drain / Settling Tank	0.06
Total area in use	1.22
Total Leasehold area	1.22

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

Category	Area in Hectares
Quarry / O.B. Dump	0.75 (Water Body)
Green Belt / Safety Zone	0.37 (Plantation)
Garland Drain, Infrastructure, Road	0.10 (Plantation)

Total area in use	1.22
Total Leasehold area	1.22
Plantation	0.47 (38.5 % of area)

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone, Infrastructure, Mining Road , Garland drain	: 0.47 ha	1175 trees @ 2500 trees per ha.
2	Haul /Approach Road	: 0.85 KM	568 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 1625 cum of waste (Over Burden) will be generated from entire M/S Jai Sri Sokha Baba Stone Works up to conceptual stage. Year-wise waste generation during the planned period is given below:

Table 3.7: Generation of Waste during Planned Period

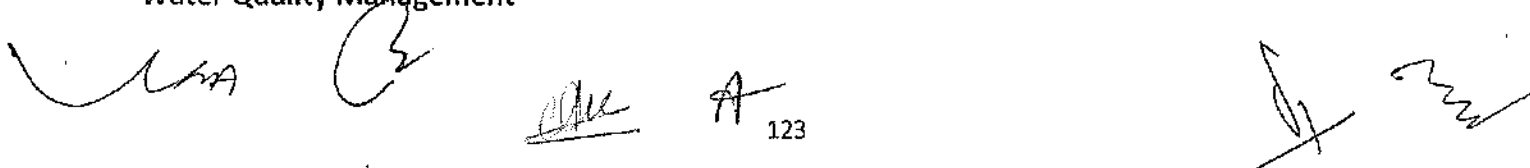
Year	Waste Generation, in Cum
1 st Year	1625
2 nd Year	0
3 rd Year	0
4 th Year	0
5 th Year	0
Total	1625

Source: Mining Plan

Disposal of Waste from the Quarry

OB will be utilized for backfilling, internal mine road construction & berm along the approach road construction & maintenance.

Water Quality Management



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

Air Quality Management

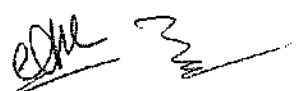
- Dust extractor or wet drilling shall be followed to control dust at source of emission during drilling.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce the dust generation.
- Controlled blasting to reduce dust emission and reduction in NOx emission
-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

Undertaking submitted affirming:

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







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

During the presentation the following documents were sought :

- i. Undertaking from mines owners for employment of suitably qualified persons.
- ii. Name of the licensed Agencies who will be engage for blasting using explosive.
- iii. Details of waste generation & its management.
- iv. Details of impact & its mitigative measures.
- v. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the project should be provided.
- vi. Occupational health impact of project should be anticipated and the proposed preventive measures spelt out in details. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP.
- vii. Provide the reference Secondary Data source for Flora & Fauna details.
- viii. Clarification regarding AAQ modelling considering the impacts of all 3 mines.
- ix. Permission from Panchayat for use of water from abandon mines.
- x. Table for EMP budget to be revised to include the details of all the activities for which funds will be utilized.

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 Stone Mine of M/s Jai Sri Sokha Baba Stone Works, Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (1.22 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

7. Stone Mine of M/s Jai Baba Vishwanath Stone Works, Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (2.46 Ha).

(Proposal No. : SIA/JH/MIN/ 425289 /2023).

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

This is a new project which has been taken for appraisal on 16.04.2023.

Project Category : The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10.05.2022 to 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/2022-23/2585/2022/127, date 18.06.2022. The final EIA / EMP submitted by PP to SEIAA on 12.04.2023 and which was forwarded to SEAC on 12.04.2023.

EC Application for: Boulder Stone : 54,444.44 Cu.M. / year i.e. 1,47,000 TPA
DG Set : 25 KVA

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: M/S Jai Baba Vishwanath Stone Works, Project type – Stone Mine & Crusher (50 TPH Capacity)
2	Lessee:	: M/S Jai Baba Vishwanath Stone Works, Signatory Partner - Shri Vikas Kumar Pathak,
3	Lease Address	: Mouza – Jaura, Thana- Chhatarpur, Dist - Palamu, State- Jharkhand.
4	Lease Area	: Ha: 2.46 ha Acres: 6.08 Acres
	Type of Land	: Non Forest – Rayati Land
6	Project Cost	: Capital Cost – 67.45 Lakhs
7	EMP Budget	: Capital: 42.8355 Lakhs (including CER) Recurring: 1.84 Lakhs
8	CSR / CER Budget	: 28.90 Lakhs (as per public hearing)
9	New or Expansion	: New Project
10	Mineable Reserves	: Cu.M.: 5,77,410.00 Cum Tonnes: 15,59,007.00 Tons
11	Mine Life	: 10.60 years
12	Man power	: 15
13	Water Requirement	: 23.88 KLD (Drinking:0.23 KLD, Dust Suppression: 7.60 KLD, Plantation:16.05 KLD)
14	Water Source	: Water will be sourced from abandoned Mine through Water Tanker for Dust Suppression and Plantation. Water will be sourced from Bore Well within the lease area for Drinking and Domestic Consumption.
15	DG Set / power	: 25 KVA DG Set proposed
16	Crusher	: Proposed Crusher of 50 TPH Capacity

17	Nearest Water Body	:	North Koel River- 20 km – SW
18	Nearest Habitation	:	Jaura – 2.30 km, Daltonganj - 28 KM
19	Nearest Rail Station	:	Japla Railway station – 34 km – NW
20	Nearest Air Port	:	Gaya Airport, Gaya – 94 km – NE
21	Nearest Forest	:	Protected Forest - 1 Km- SE
22	Road & Highways	:	Patan Chhatarpur Road – 0.95 Km in East direction, NH-139 – 7.80 Km in West direction from project site

CO-ORDINATES

Sl.No.	Latitude	Longitude
1	24° 16'33.83" N	84° 10' 36.17" E
2	24° 16'35.59" N	84° 10' 35.84" E
3	24° 16'37.88" N	84° 10' 36.61" E
4	24° 16'39.15" N	84° 10' 37.53" E
5	24° 16'39.21" N	84° 10' 39.78" E
6	24° 16'38.60" N	84° 10' 41.54" E
7	24° 16'37.65" N	84° 10' 44.53" E
8	24° 16'35.68" N	84° 10' 44.11" E
9	24° 16'36.04" N	84° 10' 41.35" E

LAND DETAILS

Mouza	Khata No.	Plot No.
JAURA	12	378 (P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Palamu, Medninagar vide letter no. 1122 /M dated 23.09.2021
2	CO	:	The CO, Chhatarpur, Palamu vide letter no. 584, dated 24.08.2018 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyani.
3	DMO	:	DMO, Palamu, Medninagar vide memo no. 1179 /M, dated 06.10.2021 certified that two more lease area (3.03 acre & 7.10 acre) exists within 500 m radius from proposed project site & Total lease area is 16.21 acre (6.563 Ha).
4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 906, dated 05.10.2021 certified that the proposed

		project site is outside Eco Sensitive Zone of Palamau Wildlife Sanctuary & Betla National Park.
5	DFO Forest Distance	: DFO, Medninagar Division vide letter no. 3794, dated 04.08.2018 certified that the distance of notified forest is 280 meter from proposed project site.
6	DSR	: The DC-cum-District Magistrate, Palamu, Medninagar vide letter no. 1276/ M, dated 16.10.2021 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	: Gram Sabha conducted on 11.06.2019
8	Mine Plan Approval	: Additional Director, Geology, Hazaribag vide Letter No. 698/G, dated 29.09.2021
9	Public Hearing	: Public Hearing conducted on 27.02.2023.

Working Details

1	Mining Method	: Semi Mechanised. Wagon Drilling & Blasting to be used
2	Quarry Area	: 5 years – 2.46 Ha End of Mine – 2.46 Ha
3	Waste Generation	: 5 years– 1890 Cu.M Life of Mine (Waste Gen.) – 1890 Cu.M
4	Stripping Ratio	: 1:0.002
5	Working Days	: 300
6	Benches: size & No	: 6 m x 6/7 m , Bench No.- 1 to 7 (Conceptual period depth)
7	Elevation of Mine	: Maximum Elevation – 402 AMSL Minimum Elevation – 399 AMSL
8	Ground Level Elevation	: 399 AMSL
9	Ultimate Working Depth	: 366 AMSL
10	Water Table	: 354 AMSL (45 m bgl)
11	Topography of Mine	: Undulating Terrain
12	Explosive Requirement	: 62.10 Tons/year
13	Diesel/Fuel requirement	: 149.40 KL/year (498 Litres/day)

Production Details

Year	Production of Stone		Over Burden (OB)	Bench RL in meters
	Cubic meters	Tons	Cubic meters	
1st Year	54444.44	147000.00	1890.0	1 st Bench : 349-346 m 2 nd Bench: 346 – 340 m
2nd Year	54444.44	147000.00	0	2 nd Bench : 346 – 340 m
3rd Year	54444.44	147000.00	0	3 rd Bench : 340 – 334 m
4th Year	54444.44	147000.00	0	3 rd Bench : 340 – 334 m 4 th Bench : 334 m – 328 m
5th Year	54444.44	147000.00	0	4 th Bench : 334 – 328 m
Total	272,222.20	735,000.00	1890	Depth – 21 m

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.04
Total area in use	0.00
Balance area unused	2.42
Total Leasehold area	2.46

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	0.95
Road	0.04
Garland Drain	0.06
Infrastructure	0.02
Crusher	0.01
O.B. Dump	0.18
Green Belt / Safety Zone	0.70
Settling Tank	0.02
Total area in use	1.98
Balance area unused	0.48
Total Leasehold area	2.46

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

Category	Area in Hectares
Quarry	0.95 (Water Body)
Road, Garland Drain, Infrastructure, Crusher, O.B. Dump, Settling Tank	0.33 (Plantation)
Green Belt / Safety Zone	0.70 (Plantation)
Total area in use	1.98
Balance area unused	0.48
Total Leasehold area	2.46
Plantation	1.03 (41 % of total area)

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone	: 0.70 ha	1750 trees @ 2500 trees per ha.
2	Haul /Approach Road	: 0.95 KM	634 trees on both sides – 3 m distance
3	Conceptual period (Road, Garland drain, Infrastructure, Crusher, O.B. Dump, Settling area)	: 0.33 Ha.	825 trees @ 2500 trees per ha.

- 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 **1890 cum** of waste (Over Burden) will be generated from entire M/S Jai Baba Vishwanath Stone Works 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	1890

Year	Waste Generation, In Cum
2 nd Year	0
3 rd Year	0
4 th Year	0
5 th Year	0
Total	1890

Source: Mining Plan

Disposal of Waste from the Quarry

There is only 1890 cum overburden will be generated in mining plan period which will be used in maintenance of mine road and village road, 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:

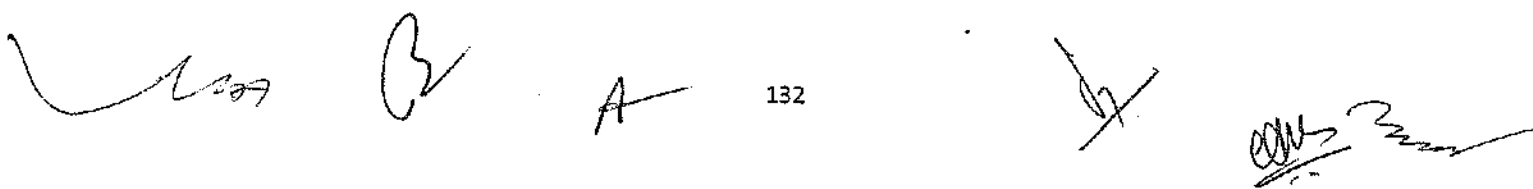
- a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
- b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.
- c. If any changes are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

During the presentation the following documents were sought :

- i. Undertaking from mines owners for employment of suitably qualified persons.
- ii. Name of the licensed Agencies who will be engage for blasting using explosive.
- iii. Details of waste generation & its management.
- iv. Details of impact & its mitigative measures.
- v. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the project should be provided.
- vi. Occupational health impact of project should be anticipated and the proposed preventive measures spelt out in details. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP.
- vii. Provide the reference Secondary Data source for Flora & Fauna details.
- viii. Clarification regarding AAQ modelling considering the impacts of all 3 mines.
- ix. Permission from Panchayat for use of water from abandon mines.
- x. Table for EMP budget to be revised to include the details of all the activities for which funds will be utilized.

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 Stone Mine of M/s Jai Baba Vishwanath Stone Works, Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (2.46 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

Handwritten signatures and initials are present at the bottom of the page. From left to right, there is a large, stylized signature, a signature that looks like 'B', a signature that looks like 'A', the number '132', a signature that looks like 'S', and a large, complex signature on the far right.

16	Crusher	:	NA
17	Nearest Water Body	:	Bansloi River 7.10 KM
18	Nearest Habitation	:	Amlagachi Village: 0.80 Km
19	Nearest Rail Station	:	Nagar Nabi Railway station – 15.2 km – NE
20	Nearest Air Port	:	Malda Airport – 64.7 km - NE
21	Nearest Forest	:	Protected Forest – 3.80 Km South
22	Road & Highways	:	Sahargram- Maheshpur Road – 500m - W NH – 114 A- 10.80 Km - NE

CO-ORDINATES

GPS Coordinate		
Point	Latitude	Longitude
1	24°33'32.60"N	87°43'16.40"E
2	24°33'32.19"N	87°43'18.53"E
3	24°33'31.15"N	87°43'19.24"E
4	24°33'27.44"N	87°43'18.71"E
5	24°33'26.17"N	87°43'18.77"E
6	24°33'26.12"N	87°43'16.63"E
7	24°33'26.45"N	87°43'14.71"E
8	24°33'24.20"N	87°43'13.59"E
9	24°33'24.85"N	87°43'12.36"E
10	24°33'27.90"N	87°43'13.63"E
11	24°33'28.06"N	87°43'13.29"E
12	24°33'28.78"N	87°43'13.54"E
13	24°33'30.56"N	87°43'14.92"E
14	24°33'30.75"N	87°43'15.38"E

LAND DETAILS

Mouza	Khata No.	Plot No.
Amlagachi	04	475

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 589/M dated 23.04.2020
2	CO	:	The CO, Maheshpur, Pakur, vide letter no. 593/R, dated 06.08.2019 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Pakur vide memo no. 1401/M, dated 12.09.2020 certified that two other mining lease area (7.09 acre & 3.16 acre) exists within 500 m radius from proposed project site & Total lease area is 6.81 Ha, i.e. more than 5 Ha.

4	DFO Wildlife	:	DFO Wildlife, Hazaribagh vide letter no. 1542, dated 03.08.2019 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 1169, dated 28.09.2019 certified that the distance of reserved / protected forest is more than 250 meter from proposed project site.
6	DSR	:	This project is mentioned in District Survey Report (DSR) of Pakur district in Chapter 13 (Page No. 66 at St. No. 32).
7	Gram Sabha	:	BDO, Maheshpur vide memo no. 1106/Vi, dated 14.08.2019 informed that Gram Sabha conducted on 28.08.2019
8	Mine Plan Approval	:	Deputy Director Mines, Santhal Pargana Circle, Dumka vide memo no. 165/DDM, dated 06.07.2020.
9	Public Hearing	:	Public Hearing conducted on 17.03.2023.

Working Details

1	Mining Method	:	Semi-mechanized open cast mining by wagon drills and control blasting.
2	Quarry Area	:	5 years – 1.10 Ha End of Mine – 1.78 Ha
3	Waste Generation	:	5 years– 9,531 Cu.M
4	Stripping Ratio	:	1:0.02
5	Working Days	:	300
6	Bench: size & No	:	6 m x 6 m, Bench No.- 1 to 4
7	Elevation of Mine	:	Maximum Elevation – 174 AMSL Minimum Elevation – 172 AMSL
8	Ground Level Elevation	:	172 AMSL
9	Ultimate Working Depth	:	148 AMSL
10	Water Table	:	139 AMSL (33 m bgl)
11	Topography of Mine	:	Undulating Terrain
12	Explosive Requirement	:	3.7 kg/day
13	Diesel/Fuel requirement	:	119.4 KL/year (398 Litres/day)

Production Details

Year	Annual Production Plan		OB	Bench RL in meters
	In Cubic Meters	In Tons	In Cubic Meters	

1st	43,102	120,686	4,290	120-112
2nd	42,861	120,011	3,008	112-106
3rd	42,925	120,190	1,273	120-112
4th	42,869	120,033	960	112-106
5th	42,880	120,064	0	106-100
Total	214,637	600,984	9,531	Depth- 20 m

Land Use

Existing Land Use pattern

Category	Area in Hectares
Barren Land	2.66
Quarry	0
Crusher Plant	0
Infrastructure	0
Garland drain	0
Settling Tank	0
Total	2.66

Land Use Pattern after Proposed Plan Period of Five Years:

Category	Area in Hectares
Quarry including Road	1.10
Safety Zone	0.88
O.B. Dump with Parapet Wall	0.01
Garland drain	0.01
Total area in use	2.00
Balance unused area	0.66
Total Leasehold area	2.66

Land Use Pattern after Life of the Mine:

Category	Area in Hectares
Quarry + Dump +Garland Drain	Water Body after reducing the depth partially)
Safety Zone/ Greenbelt	0.88 (Plantation)
Total Leasehold area	2.66

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone	0.88 ha	2200 trees @ 2500 trees per ha
2	Haul /Approach Road	0.5 KM	334 trees on both sides – 3 m distance

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

Waste Generation Waste Generation

A total of 9,531 cum of wastes (Over Burden) will be generated from entire Amlagachi Stone Deposit 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	4,290
2 nd Year	3,008
3 rd Year	1,273
4 th Year	960
5 th Year	0
Total	9,531

Source: Mining Plan

Disposal of Waste from the Quarry

There is only 9,531 cum overburden will be generated in mining plan period which will be used for mine road construction & berm along the approach road construction & maintenance.

Water Quality Management

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

outside

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

Air Quality Management

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

Undertaking submitted affirming :

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

During the presentation the following documents were sought :

- i. Undertaking from mines owners for employment of suitably qualified persons.
- ii. Name of the licensed Agencies who will be engage for blasting using explosive.

- iii. Details of waste generation & its management.
- iv. Details of impact & its mitigative measures.
- v. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the project should be provided.
- vi. Occupational health impact of project should be anticipated and the proposed preventive measures spelt out in details. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP.
- vii. Provide the reference Secondary Data source for Flora & Fauna details.
- viii. Clarification regarding AAQ modelling considering the impacts of all 3 mines.
- ix. Permission from Panchayat for use of water from abandon mines.
- x. Table for EMP budget to be revised to include the details of all the activities for which funds will be utilized.

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 Amlagachi Stone Mine of M/s Maa Durga Stone Works, Mouza : Amlagachi, P.S. : Maheshpur, Dist. : Pakur, Jharkhand (2.66 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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

(Proposal No. : SIA/JH/MIN/ 425582/ 2023).

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

This is a new project which has been taken for appraisal on 16.04.2023.

Project Category : The State Expert Appraisal Committee, Jharkhand deliberated the project during its 92nd meeting held on 20.10.2021 to 23.10.2021 and SEIAA, Jharkhand has approved the ToRs in 93rd meeting held on 26th, 27th & 28th October, 2021. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2021-22/2454/2021/206, date 30.10.2021. The final EIA / EMP submitted by PP to SEIAA on 12.04.2023 and which was forwarded to SEAC on 12.04.2023.

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

Project and Location Details :

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

3	Lease Address	:	Mouza – Suraidih, Block & P.S.- Hiranpur, Dist.- Pakur, Jharkhand
4	Lease Area	:	Ha: 2.81 ha Acres: 6.94 Acres
5	Type of Land	:	Non Forest – Rayati Land
6	Project Cost	:	Capital Cost – 91.50 Lakhs Recurring Cost – 18.24 Lakhs
7	EMP Budget	:	Capital: 37.75 Lakhs (Including CER) Recurring: 1.75 Lakhs
8	CSR / CER Budget	:	13 Lakhs (As per Public Hearing)
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 5,47,966 Cu. M. Tonnes: 14,79,508 Tonnes
11	Mine Life	:	9.87 years
12	Man power	:	46
13	Water Requirement	:	22.35 KLD (Drinking: 0.69 KLD, Dust Suppression: 10.62 KLD, Plantation: 11.04KLD)
14	Water Source	:	<ul style="list-style-type: none"> Water will be Sourced from Surrendered Mine at a distance of 80 meters for Dust Suppression and Plantation. Water for Domestic Consumption will be sourced from Bore Well at a distance of 300 meters. Water will be supplied through water tanker.
15	DG Set / power	:	60 KVA
16	Crusher	:	NA
17	Nearest Water Body	:	Torai River 3.00 KM
18	Nearest Habitation	:	Suraidih Village: 0.24 Km, Pakur 13.10 KM
19	Nearest Rail Station	:	Pakur 13.50 KM
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Durgapur – 130 Km
21	Nearest Forest	:	Protected Forest - 6.00 Km
22	Road & Highways	:	NH 114 A – 0.92 KM; Belpahari – Beldiha Road – 0.275 KM

CO-ORDINATES :

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

LAND DETAILS :

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

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 1646/M dated 18.09.2020
2	CO	:	The CO, Hiranpur vide letter no. 41/Ra, dated 29.01.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Pakur vide memo no. 39/M, dated 11.01.2021 certified that three other mining leases (6.43 Acres, 18.13 Acres & 5.50 acres) exists within 500 m radius from proposed project site & Total lease area is 14.97 Ha.
4	DFO Wild Life	:	DFO Wildlife, Hazaribagh vide letter no. 1830 , dated 27.10.2020 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.
5	DFO Forest Distance	:	DFO, Pakur Division vide letter no. 633, dated 20.03.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
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) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 10.02.2020
8	Mine Plan Approval	:	Deputy Director Mines, Santhal Pargana Circle, Dumka vide memo no. 285 / DDM, dated 30.09.2020
9	Public Hearing	:	Public Hearing conducted on 24.02.2023.

Working Details :

1	Mining Method	:	Semi Mechanised. Jack Hammer Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 0.95 Ha	End of Mine – 1.81Ha
3	Waste Generation	:	5 years– 65,670 Cu.M	Life of Mine (Waste Gen.) – 65,670 Cu.M
4	Stripping Ratio	:	1:0.09	
5	Working Days	:	300	

6	Benches: size & No	:	3 m in height & 3/ 4 m wide, Bench No.- 1 to 7
7	Elevation of Mine	:	Maximum – 136.46 AMSL Minimum - 123.46 AMSL
8	Ground Level Elevation		123.46 AMSL
9	Ultimate Working Depth	:	86.46 AMSL
10	Water Table	:	81.46 AMSL (42 m bgl)
11	Topography of Mine	:	Undulating Terrain
12	Explosive Requirement	:	18.6 Tons/year
13	Diesel/Fuel requirement	:	608 KL/year (182 Litres/day)

Production Details

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

Land Use :

Existing Land Use pattern

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

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	0.95
Infrastructure	0.02
Dump	0.10
Road	0.02
Green Belt / Safety Zone	0.84
Garland Drain	0.02
Total area in use	1.95
Unutilized	0.86
Total Leasehold area	2.81

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

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

ENVIRONMENT MANAGEMENT

Green Belt Development

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

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road 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

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

Generation of Waste during Planned Period

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

Disposal of Waste from the Quarry

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

Water Quality Management

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

During the presentation the following documents were sought :

- i. Undertaking from mines owners for employment of suitably qualified persons.
- ii. Name of the licensed Agencies who will be engage for blasting using explosive.
- iii. Details of waste generation & its management.
- iv. Details of impact & its mitigative measures.
- v. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the project should be provided.
- vi. Occupational health impact of project should be anticipated and the proposed preventive measures spelt out in details. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP.
- vii. Provide the reference Secondary Data source for Flora & Fauna details.
- viii. Clarification regarding AAQ modelling considering the impacts of all 3 mines.

- ix. Permission from Panchayat for use of water from abandon mines.
- x. Table for EMP budget to be revised to include the details of all the activities for which funds will be utilized.

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 Suraidih Stone Mine of M/s Laxmi Ganesh Stone Works, Mouza : Suraidih, Block & P.S. : Hiranpur, Dist. : Pakur, Jharkhand (2.81 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

10. Khaprajola Stone Mine of Shri Shyam Madhyan, Village : Khaprajola, Tehsil : Pakur, Dist. : Pakur, Jharkhand (3.31 Ha).

(Proposal No. : SIA/JH/MIN/425747 /2023).

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

This is a existing project which has been taken for appraisal on 16.04.2023.

Project Category : The State Expert Appraisal Committee, Jharkhand deliberated the project during its 93rd meeting held on 18.02.2022 to 27.02.2022 and SEIAA, Jharkhand has approved the 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/2021-22/2543/2021/86, date 16.04.2022. The final EIA / EMP submitted by PP to SEIAA on 12.04.2023 and which was forwarded to SEAC on 12.04.2023.

EC Application for: Boulder Stone : 50,000 Cu.M. / year i.e. 1,35,000 TPA

DG Set : 20 KVA

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Khaprajola Stone Mine Project Type – Stone Mine Increase in Production From 36,439 Tons/ Year to 1,35,000 tons / Year up to 21.05.2024 (remaining period of lease)	
2	Lessee:	: Shri Shyam Madhyan	
3	Lease Address	: Mouza – Khaprajola, P.S.- Pakur, No. – 92, District – Pakur, Jharkhand	
4	Lease Area	: Ha: 3.31 ha	Acres: 8.19 Acres
5	Type of Land	: Non Forest – Rayati Land	

6	Project Cost	:	105.40 Lakhs
7	EMP Budget	:	Capital: Rs. 36.16 Lakhs (including CER activities) Recurring: 1.74 Lakhs
8	CSR / CER Budget	:	Rs. 14.00 Lakhs
9	New or Expansion	:	New Project
10	Mineable Reserves	:	Cu.M.: 2,23,560 Cu. M. Tonnes: 6,03,612Tonnes
11	Mine Life	:	6 years
12	Man power	:	36
13	Water Requirement	:	22.66 KLD (Drinking:0.54 KLD, Dust Suppression:8 KLD, Plantation:14.12 KLD
14	Water Source	:	<ul style="list-style-type: none"> Water will be Sourced from Pond at a distance of 200 m from Abandoned Mine through Water Tanker for Dust Suppression and Plantation. Water will be sourced from Bore Well through hired tankers from the nearby settlement (Khaprajola) which is 0.40 km (SW) from the Mine lease area.
15	DG Set / power	:	20 KVA
16	Crusher	:	Na.
17	Nearest Water Body	:	Ganga River 15.00 KM
18	Nearest Habitation	:	Khaprajola Village: 0.40 KM; Pakur 5.00 KM
19	Nearest Rail Station	:	Pakur Railway station – 4.5 km – NNE
20	Nearest Air Port	:	Kazi Nazrul Islam Airport – 125 km – SW
21	Nearest Forest	:	Protected Forest, Mohanpur - 3.70 Km
22	Road & Highways	:	Malpahari road – 1 Km, NH -114 A-3.60 Km North

CO-ORDINATES :

Geo-Coordinates		
Corner Point	Latitude	Longitude
P1	24° 35' 57.38"N	87° 50' 31.02"E
P2	24° 35' 57.87"N	87° 50' 29.45"E
P3	24° 35' 58.85"N	87° 50' 29.60"E
P4	24° 36' 01.45"N	87° 50' 30.78"E
P5	24° 36' 01.92"N	87° 50' 29.78"E
P6	24° 36' 00.96"N	87° 50' 29.13"E
P7	24° 35' 58.16"N	87° 50' 28.35"E
P8	24° 35' 58.57"N	87° 50' 26.60"E
P9	24° 35' 59.00"N	87° 50' 26.48"E
P10	24° 36' 02.84"N	87° 50' 27.80"E
P11	24° 36' 03.18"N	87° 50' 26.91"E
P12	24° 36' 03.06"N	87° 50' 25.60"E
P13	24° 36' 02.27"N	87° 50' 24.86"E
P14	24° 36' 01.91"N	87° 50' 23.57"E
P15	24° 36' 02.24"N	87° 50' 22.63"E

P16	24° 36' 02.53"N	87° 50' 22.68"E
P17	24° 36' 02.88"N	87° 50' 24.16"E
P18	24° 36' 03.74"N	87° 50' 25.19"E
P19	24° 36' 03.64"N	87° 50' 25.87"E
P20	24° 36' 04.13"N	87° 50' 27.31"E
P21	24° 36' 04.37"N	87° 50' 27.21"E
P22	24° 36' 04.70"N	87° 50' 27.52"E
P23	24° 36' 04.62"N	87° 50' 28.32"E
P24	24° 36' 04.37"N	87° 50' 28.78"E
P25	24° 36' 04.01"N	87° 50' 28.90"E
P26	24° 36' 03.76"N	87° 50' 30.33"E
P27	24° 36' 04.08"N	87° 50' 32.04"E
P28	24° 36' 03.79"N	87° 50' 32.16"E
P29	24° 36' 03.01"N	87° 50' 35.18"E
P30	24° 36' 00.13"N	87° 50' 34.03"E
P31	24° 36' 00.49"N	87° 50' 32.58"E
P32	24° 35' 59.10"N	87° 50' 31.88"E

LAND DETAILS

Mouza	Khata No.	Plot No.
Khaprajola	4	626
	6	622, 623, 624, 625
	10	627, 628, 629
	16	631
	17	634, 635, 636, 637
	20	633
	21	632

STATUTORY CLEARANCES

1	LOI/Lease docs	: Lease deed 22.05.2014 to 21.05.2024.
2	CO	: The CO, Pakur vide letter no. 739/Ra, dated 07.08.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	: DMO, Pakur vide memo no. 912/M, dated 02.08.2014 certified that 05 other lease area (10.89 acre, 3.75 acre, 2.35 acre, 3.40 acre & 2.35 acre) exists within 500 m radius from proposed project site and total area is 9.21 ha.
4	DFO Wild Life	: DFO, Wildlife Hazaribagh vide letter no. 991, dated 14.06.2021 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Lake Bird Sanctuary.

5	DFO Forest Distance	:	DFO, Pakur Division vide letter no. 800, dated 17.06.2014 certified that the distance of forest is more than 500 metre from proposed project site.
6	DSR	:	This project site has mentioned in District Survey Report (DSR) of Pakur district.
7	Gram Sabha	:	Gram Sabha conducted on 12.08.2014
8	Mine Plan Approval	:	District Mining Officer, Pakur vide memo no. 2132/M, dated 27.09.2018
9	Previous Environmental Clearance (EC)	:	Previous EC granted by SEIAA, Jharkhand vide letter no. EC/SEIAA/2014-15/446/2014/845, dated 30.04.2015.
10	Public Hearing	:	Public Hearing conducted on 25.02.2023.

Working Details

1	Mining Method	:	Semi Mechanised. Wagon, Drilling & Blasting to be used
2	Quarry Area	:	5 years – 2.23 Ha End of Mine – 2.34 Ha
3	Waste Generation	:	5 years – 7,283 Cum. Life of Mine – 7,283 Cu.M
4	Stripping Ratio	:	1:0.02
5	Working Days	:	300
6	Bench: size & No	:	6 m x 6 m, Bench No.- 1 to 7
7	Elevation of Mine	:	Elevation – 96 AMSL
8	Ground Level Elevation	:	96 m In AMSL
9	Ultimate Working Depth	:	18 mRL (71 m AMSL)
10	Water Table	:	63 m AMSL & also 33 m bgl
11	Topography of Mine	:	Undulating Terrain
12	Explosive Requirement	:	18.9 Tons/year
13	Diesel/Fuel requirement	:	688 KL/year (206.40 Litres/day)

Production Details

Year	Production of Stone		Over Burden (OB)	Bench RL in meters
	Cubic meters	Tons	Cum.	
6 th Year	50000	135000	4855	48 to 42 m (Stone) 42 to 36 m (Stone) 48 to 42 m (O.B.)
7 th Year	50000	135000	0	36 to 30 m (Stone) 30 to 24 m (Stone)

8 th Year	50000	135000	0	30 to 24 m (Stone) 24 to 18 m (Stone)
9 th Year	8333	22499	0	24 to 18 m (Stone)
Total	1,58,333	4,27,499	4855	Depth – 30 m

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry including road	1.39
Total area in use	1.39
Balance area unused	1:92
Total Leasehold area	3.31

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry including road	2.230
Plantation in Safety Barrier	0.970
Dump	0.070
Parapet Wall	0.005
Garland Drain	0.005
Total area in use	3.280
Total Leasehold area	3.310

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

Category	Area in Hectares
Quarry including backfilling & reservoir	2.34 (Water Body) 4855 Cum. of O.B. will be used first for backfilling and after reducing the depth it will be converted into water body
Green Belt in Safety Zone	0.97 (Plantation)
Total area in use	3.31
Balance area unused	0
Total Leasehold area	3.31

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.97 ha	2424 trees @ 2500 trees per ha
2	Other Reclaimed Area	:	0.10 Ha.	250 trees @ 2500 trees per Ha.
3	Haul /Approach Road	:	1 KM	400 trees on both sides – 5 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

- A total of 4,855 Cum of wastes (Over Burden) will be generated from entire Khaprajola Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

Generation of Waste during Planned Period

Year	Waste Generation, In Cum
6 th Year	4,855
7 th Year	0
8 th Year	0
9 th Year	0
Total	4,855

Disposal of Waste from the Quarry

- Over burden will be dumped in the waste dump within the mining lease area in 0.07 Ha. waste dump area inside the lease. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance.

Water Quality Management

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

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

Air Quality Management

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

Undertaking submitted affirming:

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

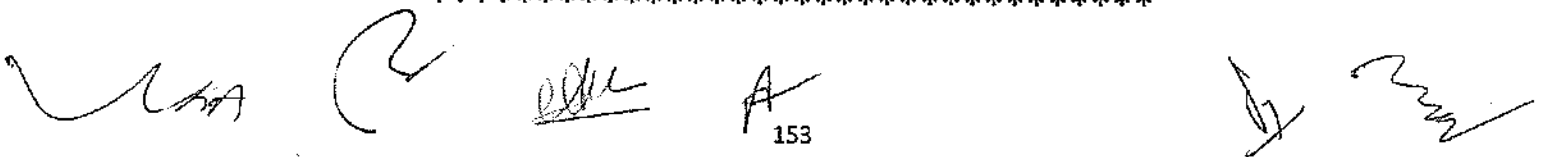
- f. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
- g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.
- h.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

During the presentation the following documents were sought :

- i. Undertaking from mines owners for employment of suitably qualified persons.
- ii. Name of the licensed Agencies who will be engage for blasting using explosive.
- iii. Details of waste generation & its management.
- iv. Details of impact & its mitigative measures.
- v. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the project should be provided.
- vi. Occupational health impact of project should be anticipated and the proposed preventive measures spelt out in details. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP.
- vii. Provide the reference Secondary Data source for Flora & Fauna details.
- viii. Clarification regarding AAQ modelling considering the impacts of all 3 mines.
- ix. Permission from Panchayat for use of water from abandon mines.
- x. Table for EMP budget to be revised to include the details of all the activities for which funds will be utilized.

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 Khaprajola Stone Mine of Shri Shyam Madhyan, Village : Khaprajola, Tehsil : Pakur, Dist. : Pakur, Jharkhand (3.31 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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A. Consideration of Proposals

- i. **Residential & Commercial Complex Project "The Emporio" of M/s Alokik Infra Build LLP, Village : Saraidhela, Distt. : Dhanbad, Jharkhand.**

(Proposal no. : SIA/JH/INFRA2/ 412891 /2023).

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

This is a case of violation which has been taken for appraisal on 17.04.2023 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.

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

Project is classified as Category 8(a) as per EIA Notification as the built up area is less than 1,50,000 m² and development area is less than 50 ha.

The proposed project is construction of Commercial and Residential complex "THE EMPORIO" by M/s Alokik Infra Build LLP. Located Village: Saraidhela, District: Dhanbad, Jharkhand. The total plot area of the project is 8454.73 m² or 2.089 acres. The Built-up area for project is 29518.04 m².

Background:

- The proposed project is construction of Commercial and Residential complex "THE EMPORIO" by M/s Alokik Infra Build LLP. Located Village: Saraidhela, District: Dhanbad, Jharkhand.
- The total plot area of the project is 8454.73 m² or 2.089 acres. The Built-up area for project is 29518.04 m². (including FAR + NON FAR + Services)
- The proposed project is consists of 3 Building blocks for which application has been submitted for Environment Clearance.
- Approved building drawing for the project obtained from Dhanbad Municipal Corporation vide Proposal file no. DMC/BP/0115/W22/2020/ALT2 Dated-24.07.2020.
- Approx. 33% of construction activities in proposed project has been already done therefore applying for Environment Clearance under category B2 (Violation case) Suo moto.

Salient features of the project:

S.No.	Area Details	AREA (m ²)
1	Total plot area (2.089 acres)	8454.73
2	Net Plot Area	8454.73
3	Permissible Coverage Area (@50 % of Net Plot Area)	4227.37

4	Proposed Coverage Area (@49.01 % of Net Plot Area)	4143.97
5	Permissible FAR Area (2.50)	21136.83
6	Proposed FAR Area	20854.98
7	Proposed Non FAR (Basement and stilt)	4663.06
8	Miscellaneous services (STP, UGT, Guard room etc.)	4000
9	Built up area	29518.04
10	Green Area (@20% of Total Plot Area)	1690.95
11	No. of RWH pits	02 pit
12	Total project cost	Rs. 25 Crore

Floor Wise Area Details :

S.No.	Floor Name	Built up Area (m ²)		
		Block A	Block B	Block C
1.	Basement	2289.98	0.00	0.00
2.	Stilt floor	0.00	966.70	688.14
3.	Lower Ground Floor	2342.30	0.00	0.00
4.	Ground Floor	2489.14	0.00	0.00
5.	First Floor	2344.52	842.81	580.56
6.	Second Floor	2344.00	842.83	580.57
7.	Third Floor	2381.97	842.83	580.57
8.	Fourth Floor	829.71	842.83	580.57
9.	Fifth Floor	0.00	842.83	580.57
10.	Sixth floor	0.00	842.83	580.57
11.	Seventh floor	0.00	0.00	301.22
12.	Terrace floor	0.00	0.00	0.00
Total		15021.62	6023.66	4472.77

LAND DETAILS :

Khata no.		Plot no.	
Old	New	Old	New
74	255	2059,2060,2061	404
57		2062	
	3	3305	1956
45	255	2063,1832	404
47	3	3303	1954
110	3	2068	1954,1956
		3304	1955
143	4	2063, 1829, 1831, 1832, 1833	402

Latitude & Longitude:

Pillar No.	Latitude	Longitude
1	23.811892°	86.454908°
2	23.811999°	86.454913°
3	23.812031°	86.454895°
4	23.812251°	86.454944°
5	23.812298°	86.454936°
6	23.812543°	86.455026°
7	23.812862°	86.455195°
8	23.812900°	86.455118°
9	23.813197°	86.454948°
10	23.813496°	86.455088°
11	23.813408°	86.455430°
12	23.813337°	86.455406°
13	23.813331°	86.455423°
14	23.813310°	86.455413°
15	23.813274°	86.455494°
16	23.813313°	86.455516°
17	23.813285°	86.455678°
18	23.812767°	86.455568°
19	23.812732°	86.455653°
20	23.812191°	86.455475°
21	23.812187°	86.455423°
22	23.812215°	86.455284°
23	23.812086°	86.455259°
24	23.811990°	86.455270°

Population Break up:

S. No.	Particulars	No. of Units	PPU/No. of person/m2	Total
1	Residents	74	@6 Person Per Unit	444
	Staff	-	@10 % of residents population	44
	Visitors	-	@10 % of residents population	44
Total Residential Population				532
2	Commercial	12328.66	1 person /6 sqm	2055
	Staff	-	@10% of Commercial population	205
	Visitors	-	@ 90% of Commercial population	1850
Total Commercial Population				2055
Total Population				2587

Site Surroundings :

S. No.	Particulates	Name of Places	Distance (Km)	Direction
1.	Nearest Railway Station	Dhanbad Junction	3.56	SW

2.	Nearest Bus Stand	Dhanbad Bus Stand	2.43	WSW
3.	Nearest Town/City/District head quarter	Dhanbad	3.09	SW
4.	Nearest State Highway/Any other road	SH-13 (Jamtara Dhanbad Road)	8.64	NE
5.	Nearest National Highway	Adjacent to NH 18	0.02	S
6.	Nearest School/College	Delhi Public School	0.48	WNW
		P.K. Roy Memorial College	0.74	W
7.	Nearest Temple/Mosque	New Shiv Mandir Saw Para Dhanbad	0.18	WNW
		Koyla Nagar Masjid Kusum Vihar, Murli Nagar Dhanbad	0.89	SE
8.	Nearest Hospital	JIMS Hospital - Private hospital	0.51	W
9.	Nearest Police Station	Saraidhela Police Station	0.50	WSW
10.	Nearest Fire Station	Fire Station Dhanbad – Infront of Randhir Prasad Verma Stadium	2.13	WSW
11.	National Border/State Border	State Border Jharkhand West Bengal	19.63	S
12.	International Border	NA		
13.	Nearest Pond	Karmik Nagar Talab Lohar Kulli Dhanbad	0.19	NW
14.	Nearest River/Nallah/ Canal	Damodar river	13.90	SW
		Katri River	15.16	W
15.	Wild Life Sanctuary & Eco-Sensitive Zone	Parasnath & Topchanchi Wildlife Sanctuary Eco-Sensitive Zone	13.5	N
16.	Reserved Forest/ Protected Forest	Dhangi Reserved forests	3.11	E
		PF	8.03	SE
		PF	9.30	ESE
		PF	7.93	NW
		PF	9.69	WNW
17.	Any other Forest	Amtal Forest Patch	5.27	SSW
18.	Wetland	NA		
19.	Nearest Defence Installation	CRPF Camp Dhanbad - Gobindpur - Baliapur Rd Mohanpur alias Nutandih	8.47	SE

20.	Historical Importance Place	NA		
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Water Requirement:

The water requirement will be met by Municipal Supply. The total water requirement for operational phase is approx. 86 KLD. Fresh water requirement is approx. 47 KLD.

Calculations for Daily Water Demand:

S. No.	Particulars	Occupancy/ Area/ No's	Fresh Water Demand		Treated Water Demand	
			lpcd	Quantity	lpcd	Quantity
1	Residents	444	70	31.08	30	13.32
	Staff	44	25	1.1	20	0.8
	Visitors	44	5	0.22	10	0.44
2	Commercial	2055				
	Staff	205	25	5.12	20	4.1
	Visitor	1850	5	9.25	10	18.5
4	Horticulture	1690.95sqm	NIL	NIL	1l/ sqm	1.69
Sub Total				46.77~47		38.85~39
Total Water Requirement						85.62~86

Summary of Water and Waste water:

S. No.	Particulars	In KLD
1	Total Water Requirement	86
2	Fresh Water Requirement	47
3	Treated Water	39
4	Wastewater Generated (80% of Fresh i.e. 47 KLD + 100% Flushing i.e. 37.16 KLD)	74.76 ~75
5	STP Capacity (approx. 20% higher than the wastewater generated)	100

Power Requirement:

There is requirement of 3000 kVA power supply. 2 DG sets of capacity of 500 kVA are proposed to be used as backup power supply. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

Calculation of Solid Waste generation:

S. No.	Category	Kg per capita per day	Waste generated (kg/day)
1	Residents	444@ 0.5 kg/day	222
	Staff	44@0.25 kg / day	11
	Visitors	44@0.15 kg /day	6.6

2	Commercial		
	Staff	205@0.25 kg / day	51.25
	Visitor	1850@0.15 kg /day	277.5
3	Landscape waste (1690.94 m ²)	0.41@0.2 kg/acres	0.082
Total Solid Waste Generated			568.43 kg/day

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Dhanbad Forest division vide letter no. 1303, dated 23.07.2020 certified that the distance of reserved / protected forest is 800 m from proposed project site.
2	DFO wildlife	:	DFO, Wildlife Hazaribagh vide letter no. 472, dated 04.03.2023 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
3	CO certificate	:	The CO, Dhanbad vide letter no. 231, dated 14.02.2023 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyon & Register II.
4	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide memo no. 2278/Tech., dated 26.08.2019.
5	Building Plan approval	:	Building plan approved by Dhanbad Municipal Corporation vide memo no. DMC/BP/0077/W22/2020, dated 27.07.2020.
6	AAI	:	Not applicable (As the building height is within 30 mts). As per the G.S.R 770 (E) dated 17.12.2022 the height of building comes under permissible height as per CCZM map.

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 14, 15, 16, 17 & 18.04.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure VI.

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- ii. "The Pride" Commercial Building of M/s Alokik Infra Navnirman Pvt. Ltd., Village : Saraidhela, Distt. : Dhanbad, Jharkhand.

(Proposal no. : SIA/JH/INFRA2/ 412460 /2022).

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

This is a case of violation which has been taken for appraisal on 17.04.2023 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.

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

Project is classified as Category 8(a) as per EIA Notification as the built up area is less than 1,50,000 m² and development area is less than 50 ha.

The proposed project is construction of Commercial Building "The Pride" by M/s Alokik Infra Navnirman Private Ltd. Located Village: Saraidhela, District: Dhanbad, Jharkhand. The total plot area of the project is 7183.15 sq.m. The Built-up area for project is 30211.39 Sq.m.

Background:

- The proposed project is construction of Commercial Building "The Pride" by M/s Alokik Infra Navnirman Private Ltd. Located Village: Saraidhela, District: Dhanbad, Jharkhand.
- The total plot area of the project is 7183.15 sq.m or 1.774 acres. The Built-up area for project is 30211.39 Sq.m. (including FAR + NON FAR + Services)
- The proposed project is consists of single building for which application has been submitted for Environment Clearance.
- Approved building drawing obtained from Dhanbad Municipal Corporation vide Memo No. DMC/BP/0390/W22/2021, dated 02.02.2022.
- Approx. 30 % of the construction of project is already done. Therefore Project has been applied for Environment Clearance under Category B2 (Violation case) Suo moto.

Salient features of the project:

S.No.	Area Details	AREA (sq.mt.)
1.	Total plot area (1.775 Acres)	7183.15
2.	Net Plot Area	7183.15
3.	Permissible Coverage Area (@50%of Net Plot Area)	3591.57
4.	Proposed Coverage Area (@42.16% of Net Plot Area)	3028.36
5.	Permissible FAR Area (2.50)	17957.57
6.	Proposed FAR Area	17886.29
7.	Non-FAR Area (Basement+ Services)	10325.08

8.	Miscellaneous Utility (STP, UGT, Guard Room)	2000.0
9.	Built up area	30211.39
10.	Green Area (@20% of Total Plot Area)	1436.63
11.	No. of RWH Pits	02 Pit
12.	Total project cost	Rs. 25 Crore

Floor Wise Area Details :

S. No.	Floor Name	Total FAR Area (Sq.mt.)	Total Built up Area (Sq.mt.)
1.	Basement First Floor	66.91	4733.77
2.	Basement Second Floor	91.99	4737.33
3.	Lower Ground Floor	2704.87	2872.98
4.	Ground Floor	3028.36	3175.00
5.	First Floor	2715.95	2884.06
6.	Second Floor	2943.34	3111.45
7.	Third Floor	3300.53	3468.64
8.	Fourth Floor	2122.44	2219.34
9.	Fifth Floor	911.92	1008.82
10.	Terrace Floor	0.00	0.00
	Total :	17886.31	28211.39

Khata no. & Plot no. of project:

Khata No		Plot No		
Old	New	Old	New	
136	859	2090	451, 1949	
		2092	451	
		2091	451	
		2095	1948	
		2096	1948	
		2097	1948	
	362	2090	452	
		2091	452	
	977	2095	453/3228	
		2093	454	
	920		2097	1947

Latitude & Longitude:

Pillar No.	Latitude	Longitude
1	23°48'43.67"N	86°27'23.08"E
2	23°48'44.04"N	86°27'23.11"E
3	23°48'44.72"N	86°27'23.36"E
4	23°48'45.51"N	86°27'23.55"E
5	23°48'45.54"N	86°27'23.12"E
6	23°48'45.66"N	86°27'23.13"E
7	23°48'45.72"N	86°27'22.44"E
8	23°48'46.17"N	86°27'22.54"E
9	23°48'46.22"N	86°27'22.57"E
10	23°48'45.89"N	86°27'23.22"E
11	23°48'48.27"N	86°27'24.05"E
12	23°48'47.81"N	86°27'25.36"E
13	23°48'47.37"N	86°27'26.32"E
14	23°48'46.33"N	86°27'25.71"E
15	23°48'45.80"N	86°27'25.45"E
16	23°48'45.21"N	86°27'25.24"E
17	23°48'45.30"N	86°27'24.88"E
18	23°48'44.84"N	86°27'24.68"E
19	23°48'44.92"N	86°27'24.32"E
20	23°48'44.97"N	86°27'24.31"E
21	23°48'44.99"N	86°27'24.11"E
22	23°48'44.59"N	86°27'24.03"E
23	23°48'44.57"N	86°27'24.11"E
24	23°48'43.65"N	86°27'23.87"E

Population Break up:

S. No.	Particulars	No. of Unit	PPU/No. of person/m2	Total
1	Residents	8	@6 Person Per Unit	48
Total Residential Population				48
2	Commercial	17727.40 sq.m.	1 Person/6 sqm.	2955
•	Staff	-	@10% of Total Residential Population	296
•	Visitors	-	@ 90% of Total Residential population	2659
Total Commercial Population				2955
Total Population (Residential + Commercial)				3003

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Site Surroundings:

S. No	Particulates		Name of Places	Distance (Km)	Direction
1.	Nearest Airport		-	-	-
2.	Nearest Railway Station		Dhanbad Junction	3.63	SW
3.	Nearest Bus Stand		Dhanbad Bus Stand	2.67	SE
4.	Nearest State Highway/Any other road		Bhiphore Hirak Road	1.43	N
			SH-13	8.19	NE
5.	Nearest National Highway		NH-18	0.01	S
6.	Nearest School/College		D.A.V. High School	0.18	NW
			Golden Daisy Public School	0.30	N
			P.K. Roy Memorial College	0.86	W
7.	Nearest Masjid/Mandir		New Shiv Mandir	0.29	NW
			Koyla Nagar Masjid	0.84	SSE
8.	Nearest Hospital		JIMS Hospital	0.64	W
			CHD hospital	0.97	SW
9.	Nearest Police Station		Saraidhela Police Station	0.65	SW
10.	Nearest Fire Station		Fire Station Dhanbad	2.29	SW
11.	State Border		West Bengal	19.60	SSE
12.	National Border		-	-	-
13.	Nearest Pond		Karmik Nagar Talab	0.25	NW
			CCWO Lake	0.64	NE
14.	Nearest River/Nallah/ Canal		Damodar River	14.00	SSW
15.	Wild Life Sanctuary and ESZ		Parasnath and Topchachi Wildlife Sanctuary and ESZ	13.4	N
16.	Forest	Reserved/ Protected	Dhangri Reserved Forest	2.86	E
		Any other	Amtal Forest Patch	5.33	SSW
17.	Nearest Town/City/ Head Quarters		City- Dhanbad	3.22	SW
18.	Nearest Defence Installation		Cisf unit bccl dhanbad	0.8	E
			CRPF Camp Dhanbad	8.38	SE
19.	Historical Importance Place		-	-	-

Water Requirement:

The water requirement will be met by Municipal Supply. The total water requirement for operational phase is approx. 60 KLD. Fresh water requirement is approx. 24 KLD.

Calculations for Daily Water Demand:

S. No.	Particulars	Occupancy/ Area/ No's	Fresh Water Demand		Treated Water Demand	
			lpcd	Quantity	lpcd	Quantity
1	Total Residents	48	70	3.36	30	1.44
2	Commercial	2955	-	-	-	-
	Staff	296	25	7.4	20	5.92
	Visitors	2659	5	13.3	10	26.6
3	Landscape	1436.63	NIL	NIL	1l/sqm	1.43
Total Water Requirement (Residential +Commercial)				24.06		35.39
Total Water Requirement						59.45~60

Summary of Water and Waste water:

No.	Particulars	In KLD
1	Total Water Requirement	60
2	Fresh Water Requirement	24.06
3	Treated Water	35.39
4	Wastewater Generated (80% of Fresh i.e. 19.2 KLD + 100% Flushing i.e. 33.96 KLD)	53.16
5	STP Capacity (approx. 20% higher than the wastewater generated)	75

Power Requirement:

There is requirement of 2800 kVA power supply. 3 DG sets of capacity of 500 kVA are proposed to be used as backup power supply. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

Calculation of Solid Waste generation:

S. No.	Category	Occupancy/ Area/ No's	Kg per capita per day	Waste generated (kg/day)

1	Residents	48	0.5 kg/day	24
2	Commercial	2955	-	-
	Staff	296	0.25 kg / day	74
	Visitor	2659	0.15 kg /day	399
3	Landscape waste (1436.63 m ²)	14.36.63	0.2 kg/acres	0.070
Total Solid Waste Generated				497.07 kg/day

STATUTORY CLEARANCES

1	DFO Forest Distance	:	Divisional Forest Officer (DFO), Dhanbad Forest Division vide letter no. 2213 dated 24.11.2020 certified that distance of reserved /protected forest is 1000 meter from the proposed project site.
2	DFO wildlife	:	DFO, Wildlife Hazaribagh vide letter no. 411, dated 27.02.2023 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
3	CO certificate	:	The CO, Dhanbad vide letter no 230 dated 14.02.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
4	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide vide memo no. 4278/Tech./2021, dated 28.12.2021.
5	Building Plan approval	:	Building plan approved by Dhanbad Municipal Corporation vide memo no. DMC/BP/0010/W22/2022, Dated 23.02.2022.
6	AAI	:	Not applicable (As the building height is within 30 mts). As per the G.S.R 770 (E) dated 17.12.2022 the height of building comes under permissible height as per CCZM map.

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 14, 15, 16, 17 & 18.04.2023, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure VI.

CO-ORDINATES

S. No.	Pillar No.	Latitude	Longitude
1	A	24°41'49.94"N	87°46'42.98"E
2	B	24°41'48.81"N	87°46'41.98"E
3	C	24°41'50.40"N	87°46'35.58"E
4	D	24°41'52.06"N	87°46'35.95"E
5	E	24°41'52.56"N	87°46'38.23"E
6	F	24°41'51.05"N	87°46'41.71"E

LAND DETAILS :

S.no.	Mouza	Khata No.	Plot No.
1	Talpahari	43	1243, 1246, 1252/P
		47	1247/P, 1248, 1249, 1250, 1251, 1253, 1254, 1255, 1256/P, 1257/P, 1258/P, 1266/P.

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Pakur vide letter no. 617/M, dated 06.04.2022.
2	CO	:	The CO, Hiranpur vide letter no. : 18/Ra, dated 07.01.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Pakur vide memo no. 677/M, dated 19.04.2022 certified that 02 other mining lease area (6.55 acre & 2.60 acre) exists within 500 m radius from proposed project site & total area is 4.93 ha.
4	DFO Wildlife	:	DFO, Incharge Wildlife Sanctuary, Udhwa (Sahebganj) vide letter no. : 372, dated 16.03.2023 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. : 1505, dated 30.09.2021 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. 573/M, dated 18.03.2023 has informed that this project is identified as a potential area for stone mining on page no. 119, Serial no. 47 of District Survey Report (DSR) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be

		taken.
7	Gram Sabha	: BDO, Hiranpur vide letter no. 131/Vi, dated 15.02.2022 informed that Gram Sabha conducted on 22.01.2022.
8	Mine Plan Approval	: DMO, Pakur vide memo no. 810/M, dated 02.05.2022.

Working Details :

1	Mining Method	: OPEN CAST, MECHANIZED
2	Quarry Area	: 1.230 ha Life of Mine – 10 years
3	Waste Generation	: 05 years–821 Cu.M
4	Stripping Ratio	: 1:0.01
5	Working Days	: 300
6	Benches: size & No	: 6m x 6m
7	Elevation of Mine	: 45 AMSL
8	Ground Level Elevation	: 44 AMSL
9	Ultimate Working Depth	: 18 m
10	Water Table	: 16 AMSL (28BGL)
11	Topography of Mine	: Flat land
12	Explosive Requirement	: 26 Kg/Day
13	Diesel/Fuel requirement	: 0.733 KL/year (733.0 Liters/day)

Production Details of Five Years

Year	Overburden and Wastes soil (cum)	Stone Production (Cum)	Stone Production (Ton)
1 st Year	301	30192	84538
2 nd Year	288	30195	84546
3 rd Year	156	30201	84563
4 th Year	76	30218	84610
5 th Year	00	30194	84543
Total	821	151000	422800

Land Use

LAND USE PATTERN			
	Existing	First to Fifth Years	After Life of Mine
Category	Area in Hectares	Area in Hectares	Area in Hectares
Quarry ✓	---	0.81	0.82 ha area will be

			converted as water water reservoir)
Haul Road	---	0.01	0.00
Proposed Crusher	---	0.00	Not proposed in lease area
Green belt in Safety Barrier	---	0.41	0.41
Dump with Parapet wall & Garland drain	---	0.00	Nil (Waste dump to be used for plantation and haul road)
Total area in use		1.23	1.23
Balance unused area	1.23	0.00	0.00
Balance used area	0.00	0.00	0.00
Total Applied Lease Area	1.23	1.23	1.23

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No. of Trees
1	Safety Zone	: 0.41 Ha	656 trees @ 1600 trees per ha
2	Other Reclaimed Area	: NIL	NIL
3	Haul /Approach Road	: 0.04 Ha	64

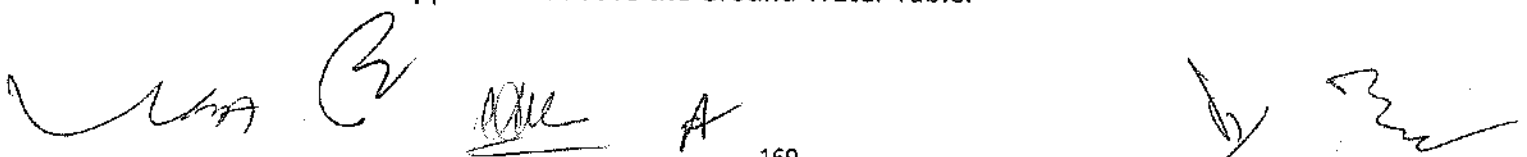
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality 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 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 Talpahari Stone Mine of M/s Rani Stone Works, Village : Talpahari, Thana : Hiranpur, Thana no. : 115, Distt. : Pakur, Jharkhand (1.230 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

- iv. Kashinathpur Stone Mine of Shri Subrata Chatterjee, Village : Kashinathpur, P.S. : Maheshpur, Thana no. : 323, Distt. : Pakur, Jharkhand (1.44 Ha).

(Proposal No. : SIA/JH/MIN/ 425319/2023).

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 17.04.2023.

Project Category: B2 – Application for Stone Quarry

EC Application for: Boulder Stone: 31152 Cu.M. Per Annum / 87226 Ton per Annum
Crusher not proposed in Applied Area
DG Set: Not Required
Mobile Crusher: NA

Project and Location Details :

Sl	Parameter	Details
1	Project Name	: Kashinathpur Stone Mine
2	Proprietor:	: Shri Subrata Chatterjee
3	Lease Address	: Mauza-Kashinathpur, Thana No.323, P.S- Maheshpur, District- Pakur, Jharkhand
4	Lease Area	: Ha: 1.44 Acres: 3.57 Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: 61.0 Lakhs
7	EMP Budget	: Capital: 5.4 Lakhs Recurring: 3.5 Lakh / year
8	New or Expansion	: New

9	Mineable Reserves	:	Cu.M.: 309301 Cu. M.	Tonnes: 866043 Tonnes
10	Mine Life	:	10 years	
11	Man power	:	18	
12	Water Requirement	:	Total water requirement is about 17.54KLD, Drinking water (human) about 0.54; water sprinkling (Source-Near Canal/Water Tanker) about 7, Plantation about 10 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	:	Pagla River about 6.6 Km in N direction	
17	Nearest Habitation	:	Kashinathpur about 0.14 km in SE direction	
18	Nearest Rail Station	:	Chatra Station is about 12.44 Km in SE direction.	
19	Nearest Air Port	:	Sido kanhu Airport is about 50.36 km in SW direction	
20	Nearest Forest	:	RF is about 8.4 Km in SSW direction	
21	Road & Highways	:	NH-14 is 13.0 km in SE direction	

CO-ORDINATES

1	Latitude	:	From 24°22'02.8"N	To 24°22'1.65"N
2	Longitude	:	From 87°44'31.8"E	To 87°44'35.13"E

LAND DETAILS

	Mouza	:	Khata No.	Plot No.
1	Kashinathpur	:	12	119/P, 120, 121/P, 122
		:	39	114/P

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (Loi) has been issued by DMO, Pakur vide letter no. 536/M, dated 26.03.2022.
2	CO	:	The CO, Maheshpur vide letter no. : 913/Ra, dated 24.11.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DMO	:	DMO, Pakur vide memo no. 836/M, dated 06.05.2022 certified that no other mining lease area exists within 500 m radius from proposed project site.
4	DFO Wildlife	:	DFO, Wildlife Hazaribagh vide letter no. : 2155, dated 19.12.2020 certified that the proposed project site is outside Eco Sensitive

		Zone of Udhwa Lake Bird Sanctuary.
5	DFO Forest Distance	: DFO, Pakur Forest Division vide letter no. : 701, dated 05.04.2021 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. 573/M, dated 18.03.2023 has informed that this project is identified as a potential area for stone mining on page no. 131, Serial no. 165 of District Survey Report (DSR) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	: BDO, Maheshpur vide memo no. 915/Vi, dated 23.09.2020 informed that Gram Sabha conducted on 07.10.2020.
8	Mine Plan Approval	: Additional Director, Geology, Hazaribagh vide memo no. 81/G, dated 10.06.2022.

Working Details

1	Mining Method	: Mechanized	
2	Quarry Area	: 1.44 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	: 91 In AMSL	
8	Ground Level Elevation	: 90 m In AMSL	
9	Ultimate Depth	: 18m (90 AMSL to 72 AMSL)	
10	Water Table	: 66 m AMSL	
11	Topography of Mine	: Uneven land	
12	Explosive Requirement	: 26 Kg/Day	
13	Diesel/Fuel requirement	: 220 KL/year (750 Liters/day)	

Production Details

Year	Generation of Waste/O. B in cum	Production of Stone in Cum	Production of Stone in Tonnes
1st	480	31058	86962
2nd	412	30855	86394
3rd	388	31152	87226
4th	00	31110	87108
5th	00	31075	87010
(A)	1280	155250	434700

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	---	0.46	0.90ha area will be convert as water reservoir(Water Accumulate in pit 309301cum)
Haul Road	---	0.01	0.01
Proposed Crusher	---	---	Not Proposed in lease Area
Green belt in Safety Barrier	---	0.53	0.53
Dump with Parapet wall & Garland drain	---	0.00	Nil (Waste dump to be removed and backfilled)
Plantation Along Haul Road	---	---	---
Reclaimed Area	---	---	---
Total area in use	---	1.0	1.44
Balance unused area	1.44	0.44	0.00
Total Applied Lease Area	1.44	1.44	1.44





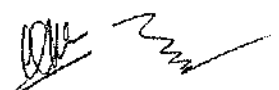
ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION	Area/Length	No of Trees
1	Safety Zone	: 0.53 Ha	848 trees @ 1600 trees per ha
2	Other Reclaimed Area	: NIL	NIL
3	Haul /Approach Road	: 150m	750 @ 300 trees per km

- 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 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 Kashinathpur Stone Mine of Shri Subrata Chatterjee, Village : Kashinathpur, P.S. : Maheshpur, Thana no. : 323, Distt. : Pakur, Jharkhand (1.44 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

- v. Stone Mining Project of M/s Asit Kumar Mandal Stone Works (Prop. : Sri Asit Kumar Mandal), Village : Garga, Tehsil : Nirsa, Distt. : Dhanbad, Jharkhand (3.72 Ha).

(Proposal No. : SIA/JH/MIN/ 418295/2023).

Name of The Consultant: AWS Envirotech (OPC) Pvt. Ltd., Lucknow, Uttar Pradesh.

This is an existing project, which has been taken for appraisal on 17.04.2023.

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 1(a) Mining of minerals as per EIA Notification, 2006.

Project Category: B1– Application for Terms of Reference.

EC Application for: Stone Boulders: Increase in Production Capacity from –144,000.00Tonne (Max) per year to 448,500.00 tonne (Max) per year up to 04/11/2027.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Stone Mining Project
2	Lessee:	: Lessee- Sri Asit Kumar Mandal, S/o Sudhan Chandra Mandal

Land Details:

Khata No	Plot No
72 (old)	495/P (old)
159 (new)	192/P, 286/P (new)

Statutory Clearances:

1	LOI/Lease docs	: i. The Letter of Intent (LOI) has been issued by District Mining Officer, Dhanbad vide memo no. 1002/M. Dhanbad, dated 04.05.2016. ii. Lease Period: 05.11.2017 to 04.11.2027
2	CO	: The CO, Nirsa vide letter no. : 469, dated 13.04.2016 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyari.
3	DMO	: DMO, Dhanbad vide memo no. 1758/M. Dhanbad, dated 06.08.2016 certified that 01 other mining lease area (8.02 acre) exists within 500 m radius from proposed project site and total area is 17.22 Acre.
4	DFO Wild Life	: DFO, Wildlife Hazaribagh vide letter no.: 2298, dated 17.11.2022 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO (Forest Distance)	: DFO, Dhanbad vide letter no.: 2613, dated 11.11.2022 certified that the distance of reserved / protected forest is 433 m from proposed project site.
6	DSR	: The project is mentioned in page No 23 (Point No 86), District Survey Report (DSR) of Dhanbad district.
7	Gram Sabha	: Gram Sabha conducted on 28.04.2016
8	Mine Plan Approval	: i. DMO, Dhanbad vide memo no. 1950, dated 06.09.2016. ii. Scheme of mining was approved by Additional Director, Geology, Hazaribagh vide memo no 189/G, dated 23.08.2022
9	Previous Environmental Clearance (EC)	: Previous EC granted by DEIAA, Dhanbad vide letter no : EC/DEIAA/2016-17/15, dated : 17.01.2017.
10	Consent to Establish (CTE) & Consent to Operate CTO from JSPCB	: i. CTE issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-2011610/2018/175, Dated: 14.02.2018. ii. CTO issued by JSPCB vide Ref. no. JSPCB/RO/DHN/CTO-8861650/2020/81, Dated : 12.11.2020.

11	Previous Production Figure	:	Previous production figure issued by DMO, Dhanbad vide memo no. 414/M, dated 18.03.2023.
12	Compliance Report	:	PAs have submitted self certified compliance report vide letter dated 10.04.2022.

Working Details

1	Mining Method	:	Opencast. Semi mechanized Mining method, wagon drill with blasting
2	Quarry Area	:	3.72 ha Life of Mine – 5.0 years
3	Waste Generation	:	Waste generation-almost nil; weathered rock with mixed soil may be generated, which will be used for development of approach road
4	Stripping Ratio	:	0: 1
5	Working Days	:	300
6	Benches: size & No	:	6m x width not less than 10m
7	Elevation of Mine	:	192 AMSL to 185 AMSL
8	Ground Level Elevation	:	202 AMSL
9	Ultimate Working Depth	:	162 AMSL
10	Water Table	:	158 AMSL
11	Topography of Mine	:	Area represents a small hillock
12	Explosive Requirement	:	828 Kg/day
13	Diesel/Fuel requirement	:	1000 litre/day

Production Details

Year	Slice/Bench	Cross Sectional Area Excavated (in m ²)	Average Length of Excavation (m)	Annual Production (m ³)	Annual Production in (Tonne)	Total Average Production Per Day (Tonne) Stone Boulder
1 st	First & Second Bench (192 m to 180m) Bench Height(6+6)= 12.00m	1245.83	120.00	149500.00	448,500.00	1495.00

2 nd	Second 2)Bench (186 m to 180m) Each Bench Height 6.00m	1245.83	120.00	149500.00	448,500.00	1495.00
3 rd	Third (3)Bench (180 m to 174m) Each Bench Height 6.00m	1311.40	114.00	149500.00	448,500.00	1495.00
4 th	Fourth (3)Bench (174 m to 168m) Each Bench Height 6.00m	1384.26	108.00	149500.00	448,500.00	1495.00
5 th	Fifth (4)Bench (168-162ach Each Bench Height 6.00m	1465.68	102.00	149500.00	448,500.00	1495.00

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Excavation	0.53	2.78 ha	2.78 ha
Road	0.01	0.01	0.01
Safety Zone (Plantation)	0.92	0.93 (Within Safety Zone)	0.93 (Within Safety Zone)
Total	1.46	3.72	3.72
Balance Area	2.26	-	-
Lease Hold Area	3.72	3.72	3.72

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	2.29 acre	3893
2	Haul /Approach Road	:	2.47 km	1652

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

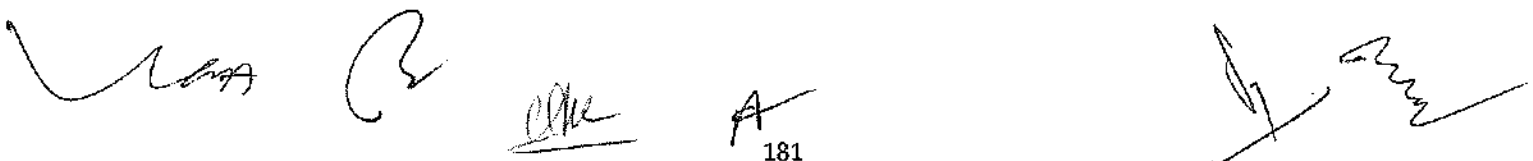
- Waste Generation is almost nil, however if generated will be used for maintenance of Haul/Approach Road.

Water Quality Management

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



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- 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

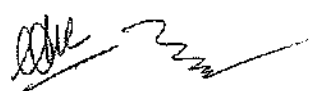
Undertaking submitted affirming:

- 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 than necessary permission should be taken from competent authority.

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 14, 15, 16, 17 & 18.04.2023, 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 V.




A

vi. **Stone Mining Project of M/s Asit Kumar Mandal Stone Works, Village : Garga, Tehsil : Nirsa, Distt. : Dhanbad, Jharkhand (3.17 Ha).**

(Proposal No. : SIA/JH/MIN/ 418828/2023).

Name of The Consultant: AWS Envirotech (OPC) Pvt. Ltd., Lucknow, Uttar Pradesh.

This is an existing project, which has been taken for appraisal on 17.04.2023.

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 1(a) Mining of minerals as per EIA Notification, 2006.

Project Category: B1– Application for Terms of Reference.

EC Application for: Stone Boulders: Increase in Production Capacity from –123,000.00Tonne (Max) per year to 359,400.00 tonne (Max) per year up to 04/11/2027.

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Stone Mining
2	Lessee:	: Lessee- Sri Asit Kumar Mandal, S/o Sri Sudhan Chandra Mandal, Village- Asanbani, P.O. Vitiya, P.S.- Govindpur, Dhanbad, Jharkhand Md. Azad Ansari, S/o Late Mustak Ansari, Village- Dumdumi, PO- Barwa, District-Dhanbad, State-Jharkhand)
3	Lease Address	: Mouza- Garga, Thana- Nirsa, District – Dhanbad, State- Jharkhand
4	Lease Area	: 3.17 ha Acres- 7.85 Acres
5	Type of Land	: Government Land
6	Project Cost	: Rs. 73.20 Lakhs
7	EMP Budget	: Capital: 7.325 Lakhs Recurring: 3.4825 Lakh / year
8	CSR/CER Budget	: 2.20 Lac
9	New or Expansion	: Expansion (production enhancement)
10	Mineable Reserves	: 1738752 tonnes
11	Mine Life	: 5.0 years
12	Man power	: 35
13	Water Requirement	: 22.178 KLD (Drinking: 0.495 KLD, Dust Suppression: 8 KLD, Plantation: 13.683 KLD)
14	Water Source	: Water will be sourced from Abandoned mines through the water tanker for dust suppression and plantation water will be sourced from a bore well within the lease area for drinking and domestic consumptions.

15	DG Set / power	:	NA
16	Crusher	:	NA
17	Nearest Water Body	:	Barakar River, at approx. 4.3 km towards NE direction
18	Nearest Habitation	:	Garga, 0.8 km towards ENE direction
19	Nearest Rail Station	:	Kalubathan Railway station, approx. 15.2 km in South direction
20	Nearest Air Port	:	Deoghar Airport, approx. 82 km towards NE direction.
21	Nearest Forest	:	Nil
22	Road & Highways	:	NH-19, Approx. 2.6 km, WNW direction

CO-ORDINATES

Pillars	Latitudes	Longitudes
P 1	23°53'37.84" N	86°38'02.37"E
P 4	23°53'34.54" N	86°38'01.07"E
P 9	23°53'32.50" N	86°38'05.19"E
P 12	23°53'33.03" N	86°38'01.39"E
P 13	23°53'31.16" N	86°38'00.73"E
P 17	23°53'27.82" N	86°38'03.71"E
P 18	23°53'27.42" N	86°38'04.98"E
P 20	23°53'28.65" N	86°38'05.82"E
P 21	23°53'29.11" N	86°38'05.13"E
P 25	23°53'32.51" N	86°38'09.16"E
P 29	23°53'32.23" N	86°38'05.23"E
P 31	23°53'34.45" N	86°38'06.31"E
P 36	23°53'37.30" N	86°38'03.88"E

Land Details:

Khata No	Plot No
72 (old)	576(P) & 604 (P) - Old
159 (New)	721(P) & 751 (P) - New

Statutory Clearances:

1	LOI/Lease docs	:	<p>i. The Letter of Intent (LOI) has been issued by District Mining Officer, Dhanbad vide letter no. 1212/M., Dhanbad, dated 24.05.2016.</p> <p>ii. Lease Period :05.11.2017 to 04.11.2027.</p>
2	CO	:	The CO, Nirsa, vide letter no. : 466, dated 13.04.2016 has mentioned the plot no. of the project is not recorded as

4	Stripping Ratio	:	0: 1
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m, Bench No 1 to 5 (Conceptual period depth)
7	Elevation of Mine	:	196 AMSL to 190 AMSL
8	Ground Level Elevation	:	202 AMSL
9	Ultimate Working Depth	:	166 AMSL
10	Water Table	:	158 AMSL
11	Topography of Mine	:	Area represents a small hillock
12	Explosive Requirement	:	828 Kg/day
13	Diesel/Fuel requirement	:	800 litre/day

Production Details

Year	Slice/Bench	Cross Sectional Area Excavated (in m ²)	Average Length of Excavation (m)	Annual Production (m ³)	Annual Production in (Tonne)	Total Average Production Per Day (Tonne) Stone Boulder
1 st	First & Second Bench(196 m to 184m)Bench Height(6+6)= 12.00m	998.33	120.00	119800.00	359,400.00	1198.00
2 nd	Second & Third Bench(190 m to 178m)Each Bench Height 12.00m	998.33	120.00	119800.00	359,400.00	1198.00
3 rd	Fourth & Fifth Bench (178 m to 166m) Each Bench Height 12.00m	998.33	120.00	119800.00	359,400.00	1198.00

A

4 th	First & Second Bench(196 m to 184m)Bench Height(6+6)= 12.00m	998.33	120.00	119800.00	359,400.00	1198.00
5 th	Third, Fourth & Fifth Bench(184 m to 166m)Each Bench Height 18.00m	998.33	120.00	119800.00	359,400.00	1198.00

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (at the end of life of mine)
Excavation	0.36	2.23	2.23
Road	0.01	0.01	0.01
Safety Zone (Plantation)	0.93	0.93 (Within Safety Zone)	0.93 (Within Safety Zone)
Total	1.30	3.17	3.17
Balance Area	1.87	-	-
Lease Hold Area	3.17	3.17	3.17

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION	Area/Length	No of Trees
1	Safety Zone	: 2.29 ha	3893
2	Haul /Approach Road	: 1.0 km	668

- 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 is almost nil, however if generated will be weathered rocks mixed with loose soil that will be used for maintenance of Haul/approach Road.

Water Quality Management

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

Air Quality Management

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

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 14, 15, 16, 17 & 18.04.2023, 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 V.

- vii. "Sky Dale" Residential Housing Complex of M/s Morias Infrastructure Pvt. Ltd., Village : Morabadi, Thana : Bariatu, Thana no. : 192, Distt. : Ranchi, Jharkhand.

(Proposal No : SIA/JH/INFRA2/415619/2023).

Name of the consultant : Gaurang Environmental Solutions Pvt. Ltd., Jaipur.

This is a case of violation which has been taken for appraisal on 17.04.2023

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 Hon'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 95th meeting held on 15-22.07.2022 and SEIAA, Jharkhand has approved the violation ToRs in 96th meeting held on 26th, 27th & 28th July, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2601/2022/217, date 06.08.2022. The final EIA / EMP submitted by PP to SEIAA on 12.04.2023 and which was forwarded to SEAC on 12.04.2023.

The proposed project involves the construction of Residential Housing Complex "Sky Dale" at Plot No- 1109, 1110, 1117 & 1118; Khata No: 2,3,26 & 89, Village- Morabadi, Thana- Bariatu, Thana no.-192, District-Ranchi, Jharkhand promoted by Morias Infrastructure Pvt. Ltd. The total plot area of the project as per deed is 8947.82 sq.m and total plot area as per site is 8663.12 sq.m. Total Built-up area envisaged for the project is 31,245.17 sq.m. and net Built up area is 25,046.74 sq.m. Thus, the project requires prior Environmental Clearance under Item 8 (a) {Building & Construction projects} of Schedule- EIA Notification 2006 and subsequent amendments thereafter from the State Level Environmental Impact Assessment Authority, Jharkhand.

Salient Features of the Project :

Particulars	Details
Project address	Village- Morabadi, Thana- Bariatu, Thana no.-192, District-Ranchi, Jharkhand
Type of project	Group Housing Project (Building & Construction)
Screening category	Category 'B-2', item 8(a), (Building and Construction)
Total Plot area	As per Deed : 8947.82 sq. m. As per Site : 8663.12 sq. m
Total Built up Area	31245.17 sq. m.
Ground Coverage	Permissible : 35% (3032.09 sq. m.) Proposed : 34.88 % (3021.69 sq. m.)
FAR	Permissible : 3.0 (25989.36 sq. m.) Proposed : 2.89 (25,036.42 sq. m.)
Green Area	31.03 % (2688.26 sq.m)

Parking facilities	Required Parking	: 259 ECU
	Provided Parking	: 260 ECU
Power requirement	Connected load	: 3049.12 KW
	Max. demand	: 1608.71 kVA
Power backup	DG sets of capacity of	: 500 kVA (1no.)
Solar	160 KW (> 5% of connected load)	
Water requirement & source	Total Water requirement	: 134 KLD
	Fresh Water	: 93 KLD
	Recycled Water	: 41 KLD
	Source	: Ground Water
Sewage treatment & disposal	Sewage treatment facility	: STP of 125 KLD Capacity
	Waste water generated	: 101 KLD
Municipal Solid waste	592 Kg/day	
No. of RWH Pits	03 (1 storage +2 recharge structures)	
Project cost	Rs. 36.03 Crores	
EMP Budget	Capital Cost	
Recurring Cost	: Rs. 23 Lacs	
Socio EMP	Rs. 72 lacs (2% of the total project cost)	

Khata no. & Plot no. of the project :

Khata no.	Plot no.
2	1109
3	1110
26	1117
89	1118

Geographical coordinates :

Point -1		Point -2	
Latitude	: 23°23'35.77"N	Latitude	: 23°23'34.66"N
Longitude	: 85°20'32.92"E	Longitude	: 85°20'32.58"E
Point -3		Point -4	
Latitude	: 23°23'32.35"N	Latitude	: 23°23'33.36"N
Longitude	: 85°20'32.24"E	Longitude	: 85°20'30.37"E
Point 5		Point 6	
Latitude	: 23°23'34.25"N	Latitude	: 23°23'36.75 "N

Longitude : 85°20'29.14 "E	Longitude : 85°20'30.00"E
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The proposed Project involves the construction of Group Housing Project with Dwelling units (225 nos.), and other facilities like Community hall and retail shop etc.
Project facilities as under:-

S. No	Particulars	Details															
1.	No of Blocks	4 Nos. Residential : 3 nos. (Block A, B, C) Community Hall : 1 No.															
2.	No of Floors & Building Height	As under :- <table border="1"> <thead> <tr> <th>Blocks</th> <th>Floors</th> <th>Height upto terrace level</th> </tr> </thead> <tbody> <tr> <td>Block A</td> <td>B+G+9</td> <td>29.70 m</td> </tr> <tr> <td>Block B</td> <td>B+G+9</td> <td>29.70 m</td> </tr> <tr> <td>Block C</td> <td>B+G+9</td> <td>29.70 m</td> </tr> <tr> <td>Community hall</td> <td>G F+1</td> <td>9.1 m</td> </tr> </tbody> </table>	Blocks	Floors	Height upto terrace level	Block A	B+G+9	29.70 m	Block B	B+G+9	29.70 m	Block C	B+G+9	29.70 m	Community hall	G F+1	9.1 m
Blocks	Floors	Height upto terrace level															
Block A	B+G+9	29.70 m															
Block B	B+G+9	29.70 m															
Block C	B+G+9	29.70 m															
Community hall	G F+1	9.1 m															
3.	Project facilities	Dwelling Units : 225 nos. <ul style="list-style-type: none"> o 2 BHK : 63 nos. o 3 BHK : 162 nos. Other facilities : Community hall, Retail shop, Gym.															

Land use Breakup

S. No	Particulars	Permissible	Proposed
1.	Total Plot area as per deed	8947.82 sq.m	
2.	Total Plot area as per site	8663.12 sq. m.	
3.	Total Built up Area	31245.17 sq. m.	
4.	Net Built up Area	25,046.74 sq. m.	
5.	Ground Coverage	35% (3032.09 sq. m.)	34.88% (3,021.69 sq. m.)
6.	FAR	3.0 (25,989.36 sq. m.)	2.89 (25,036.41 sq. m.)
7.	Landscape	31.03 % (2688.26 sq. m.)	
8.	Road & Paved Areas	34.09 % (2953.17 sq. m.)	

Built Up Area Details:

Blocks	Built-up area details (sq.m.)		
	Total Built up area	Total deductions	Net Built up area
Block A	9732.2	1951.64	7770.56
Block B	11626.2	2275.15	9351.06

Block C	9732.2	1951.64	7770.56
Community Block	154.56	--	154.56
Total	31, 245.17	6198.43	25046.74

Parking Details:

Particulars	Flats/ dwelling units	Basis	Required
Residential	225	@1 ECU/ Dwelling unit	225 ECU
Visitors	-	@ 15% of total parking	34 ECU
			259 ECU

Required Parking : 259 ECS

Provided Parking : 260 ECS

Population Projection:

Water demand Calculation

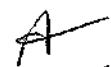
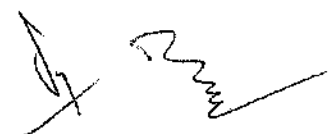
S. No.	Particulars	Population	Fresh water demand	Treated water demand	Total water demand
1.	Residential	1125	@80 LPCD: 90 KLD	@21 LPCD: 24 KLD	114 KLD
2.	Staff	50	@20 LPCD: 1 KLD	@15 LPCD: 1 KLD	2 KLD
3.	Visitors	113	@5 LPCD: 1KLD	@10 LPCD: 1 KLD	2 KLD
4.	Community	42	@20 LPCD: 1 KLD	@20 LPCD: 1 KLD	2 KLD
5.	Landscaping (5lt/sq.m)			14 KLD	14 KLD
	Total		93 KLD	41 KLD	134 KLD

Water & Waste Water Management

- Domestic waste water to the tune of 101 KLD will be treated in sewage treatment plant based on MBBR technology with capacity of 125 KLD.
- Treated water from STP will be reused/ recycled for flushing (27 KLD), landscaping & general washing (14KLD) which will help in reducing the water demand & Excessive treated water will be used in road side plantation (50KLD).
- Efforts will be done for water conservation by the use of efficient and low flow fixtures.
- Water meter will be installed to monitor the water usage at the following points:

Fresh water intake



- ❖ Inlet of flushing tanks
- ❖ STP inlet
- ❖ STP outlet
- ❖ Landscaping

Characteristics of inlet and outlet of STP

Parameters	Influent	Treated effluent
pH	7.5 - 8.5	7 - 8
Suspended solids	100- 150 mg/l	<5 mg/l
BOD	200 - 250 mg/l	<5 mg/l
COD	450 - 600 mg/l	<60 mg/l
Oil & Grease	20-25 mg/l	<1 mg/l

Solid Waste Calculation

Particulars	Population	Basis	Quantity of waste generated (in kg/day)
Residential	1125	@ 0.5 kg/day	562.5
Staff	50	@0.25 kg/day	12.5
Visitors	113	@0.15 kg/day	16.95
Landscaping	0.27 Acre	@0.2 kg/acre/day	0.054
Total			592.004 say 592 Kg/day

SOILD WASTE MANAGEMENT:

Bins	Particulars	Treatment	Disposal
Green	Wet/Compostable waste	Collected in green colored bins	Will be treated in organic waste convertor. Other waste will be sent to Municipal corporation.
White	Dry/ recyclable waste	No in-situ treatment. Collected in white colored bins and sent to solid waste collection point.	
Black	Other waste/ Domestic hazardous waste	No in-situ treatment. Collected in Black colored bins and sent to solid waste collection point	

STATUTORY CLEARANCE

1	DFO Certificate	:	The DFO, Ranchi Forest Division vide Letter No. 2177 Dated 11.05.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO wildlife	:	The DFO, Wildlife Ranchi Vide Letter No. 397 Dated 07.05.2022 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
3	CO certificate	:	The CO, Baragai, Ranchi vide Letter No. 845 Dated 19.11.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyar.
4	AAI NOC	:	Airport Authority of India issued a height clearance NOC vide its NOC ID -RANC/EAST/B/022716/122027, dated 08.04.2016
5	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi vide letter no. 192 dated 23.05.2014.
6	Building Plan	:	Building plan approved by Ranchi Municipal Corporation vide case no. 299/2014/A, dated 04.09.2014.
7	CGWA	:	CGWA NOC for Ground Water abstraction has been obtained vide NOC No. CGWA/NOC/INF/ORIG/2022/14626 dated 21.02.2022, which was valid upto 20.02.2027.

During the presentation the following documents were sought :

- i. The Mosaic plan to include MSW and OWC locations & passage for fire tender movement.
- ii. Proof that the construction activity started in May, 2015

The Project Authorities have submitted the above mentioned documents.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of Rs. 181 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 :-

S. No.	Particulars	Details	Cost (Rs. In Lacs)
1.	Air Environment and Plantation	Fund allocation for the air pollution mitigation measures Tree Plantation (3000 trees) at Govt. School & nearby areas in consultation of DFO (Ranchi)	80
2.	Socio economic environment	Establishment of science and computer lab in the neighbouring Govt. School	20
		Construction of rain water harvesting structures (10 nos. @ 3 lacs each:) at various locations such as	30

		Govt. school, PHC, community center etc. in nearby villages (Construction of RWH will include cost of pipes to be laid from roof top to the RWH pit, channelization of storm water, and other associated civil costs as well)	
3.	Energy conservation	Installation of solar powered PV plant (50 KW) at nearby Govt. School	40
4.	Community Resource	Jute/cotton bag distributions in school and village household as per prohibition of single use plastic (SUP)	11
Total cost			181 Lacs

- I. The Committee visited the project site on 14.04.2023 to verify the details submitted by PAs. During inspection, Committee saw that the STP is installed and is operational, RWH has been installed with 03 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. 181 Lakh.
- III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 181 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.
- 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 premises.
- VIII. Energy conservation measures adhering to part of ECBC norms shall be complied with.

- IX. The penalty of Rupees **36.01 Lakh** being 1% of the project cost incurred till date (Rs. 36.01 Crore) 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 "Sky Dale" Residential Housing Complex of M/s Morias Infrastructure Pvt. Ltd., Village : Morabadi, Thana : Bariatu, Thana no. : 192, 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.
- XII. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.

- XIII. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.
- XIV. A cycling tract to be provided in residential complex so as to save on fuel and make in campus movement environment friendly.

viii. Proposed expansion of existing SMS of M/s Radhagopal Ispat LLP, Village : Konra, Barhi Industrial Area, Tehsil : Barhi, Dist. : Hazaribagh, Jharkhand.

(Proposal No. : SIA/JH/IND1 /425399 /2023).

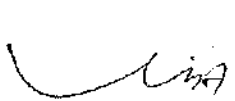
Name of the consultant : AMPL Environ (Private) Ltd., Hyderabad

On verification of the documents submitted it was seen that :

- i. The ToR application was presented by AMPL Environ (Private) Ltd., Hyderabad on 23.02.2022 and ToR was granted accordingly vide letter no. EC/SEIAA/2021-22/2404/2021/83, dated 16.04.2022.
- ii. The final EIA was submitted to SEIAA on 10.04.2023 which was prepared by Pollution & Ecology Control Services, Nagpur.
- iii. Hence it is seen that there has been a change of consultant after obtaining ToR for which no intimation was provided to SEIAA /SEAC.

In view of the above the PAs have been asked to provide the following details & clarifications.

- i. Confirmation from the new consultant i.e. Pollution & Ecology Control Services, Nagpur regarding their acceptance of the project for carried out EIA studies and the date from which this proposal is accepted. This information is to be provided to SEIAA/SEAC from the official E-mail id of Pollution & Ecology Control Services, Nagpur.
- ii. After providing the above information by E-mail, PECS shall carried out 01 month of additional baseline data generation study & incorporate the same in the final EIA/EMP. This baseline study must be carried out by their in-house laboratoty or their empanelled laboratory.
- iii. Latest NABET accridiation certificate shall be provided which is valid at the time of submission of final revised EIA report.
- iv. Final EIA report duly revised, incorporating the above required details shall be submitted for the consideration for Environmental Clearance.



B. Deputy Commissioner –cum- District Magistrate, Chatra or through authorized representative and M/s Rian Enviro Pvt. Ltd.

i. Final District Survey Report (DSR) of Sand, Chatra.

The Final DSR was submitted by Deputy Commissioner, Chatra. He was represented by District Mining Officer, Chatra Shri Gopal Kumar Das and Assistant Director, Geology, Hazaribagh Md. Abu Hussain at the SEAC meeting on 17.04.2023.

During the meeting the consultant M/s Rian Enviro Pvt. Ltd., Patna, Bihar in the presence of DMO, Chatra and Assistant Director, Geology, Hazaribagh presented the DSR before the Committee. The DSR was appraised considering the following aspects alongwith other conditions of Enforcement and Monitoring Guidelines for Sand Mining (EMGSM), 2020 / 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 they have affirmed the following :

1. The final DSR submitted is duly signed by all members of the Sub Divisional Committee and the Consultant. All the pages of the DSR are signed by the authorized officer of the Sub Divisional Committee.
2. The final DSR consists of the complete potential area and is demarcated as Potential Resource Area (PRA) / Sand Leases / Ghats as per EMGSM guideline 2020.
3. The replenishment study of pre & post monsoon period is included in final DSR.
4. The final DSR had been placed in the public domain for 01 (One) month from the 17.12.2022. As per the Sub Divisional Committee no comments / observations were obtained.
5. Demand and supply of the river bed material has been provided. The future demand for next 05 years is included in the final DSR.
6. The PRA / Sand Leases / Ghats have not been proposed on the confluence / meanders / concavities / active channels of the river.
7. Khata & Khasra numbers of the lease area certified by the concerned Circle Officer (CO) are incorporated in the final DSR.
8. The distance of PRA / Sand Leases / Ghats from the Forest / Wildlife Protected area / Birds Sanctuary/ Wildlife Sanctuary / National Park / Eco Sensitive Zone has been verified and certified by the concerned DFOs of the respective Territorial and Wildlife division.
9. A report detailing the presence of aquatic animal in the river in proximity of the proposed PRA / Sand Leases / Ghats is included in the final DSR.
10. The proposed PRA / Sand Leases / Ghats meet the siting criteria of State Pollution Control Board / SEIAA.
11. High resolution color satellite images of the proposed potential sand mining areas are included in final DSR.
12. Bulk density and specific gravity of sand sample data has been provided by NABL accredited laboratory.

13. Cluster and contiguous cluster formation as per EMGSM guidelines, 2020 has been included in the Annexures.
14. Mining is restricted to 3/4th of the river width and 60% of the mineable reserve.
15. Transportation routes for movement of sand are provided in the final DSR.
16. All the annexures as per EMGSM guidelines, 2020 are included in the final DSR.
17. An undertaking with reference to Point no. 9.3 of the EMGSM guidelines, 2020 regarding monitoring of mining near inter-district or inter-state boundary has been provided.
18. The representative of the Sub Divisional Committee along with the Consultants have affirmed that all the guidelines of EMGSM guidelines, 2020 / 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 have been followed in preparation of the final DSR.

The final DSR (sand) of District Chatra is recommended to SEIAA for approval.

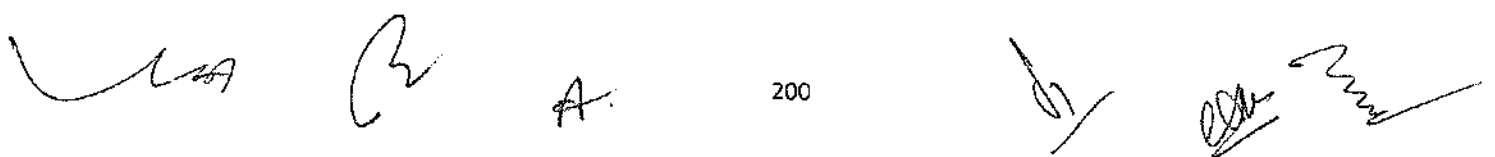
C. Deputy Commissioner –cum- District Magistrate, Deoghar or through authorized representative and M/s Crystal Consultants.

i. Final District Survey Report (DSR) of Sand, Deoghar.

The Final DSR was submitted by Deputy Commissioner, Deoghar. He was represented by District Mining Officer, Deoghar Shri Rajesh Kumar and Assistant Director, Geology, Deoghar Shri Biswadeep Kumar at the SEAC meeting on 17.04.2023.

During the meeting the consultant M/s Crystal Consultants, Ranchi, Jharkhand in the presence of DMO, Deoghar and Assistant Director, Geology, Deoghar presented the DSR before the Committee. The DSR was appraised considering the following aspects alongwith other conditions of Enforcement and Monitoring Guidelines for Sand Mining (EMGSM), 2020 / 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 they have affirmed the following :

1. The final DSR submitted is duly signed by all members of the Sub Divisional Committee and the Consultant. All the pages of the DSR are signed by the authorized officer of the Sub Divisional Committee.
2. The final DSR consists of the complete potential area and is demarcated as Potential Resource Area (PRA) / Sand Leases / Ghats as per EMGSM guideline 2020.
3. The replenishment study of pre & post monsoon period is included in final DSR.
4. The final DSR had been placed in the public domain for 01 (One) month from the 25.02.2023. As per the Sub Divisional Committee no comments / observations were obtained.
5. Demand and supply of the river bed material has been provided. The future demand for next 05 years is included in the final DSR.

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6. The PRA / Sand Leases / Ghats have not been proposed on the confluence / meanders / concavities / active channels of the river.
7. Khata & Khasra numbers of the lease area certified by the concerned Circle Officer (CO) are incorporated in the final DSR.
8. The distance of PRA / Sand Leases / Ghats from the Forest / Wildlife Protected area / Birds Sanctuary/ Wildlife Sanctuary / National Park / Eco Sensitive Zone has been verified and certified by the concerned DFOs of the respective Territorial and Wildlife division.
9. A report detailing the presence of aquatic animal in the river in proximity of the proposed PRA / Sand Leases / Ghats is included in the final DSR.
10. The proposed PRA / Sand Leases / Ghats meet the siting criteria of State Pollution Control Board / SEIAA.
11. High resolution color satellite images of the proposed potential sand mining areas are included in final DSR.
12. Bulk density and specific gravity of sand sample data has been provided by NABL accredited laboratory.
13. Cluster and contiguous cluster formation as per EMGSM guidelines, 2020 has been included in the Annexures.
14. Mining is restricted to 3/4th of the river width and 60% of the mineable reserve.
15. Transportation routes for movement of sand are provided in the final DSR.
16. All the annexures as per EMGSM guidelines, 2020 are included in the final DSR.
17. An undertaking with reference to Point no. 9.3 of the EMGSM guidelines, 2020 regarding monitoring of mining near inter-district or inter-state boundary has been provided.
18. The representative of the Sub Divisional Committee along with the Consultants have affirmed that all the guidelines of EMGSM guidelines, 2020 / 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 have been followed in preparation of the final DSR.

The final DSR (sand) of District Deoghar is recommended to SEIAA for approval.

D. Deputy Commissioner, Khunti or through authorized representative and M/s Crystal Consultants.

i. Final District Survey Report (DSR) of Sand, Khunti.

The Final DSR was submitted by Deputy Commissioner, Khunti. He was represented by District Mining Officer, Khunti Md. Nadeem Shafi and Assistant Director, Geology, Ranchi Smt. Anima Xess at the SEAC meeting on 17.04.2023.

During the meeting the consultant M/s Crystal Consultants, Ranchi, Jharkhand in the presence of DMO, Khunti and Assistant Director, Geology, Ranchi presented the DSR before the Committee.

The DSR was appraised considering the following aspects alongwith other conditions of

Enforcement and Monitoring Guidelines for Sand Mining (EMGSM), 2020 / 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 they have affirmed the following :

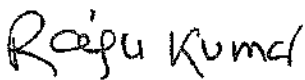
1. The final DSR submitted is duly signed by all members of the Sub Divisional Committee and the Consultant. All the pages of the DSR are signed by the authorized officer of the Sub Divisional Committee.
2. The final DSR consists of the complete potential area and is demarcated as Potential Resource Area (PRA) / Sand Leases / Ghats as per EMGSM guideline 2020.
3. The replenishment study of pre & post monsoon period is included in final DSR.
4. The final DSR had been placed in the public domain for 01 (One) month from the 17.03.2023. As per the Sub Divisional Committee no comments / observations were obtained.
5. Demand and supply of the river bed material has been provided. The future demand for next 05 years is included in the final DSR.
6. The PRA / Sand Leases / Ghats have not been proposed on the confluence / meanders / concavities / active channels of the river.
7. Khata & Khasra numbers of the lease area certified by the concerned Circle Officer (CO) are incorporated in the final DSR.
8. The distance of PRA / Sand Leases / Ghats from the Forest / Wildlife Protected area / Birds Sanctuary/ Wildlife Sanctuary / National Park / Eco Sensitive Zone has been verified and certified by the concerned DFOs of the respective Territorial and Wildlife division.
9. A report detailing the presence of aquatic animal in the river in proximity of the proposed PRA / Sand Leases / Ghats is included in the final DSR.
10. The proposed PRA / Sand Leases / Ghats meet the siting criteria of State Pollution Control Board / SEIAA.
11. High resolution color satellite images of the proposed potential sand mining areas are included in final DSR.
12. Bulk density and specific gravity of sand sample data has been provided by NABL accredited laboratory.
13. Cluster and contiguous cluster formation as per EMGSM guidelines, 2020 has been included in the Annexures.
14. Mining is restricted to 3/4th of the river width and 60% of the mineable reserve.
15. Transportation routes for movement of sand are provided in the final DSR.
16. All the annexures as per EMGSM guidelines, 2020 are included in the final DSR.
17. An undertaking with reference to Point no. 9.3 of the EMGSM guidelines, 2020 regarding monitoring of mining near inter-district or inter-state boundary has been provided.

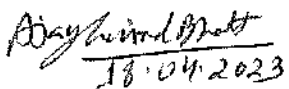


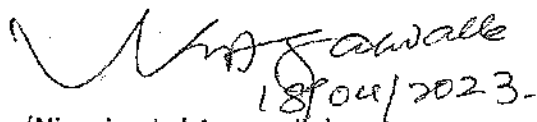
18. The representative of the Sub Divisional Committee along with the Consultants have affirmed that all the guidelines of EMGSM guidelines, 2020 / Hon'ble Apex Court in Civil Appeal no. 3661-3662/2020, Pawan Kumar vs State of Bihar & ors, Hon'ble NGT in O.A. no. 54/2022/EZ, Bhumi Adhigrahan Visthapan Avam Punarvas Kisan Samiti vs State of Jharkhand & ors have been followed in preparation of the final DSR.

The final DSR (sand) of District Khunti is recommended to SEIAA for approval.

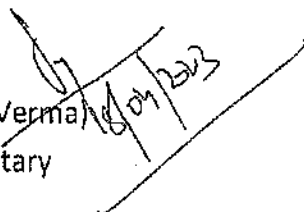
The meeting concluded with thanks to all present.



(Dr. Raju Kumar)
Member


(Dr. Ajay Govind Bhatt)
Member


(Niranjana Lal Agarwalla)
Member


(Dr. Kirti Avishek)
Member


(Srikant Verma)
Secretary


(Ashok Kumar Singh)
Chairman

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

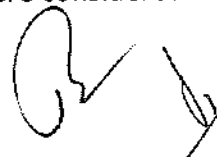
- i. Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and 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, Forest and Climate Change as per OM no. F.no. IA3-22/10/2022-IA.III [E 177258], dated 08th June, 2022 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing / existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification, 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.



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- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site. .
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

5. Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-
thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, 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 2500 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.

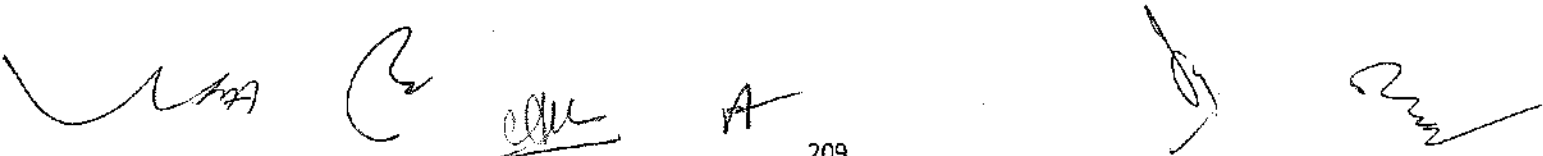
B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON FERROUS)

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 is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022. of MoEF&CC, Govt. of India.

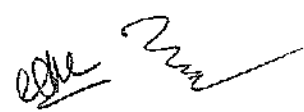
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I. Statutory Compliance

- i. The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project.
- ii. 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.
- iii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iv. 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).
- 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.

II. Air quality monitoring and preservation

- i. Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. to be carried out at least once in six months. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation with the SPCB.
- 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 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 sprinkling/rain gun/ mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, 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. Major approach roads shall be black topped and properly maintained.
 - v. The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining 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 that the impact of sound, dust and accidents could be appropriately mitigated.
 - vi. 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 centers.
 - vii. 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.
 - viii. 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.11 (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,



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- 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 MOEF&CC/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. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river / nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.
 - vii. Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff.
 - viii. 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.
 - ix. Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.
 - x. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
 - xi. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/Gol 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.

- xii. The project proponent shall take all precautionary measures to ensure reverian / riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /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 below 85 dB(A) in the work environment. Workers engaged in underground mining operations, operation of HEMM, etc. shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms/guidelines in this regard. Progress in usage of such accessories to be monitored. Adequate awareness programme for users to be conducted.
- ii. 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. No change in mining method *i.e.* UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
- iii. 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).
- iv. Underground work place environmental conditions shall be rendered ergonomic and au breathable with adequate illumination in conformance with DGMS standards.
- v. No mining activity shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.
- vi. 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(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).

- ii. Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, 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. Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.
- 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, alongwith fly ash for external dump of overburden, backfilling or stowing of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- v. A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.
- vi. Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.
- vii. Native tree species shall be selected and planted over areas affected by subsidence.
- viii. 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 flora/fauna, if any, spotted/reported in the study area. 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 three-tier plantation, of width not less than 7.5 m, shall be developed all along the mine lease area in a phased manner. The green belt

comprising of a mix of native species shall be developed all along the major approach roads/ 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.
- ii. The Project Proponent shall undertake Occupational Health survey for initial and Periodical medical examination of the workers engaged in the Project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS Circulars. Besides carrying out regular periodic health check-up of their workers, 20% of the workers engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.
- iii. Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
- v. Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
- vi. Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing. Land oustees shall be compensated as per the norms laid out R&R Policy of the Company/ or the National R&R Policy/ R&R Policy of the State Government, as applicable.
- vii. The project proponent shall follow the mitigation measures provided in this Ministry'S OM No.Z-11013/5712014-IA.11 (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 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.

XI. 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 tum 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 authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and/the State Government.

- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- 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 may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. 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.
- 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. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.









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.

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- 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.

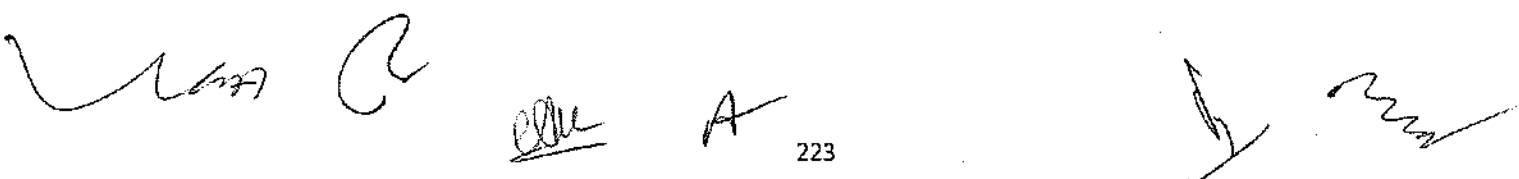


V. Energy Conservation measures

- 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.

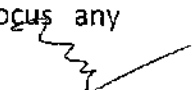
- a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation
- ii. Vehicles hired for bringing construction material to the site should be in good condition 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

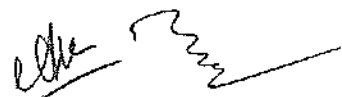

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infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / 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.

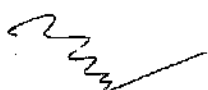
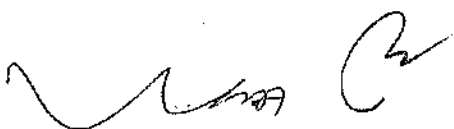
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility 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.



- 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. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.



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-IAJ (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 all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust 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-IAJ (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- vi. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
- vii. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
- viii. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

- i. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- ii. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
- iii. The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training,

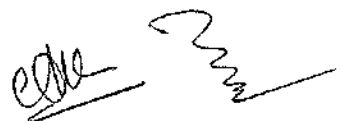
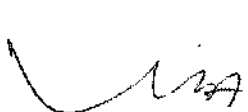
awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining Plan

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

VI. Land reclamation

- i. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- ii. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as



- per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- iii. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
 - iv. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
 - v. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.
 - vi. Catch drains, settling tanks and ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
 - vii. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
 - viii. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

- i. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural

roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain 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 shall not increase production rate and alter lease area during the validity of Environmental Clearance.
- x. Any appeal against this Environmental Clearance 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.

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.

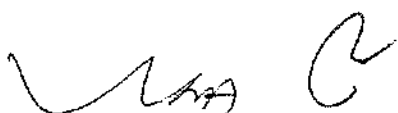
- xx. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to 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.

- 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.
- xliii. 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 is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022 of MoEF&CC, Govt. of India.



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

A. Standard Conditions :

1. Examine base line environmental quality along with projected incremental load due to the project.
2. Environmental data to be considered in relation to the project development would be (a) land, (b) ground water, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
3. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding areas. Any obstruction of the same by the project.
4. Submit the details of the tree felling for the project.
5. Submit the present land use and permission required / obtained for any conversion such as forest, agriculture land etc.
6. Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of E (P) Act.
7. Ground water classification as per the Central Ground Water Authority.
8. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
9. Rain water harvesting proposals should be made with due safeguards for ground water quality. Maximize recycling of water and utilization of rain water.
10. Examine details of solid waste generation, treatment and disposal.
11. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption and energy efficiency.
12. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
13. Examine road / rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
14. Examine the details of transport of materials for construction which should include source and availability.
15. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
16. Submit details of a comprehensive Disaster Management Plan including emergency evacuation and fire during natural and man-made disaster.

17. Details of litigation pending or any notice received against the project, if any, with direction / order passed by any Court of Law against the Project should be given.
18. The cost of the Project (capital cost and recurring cost) the damage cost of already opened land as well as the cost to wards implementation of EMP should be clearly spelt out.
19. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measures, project proponent can refer to the model ToR available on Ministry website "[http://moef.nic.in /Manual / Townships](http://moef.nic.in/Manual/Townships)".
20. Any other rules / guidelines / orders issued by any competent authority shall be applicable to the project at the time of consideration of the projects for grant of EC.

B. 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.

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 is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022 of MoEF&CC, Govt. of India.

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