MINUTES OF THE 96TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 16TH , 17TH, 18TH and 19TH AUGUST, 2022

The 96th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 16th , 17th, 18th and 19th August, 2022 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 Niranjan 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 15th , 16th , 17th, 18th , 19th , 20th , 21st and 22nd July, 2022. These projects have been put up for discussions. Besides, these Projects, wherein PP's were asked to provide requisite information / clarifications in the earlier meeting of SEAC, were also considered for appraisal. The Project Proponents have been asked to make technical presentation for the appraisal of their projects before the committee.

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

Day 1 : August 16th , 2022 [Tuesday]

Consideration of Proposals

1. **Brahmadiha Coal Mine for production of 0.5 MTPA Normative Coal through Opencast mining method with total excavation of 22.982 MCum of M/s The Andhra Pradesh Mineral Development Corporation Limited (APMDC), Village : Bhorandiha, Bishwasdih, Budhiadih, Chunjka & Tikodih, Tehsil & Distt. : Giridih, Jharkhand (105.153 Ha).**

(Proposal No. : SIA/JH /CMIN /72368 /2022)

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

This is a new project which has been taken for appraisal on 16.08.2022

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) (i) Mining of Minerals (Coal) as per EIA Notification, 2006.

The coal block (named Brahmadiha Coal Mine) was earlier allocated to M/s Castron Technologies Ltd. in 1997. The EC was obtained for this coal block vide F. No. J-

110015/14/2002-IA.II(M) on 12.03.2004, later on it was transferred in the name of M/s. Castron Mining Ltd. vide F. No. J- 110015/14/2002-IA.II(M) on 09.12.2009. The coal block was de-allocated in September 2014 as perthe judgment of Hon'ble Supreme Court. Now the block (named Brahmadiha Coal Mine) has been allotted to M/s Andhra Pradesh Mineral Development Corporation Limited (APMDC) for sale of Coalunder the provisions of the Coal Mines (Special Provisions) Act 2015.

After allocation of the coal block, APMDC desired to obtain transfer of EC from MoEF&CC. Accordingly, it applied for transfer of EC through online in PARIVESH portal. The proposal was deliberated in the MoEF&CC and concluded that the validity of EC dated 12th March, 2004 has been expired and EC is no more valid and therefore cannot be transferred. Also, the MoEF&CC directed to apply fresh proposal of Environment Clearance as per EIA Notification, 2006 and its amendments therein i.e., under Category B as per EIA Notification, 2006 (the area of project is less than 150 ha) toState Authority. The current proposal is production of 0.5 MTPA (peak 0.75 MTPA) coal through Opencast mining method with total excavation of 22.982 MCum. Total mine lease area is spread over 105.153 Ha.

Salient features of the Project :

Project Name	Brahmadiha Coal Mine		
Location of Mine Site	Villages – Bhorandiha, Bishwasdih, Budhiadih, Chunjka & Tikodih, Tehsil & District – Giridih, State – Jharkhand		
Mining Lease Area	Total Lease area: 105.153 Ha		
Type of Land	**Private Land**	**Govt. Land**	**Total**
	56.990 Ha	48.163 Ha	105.153 Ha
Coordinates	24°08'19" to 24°09'18" N 86°19'12" to 86°19'53" E		
Mine Lease Area Located in Toposheet/OSM no.	72L/8		
Minerals of mine	Coal		
Total Geological reserves	5.56 MT		
Total Mineable reserves	2.215 MT		
Extractable reserves	1.92 MT		
Life of mine	6 years		
Proposed production of mine	0.5 MTPA		
Method of mining	Shovel and Dumper Combination for Open Cast Mining of Coal		
No. of working days	300 days and 3 shifts per day		
Water demand	Make-up Water requirement is about 327 KLD.		

Sources of water	7 KLD water will be used for drinking and sourced from Borewell. 320 KLD water will be used for other processes and sourced from Mine Pit Water. Permission for both the above obtained from CGWA vide NOC No. CGWA/NOC/MIN/ORIG/2022/14517, Dt. 10.02.2022.
Power requirement	A total of 11 KV will be required for the proposed activity. Electrical power requirement for the proposed Mining Plant shall be met from proposed 132/11 KV substation located in Giridih. Power supply to MRS shall be made by extension at proposed 33/11 KV sub-station and through 3 km 33 KV double circuit line overhead line with wolf conductor up to Main Receiving Station.
Manpower	200
Nearest railway station	Giridih Railway Station, 3.2 Km, NE.
Nearest State Highway/ Nationalhighway	SH13 is at 1.0 km in NE. Metalled Road connects to Burhidih (Budiadih) to Biswasdih passes through the mine lease.
Nearest airport	Birsa Munda Airport, Ranchi is about 140 Km in SW direction.
Seismic zone	Zone II, as per Seismic Map of India
Project Cost	Rs. 90 Crores

Land Details:

Mouza	Khata no.	Plot no.
Chunjka	5, 7, 22, 30, 33 and 54	913P to 917P, 918 to 932, 933P, 1213, 1223 and 1232
Budhiadih	1 to 15, 17, 19 to 24, 26, 27, 30, 37 to 42, 44, 46, 51, 52, 65, 150 and 162	402P, 407P, 409P, 410, 411, 412P, 413 to 417, 418P, 419P, 426P, 427P, 774, 775P, 776, 777P, 778, 779P, 780P, 783P, 784 to 791, 792P, 793 to 935, 936P to 939P, 940 to 945, 946P, 947P, 1048P, 1110P, 1111P and 1112 to 1207

Bhorandiha	6, 8, 10, 13, 19, 20, 34, 37, 39 to 43, 46, 47, 50, 72, 77, 82, 83, 103, 128, 140, 143, 145, 179, 189, 191, 193 and 197	704P to 708P, 709, 725P, 726, 727, 728P, 730P, 836P, 839P, 840P, 852P, 858P, 859P, 860 to 863, 864P, 865, 866P, 871P, 872P, 873 to 875, 876 P to 880 P, 881 to 897, 898 P, 899 P and 932
Bishwasdih	1 to 4, 6, 8, 10 to 14, 17, 20, 23, 25, 26, 29, 30, 32, 34, 36, 38, 42, 44, 45, 47, 49, 50, 56, 57, 63, 64, 71, 73 and 103	1, 2, 3P, 4 to 59, 60P to 62P, 63, 64P, 66P, 67, 68P, 106P, 107 to 110, 111P, 112 to 136, 137P to 139P, 140 to 150, 151P to 153P, 164P, 165P, 166, 167, 168P, 169P, 169, 170, 171P, 176P, 333P, 334P, 336P, 337P, 338 to 344, 345P, 346P, 347, 348P, 368P and 370P
Tikodih	1 to 5, 7, 8, 10, 11, 13 to 17, 19, 20, 22, 24 to 30, 33 to 35, 37, 39, 40, 43, 44, 46 to 48, 50 to 52, 57, 59, 63, 71, 81 and 84	1 to 103, 104P, 105P, 106 to 123, 124P, 125 to 158, 159P, 160, 161, 162P, 163, 164P, 165P, 166, 167, 168P, 169, 198P, 200P, 201P, 203P, 204, 205, 206P, 219P to 221P, 234P, 249P, 250P, 252P, 253 to 255, 256P, 257, 258, 259P, 261P, 262P, 263, 264, 265P, 280P, 281 to 283, 284P, 285 to 293 and 294P to 298P.

Year Wise tentative Topsoil and OB generation :

Year of operation	Calendar Year	Total (OB + Top Soil) in MM^3	OB in MM^3	Topsoil in MM^3
Year-1	2021-22	0.50	0.38	0.12
Year-2	2022-23	1.41	1.22	0.19
Year-3	2023-24	5.00	4.73	0.27
Year-4	2024-25	5.00	4.65	0.35
Year-5	2025-26	5.00	5.00	0.00
Year-6	2026-27	2.55	2.55	0.00
Total		**19.46**	**18.53**	**0.93**

Re-Handling Schedule:

Year	OperationYear	OB Mcum
3rd Year	2023-24	1.00
4th Year	2024-25	0.91
Total		**1.91**

Proposed Production Schedule: Stripping Ratio

Proposed Production Schedule						
Year of operation	Calendar Year	Coal Production (MT)			OB (MM3)	SR
		UG	OC	Total		
Year-1	2021-22	-	-	-	0.50	-
Year-2	2022-23	-	0.15	0.15	1.41	9.40
Year-3	2023-24	-	0.50	0.50	5.00	10.00
Year-4	2024-25	-	0.50	0.50	5.00	10.00
Year-5	2025-26	-	0.50	0.50	5.00	10.00
Year-6	2026-27	-	0.27	0.27	2.55	9.44
Total		-	**1.92**	**1.92**	**19.46**	**10.14**

Water Requirement:

Description	Make-up Water (KLD)	Recycled Water	Total Requirement	Source
Dust suppression in mine and haul road	143	-	143	Mine Pit
Drinking & domestic	7	-	7	Bore Well
Greenbelt development	122	5	127	Mine Pit & STP
Vehicle & Equipment Washing	25	45	70	Mine Pit & ETP
Evaporation & Other Losses	30	-	30	Mine Pit
Total	**327**	**45**	**379**	

Existing Land Use Pattern (Ha):

S. No.	Name of the village	Area in Acres				
		Private		Government		Total
		Raiyati	Bakasht	GMK	GMA	
1	Tikodih	30.643	0.530	7.025	0.710	38.908
2	Bishwasdih	25.700	0.230	26.012	0.000	51.942
3	Budhiadih	62.908	0.000	71.252	3.640	137.800
4	Chunjka	11.929	0.000	3.420	0.000	15.349
5	Bhorandiha	7.478	1.405	6.533	0.420	15.836
Total in acres		**138.658**	**2.165**	**113.632**	**5.384**	**259.835**
Sub-total in Ha.		**56.114**	**0.876**	**45.986**	**2.177**	**105.153**
Total in Ha.		**56.990**		**48.163**		**105.153**

Proposed Land Use Pattern:

S. No.	Type	Land Use (Ha)		
		Proposed	End of Life	Usage at end of mine closure
1.	Excavation Area	76.6130	--	
	Backfilled Area	--	58.311	Greenbelt/Plantation
	Excavated Void		18.302	Water Reservoir
2.	Topsoil Dump.	1.700	1.700	Greenbelt/Plantation
3.	Safety Zone	6.660	6.660	Greenbelt/Plantation
4.	Road Diversion	0.97	0.97	Road for public use
5.	Settling Pond	0.15	0.15	--
6.	Infrastructure area	1.4800	1.4800	--
7.	Garland Drains	0.65	0.65	--
8.	Green Belt.	9.110	9.110	Greenbelt/Plantation
9.	Undisturbed	7.8200	7.8200	--
	Total	**105.153**	**105.153**	

- Overburden generated till 2nd year will be dumped in the temporary external dump in the northern part of the project boundary. Dumping in the external dump will continue till 2nd Year over an area of about 5.928 Ha. and height of the dump is about 20m. from the surface level. Concurrent backfilling will commence from 3rd year onwards.

- As per hydrogeological report Groundwater table occurs at 278 mRL (amsl) and intersection will occur for mining operations below that. It is envisaged that mining in 1st year itself will intersect the ground water table and dewatering will be required. CGWA permission for dewatering and fresh water for domestic use has been obtained vide NOC number CGWA/NOC/MIN/ORIG /2022/14517 dated 10-02-2022.
- The detailed hydrogeological report will be submitted as Annexure along with the final EIA/EMP Report and highlights of the same shall be included in the report.
- The baseline data for the project has been collected for the period March 2022 to May 2022 and the same will be used for the EIA/EMP Studies.

Statutory Clearances :

1	Lease / Land docs	:	The proposed land documents is certified by the concerned Circle Officer, Giridih Sadar vide letter 453, dated 19.04.2022
2	CO	:	The CO, Giridih Sadar vide letter no. 453 dated 19.04.2022 has certified that the Khatiyan was mutilated resulting in non legibility of some plots. Other plots are clarified as Tand / Parti Kadim / Dhan Khet etc. in Khatiyan. None of the plots are mentioned as "Jungle Jhari"
3	DC-cum- District Magistrate, Giridih		In absence of non availability of Khatiyan / Revenue record for rest of the plots, DC-cum- District Magistrate, Giridih has given a certificate vide letter no. 1522/रा०, dated 18.07.2022 that if any part of land belongs to forest land / jangal jhari in future the project proponent is bound to follow the direction of Forest (Conservation) Act, 1980. This certificate was based on the directives of Revenue, Registration and Land Reforms, Deptt., Govt. of Jharkand issued vide letter no. 05/स०भू० लातेहार (विविध)–181 /2018(छाया संचिका)4792/रा०रांची, दिनांक 04. 12.2018.
4	DFO Wild Life	:	DFO, Wildlife Hazaribag vide letter no. 915, dated 23.05.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Giridih East Division vide letter no. 1631 dated 23.05.2022 certified that the distance of reserved / protected forest is more than 250 m from the project site.

6	CGWA	:	Central Ground Water Authority has issed vide NOC no. : CGWA/NOC/MIN/ORIG/2022/14517 dated 10.02.2022
7	Vesting order	:	Ministry of Coal, Govt. of India has given a Vesting Order no. NA-104/13/2020-NA, dated 02.03.2021.
8	Mine Plan	:	Ministry of Mines & Minerals, Deptt. of Coal, Govt. of India has approved the mine plan vide letter no. 13016/8/99.CA, dated 02.03.2000.

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 16, 17, 18 & 19.08.2022, the Committee recommends for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure I along with special conditions as follows.

i. **R&R plan to be submitted.**
ii. **If tree felling is required a permission should be obtained from Competent Authority.**
iii. **Permission from competent authority for diversion of road and electric tower is required to be included in EIA / EMP.**
iv. **Conceptual plan with green belt to be included in EIA / EMP.**
v. **Hydrogeological study to be conducted and report to be included in EIA / EMP.**
vi. **Proposal for Handling of sludge to be included in EIA / EMP.**
vii. **Feasibility study to installed a conveyor system to be done for transportation of OB during back filling and to be included in EIA /EMP report.**
viii. **Wildlife Conservation plan to be made as 07 Protected Forests exist within 10 KM Buffer Zone.**

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2. **Affordable Housing Project "Bhavya City"of M/s Jaishree and KKA Developers JV, Village : Hurhuru, Tehsil : Bishungarh, Thana no. : 147, Distt. : Hazaribagh, Jharkhand.**

(Proposal No. : SIA/JH /MIS /285800 /2022).

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

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

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

Jaishree and KKA Developer J.V. are proposed to develop residential Building "Bhavya City" Project on the total land area measuring 4503.76 sqm. The proposed build up area is 23443.77

sqm. Affordable Housing "Bhavya City" at Thana No. 147, Village : Hurhuru, Tehsil : Bishungarh, Distt. : Ranchi, Jharkhand.

Salient features of the project :

Sr. No.	Particulars		
1.	Latitude		**23°58'31.64"N**
2.	Longitude		**85°22'22.36"E**
3.	Plot Area		4503.76 Sqm
4.	Proposed Ground Coverage		1520.37 Sqm
5.	**Proposed FAR @3.48**		**15693.43 Sqm.**
6.	Parking Area		5155.34 Sqm.
7.	**Others (Non FAR)**		**2595 Sqm.**
8.	**Total Built-up Area**		**23443.77 Sqm.**
9.	**Total Parking Required (ECS)**		**116 Nos.**
10.	**Total Parking Proposed (ECS)**		**Four-wheeler: 163 Nos.** **Two wheeler: 177 Nos.**
11.	Total Green Area provided @15.05%		677.73 Sqm.
12.	Rain Water Harvesting Pits (with size)		3 Nos.
13.	STP Capacity		100 KLD
14.	Maximum Height of the Building (m)		34.3 m
15.	Power Requirement		~1000 KW
16.	Power Backup		2 DGs of 250 KVA each
17.	Total Water Requirement		~93 KLD
18.	Fresh/Domestic Water Requirement		~60 KLD
19.	Reuse of Recycled Water		~34 KLD
20.	Waste Water Generated		~77 KLD
21.	Solid Waste Generated (Operational)		~392 Kg/day
22.	Biodegradable Waste (Operational)		~235 Kg/day
23.	Non-Biodegradable Waste (Operational)		~157 Kg/day
24.	Number of Tower		03
25.	Basement		01
26.	Stories		B+G+11
27.	R+U Value of Material used (Glass)		U-value-5.6 w/m^2 R-value- 0.17 w/m^2
28.	Total Cost of the project:	i) Land Cost	**656.13 Lakh**
		ii) Construction Cost	**378.38 Lakh**
		Total	**4439.95 Lakh**
29.	EMP Budget		During Construction:
			Capital: 25 Lakhs Recurring: 13.5 Lakhs

			Operational Cost: Capital: 81 Lakhs Recurring: 19.5 Lakhs
30.	Incremental Load in respect of:	i) PM_{10} (24 hr)	1.64
		ii) NO_2 (24 hr)	15.2
		iii) CO (24 hr)	116.4
31.	Construction Phase:	i) Power Back-up	2 DG of 250 KVA each
		ii) Water Requirement & Source	Fresh water – 9 KLD Treated wastewater-12 KLD Source: Tanker water supply
		iii) STP (Modular)	20 KLD

Khata no. & Plot no. of the project :

Khata No	Plot no
1	1053
	1054
	1055
15	1059
	1060
32	1056

Floor wise Built-up Area Details :

S. No.	Description	Block A (Sqm.)	Block B (Sqm.)	Block C (Sqm.)
1	Basement Floor	2728.35	1416.08	360.32
2	Ground Floor	474.54	742.10	387.36
3	First Floor	524.35	744.05	387.36
4	Second Floor	527.42	772.86	387.36
5	Third Floor	527.42	772.86	387.36
6	Fourth Floor	527.42	772.86	387.36
7	Fifth Floor	527.42	772.86	387.36
8	Sixth Floor	527.42	772.86	387.36
9	Seventh Floor	527.42	772.86	387.36
10	Eight Floor	527.42	772.86	352.32
11	Nineth Floor	527.42	772.86	--
12	Tenth Floor	527.42	772.86	--
13	Eleventh Floor	527.42	772.86	--
		9001.39	**10630.86**	**3811.52**

Details of Building Blocks:

Building Block	No. of Floors	No. of Flats
Block A	B+G+11	44
Block B	B+G+11	73

Block C	B+G+8	63
	Total	**180**

Calculation of Population:

Details	Dwelling unit	Person per Dwelling unit	Population
Block A	44	5	220
Block B	73	5	365
Block C	63	4	252
Visitors @15% of total Population			126
Total			**963**

Parking requirement:

Total Parking Required (ECS)	116 Nos.
Total Parking Proposed (ECS)	Four-wheeler: 163 Nos. Two wheeler: 177 Nos.

Site Surroundings and Connectivity Details:

S. No.	Connectivity & Site Surroundings		
	Description		Distance and Direction
1.	Nearest Railway Station	Hazaribagh Town Railway Station	Approx. 3.38 Km towards WNW
2.	Nearest Airport	Birsa Munda Airport, Ranchi	Approx. 73.03 Km South
3.	Nearest Village	Patratu Hurhuru Subash Nagar	0.29 Km towards ESE 0.93 Km towards WNW 0.97 Km towards WNW
4.	Nearest Highway/Roads	NH-20 Patratu Rd. Hurhuru Rd. Hazaribagh Brakagaon Rd.	Approx. 0.03 Km towards East Approx. 0.17 Km towards SSE Approx. 0.51 Km towards North Approx. 1.48 Km towards West
5.	Nearest School & College	Hurhuru Sarkari School Government Middle School, Bharouna Markham College of Commerce St. Kiran Girl's High School	Approx. 0.49 Km towards NW Approx. 1.12 Km towards NE Approx. 1.47 Km towards West Approx. 0.26 Km towards NE
6.	Nearest Hospital	Kshitij Hospital & Research Centre Sadar Hospital, Hazaribagh St. Columba's (Mission) Hospital,Hazaribagh	Approx. 0.78 Km towards SSE Approx. 2.96 Km towards NW Approx. 1.63 Km towards NW

7.	Places of worship	Shiv Temple, Hurhuru Shiv Mandir, Patratu Pandiji Hurhuru Temple	Approx. 0.27 Km towards NW Approx. 0.19 Km towards East Approx. 0.25 Km towards North

Statutory Clearances:

1	DFO Forest Distance	:	DFO, Hazaribagh East Division vide letter no. 2116, dated 04.08.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 790, dated 20.04.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Hazaribag (Sadar) vide letter no. 938, dated 08.07.2022 has certified that applied plot no. belongs to Raiyati land as per Khatiyan. None of the plots are mentioned as "Jungle Jhari". PAs has also submitted the affidavit affirming that the proposed project area does not falls under "Jangle Jhari".
4	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi, vide letter no. 1864/Tech./2021, dated 02.07.2021.
5	Building Plan	:	Conceptual Plan
6.	AAI	:	Project Authority has submitted the affidavit affirming that there is no Airport available in Hazaribagh district. In future if it is required a permission should be obtained from Airport Authority of India.

Water & Waste water requirement Details

Sl. No.	No /name of block	No of dwelling unit	Person per D.U.	Population	LPCD*	Domestic water requirement	Flushing water	Total water requirement	Waste water generation @80%
1	A	44	5	220	100	14740	7260	22000	19052
2	B	73	5	365	100	24455	12045	36500	31609
3	C	63	4	252	100	16884	8316	25200	21823.2
4	Visitor @15% of total population			126	45	3767	1883	5650	4896.45
	Total	180		963		59846	29504	89350	77381
	KLD					**59.85**	**29.50**	**89.35**	**77.38**
	Waste water generation			77.38					
	STP input			77.38					
	STP size @20% higher than wastewater			92.86					
	STP treated water			61.90					

Reuse of treated water								
1	Flushing	29.50						
2	Horticulture +DG	4.38						

Category	Total Quantity (KLD)
Fresh water Req. for domestic purpose	~60
Flushing water Req.	~30
Sewage generation (@80% of the fresh water consumption + 100% flushing water & swimming Pool)	~77 (47+30)
Capacity of STP	~93
Recovered water from STP (80% of Waste water) 1. Flushing 2. Landscaping 3. Discharge to Sewer	~70 ~30 ~4 ~36

Solid Waste Requirement

S.No.	Category of Solid Waste	Waste Generation Rate	Formula	Total Population	Waste Generated	Bio-degradable	Non-biodegradable
1	Residential Refuse	0.3 to 0.6 kg/cap/day	Total Population*0.45	837	376.65	226	151
2	Visitors	0.05 to 0.2 kg/cap/day	Total Population*0.125	126	15.75	9.45	6.3
	Total			**963**	**392**	**235**	**157**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 677.73 sqm. (@15.05% of plot area), which will enhance the beauty of the site and help combat air and noise pollution. (Plan Attached)
- 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. 94 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. 60 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

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

Based on the presentation made and information provided, the Committee decided that the proposal for Affordable Housing Project of M/s Jaishree and KKA Developers JV, Village : Hurhuru, Tehsil : Bishungarh, Distt. : Hazaribagh, Jharkhand 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. 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 point to be installed.

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Day 2 : August 17th , 2022 [Wednesday]

Consideration of Proposals

1. **Group Housing Project "Ashiana Prakriti" of M/s Ashiana Housing Limited, Village & Mauza : Pudisli, Halka no. : 02, Thana no. : 328, Anchal & P.S. : Chandil, Distt. : Seraikela-Kharsawan, Jharkhand.**

   (Proposal No. : SIA/JH/MIS/ 278170/2022).

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

   EC Application for: Residential buildings: Total built-up area is 52691.13 sq m.

   Name of the consultant: P & M SOLUTION, Noida

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

   M/s Ashiana Housing Limited has planned to develop a Group Housing project **"Ashiana Prakriti"** located at Village Pudisli, Mauza-Pudisli, HalkaNo.02, Thana No-328, Anchal Chandil, P.S. Chandil, District Seraikela-Kharswan, State- Jharkhand. Ashiana Housing Limited has entered into a Registered Development Agreement dated 22.11.2021 with the land owners for the development of the said project on this land. As per this agreement Ashiana Housing Limit has exclusive, absolute, and irrevocable rights on the said land for construction, development and marketing of Group Housing project.

   The Project proposal involves development of 5 no. s of Residential buildings - Tower A, Tower B,Tower C, Tower D and Tower E and 21 no. of Shops with the allied facilities like waste management system, storm water management system, water supply system, sewerage system, Fire Fighting Management, adequate parking facility and green area. Total plot area of the project is **15183.7812 sq.m.** Built-up area of project after development will be approx. **52691.13 sq m.**

   Project and Location Details:

Parameters	Description
Plot Area	15183.78 m^2 (approx. 3.75 acre)
Project Cost	INR 123.29 Crores
Built-up Area	52691.13 m^2
Green Area	Green Area on podium (@ 22.39% of plot area)-3400 sq.m Green Area on ground (@ 15 % of plot area)-2270 sq.m
Population	1862
Water Requirement	281 KLD

Fresh Water Requirement	180 KLD
Recycled Water Requirement	101 KLD
Wastewater Generation	212 KLD
STP Capacity	260 KLD (MBBR Technology)
Total Municipal Waste	869 kg/day
Power Requirement	1313 KVA (Jharkhand State Electricity board)
DG Sets	2 no. of DG set of Total 250 kVA
No. of RWH Pits	05
Parking	469 ECU, Total Area - 5169sq.m (in open surface, stilt and podium)
Connecting road	Project site is well connected with road adjacent.
National Highway	NH-18 (2.35 km, NNE)
Nearest Railway Station	Kandra Railway Station (9.99 Km, WSW)
Airport	Sonari Airport (6.24 SE)
Nearest Hospitals	Brahmananda Narayan Multispeciality Hospital (5.34 km, ESE) JKL Hospital (7.05 km, SW)
Nearest Water Bodies	Subernarekha River (0.47 Km W) Bamni River (11.83 Km NNW) Satnala Dam (2.5 Km ESE)

Co-Ordinates :

1	**Latitude**		From 22°51'56.54"N	To 86° 8'38.56"E
2	**Longitude**		From 22°51'51.13"N	To 86° 8'40.12"E

Khata no. & Plot no. of the project :

Khata no.	Plot no.
227	200 (P), 212 (P), 211 (P)

Area Summary :

S. No.	Description	Area (SQ M)
A.	**Plot Area**	**15183.78**
B.	Proposed Ground Coverage (@34.96%) of plot area)	5308

C.	FAR area (@2.71)	41295.1
D.	Non-FAR area	11396.03
E.	Built-up Area (C+D)	**52691.13**
F.	Height	44.9 m
G.	No. of Dwelling Units	274

Statutory Clearances :

1	DFO Forest Distance	:	DFO, Seraikela Forest Division vide letter no. 668, dated 30.03.2022 certified that the distance of reserved / protected forest is 66 m from proposed project site.
2	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 900, dated 29.06.2022 certified that the said project is out side of Eco Sensitive Zone of Dalma Wildlife Sanctuary.
3	CO certificate	:	The CO, Chandil vide letter no. 659, dated 22.07.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
4	AAI NOC	:	An application has been made for height clearance to Airport Authority of India vide application no JAMS/EAST/B/041422/ 666245.
5	Fire Department	:	An application has been made to Fire Department vide File / Acknowlegement / Approval no. SKZP/TEMP/GH/0059/2022
6	Building Plan	:	Conceptual Plan.

Water and waste water Requirement Details :

Category	Population/ Area (sqm)/ Capacity	Standard (LPCD)	Water Requirement (KLD)	Fresh Water Requirement (KLD)	Recycled Water requirement (KLD)
Domestic					
Residents	1602	135	216	151	65
Staff	90	45	4	1.2	2.8
Visitors	170	15	3	2.1	0.9
Club			10	10	-
Commercial			10	10	-
Makeup Water for Swimming Pool			5	5	-
Total Domestic Water Demand			**248**	**180**	**68**
Landscape	5670	4ltr/sq.m	22	-	22

Fire Fighting	-	-	1	-	1
Filter Backwash			10	-	10
Total			**281**	**180**	**101**

Category	Total Quantity (KLD)
Domestic water Req. (Fresh)	180
Flushing water Req.	68
Sewage generation (@80% of the fresh + 100% flushing water requirement)	**212**
Capacity of STP	**260**
Recovered water from STP (90% of Waste water)	**191**
1. Flushing	68
2. Landscaping	22
3. Fire Fighting	1
4. Filter Backwash	10
5. Road washing/Sewer	90

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	1602	0.5	801	641	160
2.	Staff	90	0.25	23	18	5
3.	Visitors	170	0.15	26	21	5
4.	Landscape waste	1.40 Acres	0.2 kg/acres	1	0.8	0.2
	Total Domestic waste			**851**	**681**	**170**
5.	STP sludge	260 KLD	--	18	14	4
Total Waste Generated				**869**	**696**	**174**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Total green area provided at the site is Green Area on podium (@ 22.39% of plot area)-3400 sq.m Green Area on ground (@ 15 % of plot area)-2270 sq.m which will enhance the beauty of the site and help combat air and noise pollution.

- The plant species will be selected based on 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. 260 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, Filter backwash, flushing, fire fighting and in road washing/sewer.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 180 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

- LED lights will be used in Street Lights, Common area etc.
- Solar Power generation will be at least 2% of the total power requirement.

UNDERTAKINGS

1. An affidavit stating that no construction work.
2. Ground water will not be used without taking permission from competent authority.
3. Provision for Solar Power generation will be made for 2% of the total power requirement.
4. We shall provide EV charging points up to 5% of the total parking requirement.

During the presentation the following documents were sought :

i. An undertaking affirming that : -
   a. Ground water will not be used without the permission from Competent Authority.
   b. The tree cover should not be less than 15% and its should be demarcated on site plan.

ii. Sufficient number of EV charging point to be provided.

The Project Authorities have submitted the above mentioned documents.

Based on the presentation made and information provided, the Committee decided that the proposal for Group Housing Project "Ashiana Prakriti" of M/s Ashiana Housing Limited, Village & Mauza : Pudisli, Halka no. : 02, Thana no. : 328, Anchal & P.S. : Chandil, Distt. : Seraikela-Kharsawan, Jharkhand 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. 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 point to be installed.

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2. Commercial Building of "City Select Developers" of M/s City Select Developers, Village : Hindpiri, Tehsil : Ranchi, Thana no. : 209, Distt. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/MIS/ 82087/2022)

Name of the consultant: P & M Solution, Noida

Project Category: 8(a) Category B2 (considered as B1 due to violation).

ToR Application for: Commercial buildings: Total built-up area is 20443.22 sq m.

This is a case of violation which has been taken for appraisal on 17.08.2022 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 and Location Details :

Parameters	Description
Plot Area	6849.50 m2 (approx. 1.69 acre)
Project Cost	INR 17.0 Crores
Built-up Area	20443.22 m^2

Green Area	1373.38 m^2 (@ 15% of plot area)
Population	2454
Water Requirement	70 KLD
Fresh Water Requirement	19 KLD
Wastewater Generation	57 KLD
STP Capacity	70 KLD
Total Municipal Waste	454 kg/day
Power Requirement	1500 KVA (Jharkhand State Electricity board)
DG Sets	1 no. of DG set of Total 600 kVA
RWH Pits	02 no.
Height of the building	38 m
Parking	450 ECS and 5404.8 sq.m
Connecting road	Mahatama Gandhi Main Road (Abuts site, E)
National Highway	NH 20 (2.49 km, E)
Nearest Railway Station	Ranchi Railway station, 1.25 km, SE
Airport	Birsa Munda Airport, 4.33 km, S
Nearest Hospitals	St. Barnabas Hospital (0.96 km, NE)
Nearest Water Bodies	Ranchi Lake (1.17 km, NW) Subernekha River (4.30 km. E) Dhruwa Dam (9.65 km, SW) Potpoto River (7.52 km, N) Jumar River (9.87 km, N)

CO-ORDINATES :

1	Latitude		From 23°21'23.92"N	To 23°21'21.06"N
2	Longitude		From 85°19'22.62"E	To 85°19'26.75"E

Khata no. & Plot no. of the project :

Khata no.	M.S Plot No.
74/1	1785

STATUTORY CLEARANCES :

1	DFO Forest Distance		DFO, Ranchi Forest division vide letter no. 3329, dated 03.08.2022 certified that the distance of reserved/protected forest is more than 250 m from project site.
2	DFO wildlife	:	DFO, Wildlife Ranchi division vide letter no. 676, dated 01.08.2022 certified that national park & sanctuary is not within 10 km from the project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Shahar, Ranchi vide letter no. 654 (ii) dated 06.08.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in M.S / R.S. Khatiyan & Register II.
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. RANC/EAST /B/051717/220193 dated 17.05.2017
5	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand Ranchi vide letter no. 2886/Tech/2021, dated 15.09.2021.
6	Building Plan	:	Ranchi Municipal Corporation has sanctioned the building plan vide letter no. BP02/2014/2020(265/2014/C) dated 11.01.2018
7	Occupancy certificate	:	Obtained on 11/OCT/2019 vide OC No –265/2014/C_OC1 from Ranchi Municipal Corporation.

Water and waste water Requirement Details

Category	Population/ Area (sqm) /Capacity	Standard (LPCD)	Water Requirement (KLD)	Fresh Water Requirement (KLD)	Recycled Water requirement (KLD)
Domestic					
Staff	800	45	36	11	25
Visitors	1654	15	25	8	17
Total Domestic Water Demand			**61**	**19**	**42**
Green area	1373.38 Sq.m	3 ltr/sqm	4	-	4
Fire Fighting			1	-	1
DG			4	--	4

cooling/HVAC					
Total		**-**	**70**	**19**	**51**

Category	Total Quantity (KLD)
Domestic water Req.	19
Flushing water Req.	42
Sewage generation (@80% of the fresh + 100% flushing water requirement)	57
Capacity of STP	70
Recovered water from STP (90% of Waste water) 1. Flushing 2. Landscaping 3. Fire Fighting 4. DG cooling	51 42 4 1 4

Solid Waste Requirement

S. No	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation (kg/day)	Recyclable (kg/day)	Non Recyclable (kg/day)
2.	Staff	800	0.25	200	160	40
3.	Visitors	1654	0.15	248	198	50
4.	Landscape waste	0.33 acres	0.2 kg/acres	1	1	-
5.	STP sludge	70 KLD	--	5		5
Total Waste Generated				**454**	**359**	**95**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 1373.38 m^2 (@ 15% 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 Laborers.
- Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- STP of capacity i.e. 70 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, DG cooling/HVAC, flushing, fire fighting
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 19 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

- Solar Panels will be used in Street Lights, Common area, Pumping area (solar panels will be used to save around 10 % of the total power requirement).

Undertaking

1. An affidavit stating that no construction work.
2. An undertaking that 57 m^3/day recycles waste water generated at Commercial Building of "City Select Developers" located at Plot No. 1785,Khata no. 74/1, Ward no. 13, New Ward no. 27, Holding No. 435 & Holding 435/B, Plot no. (MS)-1785, Thana no. 209, Main Road, Hindipiri, Ranchi, Jharkhand of M/s City Select Developers.
3. An undertaking that 1500 KVA Power requirement in Commercial Building of "City Select Developers" located at Plot No. 1785,Khata no. 74/1, Ward no. 13, New Ward no. 27, Holding No. 435 & Holding 435/B, Plot no. (MS)-1785, Thana no. 209, Main Road, Hindipiri, Ranchi, Jharkhand of M/s City Select Developers.
4. Ground water will not be used without the permission 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 16, 17, 18 & 19.08.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in 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 point to be installed.

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3. **Residential Cum Commercial Project "Faii Residency" of M/s R.K. Builder and Developers, Village : Bhitha, Thana : Gonda, Tehsil : Ranchi, Distt. : Ranchi, Jharkhand.**

(Proposal No. : SIA/JH/MIS/ 72218/2022)

Name of the consultant: P & M Solution, Noida

Project Category: 8(a) Category B2 (considered as B1 due to violation).

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

This is a case of violation which has been taken for appraisal on 17.08.2022 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.

M/s RK Builder and Developers has planned to develop a residential cum commercial project "Faii 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)
Project Cost	INR 22 Crore
Built-up Area	23030.51 m^2
Green Area	308.9 m^2 (@ 5 % of balance plot area)
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	400 KVA (Jharkhand State Electricity board)
DG Sets	DG set of 125 kVA
RWH Pits	10 no.
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

1	Latitude	23°24'54.98"N
2	Longitude	85°19'4.07"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	2342.22

	Coverage(@33.96% of net plot area)	
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 (@5% of balance plot area)	308.9
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 National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
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 letter no. 1920/tech. dated 26.04.2019
5	Building Plan	:	Ranchi Municpal 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**

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) 1. Flushing 2. Landscaping 3. HVAC Cooling	83 34 1 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.
- Green area will be provided in 308.9 m^2 (@ 5 % of balance 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

- Solar Panels will be used in Street Lights, Common area, pumping area (solar panels will be used to save around 10 % of the total power requirement).

Undertaking

1. An affidavit stating that no construction work.
2. An undertaking that 83 m^3_t/day recycles waste water generated at Proposed residential cum commercial project "Faii Residency" at Khata No. 18, 83 & 110, Plot No. 30,31,32,33 &

34 at Village Bhitha, Thana No. 187, Thana Gonda, District Ranchi, Jharkhand shall be met from M/s RK Builder and Developers.

3. An undertaking that 400 KVA Power requirement in Proposed residential cum commercial project "Faii Residency" Khata No. 18, 83 & 110, Plot No. 30,31,32,33 & 34 at Village Bhitha, Thana No. 187, Thana Gonda, District Ranchi, Jharkhand shall be met from M/s RK Builder and Developers.

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 16, 17, 18 & 19.08.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in 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 point to be installed.

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4. **Proposed Residential cum Commercial Project "Palm Hills" of M/s Nisith Keshari Constructions Pvt. Ltd., Village : Bajra, Tehsil : Hehal, Distt. : Ranchi, Jharkhand.**

(Proposal No. : SIA/JH/MIS/ 287703/2022)

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

EC Application for : Residential buildings: Total built-up area is 71000 sq m.

Name of the consultant: P & M SOLUTION, Noida

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

M/s Nitin Keshari Constructions Pvt. Ltd. has proposed to develop a residential cum commercial project at Mauja – Bajra, Thana No – 140, Thana – Sukhdeonagar, Block Mandar, Ranchi, Jharkhand. Project involves development of 1 commercial block, 4 residential blocks, 1 community hall and ancillary facilities. Project site is spread over area of 14,306.5 sq m and has built-up area of 71,000 sq m.

Project and Location Details:

Parameters	Description
Plot Area	14306.5 m^2 (approx. 3.53 acre)
Project Cost	INR 92.0 Crores
Built-up Area	71000 m^2
Green Area	3475 m^2 (@ 24.9 % of plot area)
Population	2540
Water Requirement	314 KLD
Fresh Water Requirement	201 KLD
Wastewater Generation	268 KLD
STP Capacity	280 KLD
Total Municipal Waste	1142 kg/day
Power Requirement	2500 KVA (Jharkhand State Electricity board)
DG Sets	DG set of 500 kVA
RWH Pits	6 no.
Parking	745(445 Car parking and 300 Scooter parking space)
Connecting road	The project site is well connected with Rourkela- Gumla-Ranchi Road Hazaribagh Road connects to circular road at 400 m W

National Highway	NH-39, 2.7km W
Nearest Railway Station	Ranchi Junction Railway station, 7.7 km, SE
Airport	Birsa Munda Airport, 7.4 km, SE
Nearest Hospitals	Radha Rani Mission Hospital (200 m, E) Devkamal Hospital (1.2 km, E)
Nearest Water Bodies	Ratu Maharaja Lake (5.9 Km NW) Kanke Dam (Approx. 5.2 Km NE) Ranchi Lake (approx. 5.7 km E) Kanke Dam (5.1, N)

CO-ORDINATES :

1	Latitude	23°22'21.85"N
2	Longitude	85°15'33.56"E

Land Details :

Khata no.	Plot no.
42	21/1339, 24, 25, 35, 37, 39, 43, 54
149	52
150	55
151	28, 29, 30

Area Summary :

S. No.	Description	Area (sq m)
1.	Plot Area	14306.5
2.	Ground Coverage	4600.0
3.	FAR (@3.3)	47,211.45
4.	Non FAR (including stilt & basement)	23,788.55
5.	Built-up Area	71,000
6.	Green Area (@24.29% of plot area)	3475
7.	No of Units Dwelling unitsShops Community Hall	400 12 5
8.	Height	45.0 m

Statutory Clearances :

1	DFO Forest Distance		DFO, Ranchi Forest division vide letter no. 2139, dated 09.05.2022 certified that the distance of reserved/protected forest is more than 250 m from project site.
2	DFO wildlife	:	DFO, Wildlife Ranchi division vide memo no. 328 dated 02.04.2022 certified that national park & sanctuary is not within 10 km from the project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Hehal, Ranchi vide letter no. 282(ii), dated 16.03.2022
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. RANC/EAST/B/ 110921/634028, dated 12.11.2021
5	Building Plan	:	Conceptual Plan
6	Fire Department	:	Project Authority has given undertaking that the Fire Advisory will be obtained before commencement of project.

Water and waste water Requirement Details

Category	Population/Area (sq m)/Capacity	Standard (LPCD)	Water Requirement-KLD	Fresh Water Requirement-KLD	Recycled Water requirement-KLD
Domestic					
Residents	2000	135	270	189	81
Staff	338	45	15	10	5
Visitors	202	15	3	2	1
Total Domestic Water Demand			288	201	87
Landscape	3475 sq m	6 l/day	21	0	21
Road Washing &Misc	--	--	5	0	5
Total		-	314	201	113

Category	Total Quantity (KLD)
Fresh water Req.	201
Flushing water Req.	87
Sewage generation (@90% of the fresh water consumption + 100% flushing water)	268
Capacity of STP	280
Recovered water from STP (80% of Waste water) Flushing 1. Landscaping 2. Road Washing &Misc 3. Discharge to Sewer	216 87 21 5 103

S. No	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation (kg/day)	Non-Recyclable (Kg/day)	Recyclable (kg/day)
1.	Residents	2000	0.5	1000	700	300
2.	Staff	338	0.25	84.5	59.2	25.4
3.	Visitors	202	0.15	30.3	21.2	9.1
4.	Landscape waste	0.86 acres	0.2	0.172	0	0.172
5.	STP sludge	268 KLD Sewage	--	27.202	0	27.202
Total Waste Generated				1142.174 **~ 1142**	780.36 **~78**	361.814 **~362**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 3475 m^2 (@ 24.9 % 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 Laborers.
- Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- STP of capacity i.e. 280 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Landscaping, Flushing, Discharge to sewer, Road Washing and misc.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 201 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

- Solar Panels will be used in Street Lights, Common area, Pumping area (solar panels will be used to save around 10 % of the total power requirement).

Undertaking

1. An affidavit stating that no construction work.
2. An undertaking that 268 m^3/day recycles waste water generated at Proposed Residential Cum Commercial project "Palm Hills" at Khasra Nos. 21/1339, 24, 25, 28, 29, 30, 35, 37, 39, 43, 52, 54, 55, Mauja – Bajra, Thana No – 140, Thana – Sukhdeonagar, Ranchi, Jharkhand shall be met from M/s Nisith Keshari Constructions Pvt. Ltd.
3. An undertaking that 2500 KVA Power requirement in Proposed Residential Cum Commercial project "Palm Hills" at Khasra Nos. 21/1339, 24, 25, 28, 29, 30, 35, 37, 39, 43, 52, 54, 55, Mauja – Bajra, Thana No – 140, Thana – Sukhdeonagar, Ranchi, Jharkhand shall be met from M/s Nisith Keshari Constructions Pvt. Ltd.
4. Ground Water will not be used without the permission from Competent Authority.
5. Organic waste convertor shall be installed within the permises.

During the presentation the following documents were sought :

i. Evacuation plan showing assembly point on site plan to be provided.

ii. Sufficient number of EV charging point to be provided.

The Project Authorities have submitted the above mentioned document.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Residential cum Commercial Project "Palm Hills" of M/s Nisith Keshari Constructions Pvt. Ltd., Village : Bajra, Tehsil : Hehal, Distt. : Ranchi, Jharkhand 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. 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 point to be installed.

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5. **Proposed Residential Project "Oak Forest" of M/s Nisith Keshari Constructions Pvt. Ltd., Village : Argora, Tehsil : Argora, Distt. : Ranchi, Jharkhand.**

(Proposal No. : SIA/JH/MIS/ 288253/2022)

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

EC Application for: Residential buildings: Total built-up area is 62000 sq m.

Name of the consultant: P & M Solution, Noida

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

M/s Nisith Kehsari Constructions Pvt Ltd (NKCPL) has planned to develop a group housing project located at Mauza Argora, Ranchi, Jharkhand. Project involves development of 6residential block and 1 duplex block along with green area and other ancillary facilities. Project site isspread over area of 14300.25 sq m and has built-up area of 62000.00 sq.m

Project and Location Details :

Parameters	Description
Plot Area	14300.25 m^2 (approx. 3.53 acre)
Project Cost	INR 93.5 Crores
Built-up Area	62000 m^2
Green Area	3018 m^2 (@ 21.1 % of plot area)
Population	1684
Water Requirement	244KLD
Fresh Water Requirement	154 KLD
Wastewater Generation	229 KLD
STP Capacity	230KLD
Total Municipal Waste	873 kg/day
Power Requirement	1600KVA (Jharkhand State Electricity board)
DG Sets	DG set of 500 kVA
RWH Pits	7 no.
Parking	Area - 3864.50 m^2, 555 parking space Car - 98 in stilt, 262 car in basement Two- wheeler - 65 in stilt, 130 in basement
Connecting road	9.61 m road (abuts site in N direction)
National Highway	NH 75 (770 m, E)
Nearest Railway Station	Ranchi Junction Railway Station (4.0 km, E)
Airport	Birsa Munda Airport (3.4 km, SE)
Nearest Hospitals	Ranchi City Hospital (2.0 km, SE) Raj Hospital (3.3 km, ENE)
Nearest Water Bodies	Pipartoli (360 m, N) Argora Talab (660 m, ENE)

Area Summary

S. No.	Description	Area (sq m)
1.	Plot Area	14,300.25
2.	Ground Coverage	3,864.47
3.	FAR (@3.00)	42,900
4.	Built-up Area	62,000.00
5.	Green Area (@21.1% of plot area)	3018
6.	Nos. of Dwelling units	324 (322 flats and 2 duplex)
7.	Height	42

CO-ORDINATES

1	Latitude	23°20'55.35"N
2	Longitude	85°17'28.77"E

LAND DETAILS

Khata No	Plot No
15	2563, 2575
18	2257
27	2555
41	2554, 2279
77	2553
79	2551
188	2552
197	2278, 2557

STATUTORY CLEARANCES

1	DFO Forest Distance		DFO, Ranchi Forest division vide letter no. 2477, dated 08.09.2021certified that the distance of reserved/protected forest is more than 250 m from project site.
2	DFO wildlife	:	DFO, Wildlife Ranchi division vide letter no. 993, dated 12.11.2021certified that national park & sanctuary is not within 10 km from the project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Argora, Ranchi vide letter no. 72(ii), dated 02.03.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. RANC/EAST/B/ 062619/409087dated 16.07.2019
5	Building Plan	:	Conceptual Plan

6	Fire Department	:	Project Authority has given undertaking that the Fire Advisory will be obtained before commencement of project.

Water and waste water Requirement Details :

Category	Population/Area (sq m)/Capacity	Standard (LPCD)	Water Requirement-KLD	Fresh Water Requirement-KLD	Recycled Water requirement-KLD
Domestic					
Residents	1620	135	219	153	66
Staff	32	45	1	0.5	0.5
Visitors	32	15	1	0.5	0.5
Total Domestic Water Demand			**221**	**154**	**67**
Landscape	3018 sq m	6 l/day	18	0	18
Road Washing & Misc	--	--	5	0	5
Total		-	**244**	**154**	**90**

Category	Total Quantity (KLD)
Fresh water Req.	154
Flushing water Req.	90
Sewage generation (@90% of the fresh water consumption + 100% flushing water)	229
Capacity of STP	230
Recovered water from STP (80% of Waste water)	180
1. Flushing	67
2. Landscaping	18
3. Road Washing & Misc.	5
4. Discharge to Sewer	90

Solid Waste Requirement

S. No	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation (kg/day)	Non-Recyclable (Kg/day)	Recyclable (kg/day)
1.	Residents	1620	0.5	810	648	162
2.	Staff	32	0.25	8	6.4	1.6
3.	Visitors	32	0.15	5	4	1

4.	Landscape waste	0.74 acres	0.2	1	0	1
5.	STP sludge	230 KLD	--	49	0	49
Total Waste Generated				873	658	214

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 3018m^2 (@ 21.1 % 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 Laborers.
- Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- STP of capacity i.e. 230 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Landscaping, Flushing, Discharge to sewer, Road Washing and misc.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 154 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

- Solar Panels will be used in Street Lights, Common area, pumping area (solar panels will be used to save around 10 % of the total power requirement).

Undertaking

1. An affidavit stating that no construction work.
2. An undertaking that 229m^3/day recycles waste water generated at Proposed Residential Project "Oak Forest" at Plot No. 2563, 2575, 2257, 2555, 2554, 2279, 2553, 2551, 2552, 2278 & 2557, Khata No. 15, 18, 27, 41, 77, 79, 188, 197, Mauza Argoda, Ranchi, Jharkhand shall be met from M/s Nisith Kehsari Constructions Pvt. Ltd
3. An undertaking that 1600 KVA Power requirement in Proposed Residential Project "Oak Forest" at Plot No. 2563, 2575, 2257, 2555, 2554, 2279, 2553, 2551, 2552, 2278 & 2557, Khata No. 15, 18, 27, 41, 77, 79, 188, 197, Mauza Argoda, Ranchi, Jharkhand shall be met from M/s Nisith Kehsari Constructions Pvt. Ltd.
4. Ground Water will not be used without the permission from Competent Authority.

During the presentation the following documents were sought :

i. Site Plan to be revised with demarcating the additional green belt.

ii. Sufficient number of EV fast charging point to be provided.

The Project Authorities have submitted the above mentioned document.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Residential Project "Oak Forest" of M/s Nisith Keshari Constructions Pvt. Ltd., Village : Argora, Tehsil : Argora, Distt. : Ranchi, Jharkhand 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. 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 point to be installed.

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6. **Residential Project "Pearl The Central Park" of M/s Moti Infraheights Pvt. Ltd., Village : Argora, Tehsil : Argora, Distt. : Ranchi, Jharkhand.**

(Proposal No. : SIA/JH/MIS/ 287892/2022)

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

EC Application for: Residential buildings: Total built-up area is 148889.2 sq m.

Name of the consultant: P & M Solution, Noida

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

M/s Moti Infra Heights Pvt. Ltd.has proposed to develop a residential project at Mauja – Argora, Thana No – 207, Thana – Argora, Ranchi, Jharkhand. Project involves development of 5 residential block along with green area and otherancillary facilities. Project site is spread over area of sq m and has built-up area of 1,48,889.2sq m.

Project and Location Details :

Parameters	Description
Plot Area	36436.14 m^2 (approx. 9.00 acre)
Project Cost	INR 97.0 Crores
Built-up Area	148889.2 m^2
Green Area	5830m^2 (@ 16 % of plot area)
Population	5024
Water Requirement	683 KLD
Fresh Water Requirement	448 KLD
Wastewater Generation	597 KLD
STP Capacity	650 KLD
Total Municipal Waste	2518 kg/day
Power Requirement	1848 KVA (Jharkhand State Electricity board)
DG Sets	DG set of 602.5 kVA
RWH Pits	12 no.
Parking	806 no.
Connecting road	The project site is connected with Pundag Road(Abuts, N) Simdega – Ranchi- Gumla Road (approx. 580 mt, E) Harmu – Bypass Road (1.06 km, E)
National Highway	NH-39, 4.6 km S
Nearest Railway Station	Ranchi Junction Railway station, 5.18 km, E Argora Railway Station, 2.5 km E
Airport	Birsa Munda Airport, 3.2 km, SE

Nearest Hospitals	Radha Rani Mission Hospital (200 m, E) Devkamal Hospital (1.2 km, E)
Nearest Water Bodies	Argora Talab (1.04 km, NE) Ranchi Lake (3.8 km, NE) Kanke Dam (6.2 km, N) Dhurwa Dam (6.5 km, SW) Subarnrekha River (3.2 Km, E)

Area Summary :

S. No.	Description	Area (sq m)
1.	Plot Area	36436.14
2.	Ground Coverage (22.89% of plot area)	8,340.99
3.	FAR (@3.45)	1,25,704.68
4.	Basement (1+2)	21500.0
5.	Non-FAR Area	23,184.51
6.	Built-up Area	1,48,889.2
7.	Green Area (@16% of plot area)	5830
8.	Parking area	18644
9.	Nos. of Dwelling units	705
10.	Nos. of LIG/EWS	234
11.	Height	44.32 m

CO-ORDINATES

1	Latitude	23°20'47.63"N
2	Longitude	85°17'16.65"E

LAND DETAILS

Sl.No.	Khata No.	Plot No.
01	79	889
02	84	890
03	80	891
04	79	893
05	79	894
06	79	895
07	113	898
08	41	897
09	41	1055
10	113	1054

11	113	1053
12	113	900
13	113	899
14	113	901
15	113	966
16	27	1051
17	27	1050
18	27	1052
19	79	970
20	79	1048
21	18	1047
22	77	1046
23	15	968
24	124	967
25	124	964
26	124	963
27	124	965
28	124	903
29	124	902
30	34	904
31	34	905
32	88	906
33	88	907
34	88	908
35	188	909
36	188	910
37	188	962
38	188	959
39	188	960
40	188	961
41	206	957
42	206	958
43	27	953
44	158	932
45	158	933
46	197	952
47	77	951
48	41	950
49	188	974
50	77	975
51	206	972
52	116	973

53	79	2594
54	80	2595
55	27	2600
56	27	2599
57	83	2596
58	83	2597
59	41	2590
60	41	2591
61	41	2592
62	15	2578

STATUTORY CLEARANCES :

1	DFO Forest Distance		DFO, Ranchi Forest division vide letter no. 708, dated 28.02.2022 certified that the distance of reserved/protected forest is more than 250 m from project site.
2	DFO wildlife	:	DFO, Wildlife Ranchi division vide letter no. 250, dated 16.03.2022 certified that national park & sanctuary is not within 10 km from the project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Argora, Ranchi vide letter no. 421(ii) dated 03.08.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. RANC/EAST/B/ 042622/668391, dated 26.05.2022 .
5	Building Plan	:	Conceptual Plan
6	Fire Department	:	An application has been made to Fire Department vide : File / Acknowlegement / Approval no. RMC/TEMP/AH/0333/W36/2021

Water and waste water Requirement Details :

Category	Population/Area (sq m)/Capacity	Standard (LPCD)	Water Requirement-KLD	Fresh Water Requirement-KLD	Recycled Water requirement-KLD
Domestic					
Residents	4695	135	634	444	190
Staff	94	45	4	1	3
Visitors	235	15	4	3	1

Total Domestic Water Demand			642	448	194
Landscape	5830 sq m	6 l/day	35	0	35
DG cooling	602.5 KVA	0.9l/hr/day	4	0	4
Fire fighting	--	--	2	0	2
Total		-	**683**	**448**	**235**

Category	Total Quantity (KLD)
Fresh water Req.	448
Flushing water Req.	194
Sewage generation (@90% of the fresh water consumption + 100% flushing water)	597
Capacity of STP	**650**
Recovered water from STP (80% of Waste water) 1. Flushing 2. Landscaping 3. DG cooling 4. Fire fighting 5. Road Washing / Discharge to Sewer	478 194 35 4 2 243

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	4695	0.5	2348	1878	470
2.	Staff	94	0.25	24	19	5
3.	Visitors	235	0.15	35	28	7
4.	Landscape waste	1.44 acres	0.2	1	1	0
5.	STP sludge	597 KLD Sewage	--	110	110	0
Total Waste Generated				**2518**	**2036**	**482**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 5830 m^2 (@ 16 % 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 Laborers.
- Generated waste water will be collected through tankers and dispose to septic tank for treatment.

During Operation Phase

- STP of capacity i.e. 650 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for DG cooling, Landscaping, flushing, fire fighting and Road Washing/Discharge to sewer.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 448 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

- Solar Panels will be used in Street Lights, Common area, Pumping area (solar panels will be used to save around 10 % of the total power requirement).

Undertaking

1. An affidavit stating that no constructions work.
2. An undertaking that 1848 kVA Power requirement in Proposed Residential project "Pearl-The Central Park" at Mauja – Argoda, Thana No – 207, Thana – Argoda, Ranchi, Jharkhand shall be met from M/s Moti Infra Heights Pvt. Ltd.
3. An undertaking that 1848 kVA Power requirement in Proposed Residential project "Pearl-The Central Park" at Thana - Argoda, Village - Argoda, Tehsil – Argoda, District - Ranchi, Jharkhand shall be met from M/s Moti Infra Heights Pvt. Ltd.
4. Ground Water will not be used without the permission from Competent Authority.

During the presentation the following documents were sought :

i. Site Plan to be revised with demarcating the additional green belt.

ii. Sufficient number of EV fast charging point to be provided.

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 Project "Pearl The Central Park" of M/s Moti Infraheights Pvt. Ltd., Village : Argora, Tehsil : Argora, Distt. : Ranchi, Jharkhand 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. 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 point to be installed.

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7. **Proposed Residential cum Commercial Complex "Symphony City" of M/s Odin Homes, Village : Mesra, Tehsil : Mesra, Thana : Sadar, Thana no. : 169, Khewat no. : 08, Dist. : Ranchi, Jharkhand .**

(Proposal No : SIA/JH/MIS/287714/2022).

Name of the consultant : P and M Solution, Noida

This is a case of violation which has been taken for appraisal on 17.08.2022.

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 (considered as B1 due to violation).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the **violation ToR** in 95th meeting held on 14th , 15th & 16th June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 144, date 18.06.2022. The final EIA / EMP submitted by PAs to SEIAA on 10.08.2022 and received by SEAC on 11.08.2022.

EC Application for: Residential buildings: Total built-up area of 85810.83 sq m. (Approx.50% part of the project has already been constructed).

M/s Odin Homes has developed residential cum commercial complex "Symphony City" at Mauza/Village Mesra, Thana Sadar, Thana 169, Khewat No-08, District Ranchi, Jharkhand. Project involves construction of residential buildings, commercial building and EWS/LIG buildings along with ancillary facilities. Project site is spread over area of 31464.06 sq m and built-up area of 85810.83 sq m.

Project and Location Details :

Parameters	Description
Plot Area	31464.06 sq.m.(or 7.77 acres)
Project Cost	INR 50.00 Crores
Built-up Area	85810.83 m^2
Green Area	3146.4 sq m (@10 % of plot area)
Population	4226
Water Requirement	753 KLD
Fresh Water Requirement	366 KLD
Wastewater Generation	486 KLD
STP Capacity	500 KLD
Total Municipal Waste	2026 kg/day
Power Requirement	1700 KVA (Jharkhand State Electricity board)
DG Sets	2 no. of DG set of Total 500 KVA
RWH Pits	07 no.
Parking	644 (Four wheeler) 208 (Two wheeler)
Connecting road	Project site is well connected with road. Site is well connected with BIT Mesra Road.
National Highway	NH-20(0.8 km, North Adjacent road (in South Direction)
Nearest Railway Station	Ranchi junction Railway station, (14 km, West)

Airport	Birsa Munda Airport, (9.81 km, S)
Nearest Hospitals	Orchid medical centre (4.04 km, SW)
Nearest Water Bodies	Subarnarekha River (2.81 km SSE)

Area Summary

S. No.	Description	Area (sq m)
1.	Plot Area at Site	31464.06
2.	Plot Area As per Deed	30686.32
3.	Inner Road Area	1166.75
4.	Road Widening	1067.39
5.	Net Plot Area	29229.92
6.	Ground Coverage Residential & Commercial EWS/LIG	10047.33 8977.98 1069.35
7.	FAR Residential & Commercial EWS/LIG	71584.02 61969.63 9614.39
8.	Non-FAR Residential & Commercial EWS/LIG	14226.81 8202.36 2486.67
9.	Built-Up Residential & Commercial EWS/LIG	85810.83 70171.99 12101.06
10.	Dwelling Units./Units Residential EWS LIG	760 544 144 72
11.	Green Area (@10% of net plot area)	3146.4

12.	Height	30 m

Co-Ordinates :

1	Latitude		23°25'51.83"N
2	Longitude		85°25'39.66"E

Land Details :

1	Village - Mesra, Tehsil – Mesra District - Ranchi		**Khata no.** 176	**Plot No.** 1567 and **Sub Plot No.** 1567/B1, 1567/B2, 1567/B3

Statutory Clearances :

1	DFO Certificate	:	Divisional Forest Officer (DFO), Ranchi Forest Division vide letter no. 488, dated 06.02.2021 certified that distance of Reserved Forest/Protected forest is more than 250 meter from project site.
2	DFO wildlife	:	DFO, Wildlife Ranchi division vide memo no. 42 dated 15.01.2021 certified that the National Park & Sanctuary is not within 10 km from project is not situated within in any ESZ.
3	CO certificate	:	The CO, Kanke, Ranchi vide letter no. 1488(ii) dated 21.12.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
4	AAI NOC	:	Airport Authority of India has issued NOC vide NOC ID no. RANC/EAST/B/ 012921/523426 dated 02.02.2021 .
5	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhand, Ranchi, vide letter no. 427 dated 13.10.2017.
6	Building Plan	:	Building Plan approved by RRDA vide letter no. 1626, dated 21.06.2018.

Water and waste water Requirement Details

Category	Population/Area (sq m)/Capacity	Standard (LPCD)	Water Requirement-KLD	Fresh Water Requirement-KLD	Recycled Water requirement-KLD

Domestic					
Residents	3800	135	513	359	154
Staff	103	45	5	3.5	1.5
Visitors	323	15	5	3.5	1.5
Total Domestic Water Demand			523	366	157
Landscape	3146.4 sq m	6 l/day	18	0	18
Road Washing &Misc	--	--	10	0	10
HVAC Cooling in Commercial Building	--	--	202	--	202
Total		**-**	**753**	**366**	**387**

Category	Total Quantity (KLD)
Fresh water Req. for domestic purpose	366
Flushing water Req.	157
Sewage generation (@90% of the fresh water consumption + 100% flushing water)	486
Capacity of STP	500
Recovered water from STP (80% of Waste water) 1. Flushing 2. Landscaping 3. Road Washing &Misc 4. Usage for HVAC Cooling 5. Discharge to Sewer	385 157 18 10 202 0

Solid Waste Requirement

S. No	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation (kg/day)	Non-Recyclable (Kg/day)	Recyclable (kg/day)
1.	Residents	3800	0.5	1900	1330	660
2.	Staff	103	0.25	26	18	8
3.	Visitors	323	0.15	48	34	14
4.	Landscape waste	0.78 acres	0.2	1	1	0
5.	STP sludge	486 KLD	--	50	50	0
Total Waste Generated				**2026**	**1433**	**682**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 3146.4 sq m sq m (@10 % 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. 500 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, DG cooling, flushing, fire fighting and in nearby construction site/sewer.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 366.0 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

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

Project Authority has submitted an undertaking affirming that :

i. Ground Water will not be used without the permission from Competent Authority.
ii. Sufficient number of EV fast charging point to be provided.

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

On the basis of above the State Level Expert Appraisal Commitee (SEAC), Jharkhand recommended an amount of Rs. 45,37,500 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	Maintenance of Road in near by area with the suggestion from local authority.	25,00,000/-
2	Water Environment	Repair of culverts and embankments in villages	5,00,000/-
3	Soil Environment	Green belt development.	5,00,000/-
4.	Socio-Economic Environment	Arrangement of equipments etc to nearby school/hospital.	5,00,000/-
5.	Energy conversation	Arrangement of Solar panel.	5,37,500/-
		Total Cost Rs. In Lacs	**45,37,500/-**

I. The Committee visited the project site on 16.08.2022 to verify the details submitted by PAs.

II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is **Rs. 45,37,500.**

III. Therefore, PAs shall be required to submit a bank guarantee of an amount of **Rs. 45,37,500** 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 remedition plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.

V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.

VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.

VII. STP of adequate capacity shall be established within the project permises.

VIII. Energy conservation measures adhearing to part of ECBC norms shall be complied with.

IX. The penalty of **Rs. 12.90 Lakh** being 1% of the capital investment incurred till EIA / EMP **(Rs. 12.90 Crores)** shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft and evidence of the same to be submitted to SEIAA, Jharkhand prior to grant of EC.

X. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Residential cum Commercial Complex "Symphony City" of M/s Odin Homes, Village : Mesra, Tehsil : Mesra, Thana : Sadar, Thana no. : 169, Khewat no. : 08, Dist. : Ranchi, Jharkhand 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. 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 point to be installed.

****

8. **"Proposed Multistoried Apartment" of M/s Oceanic Buildtech & Construction Pvt. Ltd., Village : Argora, Thana : Argora, Thana no. : 207, Tehsil : Argora, Dist. : Ranchi, Jharkhand.**

(Proposal No. : SIA/JH/MIS /287540 /2022).

Name of the consultant : P and M Solution, Noida

This is a case of violation which has been taken for appraisal on 17.08.2022.

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 (considered as B1 due to violation).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the **violation ToR** in 95th meeting held on 14th , 15th & 16th June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 136, date 18.06.2022. The final EIA / EMP submitted by PAs to SEIAA on 09.08.2022 and received by SEAC on 10.08.2022.

EC Application for: Residential buildings: Total built-up area of 25290.91 sq m. (Approx.50%. part of the project has already been constructed).

M/s Oceanic Buildtech & Construction Pvt. Ltd. has planned to develop a **"Proposed Multistoried Apartment B+G+10" located at Thana no. 207, Village - Argora,Thana-Argora, Tehsil-Argora, District-Ranchi, State- Jharkhand.** 'RMC" has permitted the construction of proposed residential project at the project site.

Project site is spread on area of **6220.75 sq.m (0.622 ha/1.53 acres)**. Project involves development of 2 nos. of residential buildings BLOCK A1 (B+G+10), BLOCK B1 (B+G+10) and 1 no. of Club Building A2 (G+1) with the allied facilities like waste management system, storm water management system, water supply system, sewerage system, Fire Fighting Management adequate parking facility and green area. Built-up area of project after development will be approx. **25290.91 sq m.**

Salient Features of the Project:

Parameters	Description
Plot Area	6220.75 sq.m.(or 1.53 acres)
Project Cost	INR 35.38 Crores
Built-up Area	25290.91 m^2
Green Area	995.32 sq m (@16 % of plot area)
Population	805
Water Requirement	107 KLD
Fresh Water Requirement	68 KLD
Wastewater Generation	84 KLD
STP Capacity	100 KLD
Total Municipal Waste	377 kg/day
Power Requirement	600 KVA (Jharkhand State Electricity board)
DG Sets	1 no. of DG set of Total 250 KVA
RWH Pits	03 no.
Parking	281
Connecting road	Project site is well connected with road.
National Highway	NH-20 (7.79 km, East)
Nearest Railway Station	Ranchi railway station (4.15 km, W)
Airport	Birsa Munda Airport, (4.41 km, SE)
Nearest Hospitals	City Hospital (1.47 km, West)
Nearest Water Bodies	Ranchi Lake River (3.17 km NE)

Co-Ordinates :

1	**Latitude**		23°20'46.26"N
2	**Longitude**		85°17'40.68"E

Area Summary :

Sl. no.	DESCRIPTION	AREA (SQ M)
A.	**Plot Area**	**6220.75**
B.	Proposed Ground Coverage (@34.83 % of plot area)	2166.47
C.	FAR area	18568.43
D.	**Non-FAR area**	6722.48
E.	Built-up Area (C+D)	**25290.91**
F.	**F.A.R**	**2.98**
G.	Green Area (@ 16 % of the plot area)	995.32
H.	Road Area (@ 23.58% of the plot area)	1466.75
I.	Paved area (@13.71 % of the plot area)	852.86
J.	Open area (@11.88 % of the plot area)	739.02
K.	Height	36.5 m
L.	No of Dwelling Units	140

Block Wise Dwelling Units Details :

Sl. No.	Building Blocks (Residential Building)	Number Of Floors	DU'S
1.	BLOCK A1 (B+G+10)	11	20
2.	BLOCK B1 (B+G+10)	11	120
3.	Club Building A2(G+1)	2	0
	Total		**140**

Land Details :

Khata no.	Plot no.
254	2756
234	2760, 2765

Statutory Clearances :

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no.2282, dated 26.08.2021 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. 218, dated 08.03.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Argora, Ranchi vide letter no. 278 (ii), dated 28.07.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
4	AAI NOC	:	Airport Authority of India has issued NOC vide NOC ID no.

.			RANC/EAST /B/ 032018/ 287480 dated 04.04.2018.
5	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand Ranchi vide memo no. 557/tech, dated 25.04.2018.
6	CGWA	:	The CGWA has issued NOC No. : CGWA/NOC/INF/ORIG/2022 /14486, dated 03.02.2022.
7	Building Plan	:	Building Plan approved by Ranchi Municipal Corporation vide memo no. RMC/GH/0618/W38/2020, dated 05.11.2020.

Water and waste water Requirement Details

Category	Population/ Area (sqm)/ Capacity	Standard (LPCD)	Water Requirement (KLD)	Fresh Water Requirement (KLD)	Recycled Water requirement (KLD)
Domestic					
Residents	700	135	95	67	28
Staff	35	45	2	0.6	1.4
Visitors	70	15	1	0.7	0.3
Total Domestic Water Demand			**98**	**68**	**30**
Landscape	995.32 Sq.m	6 ltr/sq m	6	-	6
Fire Fighting			1	-	1
DG cooling	250 KVA	0.9 l/kVA/hr	2	-	2
Total		-	**107**	**68**	**39**

Category	Total Quantity (KLD)
Fresh water requirement	68
Flushing water Req.	30
Sewage generation (@80% of the fresh + 100% flushing water requirement)	**84**
Capacity of STP	**100**
Recovered water from STP (90% of Waste water)	76
1. Flushing	30
2. Landscaping	6
3. Fire Fighting	1
4. DG cooling	2
5. Road washing/Sewer	37

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	700	0.5	350	280	70
2.	Staff	35	0.25	7	5	2
3.	Visitors	70	0.15	11	9	2
4.	Landscape waste	0.24 acres	0.2 kg/acres	1	1	-
	Total Waste Generated			**369**	**295**	**74**
5.	STP sludge	100 KLD	--	8	6	2
Total Waste Generated				**377**	**301**	**76**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 995.32 sq m sq m (@16 % of plot area) and 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. 100 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, DG cooling, flushing, fire fighting and in nearby construction site/sewer.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 68 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

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

Project Authority has submitted an undertaking affirming that :

i. Ground Water will not be used without the permission from Competent Authority.
ii. Sufficient number of EV fast charging point to be provided.

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

On the basis of above the State Level Expert Appraisal Commitee (SEAC), Jharkhand recommended an amount of rupees 32.50 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 Lacs
1	Air Environment	Provide Air monitoring equipments	10.0
2	Water Environment	Repair of culverts and embankments etc or any suggestion from the local authority.	10.0
3	Soil Environment	Green belt development.	5.00
4.	Socio-Economic Environment	Provide equipments etc to charitable school, hospital and other allied services.	5.00
5.	Energy conversation	Provide solar power panel.	2.50
		Total Cost Rs. In Lacs	**32.50**

I. The Committee visited the project site on 16.08.2022 to verify the details submitted by PAs.

II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. **32.50** Lakh.

III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. **32.50** 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 remedition plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.

V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.

VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.

VII. STP of adequate capacity shall be established within the project permises.

VIII. Energy conservation measures adhearing to part of ECBC norms shall be complied with.

IX. The penalty of Rs. **15,37,250** being 1% of the capital investment incurred till EIA / EMP (**Rs. 15,37,25,000**) shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft and evidence of the same to be submitted to SEIAA, Jharkhand prior to grant of EC.

X. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

Based on the presentation made and information provided, the Committee decided that the proposal for "Proposed Multistoried Apartment" of M/s Oceanic Buildtech & Construction Pvt. Ltd., Village : Argora, Thana : Argora, Thana no. : 207, Tehsil : Argora, Dist. : Ranchi, Jharkhand. 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. 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 point to be installed.

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9. **Multistoried Residential Complex "Panchwati IVY" of M/s Panchwati Builders (A Unit of Panchwati Promoters Pvt. Ltd.), Village : Murramkala, Tehsil : Ramgarh, Dist. : Ramgarh, Jharkhand.**

(Proposal No. : SIA/JH/MIS /286732 /2022).

Name of the consultant : P and M Solution, Noida

This is a case of violation which has been taken for appraisal on 17.08.2022.

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 (considered as B1 due to violation).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the **violation ToR** in 95th meeting held on 14th , 15th & 16th June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 138, date 18.06.2022. The final EIA / EMP submitted by PAs to SEIAA on 08.08.2022 and received by SEAC on 10.08.2022.

EC Application for : Residential buildings : Total plot area of 27346.87 sq m. (Approx. 70% part of the project has already been constructed).

Panchwati Builders a Unit of "M/s Panchwati Promoters Pvt. Ltd." has planned to develop a Proposed Multistoried Residential Complex Project "PANCHWATI IVY" located at Village- Murramkala, Tehsil- Ramgarh, Dist. — Ramgarh, Jharkhand. The project will be developed by M/s Panchwati Builders.

Land use of the project site is also residential thus no change in land use is anticipated. RNP (Ramgarh Nagar Parishad) has permitted the construction of proposed residential project at the project site.

"Panchwati IVY" is a Residential Project comprising of 3 BHK & 4 BHK Apartments. It is spread over an plot area of 7995.45 Sq.m. it is proposed to have 112 Nos of 3 BHK and 42 Nos of 4 BHK with all modern day facilities.

Project involves development of total 4 nos. of residential blocks (B+GF+7), along with the allied facilities like waste management system, storm water management system, water supply system, sewerage system, adequate parking facility, Swimming pool and green area. Built-up area of project after development will be pprox.. 27346.87 sq. m.

Approx. 70% part of the project has already been constructed. So the project has been applied under violation case.

Salient Features of the Project:

Parameters	Description
Plot Area	7995.45 sq.m.(or 1.97 acres)
Project Cost	INR 34.00 Crores
Built-up Area	27346.87 m^2
Green Area	1405 sq m (@17.57 % of plot area)
Population	886
Water Requirement	57 KLD
Fresh Water Requirement	32 KLD
Wastewater Generation	40 KLD
STP Capacity	50 KLD
Total Municipal Waste	408 kg/day
Power Requirement	860 KW (Jharkhand State Electricity board)
DG Sets	2 no. of DG set of Total 100 KVA
RWH Pits	05 no.
Parking	177
Connecting road	Project site is well connected with road.
National Highway	SH—20(0.1 km, West)
Nearest Railway Station	Ramgarh Cantonment railway station (1.13 km, NW)

Airport	Birsa Munda Airport, (38.05 km, SW)
Nearest Hospitals	Vrindaban Hospital (6.10 km, South)
Nearest Water Bodies	Damodar River (5.0 km North)

CO-ORDINATES

1	**Latitude**		23°36'28.01"N
2	**Longitude**		85°31'31.96"E

Area Summary :

S. No.	Description	Area (sq m) Phase II
1.	Plot Area	7995.45
2.	Proposed Ground Coverage (@39.16% of net plot area)	3130.90
3.	Proposed FAR (@2.83 of plot area)	22613.75
4.	Non FAR Area	4733.12
5.	Built-up Area	27346.87
6.	Green Area (@ 17.57% of plot area)	1405
7.	Paved Area (@ 33.27% of plot area)	2660.08
8.	Open area (@ 10 % of plot area)	779.54
9.	Height	26 Meter
10.	No of Dwelling Units	154

Block Wise Dwelling Units Details :

S. No.	Building Blocks (Residential Building)	Number of Floors	DU' S
1.	Block 1(B+GF+7)	8	42
2.	Block 2 (B+GF+7)	8	42
3.	Block 3 (B+GF+7)	8	42
4.	Block 3 (B+GF+7)	8	28
	Total		**154**

LAND DETAILS :

Khata no.	Plot no.
74	252 (P), 253 (P), 254 (P)
64	343, 344 (P), 346 (P)
16	337

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Ramgarh Forest Division vide letter no. 456, dated 03.03.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO Wild Life	:	DFO, Wildlife Hazaribagh Division vide letter no. 258, dated 18.02.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Ramgarh vide memo no. 268, dated 18.02.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan.
4	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide letter no. 1680/tech./2020, dated 06.08.2020.
5	Building Plan	:	Building Plan approved by Ramgarh Nagar Parishad vide B.P. case no. 02/2018, dated 24.06.2019.
6	AAI	:	Project Authority has given an undertaking affirming 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 (KLD)	Fresh Water Requirement (KLD)	Recycled Water requirement (KLD)
Domestic					
Residents	770	55	42	30	12
Staff	39	45	2	0.6	1.4
Visitors	77	15	1.15	1	0.15
Total Domestic Water Demand			**46**	**32**	**14**
Landscape	1405 Sq.m	6 ltr/sqm	8	-	8
Fire Fighting			1	-	1

DG cooling	200KVA	0.9 l/kVA/hr	2	-	2
Total		-	**57**	**32**	**25**

Category	Total Quantity (KLD)
Fresh water Req.	32
Flushing water Req.	14
Sewage generation (@80% of the fresh + 100% flushing water requirement)	40
Capacity of STP	50
Recovered water from STP (90% of Waste water) 1. Flushing 2. Landscaping 3. Fire Fighting 4. DG cooling 5. Car washing/road washing/sewer	36 14 8 1 2 11

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	770	0.5	385	308	77
2.	Staff	39	0.25	10	8	2
3.	Visitors	77	0.15	12	10	2
4.	Landscape waste	0.35 acres	0.2 kg/acres	1	1	-
	Total Municipal solid Waste Generated			**408**	**327**	**81**
5.	STP sludge	50 KLD	--	4		4

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 1405 sq m sq m (@17.5 % of plot area) and 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. 50 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, DG cooling, flushing, fire fighting and in nearby construction site/sewer.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 32 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

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

During the presentation the following documents were sought :

i. Site plan to be revised demarcating the green belt 15%.

ii. Project Authority has submitted an undertaking affirming that ground Water will not be used without the permission from Competent Authority.

The Project Authorities have submitted the above mentioned document.

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

On the basis of above the State Level Expert Appraisal Commitee (SEAC), Jharkhand recommended an amount of Rs. 47,31,250 as per CPCB guidelines towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

Sl. No.	Major Environment component	Details	Cost Rs
1	Air Environment	Provide Air monitoring equipments	10,00,000/-
2	Water Environment	Repair of culverts and embankments etc or any suggestion from the local authority.	10,00,000/-
3	Soil Environment	Green belt development.	10,00,000/-
4.	Socio-Economic Environment	Provide equipments etc to charitable school, hospital and other allied services.	10,00,000/-
5.	Energy conversation	Provide solar power panel.	7,32,250

TOTAL COST RS. IN LACS	**47,31,250/-**

I. The Committee visited the project site on 16.08.2022 to verify the details submitted by PAs.

II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. **47,31,250.**

III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. **47,31,250** towards remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board and evidence of the same submitted to SEIAA, Jharkhand prior to grant of EC.

IV. The bank guarantee shall be released after successful completion of remedition plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.

V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.

VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.

VII. STP of adequate capacity shall be established within the project permises.

VIII. Energy conservation measures adhearing to part of ECBC norms shall be complied with.

IX. The penalty of **Rs. 20.60 Lakh** being 1% of the project cost (**Rs. 20.60 Crores**) 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 Multistoried Residential Complex "Panchwati IVY" of M/s Panchwati Builders (A Unit of Panchwati Promoters Pvt. Ltd.), Village : Murramkala, Tehsil : Ramgarh, Dist. : Ramgarh, Jharkhand 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. 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 point to be installed.

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10. Kailadhab Stone Deposit of Shri Siddharth Jhanjhri, Village : Kailadhab, Thana : Dhanwar, Thana no. : 297, Distt. : Giridih, Jharkhand (1.61924 Ha).

(Proposal No. : SIA/JH/MIN/ 288510/2022)

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 21,660 Cu.M. / year i.e. 60,649 Tonnes / year

Name of the Consultant: P & M Solution, Noida, UP.

This is a new project which has been taken for appraisal on 17.08.2022

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Kailadhab Stone Deposit	
2	Applicant:	:	Sri Siddharth Jhanjhri At 541, Jhanjhri Niwas, Near Railway Crossing, P.O. + P.S. – Jhumri Tilaiya, District – Koderma, State – Jharkhand, Pin code. – 825409.	
3	Lease Address	:	In Mouza - Kailadhab, Thana - Dhanwar, Thana No.-297, District - Giridih, Jharkhand.	
4	Applied Area	:	Ha: 1.61924 Hectares	Acres: 4.00125 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	64 Lakhs	
7	EMP Budget	:	Capital: 13.91 Lakhs	Recurring: 4.15 Lakh / year

8	CSR / CER Budget	:	Rs. 1.28 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 2,16,602 Cu. M.	Tonnes: 6,06,486 Tonnes
11	Mine Life	:	10 years	
12	Man power	:	34	
13	Water Requirement	:	16.38 KLD Dust Suppression: 11.0 KLD, Drinking: 1.36 KLD, , Plantation: 4.02 KLD	
14	Water Source	:	From nearby authorized sources.	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No	
17	Nearest Water Body	:	Mokhli Nadi is flowing from north west to south east direction, the nearest distance from the applied area to Mokhli Nadi is approx. 0.96 Km aerial distance away towards South direction.	
18	Nearest Habitation	:	Kailadhab village is approx. 0.78 Km aerial distance away in North West direction.	
19	Nearest Rail Station	:	Rema Railway Station is approx. 9.76 Km aerial distance away in North East direction	
20	Nearest Air Port	:	Gaya Airport, Bihar is approx. 115.48 Km aerial distance away in North-West direction. Birsa Munda Airport, Ranchi, Jharkhand is approx. 131.28 Km aerial distance away in South West direction	
21	Nearest Forest	:	More than 250m away from the proposed project.	
22	Road & Highways	:	Approach Road: Mahuatanr – Padnatand - Rohnibera Road is approx. 0.62 Km away in east direction. Highway: SH-13 is approx. 13.45 Km away in East direction.	

CO-ORDINATES

1	Latitude	:	From N 24°19'20.60"	To N 24°19'26.61"
2	Longitude	:	From E 86°00'22.98"	To E 86°00'28.87"

LAND DETAILS

Khata No -	11	24	30	33	37	20
Plot Nos –	1345	974 (P)	975	976	977 (P)	978 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Giridih vide letter no. 622/M, dated 05.07.2022.
2	CO	:	The CO, Dhanwar, Giridih vide letter no. 338, dated 09.05.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.

3	DMO	:	DMO, Giridih vide memo no. 673/M, dated 15.07.2022 certified that there is no other lease area exist within 500m radius from proposed project site & total lease area is less than 5 Ha.
4	DFO Wild Life	:	DFO Wildlife Hazaribagh vide letter no. 844, dated 09.05.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	Division Forest Officer, Giridih West Division vide letter no. 437, dated 20.04.2022 certified that the distance of reserved / protected forest is more than 250m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Giridih, vide letter no. 763/M, dated 08.08.2022 has informed that this project is part of District Survey Report (DSR) at Giridih district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 11.04.2022
8	Mine Plan Approval	:	Approved by the Additional Director, Geology, Hazaribag vide Memo No. 160/G dated 02.08.2022

Working Details

1	Mining Method	:	Opencast Mechanized Mining.	
2	Quarry Area	:	5 years – 1.01884 Ha	Life of Mine – 1.04615 Ha
3	Waste Generation	:	5 years– 3720 Cu.M (Gritty Soil)	Life of Mine – 3930 Cu.M (Gritty Soil)
4	Stripping Ratio	:	1 : 0.03	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Size: 6m x 6m, No. - 6	
7	Elevation of Mine	:	Highest RL 321m AMSL, Lowest RL 318m AMSL	
8	Ground Level Elevation		318m AMSL	
9	Ultimate Working Depth	:	285m AMSL	
10	Water Table	:	272m AMSL	
11	Topography of Mine	:	Almost flat land.	
12	Explosive Requirement	:	4.96 Tons/year	
13	Diesel/Fuel requirement	:	42 KL/year (140 Litres/day)	

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste (gritty soil) Generation (CuM)	Bench RL in Meters
1st Year	21,660	60,649	1040	321m – 315m
2nd Year	21,659	60,646	1704	321m – 315m
3rd Year	21,660	60,649	976	321m – 309m
4th Year	21,659	60,646	Nil	315m – 309m
5th Year	21,660	60,649	Nil	315m – 309m
Total	**1,08,298**	**3,03,239**	**3720**	

Land Use

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area (Quarry)	Nil	1.01884 (including backfill 0.04237)	1.04615 (including backfill 0.04237)	1.00378	Water Body
					0.04237	Backfill Plantation
2	Green Belt Within Safety Barrier	Nil	0.56381	0.56381	0.56381	Plantation
3	Road	0.00819	Nil	Nil	Nil	-
4	Non Mining Area	Nil	Nil	0.00928 (Plantation)	0.00928	Plantation
5	Unutilized	0.00819	0.03659	Nil	Nil	-
	TOTAL	**1.61924**	**1.61924**	**1.61924**		

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.5638Ha	1410 trees @ 2500 trees per Ha
2	Haul /Approach Road	:	0. 124 Ha	416 trees on both sides – 3m distance
			i.e. Length 620 width 2m	
3	Quarry Backfill Area		0.04237 Ha	106 trees @ 2500 trees per Ha
4	Non mining area		0.00928 Ha	23 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 in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such

as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste (gritty soil) Generation will be 3930 Cu.M. during the life of Mine.
  The area is covered with a layer of gritty soil. During quarry development in 1st year huge amount of gritty soil will be removed and this soil will be temporarily dumped (L x W x H =19m x 15m x 5m) at the south-east part of the area with suitable precautions like parapet wall and garland drain & in 2nd year removal soil & existing dumped soil will be backfill within the exhausted quarry & in 3rd year little amount of gritty soil will be removed and this soil will be used in haul road dressing & plantation. In conceptual period removal soil will be used in haul road dressing & plantation.

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Kailadhab Stone Deposit of Shri Siddharth Jhanjhri, Village : Kailadhab, Thana : Dhanwar, Thana no. : 297, Distt. : Giridih, Jharkhand (1.61924 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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11. **Darho Stone Deposit of M/s Maa Devi Stone Works, Village : Darho, Thana : Gawan, Thana no. : 224, Distt. : Giridih, Jharkhand (0.79 Ha).**

(Proposal No. : SIA/JH/MIN/ 288407/2022)

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 4,300 Cu.M. / year i.e. 12,040 Tonnes / year

Name of the Consultant: P & M Solution, Noida, UP.

This is a new project which has been taken for appraisal on 17.08.2022

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Darho Stone Deposit	
2	Applicant Address:	:	M/s Maa Devi Stone Works Partners: - 1) Sri Pankaj Kumar At Village - Bishnitikar, Panchyat – Nimadih, P.O. - Charki, Thana - Gawan, District – Giridih, State – Jharkhand, Pin Code – 815313 2) Sri Bahadur Murmu, 3) Sri Sukhu Manjhi, 4) Sri Dinesh Kr Murmu & 5) Sri Talo Hembrom. All are residing - at Village – Darho, Thana – Gawan, District – Giridih, State – Jharkhand, Pin Code – 815313	
3	Lease Address	:	In Mouza – Darho, Thana – Gawan, Thana No – 224, District – Giridih, Jharkhand.	
4	Applied Area	:	Ha: 0.79 Hectares	Acres: 1.94 Acres
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	46 Lakhs	
7	EMP Budget	:	Capital: 12.27 Lakhs	Recurring: 3.86 Lakh / year
8	CSR / CER Budget	:	Rs. 0.92 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 21,459 Cu. M.	Tonnes: 60,083 Tonnes
11	Mine Life	:	5 years	
12	Man power	:	30	
13	Water Requirement	:	8.49 KLD Dust Suppression: 4 KLD, Drinking: 1.2 KLD, , Plantation: 3.29 KLD	
14	Water Source	:	from nearby authorized sources	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No	
17	Nearest Water Body	:	Sukhner Nadi is flowing approx. 5.37 Km aerial distance away in North - East direction	
18	Nearest Habitation	:	Manjhladih village is approx. 1.51 Km aerial distance away in East direction.	
19	Nearest Rail Station	:	Dhanwar Railway Station is approx. 14.95 Km aerial distance away in South -East direction.	
20	Nearest Air Port	:	Gaya Airport, Bihar is approx. 98.45 Km aerial distance away in North-West direction. Birsa Munda Airport, Ranchi, Jharkhand is approx. 146.98 Km aerial distance away in South - West direction.	
21	Nearest Forest	:	Nearest Forest is more than 250m away from the proposed project.	
22	Road & Highways	:	Approach Road: Jamua – Darho - Manjhaldih Road is approx. 160m away in East direction.	

			Highway: SH-13 is approx. 8.56 Km away in South direction.

CO-ORDINATES

1	Latitude		From N24°32'20.01"	To N24°32'23.73"
2	Longitude		From E85°53'19.70"	To E85°53'25.08"

LAND DETAILS

Khata No -	23	24	36	39
Plot Nos –	87(P)	88, 154 & 84(P)	148, 151, 155	153(P) & 161

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Giridih vide letter no. 916/M dated 20.10.2021.
2	CO	:	The CO, Gawan vide letter no. 149, dated 25.03.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
3	DMO	:	DMO, Giridih vide memo no. 640/M, dated 08.07.2022 certified that no other lease exists within 500m radius from proposed project site & total lease area is less than 5 Ha.
4	DFO Wild Life	:	DFO Wildlife Hazaribagh vide letter no. 2110, dated 02.12.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	Division Forest Officer, Giridih East Division vide letter no. 1482, dated 10.07.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Giridih vide letter no. 763/M, dated 08.08.2022 has informed that this project is part of District Survey Report (DSR) at Giridih district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Gawan vide Letter no 800, dated 06.09.2021 informed that Gram Sabha conducted on 24.05.2021
8	Mine Plan Approval	:	Approved by the Additional Director, Geology, Hazaribag vide Memo No. 33/G dated 29.04.2022.

Working Details

1	Mining Method	:	Opencast Semi-mechanized Mining.	
2	Quarry Area	:	5 years – 0.37 Ha	Life of Mine – 0.37 Ha
3	Waste Generation	:	5 years– 1802 Cu.M (Gritty Soil)	Life of Mine – 1802 Cu.M (Gritty Soil)
4	Stripping Ratio	:	1 : 0.1	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Size: 3m x 3m, No. - 5	
7	Elevation of Mine	:	Highest RL 292m AMSL, Lowest RL 284m AMSL	
8	Ground Level Elevation		279m AMSL	
9	Ultimate Working Depth	:	275m AMSL	
10	Water Table	:	262m AMSL	
11	Topography of Mine	:	Almost flat land.	
12	Explosive Requirement	:	18.9 Tons/year	
13	Diesel/Fuel requirement	:	54 KL/year (180 Litres/day)	

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste (gritty soil) Generation (CuM)	Bench RL in Meters
1st	4286	12000	952	290m – 287m
2nd	4300	12040	346	287m – 284m
3rd	4286	12000	504	287m – 281m
4th	4290	12011	000	284m – 281m
5th	4297	12032	000	284m – 275m
Total	**21459**	**60083**	**1802**	

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	0.37	0.37	0.37	0.18 Ha Water Body 0.19 Ha Dead bench Plantation
2	Green Belt	Nil	0.42	0.42	0.42	Plantation

	Within Safety Barrier					
3	Road	0.003	Nil	Nil	Nil	-
4	Unutilized	0.787	Nil	Nil	Nil	-
	TOTAL	**0.790**	**0.79**	**0.79**	**0.79**	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.42 Ha	1050 trees @ 2500 trees per Ha
2	Dead Bench Plantation	:	0.19 Ha	475 trees @ 2500 trees per Ha
3	Haul /Approach Road	:	0.032 Ha i.e. Length 160 width 2m	108 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 in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste (gritty soil) Generation will be 1802 Cu.M. during the life of Mine.

  The area is covered with a layer of gritty soil of about 0.5m in thickness. During quarry development in 1st to 3rd year few amount of gritty soil will be removed which will be used for haul road dressing & plantation.

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

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Darho Stone Deposit of M/s Maa Devi Stone Works, Village : Darho, Thana : Gawan, Thana no. : 224, Distt. : Giridih, Jharkhand (0.79 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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12. **Kucchu Stone Deposit of M/s Damodar Enterprises, Village : Kucchu, Thana : Angara, Thana no. : 71, Distt. : Ranchi, Jharkhand (2.404 Ha).**

(Proposal No. : SIA/JH/MIN/ 287927/2022)

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 69,560.4 Cum Per Year i.e. 1,87,813.08 Tonnes Per Year

Name of the Consultant: P & M Solution, Noida, UP.

This is a new project which has been taken for appraisal on 17.08.2022

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Kucchu Stone Deposit	
2	Applicant:	:	M/s Damodar Enterprises Partner: Sri Prabhat Kumar At Village – Saraiyatola, P.O. – Sonda, P.S. – Patratu, District – Ramgarh, State - Jharkhand, Pin Code – 829133.	
3	Lease Address	:	In Mouza – Kucchu, Thana – Angara, Thana No. – 71, District – Ranchi, Jharkhand	
4	Applied Area	:	Ha: 2.404 Hectares	Acres: 5.94 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	72 Lakhs	
7	EMP Budget	:	Capital: 20.68 Lakhs	Recurring: 5.42 Lakh / year
8	CSR / CER Budget	:	Rs. 1.44 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 3,47,253.2 Cu. M.	Tonnes: 9,37,583.64 Tonnes
11	Mine Life	:	5 years	
12	Man power	:	25	
13	Water Requirement	:	14.94 KLD Dust Suppression: 7.8 KLD, Drinking: 1.00 KLD, , Plantation: 6.14 KLD	
14	Water Source	:	From nearby authorized sources.	

15	DG Set / power	:	60 KVA
16	Crusher	:	No
17	Nearest Water Body	:	Getalsud Dam is situated approx. 9.56 Km aerial distance away towards North West direction.
18	Nearest Habitation	:	Kucchu village is approx. 1.04 Km aerial distance away in South East direction.
19	Nearest Rail Station	:	Jonha Railway Station is approx. 9.26 Km aerial distance away in South West direction.
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi, Jharkhand is approx. 35.25 Km aerial distance away in South West direction.
21	Nearest Forest	:	More than 250m away from the proposed project.
22	Road & Highways	:	Approach Road: Rangamati – Badri – Kucchu Road is approx. 0.40 Km away in south direction. Highway: NH-320 is approx. 5.73 Km away in South direction.

CO-ORDINATES

1	Latitude	:	From N23°26'04.2742"	To N23°26'09.4946"
2	Longitude	:	From E85°38'44.8762"	To E85°38'53.8382"

LAND DETAILS :

Khata No -	82
Plot Nos –	259, 260, 261, 262, 264, 267 & 302

STATUTORY CLEARANCES :

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Ranchi vide letter no. 618/M, dated 28.07.2022.
2	CO	:	The CO, Angara, Ranchi vide letter no. 691(ii), dated 02.09.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan or Register II.
3	DMO	:	DMO, Ranchi vide memo no. 1021/M, dated 11.12.2021 certified that there is no other lease area exist within 500m radius from proposed project site.
4	DFO Wild Life	:	DFO Wildlife Ranchi vide letter no. 1125, dated 14.12.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	Division Forest Officer, Ranchi Forest Division vide letter no. 2478, dated 08.09.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ranchi vide letter no. 1161/M, dated 30.12.2021 has informed that this project is part of District Survey Report (DSR) at Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Angara, Ranchi vide Letter no 1402 (ii), dated 28.10.2021

			informed that Gram Sabha conducted on 15.09.2021 & 26.09.2021
8	Mine Plan Approval	:	Approved by the Additional Director, Geology, Hazaribagh vide Memo No. 115, dated 05.07.2022

Working Details

1	Mining Method	:	Opencast Semi-mechanized Mining.	
2	Quarry Area	:	5 years – 1.845 Ha	Life of Mine – 1.845 Ha
3	Waste Generation	:	5 years– 44814 Cu.M	Life of Mine – 44814 Cu.M
4	Stripping Ratio	:	1 : 0.13	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Size: 6m x 6m, No. - 5	
7	Elevation of Mine	:	Highest RL 523m AMSL, Lowest RL 497m AMSL	
8	Ground Level Elevation		485m AMSL	
9	Ultimate Working Depth	:	492m AMSL	
10	Water Table	:	475m AMSL	
11	Topography of Mine	:	Gently sloping land.	
12	Explosive Requirement	:	6.0 Tons/year	
13	Diesel/Fuel requirement	:	42 KL/year (140 Litres/day)	

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste Generation (CuM)	Bench RL in Meters
1st Year	69560.4	187813.08	11438	523m – 510m
2nd Year	69423.2	187442.64	9604	516m – 504m
3rd Year	69423.2	187442.64	7924	510m – 498m
4th Year	69560.4	187813.08	7098	504m – 492m
5th Year	69286.0	187072.20	8750	510m – 492m
Total	**347253.2**	**937583.64**	**44814**	

Land Use

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area (Quarry)	Nil	1.845 (including 0.40 Ha Back filling	1.845 (including 0.40 Ha Back filling	1.294	Water Body
					0.148	Dead Bench Plantation

					0.40	Back filling Plantation
2	Green Belt Within Safety Barrier	Nil	0.559	0.559	0.559	Plantation
3	Road	Nil	Nil	Nil	Nil	-
4	Unutilized	2.404	Nil	Nil	Nil	-
	TOTAL	**2.404**	**2.404**	**2.404**	**2.404**	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area / Length	No of Trees
1	Safety Zone	:	0.559 Ha	1398 trees @ 2500 trees per Ha
2	Haul /Approach Road	:	0.08 Ha i.e. Length 400 width 2m	268 trees on both sides – 3m distance
3	Quarry Backfill Area	:	0.40 Ha	1000 trees @ 2500 trees per Ha
4	Dead Bench Plantation	:	0.148 Ha	370 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 in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste (gritty soil) Generation will be 44814 Cu.M. during the life of Mine.

  The area is covered with a layer of gritty soil. During quarry development gritty soil will be removed and this will be temporarily dumped within the applied area with suitable precautions like constructing parapet wall, garland drain and in conceptual period total removal waste 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 water required for the mining activities shall be supplied by the tanker from nearby authorized sources.

c. The letter issued in respect of District Survey Report (DSR), is issued by the competent authority. We will abide by any directives issued by any court of law in future.

d. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard

e. The Boundary Pillars of the proposed mine applied area will be maintained properly.

f. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.

g. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.

h. Sufficient water spray using water tankers will be done for effective dust suppression within the mine applied area and on haul roads.

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

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Kucchu Stone Deposit of M/s Damodar Enterprises, Village : Kucchu, Thana : Angara, Thana no. : 71, Distt. : Ranchi, Jharkhand (2.404 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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13. **Malua Brick Earth Deposit of Shri Ashish Kumar Maity, Village : Malua, P.S. : Barshol, Distt. : East Singhbhum, Jharkhand (2.306 Ha).**

(Proposal No. : SIA/JH/MIN / 288248/2022)
Project Category: B2 – Application for Environment Clearance
EC Application for: Proposed Capacity-1740.0 cu.m/annum or 2262.0 MTPA

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

This is a new project which has been taken for appraisal on 17.08.2022.

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Malua Brick Earth Deposit	
2	Lessee:	:	Shri Ashish Kumar Maity	
3	Lease Address	:	Village- Rajbandh, P.O- Malua, P.S- Barshol, District- East Singhbhum, Jharkhand	
4	Lease Area	:	2.306 ha	Acres-5.70 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 25 Lakhs	
7	EMP Budget	:	Capital: 5.135 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.50 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.: 24165.81 cum	Tonnes: 65247.68 tons
11	Mine Life	:	13.89 or 14 years	
12	Man power	:	26	
13	Water Requirement	:	12.50 KLD(Drinking: 0.26 KLD, Dust Suppression: 5.50 KLD, Plantation: 7.0 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No crusher	

17	Nearest Water Body	:	Subarnekha Nadi, approx. 5.10 km, SE direction Rangro Nala, approx. 60 m, East direction
18	Nearest Habitation	:	Rajbandh, 0.60 km
19	Nearest Rail Station	:	Chakulia Railway Station at a distance of 25.00 km towards NNW direction
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi at a distance of 180.10 km in NW direction
21	Nearest Forest	:	Dhanbani RF, approx. 6.3 km, NE direction Manus Hmuriya RF, approx. 8.42 km, N direction
22	Road & Highways	:	NH-49, approx, 2.30 km towards N direction

CO-ORDINATES

1	Latitude		From 22°15'46.01"N	To 22°15'56.20"N
2	Longitude		From 86°46'41.35"E	To 86°46'50.44"E

LAND DETAILS

Khata No	Plot No
56	56
64	80
89	69, 64, 78, 97, 62, 65, 72, 73, 96, 79
92	70, 77, 98, 71, 74, 99

STATUTORY CLEARANCES :

1	LOI / Lease docs	:	Land agreement made.
2	CO	:	The CO, Bahragoda vide letter no. 667, dated 19.12.2019 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, East Singhbhum, Jamshedpur vide letter no. 992/khanan, dated 09.04.2018 certified that no other lease area exists within 500 m radius from proposed project.
4	DFO Dalma Elephant Project	:	DFO, Dalma Elephant Project vide letter no. 1325, dated 31.12.2019 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated

			in any ESZ.
5	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 1987 dated 01.09.2021 certified that the distance of reserved / protected forest is more than 250 m from the project site.
6	DSR	:	The project is already mentioned in page no. 30 of District Survey Report (DSR) of District East Singhbhum.
7	Gram Sabha	:	on 19.07.2018
8	Mine Plan Approval	:	Approved by Deputy Director, Geology, Palamu, vide letter no. 137/G dated 11.05.2018.

Working Details

1	Mining Method	:	Opencast Manual Mining method	
2	Quarry Area	:	5 years–0.456 ha	Life of Mine – 0.620 ha
3	Waste Generation	:	5 years–0.0 cu.m	
4	Stripping Ratio	:	1: 0	
5	Working Days	:	150	
6	Benches: size & No	:	2m x 2.5m	
7	Elevation of Mine	:	47 AMSL to 52 AMSL	
8	Ground Level Elevation	:	47 AMSL	
9	Ultimate Working Depth	:	From top surface upto a depth of 2.00m	
10	Water Table	:	27 AMSL (20mbgl)	
11	Topography of Mine	:	Area represents almost flat land	
12	Explosive Requirement	:	NA	
13	Diesel/Fuel requirement	:	40 litre/day	

Production Details

Year	Total excavation of brick earth in cum	Number of bricks	Total excavation of brick earth
			MT=Cum x 1.3
1st	1740.00	600000	2262.00
2nd	1740.00	600000	2262.00
3rd	1740.00	600000	2262.00
4th	1740.00	600000	2262.00
5th	1740.00	600000	2262.00
Total	**8700.00**	**3000000.00**	**11310.00**

Land Use

Pattern of Utilization	Existing (Ha)
Quarrying	Nil
Storage of casted bricks	Nil
Safety Zone Plantation	0.853
Proposed Kiln	1.453
Road	Nil
Total	**2.306**

1. ENVIRONMENT MANAGEMENT
2. Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.853 ha	2140
2	Haul /Approach Road	:	0.19 km	190

- 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 road.

Water Quality Management

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

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

Air Quality Management

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

Undertaking submitted affirming:

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Malua Brick Earth Deposit of Shri Ashish Kumar Maity, Village : Malua, P.S. : Barshol, Distt. : East Singhbhum, Jharkhand (2.306 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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14. **Salboni Stone Mine of Sri Ragda Murmu, Mouza : Salboni, Thana no. : 115, Distt. : Pakur, Jharkhand (1.846 Ha).**

(Proposal No. : SIA/JH/MIN/ 81799/2022)

Project Category: **B1 – Application for Terms of Reference**
EC Application for: **Proposed Capacity- 39,064 cu.m/annum or 109379 TPA**

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

This is a new project which has been taken for appraisal on 17.08.2022.

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Salboni Stone Mine	
2	Lessee:	:	Sri Ragda Murmu S/o Late Misir Murmu R/O Gram- Pipaljori, Thana- Malpahari (O.P.), District- Pakur, Jharkhand	
3	Lease Address	:	Village – Salboni , Thana No.- 115, District – Pakur, State :-Jharkhand.	
4	Lease Area	:	1.846 ha	Acres- 4.56Acre
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 20 Lakhs	
7	EMP Budget	:	Capital: 4.672 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.40 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.: 4,25,351.11 cum	Tonnes: 11,48,448 tons
11	Mine Life	:	10 years	
12	Man power	:	39	
13	Water Requirement	:	10.10 KLD (Drinking: 0.39 KLD, Dust Suppression: 6.64 KLD, Plantation: 3.07 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / Power	:	60 KVA	
16	Crusher	:	No crusher	
17	Nearest Water Body	:	Torai Nadi, Approx. 7.40 km towards NW direction. Baghmari Nadi Approx. 5.74 km towards NE direction. Farakka Feeder Canal, Approx. 9.22 km towards NE direction.	
18	Nearest Habitation	:	Salboni , 0.40 km	
19	Nearest Rail Station	:	Nagarnabi Railway station, approx. 1.15 km towards ESE direction.	
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Durgapur, approx. 125.0 km towards SW direction.	

21	Nearest Forest	:	Protected Forest, at approx. 3.21 km towards SW direction. Protected Forest, at approx. 8.70 km towards WNW direction.
22	Road & Highways	:	NH-114A, Approx. 5.00 km. in North direction. SH-7, Approx. 4.98 km in SE direction.

CO-ORDINATES

1	Latitude		From 24°35'28.69"N	To 24°35'34.59"N
2	Longitude		From 87°51'21.94"E	To 87°51'27.36"E

Land Details :

Khata No.	Plot No.
05	408 (P)
11	405
14	410
24	409 (P)
28	338 (P), 411, 412, 413, 414, 415, 335, 337

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Pakur vide letter no. 600/M, dated 20.05.2021.
2	CO	:	The CO, Pakur vide letter no. 950, dated 27.06.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Pakur vide memo no. 1206/M, dated 20.06.2022 certified that 02 other mining area (4.75 acre & 7.0½ acre) exists within 500 m radius from proposed project site and total mining lease area is 16.32 Acre (more than 5 ha).
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 2196, dated 30.12.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 487, dated 05.03.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC – cum- District Magistrate, Pakur vide letter no. 1412/M,

			dated 12.08.2021 has informed that this project is part of District Survey Report (DSR) of Pakur district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Pakur vide Letter no. 1322, dated 22.06.2020 informed that Gram Sabha conducted on 17.06.2020.
8	Mine Plan Approval	:	DMO, Pakur vide Memo No. 1696/M, dated 24.09.2021

Working Details :

1	Mining Method	:	Opencast Mechanized Mining method	
2	Quarry Area	:	5 years– 0.87 ha	Life of Mine – 1.27 Ha
3	Waste Generation	:	5 years– 8472 cu.m	
4	Stripping Ratio	:	1: 0.02	
5	Working Days	:	300	
6	Benches: size & No	:	6m x 6 m	
7	Elevation of Mine	:	44 AMSL to 46 AMSL	
8	Ground Level Elevation	:	44 AMSL	
9	Ultimate Working Depth	:	26 AMSL (12 mbgl)	
10	Water Table	:	19 AMSL (19 mbgl)	
11	Topography of Mine	:	Area represents a flat topography.	
12	Explosive Requirement	:	5 T/month	
13	Diesel/Fuel requirement	:	95 litre/day	

Production Details

Year	Production of stone (Cum)	Production of stone (Tonnes)	Waste Generation (CuM)	Bench RL in Meters
1st	39063	109376	4621	44 mRL – 45 mRL
2nd	39039	109309	3851	44 mRL - 45 mRL
3rd	39032	109290	-	32 mRL - 38 mRL
4th	39064	109379	-	32 mRL - 38 mRL
5th	39040	109312	-	26 mRL - 32 mRL
Total	**195238**	**546666**	**8472**	

Land Use

Pattern of Utilization	Existing (Ha)	Plan period(Ha)	Conceptual stage (Ha)
Quarry	-	0.87	1.27 ha (area will be converted into water reservoir)
Haul Road	-	0.03	0.02
Proposed Crusher	-	-	-
Green Belt in safety barrier	-	0.56	0.56
Dump with Parapet wall & Garland Drain	-	0.23	Nil (Waste dump to be removed and backfilled)
Total area in use	-	**1.69**	**1.846**
Balances unused Area	1.846	0.156	-
Balance used area	-	-	-
Total applied Lease area	**1.846**	**1.846**	1.846

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.56 ha	896
2	Haul /Approach Road	:	0.64 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

- Waste Generation will be 8472 cum waste during the plan period which will be used for village & haul road maintenance.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 9m 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 a 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 16, 17, 18 & 19.08.2022, 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.

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Day 3 : August 18th , 2022 [Thursday]

Consideration of Proposals

1. **Group Housing Residential Project "ATC Extension" of M/s Rukmani Property Project Pvt. Ltd., Village : Hurlung, Distt. : East Singhbhum, Jharkhand.**

(Proposal No. : SIA/JH/MIS/279518 /2022).

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

Name of the consultant: M/s Oceao-Enviro Management Solutions (India) Pvt. Ltd, Ghaziabad

This is a new project which has been taken for appraisal on 18.08.2022

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

The proposed project is construction of Group housing project "ATC Extension" by M/s Rukmani Property Projects Private Limited. Located at Village Hurlung, P.S. Birsanagar, Town : Jamshedpur,District East Singhbhum, Jharkhand. The total plot area of the project is 13273.77 m2or 3.28 acres. The Built-up area for project is 53012.24 Sq.m.

Background :

- That Project Proponent has proposed construction of Group Housing Project "ATC EXTENSION" located at Village: Hurlung, District: East Singhbhum, Jamshedpur Jharkhand.
- That, the project consists of 6 towers named Royal Palm, Cotton Wood, Casuarina, Conifer, Hazel and Amorium, and 5 duplexes.

- Approved building drawing from Zila Parishad of two towers named Royal Palm and Cotton Wood for vide Memo No. ESZP/GH/0038/2021, dated 09/06/2021for 17198.25 m^2built-up area has already been obtained which is less than 20000 m^2.
- That, meanwhile commencing construction activities that above mentioned towers in point no 3 we had revised our planning and now our built-up area became 51012.24m^2 for 6 towers and duplexes.
- That, we had obtained approved building drawing from Zila Parishad vide Memo No. ESZP/GH/0102/2022, dated 15/04/2022for 6 towers and 5 duplexes.

Salient features of the project :

S.No.	Area Details	AREA (sq.mt.)
1	Total plot area	13273.77
2	Common Plot	2000.37
3	Balance area of the plot	11273.4
4	Net Plot Area	13273.77
5	Permissible Coverage Area (@35%of Net Plot Area)	4645.82
6	Proposed Coverage Area (@30.56% of Net Plot Area)	4056.46
7	Balance Coverage Area (@4.44% of Net Plot Area)	589.35
8	Permissible FAR Area (3.00)	39821.31
9	Residential FAR	36036.64
10	Commercial FAR	37.37
11	Special FAR	732.37
12	Consumed FAR (Factor)	2.78
13	Proposed FAR Area	36852.15
14	Non FAR	14160.09
15	Miscellaneous Area	2000
16	Built up area	53012.24
17	Green Area (@33% of Plot Area)	4380.34
	@25% of Plot area (Landscape Area)	3318.4
	@8% of plot area (Terrace Green Area)	1061.9
18	No. of RWH	09
19	Height of the building	77 m

20	Project cost	135 Crores

Floor Wise Area Details :

Floor Name	D and E	C and F	A and B	DUPLEX
	FAR Area (sq.mt.)	FAR Area (sq.mt.)	FAR Area (sq.mt.)	FAR Area (sq.mt.)
Basement Floor			9.74	0
Ground Floor	373.47	328.34	103.96	806.02
First Floor	939.54	939.66	984.16	870.25
Second Floor	939.54	939.66	984.16	0
Thirrd Floor	939.54	939.66	984.16	0
Fourth Floor	939.54	939.66	984.16	0
Fifth Floor	939.54	939.66	984.16	0
Sixth Floor	939.54	939.66	984.16	0
Seventh Floor	939.54	939.66	984.16	0
Eighth Floor	939.54	939.66	984.16	0
Ninth Floor	939.54	939.66	984.16	0
Tenth Floor	939.54	939.66	984.16	0
Eleventh Floor	939.54	939.66	984.16	0
Twelth Floor	939.54	939.66	984.16	0
Terrace Floor	0	0	0	0
Total	**11647.95**	**11604.26**	**11923.62**	**1676.27**

Khata no. & Plot no. of project :

Khata No	Plot No
120	249, 1162, 1163, 1170, 1171(P)
16	1176, 1175
15	1166, 1173, 1177, 1178, 1181(P), 1241, 1242
250	1203
329	1184
323	1191,1192

Latitude & Longitude :

Latitude	Longitude
22°47'36.97"N	86°16'4.19"E
22°47'36.60"N	86°16'6.68"E
22°47'33.06"N	86°16'6.11"E
22°47'33.18"N	86°16'5.30"E
22°47'32.67"N	86°16'5.21"E
22°47'33.05"N	86°16'2.39"E
22°47'36.57"N	86°16'2.96"E
22°47'36.41"N	86°16'4.09"E

Population Break up :

S. No.	Particulars	No. of Flats	PPU/No. of person/m2	Total
1	Residents	301	@5 Person Per Unit	1505
2	Staff	-	@10% of Residential	150.5
3	Visitors	-	@ 10% of Residential	150.5
	Total			**1806**

Site Surroundings :

S. No	Particulates	Name of Places	Distance (Km)	Direction
1.	Nearest Airport	Sonari Airport	10.10 km	NW
2.	Nearest Railway Station	Tata Nagar Junction	7.43 km	WSW
3.	Nearest Bus Stand	Baridih Bus stop	2.46 km	W
		Bhalubhasha Golchakkar Bus Stop	5.26 km	NW
4.	Nearest State Highway/Any other road	Hurlung Road	0.02 km	N
		State Highway no. 6	4.00 km	WSW
5.	Nearest National Highway	National Highway no. 18	4.78 km	E
6.	Nearest	City Public School	1.49 km	NW
		Baridhi High School	3.00 km	W

	School/College			
7.	Nearest Temple	Bhubaneshwari Temple	1.93 km	SSW
		Shiv Mandir	2.48 km	SW
8.	Nearest Hospital	Mercy Hospital	2.24 km	NW
		Birsanagar Government Hospital	3.03 km	SW
9.	Nearest Police Station	Birsanagar Police Station	1.99 km	SW
		Sidhgora Police Station	3.35 km	WNW
10.	Nearest Fire Station	CRM Bara Fire Station	3.48 km	NW
		Tata Motors Fire Station Control Room	4.24 km	SW
11.	Commissioner Office	District Labour Commissioner Office(DLC)	4.94 km	WNW
12.	Gram Panchayat	Godabandha Gram Panchayat	2.61 km	SSE
		West Godabandha Gram Panchayat	2.56 km	S
13.	Nearest Pond	Indra Nagar Pond	3.74 km	SW
14.	Nearest River/Nallah/ Canal	Subarnarekha River	1.05 km	N
15.	Wild Life Sanctuary	Dalma Wildlife Sanctuary	10.71 km	NNW
16.	Zoological Park	Tata Steel Zoological Park	7.78 km	WNW
17.	Nearest Defense Installation	CRPF Ground	3.33 km	WNW

Water Requirement :

The water requirement will be met by Municipal Supply. The total water requirement for operational phase is approx. 214 KLD. Fresh water requirement is approx. 140 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	1505	90	135.45	45	67.725
2	Staff	150.5	25	3.7625	20	3.01
3	Visitors	150.5	5	0.7525	10	1.505
4	Landscape	1991.07	NIL	NIL	1l/ sqm	1.99
Total Water Requirement				**139.96~140**		**74.23~ 74**

Total Water Requirement	**214**

Summary of Water and Waste water :

S. No.	Particulars	In KLD
1	Total Water Requirement	214
2	Water Requirement met by Fresh Water	140
3	Water Requirement met by Treated Water	74
4	Wastewater Generated (80% of Fresh + 100% Flushing)	186
5	STP Capacity (20% higher than the wastewater generated)	250

Power Requirement :

There is requirement of 3000 kVA power supply. 3 DG sets of capacity of 500 kVA are proposedto be used as backup power supply.

Calculation of Solid Waste generation :

S. No.	Category	Kg per capita per day	Waste generated (kg/day)
1	Residents	1505@ 0.5 kg/day	752.5
2	Staff	150.5@ 0.25 kg / day	37.625
3	Visitor	150.5@ 0.15 kg /day	22.575
4	Landscape waste (1991.07 m^2)	0.49 @ 0.2 kg/acres	0.1
Total Solid Waste Generated			**812.8 kg/day**

STATUTORY CLEARANCES

1	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 631, dated 24.03.2022 & letter no. 1190, dated 06.06.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 581, dated 05.05.2022 & letter no. 878, dated 25.06.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Jamshedpur, East Singhbhum vide letter no. 2098, dated 27.10.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.

4	AAI NOC	:	Airport Authority of India has issued NOC vide NOC ID no. JAMS/EAST/B/070522/681601, dated 13.07.2022.
5	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi vide letter no. 1424/Tech./2021, dated 13.05.2021 & letter no. 2110/Tech./2022, dated 19.05.2022.
6	Building Plan	:	East Singhbhum Zila Parishad has approved building plan vide Memo No. ESZP/GH/0038/2021, dated 09.06.2021 and Memo No. ESZP/GH/0102/2022, dated 15/04/2022.

During the presentation the following documents were sought :

1. Undertaking affirming that : -

   a. Ground water will not be used without taking approval from Competent Authority.
   b. Organic waste convertor to be installed and maintained.
   c. Sufficient number of EV fast charging point to be provided.

The Project Authorities have submitted the above mentioned undertaking.

Based on the presentation made and information provided, the Committee decided that the proposal for Group Housing Residential Project "ATC Extension" of M/s Rukmani Property Project Pvt. Ltd., Village : Hurlung, Distt. : East Singhbhum, Jharkhand 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. 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 point to be installed.

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

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

The PAs did not turn up for the appraisal. Therefore, the committee deferred the project for appraisal.

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3. **Gurgai Stone Deposit of M/s Lalkeshwar Stone Chips Pvt. Ltd., Village : Gurgai, Thana : Ormanjhi, Thana no. : 69, Distt. : Ranchi, Jharkhand (1.33 Ha).**

(Proposal No. : SIA/JH/ MIN/285892 /2022).

Project Category: B2 – Application for Environment Clearance
EC Application for: Stone: 32,095 Cu.M. / year i.e. 89,867 Tonnes / year

Name of the consultant : Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 18.08.2022

Project and Location Details:

Sl	Parameter		Details
1	Project Name	:	Gurgai Stone Deposit
2	Applicant:	:	M/s Lalkeshwar Stone Chips Pvt. Ltd. Partners: 1) Sri Lalkeshwar Mahto At Village – Gunja, P.O. – Hendebili, P.S. – Ormanjhi, District – Ranchi, State - Jharkhand, Pin code – 835219. 2) Sri Ramnandan Mahto At Village + P.O. - Pancha, P.S. – Ormanjhi, District – Ranchi, State – Jharkhand, Pin. – 835219. 3) Sri Tulsi Kharwar At Village - Chapawar, P.O. – Dahu, P.S. – Ormanjhi, District – Ranchi, State – Jharkhand, Pin. – 835219.

3	Lease Address	:	In Mouza - Gurgai, Thana - Ormanjhi, Thana No. - 69, District – Ranchi, Jharkhand.	
4	Applied Area	:	Ha: 1.33 Hectares	Acres: 3.28 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	60 Lakhs	
7	EMP Budget	:	Capital: 15.69 Lakhs	Recurring: 5.02 Lakh / year
8	CSR / CER Budget	:	Rs. 1.20 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 1,60,471 Cu. M.	Tonnes: 4,49,319 Tonnes
11	Mine Life	:	5 years	
12	Man power	:	32	
13	Water Requirement	:	13.08 KLD Dust Suppression: 9.0 KLD, Drinking: 1.28 KLD, , Plantation: 2.8 KLD	
14	Water Source	:	From nearby authorized sources.	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No	
17	Nearest Water Body	:	Getalsud Dam is situated approx. 3.04 Km aerial distance away towards South-East direction.	
18	Nearest Habitation	:	Gurgai village is approx. 0.73 Km aerial distance away in North East direction.	
19	Nearest Rail Station	:	Sidhwar Railway Station is approx. 10.02 Km aerial distance away in North West direction. Mesra Railway Station is approx. 14.15 Km aerial distance away in South-West direction.	
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi, Jharkhand is approx. 29.09 Km aerial distance away in South-West direction.	
21	Nearest Forest	:	More than 250m away from the proposed project.	
22	Road & Highways	:	Approach Road: Gurgai-Kurum-Guru Road is approx. 0.63 Km away in north direction. Highway: NH-320 is approx. 1.16 Km away in South direction.	

CO-ORDINATES

1	Latitude	:	From N23°30'15.76"	To N23°30'19.73"
2	Longitude	:	From E85°31'28.50"	To E85°31'34.93"

Land Details :

Khata No.	Plot No.
13	697, 698, 699, 700 & 701
16	703

19	695, 696 & 704

Statutory Clearances :

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Ranchi vide letter no. 379/M dated 31.03.2022.
2	CO	:	The CO, Ormanjhi (Ranchi) vide letter no. 92(ii), dated 17.01.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan or Register II.
3	DMO	:	DMO, Ranchi vide memo no. 546/M, dated 20.06.2022 certified that there is no other lease area exist within 500m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide letter no. 370, dated 20.04.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	Division Forest Officer, Ranchi Forest Division vide letter no. 3616, dated 21.12.2021 certified that the distance of reserved / protected forest is more than 250m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ranchi vide letter no. 600/M, dated 21.07.2022 has informed that this project is part of District Survey Report (DSR) at Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Ormanjhi vide Letter no. 1802(ii), dated 01.01.2022 informed that Gram Sabha conducted on 22.12.2021.
8	Mine Plan Approval	:	Approved by the Assistant Mining Officer, Ranchi vide Memo No. 562/M, dated 23.06.2022.

Working Details

1	Mining Method	:	Opencast Semi-mechanized Mining.	
2	Quarry Area	:	5 years – 0.96 Ha	Life of Mine – 0.96 Ha
3	Waste Generation	:	5 years– 4325 Cu.M (Gritty Soil)	Life of Mine – 4325 Cu.M (Gritty Soil)
4	Stripping Ratio	:	1 : 0.03	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Size: 6m x 6m, No. - 6	
7	Elevation of Mine	:	Highest RL 606m AMSL, Lowest RL 604m AMSL	

8	Ground Level Elevation		602m AMSL
9	Ultimate Working Depth	:	570m AMSL
10	Water Table	:	558m AMSL
11	Topography of Mine	:	Gently sloping land.
12	Explosive Requirement	:	4.96 Tons/year
13	Diesel/Fuel requirement	:	42 KL/year (140 Litres/day)

Production Details :

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste (gritty soil) Generation (CuM)	Bench RL in Meters
1st Year	32,094	89,864	2,725	606m – 600m
2nd Year	32,093	89,862	971	606m – 594m
3rd Year	32,094	89,864	000	600m – 588m
4th Year	32,093	89,862	629	594m – 588m
5th Year	32,095	89,867	000	588m – 570m
Total	**1,60,469**	**4,49,319**	**4,325**	

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)	0.05	0.96 (including backfilling 0.03 Ha)	0.96 (including backfilling 0.03 Ha)	0.96	Water Body
2	Green Belt Within Safety Barrier	Nil	0.37	0.37	0.37	Plantation
3	Road	0.02	Nil	Nil	Nil	-
4	Unutilized	1.26	Nil	Nil	Nil	-
	TOTAL	**1.33**	**1.33**	**1.33**		

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees

1	Safety Zone	:	0.37 Ha	925 trees @ 2500 trees per Ha
2	Haul /Approach Road	:	0.126 Ha i.e. Length 630 width 2m	420 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 in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste (gritty soil) Generation will be 4,325 Cu.M. during the life of Mine.
  The area is covered with a layer of gritty soil, of about 0.5m in thickness. During quarry development in 1st, 2nd & 4th year gritty soil will be removed and 1st year removal soil will be temporarily dumped [Area – 0.054 Ha, (L x W x H = 26m x 21m x 5m)] at the south-east part of the area with suitable precautions like parapet wall, garland drain & 2nd year removal soil will be used in road dressing & plantation & in 4th year removal soil & dumped soil will be backfilled within the exhausted quarry.

Water Quality Management

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

Air Quality Management

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

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

Undertaking submitted affirming:

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Gurgai Stone Deposit of M/s Lalkeshwar Stone Chips Pvt. Ltd., Village : Gurgai, Thana : Ormanjhi, Thana no. : 69, Distt. : Ranchi, Jharkhand (1.33 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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4. **Tentoposi Stone Deposit of M/s Aarohi Impex & Trade Links, Village : Tentoposi, Thana : Saraikela, Thana no. : 241, Distt. : Saraikela-Kharsawan, Jharkhand (1.82 Ha).**

(Proposal No. : SIA/JH/ MIN/286719 /2022).

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 43,466 Cum Per Year i.e. 1,21,705 Tonnes Per Year.

Name of the consultant : Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 18.08.2022.

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Tentoposi Stone Deposit	
2	Applicant:	:	Aarohi Impex & Trade Links Proprietor - Sri Abhishek Agarwal At - 59 Shiv Mandir Line, Sakchi Market, P.O.-Sakchi, Jamshedpur, District – East Singhbhum, Jharkhand, 831001.	
3	Lease Address	:	In Mouza – Tentoposi, Thana -Saraikela, Thana No - 241, District- Saraikela – Kharsawan, Jharkhand.	
4	Applied Area	:	Ha: 1.82 Hectares	Acres: 4.50 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	64 Lakhs	
7	EMP Budget	:	Capital: 16.35 Lakhs	Recurring: 4.95 Lakh / year
8	CSR / CER Budget	:	Rs. 1.28 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 2,16,300 Cu. M.	Tonnes: 6,05,640 Tonnes
11	Mine Life	:	5 years	
12	Man power	:	30	
13	Water Requirement	:	7.77 KLD Dust Suppression: 3.8 KLD, Drinking: 1.2 KLD, , Plantation: 2.77 KLD	
14	Water Source	:	From nearby authorized sources.	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No	
17	Nearest Water Body	:	Kharkai River is flowing from south - west to north - east direction. The nearest distance from the project area to Kharkai River is near about 2.06 Km aerial distance away in south direction.	
18	Nearest Habitation	:	Tentoposi village is situated near about 680m aerial distance away in south –west direction.	
19	Nearest Rail Station	:	Birbans Railway Station is approx. 7.96 Km aerial distance away in north - west direction.	
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi, Jharkhand is approx. 97.65 Km aerial distance away in north - west direction.	

21	Nearest Forest	:	More than 250m away from the proposed project.
22	Road & Highways	:	Approach Road: Ugma-Tentoposi Road is approx. 0.11 Km away in west direction. Highway: SH-5 is approx. 5.48 Km away in north – west direction.

CO-ORDINATES

1	Latitude	:	From 22°43'17.25"N	To 22°43'23.85"N
2	Longitude	:	From 86°01'34.53"E	To 86°01'40.28"E

Land Details :

Khata No.	Plot No.
60	1112 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Saraikela-Kharsawan vide letter no. 29/M, dated 15.01.2021.
2	CO	:	The CO, Saraikela vide letter no. 1073, dated 03.11.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Saraikela-Kharsawan vide letter no. 216/M, dated 05.04.2021 certified that one other mining area (5.53 acre) exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 535, dated 31.03.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Seraikela Forest Division vide letter no. 1478, dated 20.07.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC, Saraikela-Kharasawan vide letter no. 33/M, dated 07.01.2022 has informed that this project is part of District Survey Report (DSR) of Saraikela-Kharsawan district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	BDO, Gamharia vide Letter no 1204, dated 17.11.2020 informed that Gram Sabha conducted on 25.10.2020.
8	Mine Plan Approval	:	Approved by the Additional Director, Geology, Hazaribag vide Letter No. 444/G, dated 02.03.2021.

Working Details

1	Mining Method	:	Opencast Mechanized Mining.	
2	Quarry Area	:	5 years – 1.30 Ha	Life of Mine – 1.30 Ha
3	Waste Generation	:	5 years– 14068 Cu.M (Gritty Soil)	Life of Mine – 14068Cu.M (Gritty Soil)
4	Stripping Ratio	:	1 : 0.07	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Size: 6m x 6m, No. - 7	
7	Elevation of Mine	:	Highest RL 164m AMSL, Lowest RL 161m AMSL	
8	Ground Level Elevation		161m AMSL	
9	Ultimate Working Depth	:	122m AMSL	
10	Water Table	:	107m AMSL	
11	Topography of Mine	:	Gently sloping land.	
12	Explosive Requirement	:	13.8 Tons/year	
13	Diesel/Fuel requirement	:	42 KL/year (140 Litres/day)	

Production Details

Year	Production of stone (Cum)	Production of stone (Tonne)	Waste (gritty soil) Generation (CuM)	Bench RL in Meters
1st Year	43,244	1,21,083	11,590	164m – 158m
2nd Year	43,251	1,21,103	Nil	158m – 152m
3rd Year	43,291	1,21,215	Nil	158m – 146m
4th Year	43,466	1,21,705	2,478	164m – 140m
5th Year	42,947	1,20,252	Nil	140m – 122m
Total	**2,16,199**	**6,05,358**	**14,068**	

Land Use

SL	Pattern	Existing Land Use (Ha)	Proposed Current Plan Period (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Proposed Land Use at End of Life of Mine (Ha)	Land Usage at Conceptual Stage
1	Mining Area (Quarry)	Nil	1.30	1.30	1.30	Water Body
2	Green Belt Within Safety Barrier	Nil	0.52	0.52	0.52	Plantation

3	Road	0.02	Nil	Nil	Nil	-
4	Unutilized	1.80	Nil	Nil	Nil	-
	TOTAL	**1.82**	**1.82**	**1.82**		

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.52 Ha	1300 trees @ 2500 trees per Ha
2	Haul /Approach Road	:	0.22 Ha i.e. Length 110 width 2m	74 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 in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of mine as per norms and schedule issued by PCCF, Development, Department of Forest, Environment & Climate Change, Govt. of Jharkhand. Records of same to be maintained and will be submitted with compliance report.

Solid Waste Management

- Waste (gritty soil) Generation will be 14068 Cu.M. during the life of Mine.
  The area is covered with a thin layer of gritty soil of 1m thickness. During 1st year of working, gritty soil will be removed and this will be dumped in the north side of the project area. The dumping of the OB in external dump would be continue till 3rd year after that the external dump and removal of gritty soil on 4th year will 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. The water required for the mining activities shall be supplied by the tanker from nearby authorized sources.
b. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
c. 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.
d. If any changes are noticed in future regarding the contiguous / cluster area report issued by the mines department, then the applicable laws / rules will be binding on the Project Authorities and all necessary steps will be taken in this regard
e. The Boundary Pillars of the proposed mine applied area will be maintained properly.
f. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.
g. The plantation work will be completed within the first year of operation. Thereafter the same will be maintained up to the Conceptual stage of the Mine.
h. Sufficient water spray using water tankers will be done for effective dust suppression within the mine applied area and on haul roads.
i. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
j. If any tree felling than necessary permission shall be taken from the competent authority.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Tentoposi Stone Deposit of M/s Aarohi Impex & Trade Links, Village : Tentoposi, Thana : Saraikela, Thana no. : 241, Distt. : Saraikela-Kharsawan, Jharkhand (1.82 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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5. **Shankardih Stone Deposit of M/s Shree Dwarkadhish Minerals, Village : Shankardih, Thana : Dumri, Distt. : Giridih, Jharkhand (1.493 Ha).**

(Proposal No. : SIA/JH/MIN/ 287038/2022).

Project Category : B2 – Application for Environment Clearance.
EC Application for : Proposed Capacity-46207.20 cu.m/annum or 124759.44 TPA.

Name of the consultant : P and M Solution, Noida

This is a new project which has been taken for appraisal on 18.08.2022.

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Shankardih Stone Deposit	
2	Lessee:	:	M/S Shree Dwarkadhish Minerals (Partners- Sri. Manoj Mehta, Sri Santosh Mehta, Sri. Sanjeet Kumar, Sri Sunny Kumar) **Address-** (Partners) 1. Sri. Manoj Mehta S/O Late Kedar Mehta, Village + P.O- Phulwariya, Thana- Nawalshahi, District- Koderma 2. Sri Santosh Mehta S/O Chaman Mehta, Village + P.O- Phulwariya, Thana- Nawalsahi, District- Koderma 3. Sri. Sanjeet Kumar S/O Anant Kumar Barnwal, P.O.+P.S.- Domchanch, District-Koderma 4. Sri Sunny Kumar S/O Gangadhar Prasad Sahu, Village & P.O.- Indarwa, District-Koderma	
3	Lease Address	:	Village – Shankardih, Thana- Dumri, District – Giridih, State – Jharkhand.	
4	Lease Area	:	1.493 ha	Acres-3.69 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 15 Lakhs	
7	EMP Budget	:	Capital: 5.275 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.30 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.: 463440.00 cum	Tonnes: 1251288.00 tons
11	Mine Life	:	10.06 ~ 10.00 years	
12	Man power	:	25	
13	Water Requirement	:	12.24 KLD(Drinking: 0.875 KLD, Dust Suppression: 8.965 KLD, Plantation: 2.40 KLD)	

14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	53 KVA
16	Crusher	:	No crusher
17	Nearest Water Body	:	Jamuniya Nadi, 3.82 km, South West direction
18	Nearest Habitation	:	Galagi, 0.79 km
19	Nearest Rail Station	:	Bholidih Railway station, approx. 2.25 km in S direction
20	Nearest Air Port	:	Giridih Airport, 35.70 km, in NNE direction
21	Nearest Forest	:	Parasnath Protected Forest, approx. 1.94 km, NW direction Protected Forest, approx.2.68 km, SE direction Open Scrub Jungle, approx. 4.33 km, SE direction
22	Road & Highways	:	NH- 19 , Approx. 0.73 km, North direction

CO-ORDINATES

1	Latitude		From 23°55'03.90"N	To 23°55'07.96"N
2	Longitude		From 86°07'16.31"E	To 86°07'23.23"E

Land Details :

Khata No.	Plot No.
177	1077
180	1046

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Giridih vide letter no. 693/M, dated 20.07.2022.
2	CO	:	The CO, Dumri (Giridih) vide letter no. 166, dated 15.03.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyan.
3	DMO	:	DMO, Giridih vide memo no. 724/M, dated 30.07.2022 certified that 03 other mining area (2.64 acre, 2.5825 acre & 3.19 acre) exists within 500 m radius from proposed project site and total mining lease area is 12.1025 Acre (less than 5 ha).
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 253, dated 18.02.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

5	DFO Forest Distance	:	DFO, Giridih East Division vide letter no. 562, dated 18.02.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC – cum- District Magistrate, Giridih vide letter no. 763/M, dated 08.08.2022 has informed that this project is part of District Survey Report (DSR) of Giridih district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	CO, Dumri (Giridih) vide Letter no 167, dated 15.03.2022 informed that Gram Sabha conducted on 05.03.2022.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Memo No. 40/G, dated 26.07.2022

Working Details

1	Mining Method	:	Opencast Semi - Mechanized Mining method	
2	Quarry Area	:	5 years–1.077 ha	Life of Mine – 1.077 ha
3	Waste Generation	:	5 years–6000 cu.m or 16200 tons	
4	Stripping Ratio	:	1: 0.009	
5	Working Days	:	300	
6	Benches: size & No	:	6m x 6m	
7	Elevation of Mine	:	270AMSL to 273 AMSL	
8	Ground Level Elevation	:	273 AMSL	
9	Ultimate Working Depth	:	257 AMSL (21mbgl)	
10	Water Table	:	230AMSL (19mbgl)	
11	Topography of Mine	:	Area represents a small hillock	
12	Explosive Requirement	:	5 T/month	
13	Diesel/Fuel requirement	:	90 litre/day	

Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Waste in Ultimate Period	Bench RL in Meters
1st	121500.00	45000.00	50*120= 6000.0	50*120= 6000.0	269mRL - 273mRL
2nd	123606.00	45780.00	-		263mRL - 269mRL
3rd	124740.00	46200.00	-		263mRL - 269mRL

4th	124759.44	46207.20	-		257mRL - 263mRL
5th	124751.34	46204.20	-		257mRL - 263mRL
Total	**619356.78**	**229931.40**	**6000.00**	**6000.00**	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	-	1.077 (0.003 ha road comes under)	1.077 ha (entire area will be converted into rainwater harvesting)
Road	0.006	0.003	0.003
Safety Zone	-	0.413	0.413
Total	**0.006**	**1.493**	**1.493**
Balance	**1.487**	**-**	**-**
Lease Hold Area	**1.493**	**1.493**	**1.493**

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.413 ha	200
2	Haul /Approach Road	:	1.15 km	1000

- 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 6000.0 cum during the plan period which will be used for maintenance of Haul Road.

Water Quality Management

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

Air Quality Management

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

Undertaking submitted affirming:

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

g. Sufficient water spray using water tankers will be done for effective dust suppression within the mine lease area and on haul roads.

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

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Shankardih Stone Deposit of M/s Shree Dwarkadhish Minerals, Village : Shankardih, Thana : Dumri, Distt. : Giridih, Jharkhand (1.493 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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6. **Khuha Stone Deposit of M/s Pavitra Quarry Explosive Pvt. Ltd., Village : Khuha, Thana : Jainagar, Distt. : Koderma, Jharkhand (2.20 Ha).**

(Proposal No. : SIA/JH/MIN/ 287428/2022).

Project Category: **B2 – Application for Environment Clearance.**

EC Application for: **Proposed Capacity-83378.0 cu.m/annum or 225120.60 TPA.**

Name of the consultant: **P & M Solution, Noida, UP.**

This is a new project which has been taken for appraisal on 18.08.2022.

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Khuha Stone Deposit	
2	Lessee:	:	M/S Pavitra Quarry Explosive Pvt. Ltd. (Director- Sri Rajkumar Das), Addreess- Sonali Apartment, 2nd Floor, 204, Hanuman Nagar, District- Ranchi, Jharkhand -834009	
3	Lease Address	:	Village – Khuha, Thana- Jainagar, District – Koderma, State – Jharkhand.	
4	Lease Area	:	2.20 ha	Acres-5.44 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 20 Lakhs	
7	EMP Budget	:	Capital: 5.10 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.40 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.: 851130.00 cum	Tonnes: 2298051.00 tons
11	Mine Life	:	10.37 ~ 10.40 years	

12	Man power	:	30
13	Water Requirement	:	12.0 KLD(Drinking: 1.05 KLD, Dust Suppression: 7.35 KLD, Plantation: 3.60 KLD)
14	Water Source	:	From Nearby villages by tankers
15	DG Set / power	:	200 KVA
16	Crusher	:	There is a Crusher inside the lease area.
17	Nearest Water Body	:	Akto Nadi River, 6.23 km, South West direction
18	Nearest Habitation	:	Khagradih, 0.60 km
19	Nearest Rail Station	:	Sarmatanr Railway station, approx. 3.90 km in SW direction
20	Nearest Air Port	:	Giridih Airport, 64.50 km, in ESE direction
21	Nearest Forest	:	Birjamu Protected Forest, approx. 2.71 km, NW direction Masmohana Protected Forest, approx.6.38 km, NE direction Guthia Protected Forest, approx.4.39 km, NE direction
22	Road & Highways	:	NH-20 , Approx. 14.50 km, North West direction SH- 13, Approx. 11.10 km, North Direction

CO-ORDINATES

1	Latitude		From 24°22'16.21"N	To 24°22'22.96"N
2	Longitude		From 85°40'59.01"E	To 85°41'07.55"E

Land Details :

Khata No.	Plot No.
09	691, 694, 700
17	692, 695, 697, 730(P), 740 (P)
42	693
46	696

Statutory Clearances :

1	LOI/Lease docs	:	The LOI has been issued by District Mining Officer, Koderma vide letter no. 1104/M , dated 29.06.2022.
2	CO	:	The CO, Jainagar (Koderma) vide letter no. 292, dated 29.04.2022 has mentioned the plot no. of the project is not recorded as "Jangle. Jhari" in R.S. Khatiyan & Register II.

3	DMO	:	DMO, Koderma vide memo no. 1156/M, dated 14.07.2022 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 992, dated 07.06.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Koderma Forest Division vide letter no. 1710, dated 28.04.2022 certified that the distance of reserved / protected forest is 360 m from the project site.
6	DSR	:	The DC-cum-District Magistrate, Koderma vide letter no 1139/M dated 07.07.2022 has informed that this project is part of District Survey Report (DSR) at Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 17.02.2022
8	Mine Plan Approval	:	Approved by the Additional Director, Geology, Hazaribag vide letter no. G/2022-23-166, dated 03.08.2022.

Working Details

1	Mining Method	:	Opencast Semi - Mechanized Mining method	
2	Quarry Area	:	5 years–0.561ha	Life of Mine – 1.447 ha
3	Waste Generation	:	5 years–4240 cu.m or 11448 tons	
4	Stripping Ratio	:	1: 0.003	
5	Working Days	:	300	
6	Benches: size & No	:	6m x 6m	
7	Elevation of Mine	:	364 AMSL to 370 AMSL	
8	Ground Level Elevation	:	364 AMSL	
9	Ultimate Working Depth	:	340 AMSL (24mbgl)	
10	Water Table	:	330 AMSL (20mbgl)	
11	Topography of Mine	:	Area represents a small hillock	
12	Explosive Requirement	:	20 T/month	
13	Diesel/Fuel requirement	:	90 litre/day	

Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1st	200880.00	74400.00	53*80= 4240.0	364mRL - 370mRL
2nd	213624.00	79120.00	-	358mRL - 364mRL
3rd	223128.00	82640.00	-	352mRL - 358mRL
4th	225120.60	83378.00	-	346mRL - 352mRL
5th	225115.20	83376.00	-	340mRL - 346mRL
Total	**1087867.80**	**402914.00**	**4240.0**	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha) (after life of mine)
Quarry	-	0.561 (0.003 ha road comes under)	1.447 ha (0.87 ha area will be converted into rainwater harvesting & rest 0.577 ha area dead bench plantation)
Road	0.006	0.003	0.003
Safety Zone	-	0.750	0.750
Proposed Crusher	-	0.030	Removed this stage
Total	**0.006**	**1.344**	**2.20**
Balance	**2.194**	**0.856**	-
Lease Hold Area	**2.20**	**2.20**	**2.20**

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.750 ha	900
2	Haul /Approach Road	:	0.60 km	900

- 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 4240.0 cum during the plan period which will be used for maintenance of Haul Road.

Water Quality Management

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

Air Quality Management

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

Undertaking submitted affirming:

a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Khuha Stone Deposit of M/s Pavitra Quarry Explosive Pvt. Ltd., Village : Khuha, Thana : Jainagar, Distt. : Koderma, Jharkhand (2.20 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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7. **Chhota Amra Stone Deposit of Shri Padam Lochan Mahato & Shri Sita Ram Mahato, Village : Chhota Amra, Thana : Chandil, Distt. : Saraikela-Kharsawan, Jharkhand (0.441 Ha).**

(Proposal No. : SIA/JH/MIN/ 288336/2022)

Project Category: **B2 – Application for Environment Clearance**
EC Application for: **Proposed Capacity-3801.00 cu.m/annum or 10262.70 MTPA**

Name of the consultant: P & M Solution, Noida, UP.
This is a new project which has been taken for appraisal on 18.08.2022.

Project and Location Details :

Sl	Parameter		Details
1	Project Name	:	Chhota Amra Stone Deposit
2	Lessee:	:	**Shri Padam Lochan Mahato &** **Shri Sita Ram Mahato** 1. Shri Padam Lochan Mahato

			S/o Late Shrikanto Mahato Vill-Tulgram P.O Ghatdulmi, P.S-Chowka, District- Saraikela-Kharsawan Jharkhand 2.Shri Sita Ram Mahato S/o Rajendra Nath Mahato Vill-Jurgu, P.O Ghatdulmi,Bansa District- Saraikela-Kharsawan, Jharkhand	
3	Lease Address	:	Village – Chhota Amra, Thana- Chandil, District – Saraikela - Kharsawan, State –Jharkhand.	
4	Lease Area	:	0.441 ha	Acres-1.09 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 40 Lakhs	
7	EMP Budget	:	Capital: 5.93 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.80 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.: 46104 cum	Tonnes: 124480.80 tons
11	Mine Life	:	4.99 ~ 5 years	
12	Man power	:	17	
13	Water Requirement	:	3.645 KLD(Drinking: 0.595 KLD, Dust Suppression: 1.92 KLD, Plantation: 1.13 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No crusher	
17	Nearest Water Body	:	Karkari Nadi, 0.69 km, North direction	
18	Nearest Habitation	:	Silda, 0.55 km	
19	Nearest Rail Station	:	Chandil Railway station, approx. 17.23 km in SE direction	
20	Nearest Air Port	:	Birsa Munda Airport Ranchi , 69.21 km, in NW direction	
21	Nearest Forest	:	Protected Forest, approx.2.60 km, SW direction Open Mixed Jungle, approx. 2.00 km, South direction	
22	Road & Highways	:	NH- 43, Approx. 4.98 km, SE direction	

CO-ORDINATES

1	Latitude		From 23°00'48.5"N	To 23°00'52.4"N
2	Longitude		From 85°54'56.1"E	To 85°55'01.35"E

Land Details :

Khata No.	Plot No.
45	402, 403 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Saraikela - Kharsawan vide letter no. 174/M , dated 19.02.2022
2	CO	:	The CO, Ichagarh vide letter no. 475, dated 03.07.2019 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
3	DMO	:	DMO, Saraikela - Kharsawan vide letter no. 569/M, dated 12.07.2022 certified no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	Deputy Conservator of Forest & Filed Director, Elephant Project, Jamshedpur vide letter no. 899, dated 29.06.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Seraikela Forest Division vide letter no. 834, dated 27.04.2022 certified that the distance of reserved / protected forest is 270 m from the project site.
6	DSR	:	The DC, Saraikela-Kharsawan vide letter no. 637/M, dated 02.08.2022 has informed that this project is part of District Survey Report (DSR) at Saraikela - Kharsawan district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 22.07.2019
8	Mine Plan Approval	:	Approved by the Additional Director, Geology, Hazaribag vide letter no. 86/G, dated 15.03.2022.

Working Details

1	Mining Method	:	Opencast other than fully Mechanized Mining method	
2	Quarry Area	:	5 years–0.216 ha	Life of Mine – 0.216 ha
3	Waste Generation	:	5 years– 1146 cu.m	
4	Stripping Ratio	:	1: 0.04	
5	Working Days	:	300	

6	Benches: size & No	:	2.5m to 3m
7	Elevation of Mine	:	190 AMSL to 194 AMSL
8	Ground Level Elevation	:	194 AMSL
9	Ultimate Working Depth	:	180 AMSL (10 mbgl)
10	Water Table	:	170 AMSL (20 mbgl)
11	Topography of Mine	:	Area represents a small hillock
12	Explosive Requirement	:	5 T/month
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Production of stone (MTPA)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1st	10260.00	3800.00	456.00	186mRL - 191mRL
2nd	10246.50	3795.00	300.00	186mRL - 192.40mRL
3rd	10260.00	3800.00	-	180mRL - 186mRL
4th	10262.70	3801.00	90.00	180mRL - 186mRL
5th	10206.00	3780.00	300.00	188mRL - 194mRL
Total	**51235.20**	**18976.00**	**1146.00**	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan Period	At Conceptual Period
Excavation	Nil	0.216	0.216 Ha (0.058 haarea shall be left as watwr reservoir for rain water harvesting and 0.20 ha area for backfilled.
Road	Nil	Nil	Nil
Waste Dump	Nil	Nil	Nil
Plantation (Green Belt)	Nil	0.225 (within safety zone)	0.228
Total	**0.441**	**0.441**	**0.441**

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.225 ha	245
2	Along Approach Road	:	320 m	320

- 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 1146.0 cum during the plan period. After plan period the proposed waste will be used for maintenance of Haul Road.

Water Quality Management

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

Air Quality Management

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

- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask e.t.c shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chhota Amra Stone Deposit of Shri Padam Lochan Mahato & Shri Sita Ram Mahato, Village : Chhota Amra, Thana : Chandil, Distt. : Saraikela-Kharsawan, Jharkhand (0.441 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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8. **Rudiya-Katiya Stone Deposit of M/s Harelal Construction Company Pvt. Ltd., Village : Rudiya-Katiya, Thana : Chandil, Distt. : Saraikela-Kharsawan, Jharkhand (1.40 Ha).**

(Proposal No. : SIA/JH/MIN/ 288451/2022).

Project Category: **B2 – Application for Environment Clearance**
EC Application for: **Proposed Capacity-12414.44 cu.m/annum or 33518.99 MTPA**
Name of the consultant: P & M Solution, Noida, UP.

This is a new project which has been taken for appraisal on 18.08.2022.

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Rudiya - Katiya Stone Deposit	
2	Lessee:	:	M/S Harelal Construction Company Pvt. Ltd. S/O Shri Dalgovind Mahato, Village/P.O.- Bhadudih, Thana- Chandil, District- Saraikela-Kharsawan, Jharkhand	
3	Lease Address	:	Village – Rudiya - Katiya, Thana- Chandil, District – Saraikela - Kharsawan, State –Jharkhand.	
4	Lease Area	:	1.40 ha	Acres-3.48 Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 60 Lakhs	
7	EMP Budget	:	Capital: 8.076 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 1.12 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.: 124144.42 cum	Tonnes: 335189.95 tons
11	Mine Life	:	10.00 years	
12	Man power	:	17	
13	Water Requirement	:	7.0 KLD(Drinking: 0.595 KLD, Dust Suppression: 3.96 KLD, Plantation: 2.426 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No crusher	
17	Nearest Water Body	:	Subarnarekha River, 0.19 km, South West direction	
18	Nearest Habitation	:	Rudiya, 1.20 km	
19	Nearest Rail Station	:	Chandil Railway station, approx. 5.65 km in NE direction	
20	Nearest Air Port	:	Birsa Munda Airport Ranchi , 84.50 km, in NW direction	
21	Nearest Forest	:	Fairly Dense Mixed Jungle, approx.2.20 km, North direction Protected Forest, approx.2.60 km, WSW direction Open Mixed Jungle, approx. 4.30 km, South direction	
22	Road & Highways	:	NH- 43, Approx. 2.30 km, North direction	

CO-ORDINATES

1	Latitude		From 22°55'05.98"N	To 22°55'10.61"N

2	Longitude		From 86°01'53.95"E	To 86°02'01.24"E

LAND DETAILS :

Mauza	Khata No.	Plot No.
Rudiya	289	2381(P), 2382, 2383, 2384
Katiya	185	05, 08, 09

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Saraikela - Kharsawan vide letter no. 178/M , dated 22.02.2022.
2	CO	:	The CO, Chandil vide letter no. 375, dated 11.06.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
3	DMO	:	DMO, Saraikela - Kharsawan vide letter no. 545/M, dated 28.06.2022 certified no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	Deputy Conservator of Forest & field Director, Elephant Project Jamshedpur vide letter nos. 81 & 83 dated 12.01.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Saraikela Forest Division vide letter no. 1535, dated 09.09.2020 and letter no. 1536, dated 09.09.2020 certified that the distance of reserved / protected forest is more than 250 m from the project site.
6	DSR	:	The DC, Saraikela-Kharsawan vide letter no. 637/M, dated 02.08.2022 has informed that this project is part of District Survey Report (DSR) at Saraikela - Kharsawan district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 21.09.2020
8	Mine Plan Approval	:	Approved by Additional Director, Geology, Hazaribag vide memo no. 23/G, dated 21.04.2022.

Working Details

1	Mining Method	:	Opencast other than fully Mechanized Mining method	
2	Quarry Area	:	5 years–0.700ha	Life of Mine – 0.913 ha
3	Waste Generation	:	5 years– 5384.02 cu.m	
4	Stripping Ratio	:	1: 0.007	
5	Working Days	:	300	
6	Benches: size & No	:	2.5m to 3m	
7	Elevation of Mine	:	142 AMSL to 146 AMSL	
8	Ground Level Elevation	:	142 AMSL	
9	Ultimate Working Depth	:	122 AMSL (5mbgl)	
10	Water Table	:	117 AMSL (25mbgl)	
11	Topography of Mine	:	Area represents a small hillock	
12	Explosive Requirement	:	5 T/month	
13	Diesel/Fuel requirement	:	90 litre/day	

Production Details

Year	Production of stone (MTPA)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1st	33518.99	12414.44	2235.70	140mRL - 145mRL
2nd	33518.99	12414.44	688.35	134mRL - 140mRL
3rd	33511.59	12411.70	1453.30	134mRL - 140mRL
4th	33516.88	12413.66	753.34	134mRL - 140mRL
5th	33515.56	12413.17	253.33	128mRL - 124mRL
Total	**167582.01**	**62067.41**	**5384.02**	

Land Use

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan Period	At Conceptual Period
Excavation	Nil	0.700	0.913 Ha (0.593 ha area shall be left as water reservoir for rain water harvesting and 0.060 ha area for backfilled.

Waste Dump	Nil	0.140	Nil
Road	Nil	0.010	0.010
Infrastructure	Nil	Nil	Nil
Plantation (Green Belt)	Nil	0.485 (within safety zone)	0.485
Balanced Unused area	1.40	0.065	-
Total	**1.40**	**1.40**	**1.40**

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.485ha	553
2	Along Approach Road	:	660 m	660

- 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 5384.02 cum (dump area- 0.140 ha) during the plan period. After plan period the proposed waste will be used for maintenance of Haul Road.

Water Quality Management

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

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

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

Air Quality Management

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

Undertaking submitted affirming:

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated

12.12.18 decided that the proposal for Rudiya-Katiya Stone Deposit of M/s Harelal Construction Company Pvt. Ltd., Village : Rudiya-Katiya, Thana : Chandil, Distt. : Saraikela-Kharsawan, Jharkhand (1.40 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – IV.

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

(Proposal No. : SIA/JH/MIS/ 283899/2022)

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

This is a case of violation which has been taken for reappraisal on 18.08.2022

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 – (Considering as B1 due to violation)

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94th meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the **violation ToR** in 95th meeting held on 14th , 15th & 16th June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 130, date 18.06.2022. The final EIA / EMP submitted by PP to SEIAA on 20.07.2022 and received by SEAC on 20.07.2022.

EC Application for Residential building: Total built-up area of 37228.22 Sqm. (Approx. 35% part of the project has already been constructed).

Project and Location Details :

Sl. no.	Parameters	Description
1.	Latitude	**23°19'56.92"N**
2.	Longitude	**85°21'18.97"E**
3.	Plot Area	8856.76 Sqm. (or 0.8856 Ha.)
4.	Project Cost	INR 50 Crores
5.	Built-up Area	37228.22 m^2, Maximum height of the building (m) is 47 m
6.	Green Area (@15 % of plot area)	1320 Sqm.
7.	Population	Residential: 972 Nos. & Commercial: 30 Nos. Visitors & Staff: 70 Nos.
8.	Water Requirement	139 KLD
9.	Fresh Water Requirement	89 KLD
10.	Wastewater Generation	116 KLD
11.	STP Capacity	140 KLD
12.	Total Municipal Waste	453 kg/day Biodegradable Waste: ~ 272 Kg/day Non-Biodegradable Waste: ~181 Kg/day
13.	Power Requirement	1487 KVA (Jharkhand State Electricity board)
14.	DG Sets	1440 KVA 4x360 KVA + 320 KVA
15.	RWH Pits	3 (35.42 Cumec / hour)
16.	Parking	299 (Four-wheeler), 467 (Two-wheeler), 24 (Visitors car Parking), 1 (Loading/Unloading Parking), 12 (Other parking).
17.	Connecting road	Project site is well connected with road. Site is well connected with NH 33, SH 1, Namkum Main Road.
18.	National Highway	NH 33 (Approx. 3.29 km, SE) SH 1 (Approx. 2.03 km, North) Adjacent road (Namkum Main Road is in South Direction)
19.	Nearest Railway Station	Ranchi junction Railway station, (2.57 km, NW)
20.	Airport	Birsa Munda Airport, (Approx. 3.5 km, SW)

21.	Nearest Hospitals	St. Barnabas Hospital (Approx. 3.76 km, NW) Jharkhand National Hospital (Approx. 3.78 km, N)
22.	Nearest Water Bodies	Thakur Talab- Approx. 2.11 km, NW Chatt Talab- Approx. 2.55 km, N Batam Talab- Approx. 3.58 km, NW Ranchi Lake- Approx. 5.23 km, NW Dhruwa Dam- Approx. 11.29 km, SW Nallah- Approx. 0.29 km, SE Subarnarekha River- Approx. 0.43 km, E
23.	EMP Budget	During Construction: Capital: 19.5 Lakhs Recurring: 20.25 Lakhs
		Operational Cost: Capital: 89 Lakhs Recurring: 18.5 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	Hatia Railway Station: Approx. 3.19 km, NW Birsa Munda Airport: Approx. 3.90 km, SW

Area Summary :

S. No.	Description	Area (Sqm.)
1.	Plot Area at Site	8856.76
3.	Green Belt Area @ 15%	1320
4.	Open Area	5096.29
5.	Ground Coverage	2599.73
6.	FAR Residential & Commercial	25711.55
7.	Non-FAR Residential & Commercial	2931.17
8.	Built-Up Residential & Commercial	37228.22
9.	Dwelling Units/Units Residential	Block A-96 Block B-60 Block C-60
10.	Height	Approx. 47 m

Co-Ordinates:

1	Latitude		23°19'56.73"N
2	Longitude		85°21'19.51"E

Details of Building block and current status

Sl no	Tower	No of floor	Constructed floor	Total built up area (Sqm)	Total constructed area (Sqm)	% Of constr uction
1.	Block-A	LB+ UB+GF+11	Only excavation work	37228.22	13,029.87	~35%
2.	Block-B	LB+ UB+GF+13	B+ G+3			
3.	Block-C	LB+ UB+GF+13	B+ G			
4.	Retail shop building	B+G+3	B+G+3			

Land Details:

Khata no.	Plot no.
271	1937
272	1938, 1939

Statutory Clearances:

1	DFO Certificate	:	Divisional Forest Officer (DFO), Ranchi Forest Division vide letter no. 4978, dated 21.12.2020 certified that distance of Reserved Forest/Protected Forest is more than 250 meters from project site.
2	DFO wildlife	:	DFO, Wildlife Ranchi division vide memo no. 50 dated 15.01.2021 certified that the National Park & Sanctuary is not within 10 km from project is not situated within in any ESZ.
3	CO certificate	:	The CO, Argora, Ranchi vide letter no. 5 (ii), dated 05.01.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in Khatiyan.
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID RANC/EAST/B/042019/388950, dated 01/05/2019
5	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand,

			Ranchi, vide letter no. 961/Tech., dated 15.04.2019.
6	Building Plan	:	Conceptual Plan

Water and waste water Requirement Details

S. No.	Description	No. of units/Area in Sqm	Unit Population	Population	Unit water consumption (lpcd)	Total water required (kl)	Fresh water required (kld)	Flushing (kld)	Total Wastewate (kld)(80% c domestic +100% Tot flushing)
1	Main Dwelling Units (Residential)	216	....	972	135 (90+45)	131	87	43.74	113.724
2	Visitors (5% of the residential population)	...	...	50	15 (10+5)	0.75	0.5	0.25	0.65
3	Commercial Unit	...	...	30	45 (30+15)	1.35	0.9	0.45	1.17
4	Staff	...	...	20	15 (10+5)	0.3	0.2	0.1	0.26
	Subtotal -I					133.4	89	44.54	115.80
	Reuse of treated water								
1	Horticulture	1320	3 liter/sqm of Landscape area	...		4			
2	DG Cooling	1440 KVA				1			
		Subtotal II				5			
		Grand Total I+II				139			

Category	Total Quantity (KLD)
Fresh water Req. for domestic purpose	89
Flushing water Req.	45
Sewage generation (@80% of the fresh water consumption + 100% flushing water & swimming Pool)	116 (71+45)
Capacity of STP	140
Recovered water from STP (80% of Waste water) 1. Flushing 2. Landscaping 3. Discharge to Sewer	93 45 5 43

Solid Waste Requirement

S. No.	Category of Solid Waste	Waste Generation Rate	Formula	Total Population	Waste Generated	Bio-degradable	Non-biodegradable
1	Residential	0.3 to 0.6	Total	972	437.4	262.44	174.96

	Refuse	kg/cap/day	Population*0.45				
2	Visitor (5% of the residential Population)	0.1 to 0.3 kg/cap/day	Total Population*0.15	50	7.5	4.5	3
3	Commercial	0.05 to 0.2 kg/cap/day	Total Population*0.125	30	3.75	2.25	1.5
4	Staff	0.1 to 0.3 kg/cap/day	Total Population*0.2	20	4	2.4	1.6
	Total			**1072**	**453**	**272**	**181**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 1320 sqm. (@15% of plot area), which will enhance the beauty of the site and help combat air and noise pollution. (Plan Attached)
- 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. 140 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. 89 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

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

Earlier this proposal was presented in SEAC on 15-22.07.2022 in which requisite document was sought are under –

i. The PAs has to be submitted the remediation plan and natural & community resource augmentation plan before the Committee in the line of CPCB guidelines.

The Project Authorities have submitted the above mentioned document which is given below :

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

On the basis of above the State Level Expert Appraisal Commitee (SEAC), Jharkhand recommended an amount of rupees 35.50 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 :-

Sr. No.	Environmental Component	Description	Location	Cost Rs in Lacs
1	Natural resource management	Installation of solar PV plate at Government school of 12 kw each	In the nearby Ranchi Municipal area	12.00
2	Waste Management	Waste collection vehicle will be purchased and hand over to local municipal for collection of waste	In nearby area with the help of nearest municipal corporation	11.50
3	Social awareness program	Awarrness program in school, colleges and community and blood donation camp. Minimum 5 awareness programs.	In the nearby Ranchi Municipal area	4.50
4	Tree Plantation	Tree plantation in the Ranchi municipal area and maintain it for 03 years @ 1500, 500 tree to be planted	In the nearby Ranchi Municipal area	7.50.
		Total cost Rs. In Lacs		**35.50**

I. The Committee visited the project site on 20.07.2022 to verify the details submitted by PAs.

II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is **Rs. 35.50 Lakh.**

III. Therefore, PAs shall be required to submit a bank guarantee of an amount of **Rs. 35.50** 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 remedition plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.

V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.

VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.

VII. STP of adequate capacity shall be established within the project permises.

VIII. Energy conservation measures adhearing to part of ECBC norms shall be complied with.

IX. The penalty of **Rs. 2.00 Lakh** being 0.5% of the capital investment incurred till the EIA/EMP report (**Rs. 4.00 Crores**) 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, information provided and site visit, the Committee decided that the proposal for Residential Group Housing Project "Shivam Heights" of M/s Durga Developers Pvt. Ltd, Mouza : Bada Ghaghra, Anchal : Argora, Tehsil : Ranchi, Dist. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II alongwith the following specific conditions :

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.

I. All raw material to be stored only under covered shed.

II. PAs to offset (upto 20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.

III. 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.

IV. Trees should be developed & maintained not less than 15% of project area.

V. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.

VI. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.

VII. 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.

VIII. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.

IX. 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.

X. Sufficient number of EV fast charging point to be installed.

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The meeting concluded with thanks to all present.

(Dr. Raju Kumar)
Member

19/08/2022
(Dr. Ajay Govind Bhatt)
Member

19/08/2022
(Niranjan Lal Agarwalla)
Member

(Dr. Kirti Avishek)
Member

19/08/2022
(Srikant Verma)
Secretary

19/08/2022
(Ashok Kumar Singh)
Chairman

Annexure - I

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

1. The EIA Report shall be prepared 0.5 MTPA (peak 0.75 MTPA) rated capacity in an ML / project area of 105.153 ha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
2. An EIA-EMP Report would be prepared for 0.5 MTPA (peak 0.75 MTPA) rated capacity to cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for 0.5 MTPA (peak 0.75 MTPA) of coal production based on approved project/Mining Plan for 0.5 MTPA (peak 0.75 MTPA). Baseline data collection can be for any season except monsoon.
3. A map specifying locations of the State, District and Project location should be provided.
4. A Study area map of the core zone and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
5. Land use map (1: 50,000 scale) based on a recent satellite imagery of the study area may also be provided with explanatory note on the land use.
6. Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
7. A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
8. A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification thereoff in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.
9. In case of any proposed diversion of nallah/canal/river, the proposed route of diversion /modification of drainage and their realignment, construction of embankment etc. should

also be shown on the map as per the approval of Irrigation and Flood Control Department of the concerned state.

10. Similarly if the project involves diversion of any road/railway line passing through the ML/project area, the proposed route of diversion and its realignment should be shown in the map.

11. Break up of lease/project area as per different land uses and their stage of acquisition should be provided.

Land use details for opencast project should be given as per the following table :

S. N.	Land use	Within ML area	Outside ML area	Total
1.	Agricultural land			
2.	Forest land			
3.	Wasteland			
4.	Grazing land			
5.	Surface water bodies			
6.	Settlements			
7.	Others (specify)			

12. Break-up of lease/project area as per mining operations should be provided.

13. Impact of changes in the land use due to the project, if much of the land being acquired is predominantly agricultural land/forestland/grazing land.

14. One-season (non-monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.

15. Map of the study area (1: 50, 000 scale) (core and buffer zone clearly delineating the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources should be provided. The number and location of the stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Values should be provided based on desirable limits.

16. Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora fauna and, or if the area is occasionally visited or used as a habitat by Schedule-I fauna, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan should be prepared and submitted with EIA-EMP Report; and comments from the CWLW of the State Govt. should also be obtained and furnished.

17. Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included.

18. Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.

19. Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing though the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.

20. Detailed water balance along with flow chart should be provided. The break-up of water requirement for the various mine operations should be given separately.

21. Source of water for use in mine, sanction of the competent authority in the State Govt. and impacts vis-à-vis the competing users should be given.

22. Impact of mining and water abstraction use in mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.

23. Impact of blasting, noise and vibrations should be given.

24. Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.

25. Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop, management plan for maintenance of HEMM, machinery, equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.

26. Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP / Silo entirely wagons and into trucks / tippers.

27. Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on slope stability studies with a max of 28o angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.

28. Efforts be made for maximizing progressive internal dumping of O.B., sequential mining , external dump on coal bearing area and later rehandling into the mine void.--to reduce land degradation.

29. Impact of change in land use from mining operations and wether the land can be restored to agriculture use post mining.

30. Progressive Green belt and Ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEF&CC given below) and selection of species (native) based on original survey/land use should be given.

31. Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the status of pre- mining should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of rehandling (wherever applicable) and backfilling and progressive mine closure and reclamation should be detailed.

Table 3 : Post-Mining land use pattern of ML / Project area (ha)

Land use during mining	Land use (ha)				
External OB dump	Plantation	Water body	Public use	Undisturbed	Total
Top soil dump					
Excavation					
Roads					
Built up area					
Green belt					
Undisturbed area					
	Total				

32. Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be accorded ?.

33. Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.

34. Risk Assessment and Disaster Preparedness and Management Plan should be provided.

35. Integration of the Environmental Management Plan with measures for minimizing use of natural resources - water, land, energy, etc. should be carried out.

36. Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.

37. Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.

38. CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.

39. Corporate Environment Responsibility:

a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
d) To have proper checks and balances, the company should have a well laid down 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.

40. Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

41. In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.

42. Status of any litigations/ court cases filed/pending on the project should be provided.

43. Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.

44. Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

Details on the Forest Clearance should be given as per the format given :

Total ML / Project area (ha)	Total forest land (ha)	Date of FC	Extent of forest land	Balance area for which FC is yet to be obtained	Status of application for diversion of forest land

45. Besides the above, the below mentioned general points should also be followed:-

a) A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.

b) All documents may 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) Where the documents provided are in a language other than English, an English translation should be provided.

e) The Questionnaire for environmental appraisal of mining projects as prescribed by the Ministry shall also be filled and submitted.

f) Approved mine plan along with copy of the approval letter for the proposed capacity should also be submitted.

g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF 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 also be followed.

h) 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. 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 process again with the revised documentation.

The EIA report should also include

1. surface plan of the area indicating Contours of main topographic features, drainage and mining area.
2. geological maps and sections and
3. sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

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.

46. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.

I. **Statutory Compliance**

i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.

ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.

iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.

iv. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.

vi. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.

vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.

viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

ix. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

x. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

xi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.

xii. Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.

xiii. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.

xiv. All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peaking hours.

xv. Accumulation/stagnation of water shall be avoided ensuring vector control.

xvi. Water during construction phase should be preferred from Municipal supply.

xvii. Unskilled construction labourers shall be recruited from the local areas.

xviii. Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.

xix. Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.

xx. Rest room facilities shall be provided for service population.

xxi. Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.

xxii. Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.

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, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

vi. Sand, murram, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.

vii. Wet jet shall be provided for grinding and stone cutting.

viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation

i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.

iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.

vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.

vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.

ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.

x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.

xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

xiii. All recharge should be limited to shallow aquifer.

xiv. No ground water shall be used during construction phase of the project.

xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.

xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

xviii. No sewage or untreated effluent water would be discharged through storm water drains.

xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed based on the MBBR/MBR/SBR technology. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.

xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.

xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

IV. Noise monitoring and prevention

i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.

ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

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.

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, 20L.6.,Ready mixed concrete must be used in building construction.

ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover

i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).

ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.

iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.

iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport

i. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.

   a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
   b. Traffic calming measures.
   c. Proper design of entry and exit points.
   d. Parking norms as per local regulation

ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.

iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

IX. Human Health Issues

i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.

ii. For indoor air quality the ventilation provisions as per National Building Code of India.

iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

v. Occupational health surveillance of the workers shall be done on a regular basis.

vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

X. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

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.

Annexure - III

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".

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 throughan organization of repute and specializing in Transport Planning shall be summited withthe 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 would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M), dated 12.01.2017.

I. Statutory compliance

i. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.

ii. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".

iii. The Project proponent complies with all the statutory requirements and judgement of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.

iv. The Hon'ble Supreme Court vide order dated 08.01.2020 in W.P. (Civil) No.114/2014 in the matter of Common Cause vs. Union of India has directed that the area which has been mined should be restored so that grass and other vegetation including trees can grow in the mining area for the benefit of animals.

> *"The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.*

v. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgement of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.

vi. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.

vii. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.

viii. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.

ix. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.

x. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.

xi. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-11013/57/2014-IAJI (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".

xii. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.

xiii. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.

xiv. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.

xv. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www. Environment clearance.nic.in). A copy of the advertisement may be forwarded to the concerned MoEF & CC Regional Office for compliance and record.

xvi. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

i. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2; CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCUI, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.

ii. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be

carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from ail sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance: Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF&CC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

i. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF&CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.

ii. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

iii. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

iv. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations

without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

v. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IAJI (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

vi. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.

vii. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.

viii. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

i. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.

ii. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

iii. The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training,

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

V. Mining Plan

i. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form 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 0.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

ii. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF&CC and its concerned Regional Office.

XI. Miscellaneous

i. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.

ii. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

iii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.

iv. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.

v. The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.

vi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

vii. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

viii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

ix. The Environmental Clearance accorded shall be valid for the period of lease of the mine, the PP does not increase production rate and alter lease area during the validity of Environmental Clearance.

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

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 would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.