MINUTES OF THE 94TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 10TH , 11TH , 12TH, 13TH and 14TH MAY, 2022

The 94th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 10th , 11th , 12th, 13th and 14th May, 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 18th , 19th 20th, 21st, 22nd 23rd , 24th , 25th , 26th and 27th February, 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 : May 10th , 2022 [Tuesday]

A. Discussion on matter related to :

i. **Bhartidih Sand Mining of M/s JSMDC Ltd. at Village – Bhartidih, P.S. – Devipur, Dist – Deoghar, Jharkhand (4.65 Ha).**

(Proposal No. : SIA/JH/MIN/34840/2019)

This proposal was pending at Project Authority (PA's) level since 03rd June, 2019 for submission of requisite documents i.e. revised Form-I, PFR, approved mining plan, mandatory certificates and updated DSR (as per Enforcement & Monitoring Guidelines for Sand Mining, 2020 of MoEF&CC, Govt. of India). Committee is of the view that this project to be temporarily delisted at SEAC level only and the same to be considered after submission of documents.

****

ii. **Chainpur Panchayat Sand Mine in Bohta River of Sri Sitaram Prasad at Vill.- Semarbudhi & Ahirpurwa & Bahertatoli, P.S. - Mahuatand, Dist. – Latehar (7.36 Ha).**

This proposal was pending at Project Authority (PA's) level since 14th - 15th March, 2019 (68th MOM of SEAC) for submission of requisite documents i.e. Status of LoI, Nature of land (Whether recorded as Jungle Jhari or not), DFO certificate regarding distance from notified forest and updated DSR (as per Enforcement & Monitoring Guidelines for Sand Mining, 2020 of MoEF&CC, Govt. of India). Committee is of the view that this project to be temporarily delisted at SEAC level only and the same to be considered after submission of documents.

****

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

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

This proposal was pending at Project Authority (PA's) level since 24th - 26th November, 2020 (83rd MOM of SEAC) for submission of requisite documents i.e. Status of LoI and updated DSR (as per Enforcement & Monitoring Guidelines for Sand Mining, 2020 of MoEF&CC, Govt. of India). Committee is of the view that this project to be temporarily delisted at SEAC level only and the same to be considered after submission of documents.

****

iv. **Heben Sand Mine Project on Sanka River of Sri Binay Kumar Agarwal at Vill.- Heben, Simagunda, Saraikela-Kharsawan (6.24 Ha).**

This proposal was pending at Project Authority (PA's) level since 24th - 26th November, 2020 (83rd MOM of SEAC) for submission of requisite documents i.e. Status of LoI and updated DSR (as per Enforcement & Monitoring Guidelines for Sand Mining, 2020 of MoEF&CC, Govt. of India). Committee is of the view that this project to be temporarily delisted at SEAC level only and the same to be considered after submission of documents.

****

B. Consideration of Proposals

1. **Sitagarh Stone Mine of M/s Abhen Mining & Engineering Work Pvt. Ltd., Village : Sitagarh and Sreerampur, P.S. : Pakur, Dist. : Pakur, Jharkhand (2.11 Ha).**
(Proposal No. : SIA/JH/MIN/254632 /2022).

The Project Authorities vide letter dated 10.05.2022 requested to defer appraisal of the proposal for next meeting. The Committee considered the request and accepted the same.

****

2. **Duari Brick Clay Mining Project of M/s Sushma Bricks Industries, Village : Duari, Tehsil : Gidhour, Dist. : Chatra, Jharkhand (1.012 Ha).**

(Proposal No. : SIA/JH/MIN /259802 /2022).

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

EC Application for : **Soil 1200 m^3/yr.**

6000 m^3 during plan period

Topsoil 1272.51 m^3 during plan period.

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

This is a new project which has been taken for appraisal on 10.05.2022.

Project and Location Details :

Sl.	Parameter		Details	
1	Project Name	:	Duari Brick Clay Mining	
2	Lessee:	:	M/s Sushma Bricks Industries, Proprietor- Shri Prakash Saw	
3	Lease Address	:	At: Village - Duari, P.S. – Gidhour, District – Chatra, Jharkhand.	
4	Lease Area	:	Ha: 1.012	Acres: 2.50
5	Type of Land	:	Non-Forest – Rayati Land	
6	Project Cost	:	Rs. 15.70 Lakhs	
7	EMP Budget	:	Capital: Rs. 2.80 Lakhs	Recurring: Rs. 2.30 Lakhs/ year Monitoring cost: Rs. 0.90 Lakhs/year
8	CSR / CER Budget	:	Rs. 78,500 Thousand	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 17044.64 Cu. M.	Tonnes: Nil
11	Mine Life	:	14.20 years only	
12	Manpower	:	20 Person	
13	Water Requirement	:	2.90 KLD (Drinking: 0.40 KLD, Dust Suppression & Plantation: 1.0 KLD, Other: 1.50 KLD)	
14	Water Source	:	Nearby spring/Nala	
15	DG Set / power	:	Not Applicable	
16	Crusher	:	Not Applicable	
17	Nearest Water Body	:	Mohana Nadi at 0.35 Km in E Dhab Nadi at 3.40 km in SW	
18	Nearest Habitation	:	Duari 1.06 km NW direction from the mine site.	
19	Nearest Rail Station	:	Katkamasandi Railway Station 5.53 km SE direction from the mine site.	
20	Nearest Airport	:	Birsa Munda Airport, Ranchi 93.53 km SE direction from the mine site.	
21	Nearest Forest	:	More than 251 m,	
22	Road & Highways	:	NH-22 at 13.54 km NW direction from the mine site.	

CO-ORDINATES :

1	Latitude	:	From 24°08' 49.46" N	To 24°08' 52.85" N
2	Longitude	:	From 85° 09' 03.92" E	To 85° 09' 10.83" E

LAND DETAILS

Khata No.	Plot No.
150	606
108	746, 747

STATUTORY CLEARANCES

1	LOI/Lease docs	:	Land agreement.
2	CO	:	The CO, Gidhour, Chatra vide letter no. 218, dated 17.06.2019 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Chatra vide memo no. 1041, dated 02.07.2019 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. 2221 , dated 21.10.20[illegible] 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, Chatra South Division vide letter no. 1812, dated 15.06.2019 certified that the distance of notified forest is 605 metre from proposed project site.
6	DSR	:	The Project is already mentioned in District Survey report (DSR), Chatra. DMO, Chatra vide letter no. 1181, dated 14.12.2021 requested that this project is part of District Survey Report (DSR) of Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 05.11.2017
8	Mine Plan Approval	:	DDM, North Chhotanagpur Circle, Hazaribag vide letter no. 549, dated 22.12.2017.

WORKING DETAILS

1	Mining Method	:	Opencast Manual Mining	
2	Quarry Area	:	5 years– 0.932 ha	Life of Mine – 0.932 ha

3	Waste Generation	:	5 years–Nil	Life of Mine –Nil
4	Stripping Ratio	:	NA	
5	Working Days	:	200 days/year	
6	Benches: size & No	:	1m x 1m	
7	Elevation of Mine	:	In 448 MSL	
8	Ground Level Elevation		In 448 MSL	
9	Ultimate Working Depth	:	In 446 MSL	
10	Water Table	:	In 438 MSL and also 5 - 10.0 m bgl	
11	Topography of Mine	:	Flat area	
12	Explosive Requirement	:	Not applicable	
13	Diesel/Fuel requirement	:	Not applicable due to manual mining	

PRODUCTION DETAILS :

Year	Production Bricks Clay in cum per Annum	Topsoil removable in cum for 5 years
1st	1200	1272.51
2nd	1200	
3rd	1200	
4th	1200	
5th	1200	
Total	**6000**	**1272.51**

LAND USE

Category	Existing (Acres)	Existing (ha.)	End of Plan Period (Acres)	End of Plan Period (ha.)	Conceptual Plan (ha.)
Quarry Area	0.00	0.00	2.30	0.932	0.932 (Converted to levelled land with topsoil spread)
Topsoil storage, Road/ Infrastructure/ etc.	0.00	0.00	0.09	0.035	
Berm Area& Plantation	0.00	0.00	0.11	0.045	Area under plantation
Unutilized Area	2.50	1.012	0.00	0.00	0.00

Total Area	2.50	1.012	2.50	1.012	0.00

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.39 Ha	000
2	Other Reclaimed Area	:	0.000	000
3	Haul /Approach Road	:	200 meters	134 Tree both side approach road.

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

Solid Waste Management

- Topsoil Generation will be 1272.51 Cu.M. during the life of Mine. Topsoil storage area is 0.02 ha. The topsoil shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

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

Air and Noise Pollution Control Measures:

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

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

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

Undertaking submitted affirming:

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Duari Brick Clay Mining Project of M/s Sushma Bricks Industries, Village : Duari, Tehsil : Gidhour, Dist. : Chatra, Jharkhand (1.012 Ha)is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

3. **Kudlum Brick Clay Mining Project of M/s Radhe Shyam Singh (R.S.S. Bricks), Village : Kudlum, Tehsil : Nagri, Dist. : Ranchi, Jharkhand (1.23 Ha).**

(Proposal No. : SIA/JH/MIN /261909 /2022).

Project Category : **B2 – Application for Environment Clearance**
EC Application for : **Soil 2000 m^3/yr.**
10000 m^3 during plan period
Topsoil 2452 m^3 during plan period.

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

This is a new project which has been taken for appraisal on 10.05.2022

PROJECT and LOCATION Details:

Sl.	Parameter		Details
1	Project Name	:	Kudlum Brick Clay Mining
2	Lessee:	:	M/s Radhe Shyam Singh (R.S.S. Bricks), Proprietor- Shri Radhe Shyam Singh
3	Lease Address	:	At: Village - Kudlum, P.S. – Nagri, District – Ranchi, Jharkhand.

4	Lease Area	:	Ha: 1.23	Acres: 3.03
5	Type of Land	:	Non-Forest – Rayati Land	
6	Project Cost	:	Rs. 20.00 Lakhs	
7	EMP Budget	:	Capital: Rs. 3.30 Lakhs	Recurring: Rs. 2.60 Lakhs/ year Monitoring cost: Rs. 0.90 Lakhs/year
8	CSR / CER Budget	:	Rs. 1.0 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 14264 Cu. M.	Tonnes: Nil
11	Mine Life	:	7.132 years ~ 7 Years Only	
12	Manpower	:	14 Person	
13	Water Requirement	:	3.61 KLD (Drinking: 0.48 KLD, Dust Suppression & Plantation: 1.09 KLD, Other: 2.04 KLD)	
14	Water Source	:	Nearby spring/Nala	
15	DG Set / power	:	Not Applicable	
16	Crusher	:	Not Applicable	
17	Nearest Water Body	:	Subarnerekha river at 1.12 Km in SW Hatia reservoir at 2.57 km in SE Jodaa Talab at 4.12 km N	
18	Nearest Habitation	:	Semartoli 1.06 km NW direction from the mine site.	
19	Nearest Rail Station	:	Piska Railway Station 2.93 km NW direction from the mine site.	
20	Nearest Airport	:	Birsa Munda Airport, Ranchi 9.5 km E direction from the mine site.	
21	Nearest Forest	:	More than 251 m, as per forest division. Letter no – 5054 Dt- 28-12-2022 Letter no.- 41 Dt- 15-01-2021	
22	Road & Highways	:	NH 23 at 3.30 km NW direction from the mine site.	

CO-ORDINATES

1	**Latitude**	:	From 23°18' 48.14" N	To 23°18' 52.44" N
2	**Longitude**	:	From 85° 13' 46.24" E	To 85°13' 52.50" E

LAND DETAILS

Khata No.	Plot No.	Area In Acre.
93	1330	1.87
	1333	1.16
Total Area in Acre		**3.03**

STATUTORY CLEARANCES

1	LOI/Lease docs	:	Land agreement.
2	CO	:	The CO, Nagri, Ranchi vide letter no. 340 (II), dated 01.04.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Ranchi vide memo no. 179, dated 23.02.2021 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide memo no. 41 , dated 15.01.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Ranchi Division vide letter no. 5054, dated 28.12.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ranchi vide letter no. 246/M, dated 02.03.2022 & letter no. 383/M, dated 01.04.2022 has informed that this project is part of District Survey Report (DSR) of Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 26.02.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter no. 441/G, dated 01.03.2021.

WORKING DETAILS

1	Mining Method	:	Opencast Manual Mining	
2	Quarry Area	:	5 years– 0.59 ha	Life of Mine – 0.84 ha
3	Waste Generation	:	5 years–Nil	Life of Mine –Nil
4	Stripping Ratio	:	NA	
5	Working Days	:	200 days/year	
6	Benches: size & No	:	1m x 1m	
7	Elevation of Mine	:	In 694 MSL	
8	Ground Level Elevation		In 694 MSL	

9	Ultimate Working Depth	:	In 692 MSL
10	Water Table	:	In 683 MSL and also 5 - 10.0 m bgl
11	Topography of Mine	:	Flat area
12	Explosive Requirement	:	Not applicable
13	Diesel/Fuel requirement	:	Not applicable due to manual mining

PRODUCTION DETAILS

Year	Production Bricks Clay in cum per Annum	Topsoil removable in cum for 5 years
1st	2000	2452
2nd	2000	
3rd	2000	
4th	2000	
5th	2000	
Total	**10000**	**2452**

LAND USE

Category	Existing (Acres)	Existing (ha.)	Plan Period (Acres)	Plan Period (ha.)	End of Life (Acres)	End of Life (ha.)	Conceptual Plan (ha.)
Quarry Area	0.00	0.00	1.46	0.59	2.07	0.84	0.84 (Converted to levelled land with topsoil spread)
Topsoil storage, Road/ Infrastructure/ etc.	0.08	0.008	0.07	0.03	0.00	0.00	
Berm Area& Plantation	0.00	0.00	0.96	0.39	0.96	0.39	Area under plantation
Unutilized Area	0.49	1.222	0.54	0.22	0.00	0.00	0.00
Total Area	**3.03**	**1.23**	**3.03**	**1.23**	**3.03**	**1.23**	**0.00**

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.39 Ha	000
2	Other Reclaimed Area	:	0.000	000
3	Haul /Approach Road	:	200 meters	134 Tree both side approach road.

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

Solid Waste Management

- Topsoil Generation will be 2452 Cu.M. during the life of Mine. Topsoil storage area is 0.02 ha. The topsoil shall be used for backfilling in the end of life of mine of the mining operation.

Water Pollution Control Measures:

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

Air and Noise Pollution Control Measures:

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

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

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

Undertaking submitted affirming :

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

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

d. The Boundary Pillars of the proposed mine lease area will be maintained properly.

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

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

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

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

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

Based on the presentation made and information provided, the Committee in the light 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 Kudlum Brick Clay Mining Project of Radhe Shyam Singh (R.S.S. Bricks), Village : Kudlum, Tehsil : Nagri, Dist. : Ranchi, Jharkhand (1.23 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

4. **Modification cum Expansion of existing Re-Rolling Mill of M/s Saluja Steel & Power (P) Lt Mouza : Mohanpur, P.S. : Mahtohdih, Dist. : Giridih, Jharkhand.**

(Proposal No. : SIA/JH/IND/66215 /2018).

Name of the consultant : Pollution & Ecology Control Services

This is a modification cum expansion project which has been taken for appraisal on 10.05.2022.

After detailed presentation the committee observed that the following details are essential before grant of EC :

I. Certified copy of CTO compliance from JSPCB is to be provided.

II. Receipt copy of application for withdrawal of ground water from competent authority for expansion project.

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

****

Day 2 : May 11th , 2022 [Wednesday]

Consideration of Proposals

1. **Operation of current plant of capacity 415,000 TPA and proposed phase-wise expansion to 1015,000 TPA capacity of Electrolytic Tinplate and Tin-Free Steel material including 28,000 TPA Printed and Lacquered sheets of M/s The Tinplate Company of India Limited at Golmuri Works, Jamshedpur, East Singhbhum, Jharkhand.**

   (Proposal No.-SIA/JH/IND/60643/2021)

   This is an expansion project which has been taken for appraisal on 11.05.2022.

   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 3 (a) Metallurgical Industries (Ferrous & Non-Ferrous) as per EIA Notification, 2006.

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

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

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

Executive Summary :

1.	Name of the Company	**M/s The Tinplate Company of India Limited.**
2.	Address of the Registered Office	4, Bankshall Street, Kolkata, West Bengal - 700001.
3.	Address of Factory	Golmuri Works, Village: Golmuri, Jamshedpur, District: East SinghbhumJharkhand – 831003.
4.	Present Business	Manufacturer of Electrolytic Tinplate and Tin-Free Steel Sheets
5.	Area of the Plant	Total Plant area is 53.94 Ha inclusive of 8.50 Ha of land to be used forexpansion.
6.	Topo Sheet No	73 J/1
7.	Latitude	22^0 47' 22.77'' N - 22^0 47' 50.57''N
8.	Longitude	86^0 13' 33.09'' E - 86^0 14' 15.67'' E
9.	Elevation	561 ft.
10.	Existing Production	Electrolytic Tinplate and Tin Free Steel - 4,15,000 TPA includingLacquered sheets and Printed Sheets – 28,000 TPA
11.	Proposed Expansion	Electrolytic Tinplate and Tin Free Steel - 6,00,000 TPA (Phase 1 : 300,000 TPA & Phase 2 : 300,000 TPA) Total Capacity :- Existing Production + Proposed expansion : 1,015,000 TPA
12.	Cost of the Project	Existing – Rs. 1408.78 Crores Estimated cost for Expansion – Rs. 1787 Crores (Net) for Phase 1 and Rs. 950 Crores (Net) for proposed Phase 2 expansion. The total estimated cost is Rs.2737 Crores including 100 Crores for EMP. Cost (Existing + Expansion) – Rs. 4145.78 Crores
13.	Man Power Requirement	**Existing Manpower** Existing Man Power (Direct) - 1380 persons. Existing Man Power (Indirect) - 800 persons.Total Existing Manpower – 2180 **Proposed Expansion (Estimated)** Construction phase (Proposed expansion) Direct – 100, Indirect - 2300 Operation phase (Proposed expansion)Man Power (Direct) - 761 persons Man Power (Indirect) - 200 personsTotal Manpower – 961

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

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

Solid Waste Generationand Disposal

Non Hazardous Solid Waste (TPA)

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

Hazardous Solid Waste(Annual generation)

Sr. No.	Type of Waste	Source	Existing	Proposed expansion	Total	Utilization
1.	Waste Emulsion Oil	Plants & CRM WWTPs	500 MT	600 MT	1110 MT	Disposal to authorized vendor.

2.	ETL Sludge	ETL ETP	753MT	1088MT	1841 MT	Disposal through CHWTSDF (M/s Adityapur Waste Management Pvt. Ltd.)
3.	Waste Pickle Liquor (WPL)	Pickling unit	18000 KL	20000 KL	38000 KL	Regenerated at ARP and Reused in Pickling
4.	Process residue	Solution Centre	12 MT	-	12 MT	Disposal to authorized vendor
5.	Alkali residue	CRM plant	4380 KL	6332 KL	10712KL	Treatment at CRM WWTPs

Land use (Area) break-up :

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

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

Khata no. & Plot no. of the project :

SN	Ward No	Khata No	Plot No	Area in Hect
1	12	61	4208 (P)	22.151
2	12	61	4209	0.842
3	12	61	4211 (P)	0.025
4	12	61	4212 (P)	0.001

5	12	61	4213	0.258
6	12	61	4336	0.115
7	12	61	4338	0.052
8	12	61	4339	0.075
9	12	61	4340	0.049
10	12	61	4341	0.014
11	12	61	4342	0.01
12	12	61	4343	0.015
13	12	61	4344	0.01
14	12	61	4345	0.013
15	12	61	4346	0.01
16	12	61	4347	0.013
17	12	61	4348	0.01
18	12	61	4349	0.013
19	12	61	4350	0.01
20	12	61	4351	0.013
21	12	61	4352	0.01
22	12	61	4353	0.012
23	12	61	4354	0.01
24	12	61	4355	0.012
25	12	61	4356	0.01
26	12	61	4357	0.012
27	12	61	4358	0.012
28	12	61	4359	0.012
29	12	61	4360	0.114
30	12	61	4361	0.068
31	12	61	4362	0.013
32	12	61	4363	0.017
33	12	61	4364	0.002
34	12	61	4365	0.018
35	12	61	4366	0.03
36	12	61	4367	0.02
37	12	61	4368	0.006
38	12	61	4369	0.017
39	12	61	4370	0.006
40	12	61	4371	0.015
41	12	61	4372	0.005
42	12	61	4373	0.015
43	12	61	4374	0.007
44	12	61	4375	0.017
45	12	61	4376	0.005
46	12	61	4377	0.017
47	12	61	4378	0.005
48	12	61	4379	0.017
49	12	61	4380	0.007
50	12	61	4381	0.017
51	12	61	4382	0.006
52	12	61	4383	0.015

53	12	61	4384	0.005
54	12	61	4385	0.017
55	12	61	4386	0.088
56	12	61	4387	0.048
57	12	61	4388	0.075
58	12	61	4389	0.072
59	12	61	4390 (P)	0.26
60	12	61	4391	0.05
61	12	61	4392	0.133
62	12	61	4393	0.014
63	12	61	4394	0.014
64	12	61	4395	0.1
65	12	61	4396	0.047
66	12	61	4397	0.006
67	12	61	4398	0.049
68	12	61	4399	0.006
69	12	61	4400	0.049
70	12	61	4401	0.006
71	12	61	4402	0.046
72	12	61	4403	0.018
73	12	61	4404	0.058
74	12	61	4405	0.38
75	12	61	4406	0.123
76	12	61	4407	2.579
77	12	61	4408 (P)	1.817
78	12	61	4414	0.118
79	12	61	4415	0.12
80	12	61	4416	0.094
81	12	61	4417	0.012
82	12	61	4418	0.06
83	12	61	4419	0.012
84	12	61	4420	0.056
85	12	61	4421	0.012
86	12	61	4422	0.056
87	12	61	4423	0.012
88	12	61	4424	0.116
89	12	61	4425	0.061
90	12	61	4426	0.009
91	12	61	4427	0.065
92	12	61	4428	0.011
93	12	61	4429	0.063
94	12	61	4430	0.011
95	12	61	4431	0.092
96	12	61	4432	0.01
97	12	61	4433	0.044
98	12	61	4434	0.085
99	12	61	4435	0.01
100	12	61	4436	0.056

101	12	61	4437	0.01
102	12	61	4438	0.056
103	12	61	4439	0.011
104	12	61	4440	0.058
105	12	61	4441	0.011
106	12	61	4442	0.056
107	12	61	4443	0.128
108	12	61	4444	0.006
109	12	61	4445	0.09
110	12	61	4446	0.012
111	12	61	4447	0.06
112	12	61	4448	0.011
113	12	61	4449	0.06
114	12	61	4450	0.011
115	12	61	4451	0.059
116	12	61	4452	0.011
117	12	61	4453	0.06
118	12	61	4454	0.152
119	12	61	4455	0.14
120	12	61	4456	0.071
121	12	61	4457	0.223
122	12	61	4458	0.043
123	12	61	4459	0.013
124	12	61	4460	0.27
125	12	61	4461	1.842
126	12	61	4462	0.096
127	12	61	4463	0.065
128	12	61	4464	0.042
129	12	61	4465	0.057
130	12	61	4466	0.09
131	12	61	4467	0.104
132	12	61	4468 (P)	0.232
133	12	61	4469 (P)	0.138
134	12	61	4474	0.018
135	12	61	4730 (P)	9.34
136	12	61	4731 (P)	0.216
137	12	61	4732 (P)	0.013
138	12	61	4733	0.004
139	12	61	4734	0.106
140	12	61	4735	0.013
141	12	61	4738	0.52
142	12	61	4739	0.057
143	12	61	4767	0.23
144	12	61	5243	0.482
145	12	61	6210 (P)	0.893
146	12	61	6233 (P)	0.17
147	12	61	6234	0.044
148	12	61	6235	0.005

149	12	61	6236	0.044
150	12	61	6237	0.005
151	12	61	6238	0.044
152	12	61	6239	0.005
153	12	61	6240	0.044
154	12	61	6241	0.11
155	12	61	6242	0.057
156	12	61	6243	0.005
157	12	61	6244	0.044
158	12	61	6245	0.004
159	12	61	6246	0.045
160	12	61	6247	0.173
161	12	61	6248	0.009
162	12	61	6249	0.197
163	12	61	6250	0.046
164	12	61	6251	0.005
165	12	61	6252	0.046
166	12	61	6253	0.004
167	12	61	6254	0.046
168	12	61	6255	0.081
169	12	61	6256	0.062
170	12	61	6257	0.005
171	12	61	6258	0.041
172	12	61	6259	0.099
173	12	61	6260	0.069
174	12	61	6261	0.322
175	12	61	6262	1.35
176	12	61	6263	0.162
177	12	61	6264	0.069
178	12	61	6265	0.127
179	12	61	6266	0.112
180	12	61	6267	0.246
181	12	61	6268	0.118
182	12	61	6269	0.047
183	12	61	6270	0.009
184	12	61	6271	0.036
185	12	61	6272	0.008
186	12	61	6273	0.063
187	12	61	6274	0.009
188	12	61	6275	0.064
189	12	61	6276	0.009
190	12	61	6277	0.113
191	12	61	6278	0.01
192	12	61	6279	0.056
193	12	61	6280	0.011
194	12	61	6281	0.092
195	12	61	6282	0.01
196	12	61	6283	0.047

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

STATUTORY CLEARANCES

1	DC, Jamshedpur	:	In absence of non availability of Khatiyan / Revenue record DC, Jamshedpur has given a certificate vide memo no. 270/TL, dated 30.07.2021 that if any part of land belongs to forest land / jan; 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.
2	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 1977, dated 20.12.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

3	DFO Forest Distance	:	DFO, Jamshedpur Forest Division vide letter no. 3231 dated 11.12.2021 certified that the distance from the nearest Reserved Forest / Protected Forest from the project site is more than 250 m.

This proposal was earlier considered in 93rd meeting of SEAC held during 18-27.02.2022 in which PAs were asked to submit additional requisite documents. The PAs have submitted the required documents.

After submission of desired documents following discripencies were identified during the presentation :

I. Receipt copy of certified copy of CTO compliance from JSPCB to be provided.
II. Revised plant layout showing existing & proposed green belt in the expansion project site to be provided.
III. Envisage possibility of 100% harvesting of rain water to be provided.
IV. Provide for additional Ash Silo for fly ash storage and disposal to be provided.
V. Recalculate & submit correct figure for quantom of fly ash generation and its utilization to be provided.

The PA's have provided the same.

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 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure II alongwith the following specific conditions :

i. **Unit to explore possibility of reusing hazardous sludge generated within the premises & promote its reuse.**
ii. **TCLP test report of the slag from existing plant to be provided in the EIA / EMP report.**
iii. **Environment management cell should be established with suitably qualified staff. HoD of the Department to report directly to the CEO.**

****

2. **Brick Soil Mining for M/s Chandni Bricks, Village : Ichapiri, Thana : Burmu, Thana no. : 46, Dist. : Ranchi, Jharkhand (0.45 Ha)**

(Proposal No. : SIA/JH/ MIN/260864 /2022).

Name of the consultant : Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 11.05.2022.

Project Category: B2 – Application for Environment Clearance

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

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Brick Soil Mining For M/s Chandni Bricks in Mouza – Ichapiri.	
2	Applicant Address:	:	M/s Chandni Bricks Proprietor: Yunus Khan S/o – Md. Sabir Khan At Village – Ichapiri, P.O – Makka, P.S - Burmu, District – Ranchi, State – Jharkhand, Pin Code – 835214.	
3	Lease Address	:	In Mouza – Ichapiri, Thana – Burmu, Thana No. – 46, District – Ranchi, Jharkhand.	
4	Applied Area	:	Ha: 0.45 Hectares	Acres: 1.11 Acres
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	8 Lakhs	
7	EMP Budget	:	Capital: 4.14 Lakhs	Recurring: 2.08 Lakh / year
8	CSR / CER Budget	:	Rs. 0.16 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 6000 Cu. M.	
11	Mine Life	:	5 years	
12	Man power	:	10	
13	Water Requirement	:	16.44 KLD (Dust Suppression: 13.8 KLD, Drinking: 0.40 KLD, Plantation: 2.24 KLD	
14	Water Source	:	From Basri Nadi by tankers	
15	DG Set / power	:	No	
16	Crusher	:	No	
17	Nearest Water Body	:	Basri Nadi is approx. 2.07 Km aerial distance away in South - West direction	
18	Nearest Habitation	:	Bhagotoli village is situated approx. 580m aerial distance away in North East direction.	
19	Nearest Rail Station	:	Kole Railway Station is situated approx. 9.6 Km aerial distance away towards North West direction.	
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi is situated approx. 36.10 Km aerial distance away towards South-East direction.	
21	Nearest Forest	:	Nearest Forest is more than 250m away from the proposed project.	
22	Road & Highways	:	Approach Road: Burmu – Umedanda Main Road is approx. 1.24 Km away in East direction. Highway: SH-2 is approx. 11.98 Km away in East direction.	

CO-ORDINATES

1	Latitude		From N23°36'06.40"	To N23°36'09.30"
2	Longitude		From E85°09'04.17"	To E85°09'09.23"

LAND DETAILS

Khata No.	Plot No.
10	369, 370 & 371

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The land argeement has been made .
2	CO	:	The CO, Burmu (Ranchi) vide letter no. 375 (ii), dated 13.08.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Ranchi vide memo no. 821, dated 16.09.2021 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide memo no. 994, dated 06.09.2019 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, Ranchi Division vide letter no. 5180, dated 07.11.2019 certified that the distance of reserved / protected forest is more than 250 metre from proposed project site.
6	DSR	:	The DC cum District Magistrate, Ranchi vide letter no. 246, dated 02.03.2022 has informed that this project is part of District Survey Report (DSR) of Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 20.12.2020
8	Mine Plan Approval	:	District Mining Office, Ranchi vide Memo No. 1131, dated 25.11.2020.

Working Details

1	Mining Method	:	Opencast Manual Mining and transportation by tippers.	
2	Quarry Area	:	5 years – 0.374 Ha	Life of Mine – 0.374 Ha
3	Waste Generation	:	5 years– 745 Cu.M (Top Soil)	Life of Mine – 745 Cu.M (Top Soil)

4	Stripping Ratio	:	1 : 0.12
5	Working Days	:	200 Days
6	Benches: size & No	:	Size: 1m X 1.5m, No. - 2
7	Elevation of Mine	:	Highest RL 634m AMSL, Lowest RL 633m AMSL
8	Ground Level Elevation		633m AMSL
9	Ultimate Working Depth	:	631m AMSL
10	Water Table	:	618m AMSL
11	Topography of Mine	:	Flat Land.
12	Explosive Requirement	:	No
13	Diesel/Fuel requirement	:	4 KL/year (20 Litres/day)

Production Details

Year	Production of Sub Soil (Cum)	Production of Bricks (Numbers)	Top Soil Generation (CuM)	Bench RL in Meters
1st	1200	6,00,000	149	634m – 632m
2nd	1200	6,00,000	149	634m – 632m
3rd	1200	6,00,000	149	633m – 631m
4th	1200	6,00,000	149	633m – 631m
5th	1200	6,00,000	149	633m – 631m
Total	**6000**	**30,00,000**	**745**	

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	0.374	0.374	0.374	Grass cultivation will be done on it
2	Road	0.004	Nil	Nil	Nil	
3	Green Belt Within Safety Barrier	Nil	0.076	0.076	0.076	Plantation
4	Unutilized	0.446	Nil	Nil	Nil	
	TOTAL	**0.450**	**0.450**	**0.450**	**0.450**	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.076 Ha	190 trees @ 2500 trees per Ha
2	Haul /Approach Road	:	0.248 Ha	830 trees on both sides – 3m

			i.e. Length 1.24 Km width 2m	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 (Top soil) Generation will be 745 Cu.M. during the life of Mine.
  The fertile top soil will be preserved temporarily by dumping and then it will be spread concurrently over the excavated part of the land after the end of each year lifting up of brick soil and grass cultivation will be done on it.

Water Quality Management

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

Air Quality Management

- No drilling and blasting is proposed.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
b. The 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.
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 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 Brick Soil Mining for M/s Chandni Bricks, Village : Ichapiri, Thana : Burmu, Thana no. : 46, Dist. : Ranchi, Jharkhand (0.45 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

3. **Kokretanr Brick Soil Mine of Sri Bhola Singh, Village : Kokretanr, Thana : Ratu, Thana no. : 6 Dist. : Ranchi, Jharkhand (2.02 Ha).**

(Proposal No. : SIA/JH/ MIN/266076 /2022).

Name of the consultant : Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 11.05.2022.

Project Category: B2 – Application for Environment Clearance

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

Project and Location Details:

Sl	Parameter		Details
1	Project Name	:	Brick Soil Mining For Kokretanr Brick Soil Mine in Mouza – Kokretanr.

2	Applicant Address:	:	Sri Bhole Singh Auri More, Adarsh Nagar, Auri, District – Sonbhadra, Anpara TPS, State – Uttar Pradesh, Pin Code - 231225.	
3	Lease Address	:	In Kokretanr, Thana – Ratu, Thana No. – 64, District – Ranchi, Jharkhand.	
4	Applied Area	:	Ha: 2.02 Hectares	Acres: 5.00 Acres
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	18 Lakhs	
7	EMP Budget	:	Capital: 4.57 Lakhs	Recurring: 2.51 Lakh / year
8	CSR / CER Budget	:	Rs. 0.36 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 27,540 Cu. M.	
11	Mine Life	:	23 years	
12	Man power	:	12	
13	Water Requirement	:	7.91 KLD (Dust Suppression: 4.0 KLD, Drinking: 0.48 KLD, Plantation: 3.43 KLD	
14	Water Source	:	From Bhur River by tankers	
15	DG Set / power	:	No	
16	Crusher	:	No	
17	Nearest Water Body	:	Bhur River is approx. 5.95 Km aerial distance away in North - West direction	
18	Nearest Habitation	:	Banapiri village is situated approx. 1.62.km aerial distance away in South-west direction	
19	Nearest Rail Station	:	Ranchi Railway Station is situated approx. 20.36 Km aerial distance away in South-east direction.	
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi, Jharkhand is situated approx. 22.71 Km aerial distance away in South - East direction.	
21	Nearest Forest	:	Nearest Forest is more than 250m away from the proposed project.	
22	Road & Highways	:	Approach Road: Hochar-Kokretanr-Ithe Road is approx. 160m away in East direction. Highway: NH-39 is approx. 5.83 Km away in south direction.	

CO-ORDINATES

1	Latitude		From N 23°28'38.37"	To N 23°28'44.38"
2	Longitude		From E 85°11'34.63"	To E 85°11'42.44"

LAND DETAILS

Khata No.	Plot No.
7	38 & 109 (P)

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	Land agreement made.
2	CO	:	The CO, Ratu (Ranchi) vide letter no. 558 (ii), dated 08.09.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Ranchi vide memo no. 60/M, dated 20.01.2022 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide letter no. 835, dated 25.09.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Ranchi Division vide letter no. 714, dated 26.02.2021 certified that the distance of reserved / protected forest is more than 250 metre from proposed project site.
6	DSR	:	The DC cum District Magistrate, Ranchi vide letter no. 246/[illegible] dated 02.03.2022 has informed that this project is part of District Survey Report (DSR) of Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 19.09.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribagh vide Letter No. 692/G, dated 21.09.2021.

Working Details

1	Mining Method	:	Opencast Manual Mining and transportation by tippers.	
2	Quarry Area	:	5 years – 0.33 Ha	Life of Mine – 1.53 Ha
3	Waste Generation	:	5 years– 720 Cu.M (Top Soil)	Life of Mine – 3060 Cu.M (Top

			Soil)
4	Stripping Ratio	:	1 : 0.12
5	Working Days	:	200 Days
6	Benches: size & No	:	Size: 1m X 1.5m, No. - 2
7	Elevation of Mine	:	Highest RL 690m AMSL, Lowest RL 688m AMSL
8	Ground Level Elevation		688m AMSL
9	Ultimate Working Depth	:	686m AMSL
10	Water Table	:	673m AMSL
11	Topography of Mine	:	Flat Land.
12	Explosive Requirement	:	No
13	Diesel/Fuel requirement	:	4 KL/year (20 Litres/day)

Production Details

Year	Production of Sub Soil (Cum)	Production of Bricks (Numbers)	Top Soil Generation (CuM)	Bench RL in Meters
1st	1200	6,00,000	144	690m – 688m
2nd	1200	6,00,000	144	690m – 688m
3rd	1200	6,00,000	144	690m – 688m
4th	1200	6,00,000	144	690m – 688m
5th	1200	6,00,000	144	690m – 688m
Total	**6000**	**30,00,000**	**720**	

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	0.33	1.53	1.53	Grass cultivation will be done on it
2	Road	Nil	Nil	Nil	Nil	
3	Green Belt Within Safety Barrier	Nil	0.49	0.49	0.49	Plantation
4	Unutilized	2.02	1.20	Nil	Nil	
	TOTAL	**2.02**	**20.2**	2.02	2.02	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.49 Ha	1225 trees @ 2500 trees per Ha
2	Other Reclaimed Area Outside the project	:	0.148 Ha	370 trees @ 2500 trees per Ha

	area			
3	Haul /Approach Road	:	0.032 Ha i.e. Length 160m width 2m	108 trees on both sides – 3m distance

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

Solid Waste Management

- Waste (Top soil) Generation will be 3060 Cu.M. during the life of Mine.
  The fertile top soil will be preserved temporarily by dumping and then it will be spread concurrently over the excavated part of the land after the end of each year lifting up of brick soil and grass cultivation will be done on it.

Water Quality Management

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

Air Quality Management

- No drilling and blasting is proposed.
- Water sprinkling will be done on haul road to control emission of dust while transporting minerals and waste. Provision for water spray by tankers on 'kaccha' road shall be done.
- Water sprinkling at loading area shall be done
- Use of personal protective equipment like dust mask etc shall be put in practice
- Ambient air pollution monitoring shall be carried out every six months

Undertaking submitted affirming:

a. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.
b. The 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 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 Kokretanr Brick Soil Mine of Sri Bhola Singh, Village : Kokretanr, Thana : Ratu, Thana no. : 64, Dist. : Ranchi, Jharkhand (2.02 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

4. **Hardag Stone Deposit of M/s Konark Traders, Village : Hardag, Thana : Namkum, Thana no. : 275, Dist. : Ranchi, Jharkhand (1.45 Ha).**

(Proposal No. : SIA/JH/ MIN/266897 /2022).

Name of the consultant : Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 11.05.2022.

Project Category: B2 – Application for Environment Clearance
EC Application for: Stone: 10,233 Cu.M. / year i.e. 28,651 Tonnes / year

Project and Location Details:

Sl	Parameter		Details
1	Project Name	:	Hardag Stone Deposit
2	Applicant Address:	:	M/s Konark Traders

			Proprietor - Sri Roshan Kumar At Village - Tupudana, P.S. - Hatia, District – Ranchi, State – Jharkhand, Pin. – 834003.	
3	Lease Address	:	In Mouza - Hardag, Thana No. – 275, Thana– Namkum, District – Ranchi, Jharkhand.	
4	Applied Area	:	Ha: 1.45 Hectares	Acres: 3.59 Acres
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	58 Lakhs	
7	EMP Budget	:	Capital: 19.82 Lakhs	Recurring: 3.32 Lakh / year
8	CSR / CER Budget	:	Rs. 1.16 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 1,02,327 Cu. M.	Tonnes: 2,86,515 Tonnes
11	Mine Life	:	10 years	
12	Man power	:	32	
13	Water Requirement	:	30.56 KLD Dust Suppression: 22 KLD, Drinking: 1.28 KLD, , Plantation: 7.28 KL.	
14	Water Source	:	From Kanchi River by tankers	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No	
17	Nearest Water Body	:	Kanchi River is flowing approx. 2.37 Km aerial distance away in South - west direction	
18	Nearest Habitation	:	Hardag village is situated approx. 1.64 Km aerial distance away in North direction	
19	Nearest Rail Station	:	Balsiring Railway Station is approx. 8.04 Km aerial distance away in North West direction. Hatia Railway Station is approx. 12.12 Km aerial distance away in North direction.	
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi, Jharkhand is approx. 13.11 Km aerial distance away in North East direction.	
21	Nearest Forest	:	Nearest Forest is more than 250m away from the proposed project.	
22	Road & Highways	:	Approach Road: NH-20 is approx. 1.95 Km away in West direction.	

CO-ORDINATES

1	Latitude		From N23°11'54.89"	To N23°12'00.39"
2	Longitude		From E85°18'21.97"	To E85°18'28.63"

LAND DETAILS

Khata No.	Plot No.
115	1953

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Ranchi vide letter no. 893, dated 26.10.2021.
2	CO	:	The CO, Namkum (Ranchi) vide letter no. 984 (ii), dated 18.09.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Ranchi vide memo no. 1003/M, dated 07.12.2021 certified that no other lease area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide letter no. 1127, 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	:	DFO, Ranchi Division vide letter no. 3417, dated 27.08.2020 certified that the distance of reserved / protected forest is more than 250 metre from proposed project site.
6	DSR	:	The DC cum District Magistrate, Ranchi vide letter no. 247/M, dated 02.03.2022 has informed that this project is part of District Survey Report (DSR) of Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 26.09.2020
8	Mine Plan Approval	:	DMO, Ranchi vide Memo No. 20, dated 07.01.2022

Working Details

1	Mining Method	:	Opencast Semi-mechanized Mining.	
2	Quarry Area	:	5 years – 0.82 Ha	Life of Mine – 0.91 Ha
3	Waste Generation	:	5 years– 3120 Cu.M (Gritty Soil)	Life of Mine – 4009 Cu.M (Gritty Soil)
4	Stripping Ratio	:	1 : 0.17	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Size: 6m x 6m, No. - 4	
7	Elevation of Mine	:	Highest RL 610m AMSL, Lowest RL 602m AMSL	
8	Ground Level Elevation		595m AMSL	

9	Ultimate Working Depth	:	586m AMSL
10	Water Table	:	574m AMSL
11	Topography of Mine	:	Hilly land.
12	Explosive Requirement	:	4.5 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	10232	28650	840	610m – 604m
2nd	10233	28651	1375	610m – 604m
3rd	10232	28650	905	610m – 598m
4th	10232	28650	-	604m – 598m
5th	10233	28651	-	604m – 598m
Total	**51162**	**143252**	**3120**	

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. 820	0.910 (including backfilling 0.033 Ha)	0.910	0. 580 Ha Water Body + 0. 330 Ha Dead bench Plantation
2	Green Belt Within Safety Barrier	Nil	0. 540	0. 540	0. 540	Plantation
3	Road	0.005	Nil	Nil	Nil	-
4	Dump	Nil	0.027	Nil	-	-
5	Parapet Wall	Nil	0.004	Nil	-	-
6	Garland Drain	Nil	0.006	Nil	-	-
7	Unutilized	1.445	0.053	Nil	Nil	-
	TOTAL	**1.450**	**1.450**	**1.450**	**1.450**	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.54 Ha	1350 trees @ 2500 trees per Ha
2	Dead Bench Plantation	:	0.33 Ha	825 trees @ 2500 trees per Ha

3	Haul /Approach Road	:	0.39 Ha i.e. Length 1950 width 2m	1304 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 4009 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 & 3rd year gritty soil will be removed and 1st & 3rd year removal soil will be used in road dressing & plantation & 2nd year removal soil will be temporarily dumped [Area – 0.027 Ha, (L x W x H = 21m x 15m x 5m)] at the southern part of the area with suitable precautions like constructing parapet wall, garland drain. In conceptual period total removal soil will be backfilled with 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 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. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.

b. 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.

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 applied 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 Hardag Stone Deposit of M/s Konark Traders, Village : Hardag, Thana : Namkum, Thana no. : 275, Dist. : Ranchi, Jharkhand (1.45 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

5. **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 Consultant vide e-mial dated 11.05.2022 requested to defer appraisal of the proposal for next meeting. The Committee considered the request and accepted the same.

****

6. **Nucleus Valley of M/s Shree Ram Metalics Pvt. Ltd., Village : Mahilong, Tehsil : Namkum, Dist. : Ranchi, Jharkhand.**

(Proposal No. : SIA/JH/ MIS/264034 /2022).

Name of the consultant: Crystal Consultants, Ranchi

This is a new project which has been taken for appraisal on 11.05.2022. On request of PA's appraisal was rescheduled on 12.05.2022.

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.

Salient features of the project :

Particular	Details
Project Name	Nucleus Valley
Proponent	Shree Ram Metalics Pvt. Ltd. Sixteen G.C. Avenue through its Director Bishnu Kumar Agarwala
Type of Building	Residential Building
Latitude	23°21'12.02"N
Longitude	85°24'24.50"E
Plot No.	1451, 1453, 1454 & 1455
Khata No.	265
Mauza	Mahilong
Tehsil	Namkum
District	Ranchi
State	Jharkhand
Plot Area	Total Plot Area as per sale deed is 22954.00 m^2
Plantation	Tree Plantation : 859.610 m^2 (4.55%) Green Area Above Basement : 1056.90m^2 (5.60%)
Ground Coverage	5707.61 m^2
FAR	3.30
Height	Block A : 39.00 m Block B : 42.30 m Block C & D : 42.60 m Block E : 42.00 m Block F : 42.00 m Block G & H : 42.00 m

Total Built-Up Area & its break - up	Total Built- Up Area: 87612.89 m^2
No. of Floor	Block A : B + G + 12 Block B : B +G + 13 Block C & D : B + G + 13 Block E : B + G +13 Block F : B + G + 13 Block G & H : B + G + 13
No. of Building Block	7
Building Configuration	**Total Dwelling Units: 642** 1 BHK : 78 **(72 EWS)** 2 BHK: 143 **(72 LIG)** 3 BHK: 421 EWS Units: 72 LIG Units: 72
Population	3908 (including 10% floating population)
Parking	Total Car Parking : 571 Total Visitor Parking : 56 Total Two Wheeler Parking : 737
Power Requirement	2831 KVA Source : Jharkhand State Electricity Board
Power Back-up	2169 KVA
Renewal Energy	60 KVA
RWH Pits	3 Pits
Project Cost	Rs. 132 Crores
EMP budget	Capital cost : Rs. 47 Lakh, Recurring cost : Rs. 5 Lakh
CER budget	Rs. 1.32 Crore

MUNICIPAL SOLID WASTE MANAGEMENT

During Construction Phase

During Construction phase of buildings municipal solid waste would be generated.

About 200 people will come to site during working shift.

The estimated Municipal Solid Waste (@0.2 Kg per person) is 40 Kg.

Break – Up

Bio-Degradable @ 40% of MSW (16 Kg)

Non-Bio-Degradable @60% of MSW (24 Kg)

Municipal Solid Waste will be handed over to Local Municipal Solid Waste Management Facility.

Bio Degradable & Non-Bio-Degradable waste would be stored in different color bins.

During Operation Phase

Block	Municipal (Kg)	Bio-Degradable (Kg)	Non-Bio-Degradable (Kg)
Block - B (Block - B)	273.00	109.20	163.80
Block - B (Block - E	273.00	109.20	163.80

Block - B (Block - F)	273.00	109.20	163.80
Block - B (Block - G & Block - H)	546.00	218.40	327.60
Block - A (Block - A)	421.20	168.48	252.72
Block - C (Block - C & Block - D)	345.60	138.24	207.36
TOTAL	**2131.80**	**852.72**	**1279.08**

They would be stored at generation source in different color bins & finally handed over to the Local Municipal Solid Waste Management Facility.

WATER DEMAND

During Construction Phase

Construction Phase – 38 KLD

Potable – 4 KLD

Flushing – 4 KLD

Construction Work – 30 KLD

Source – Municipal Tanker Supply

During Operational Phase

Water Demand (KLD)		Source
Domestic	319.77	Fresh Water
Flushing	159.89	Treated Water
Horticulture	15.00	Treated Water
Dust Suppression	10.00	Treated Water
Vehicle Washing	60.00	Treated Water
Total Water Demand	**564.66**	
Total Fresh Water Demand	319.77	
Total Treated Water Demand	244.89	

STP Calculation

Block	Waste Water (KLD)	
	Domestic	Flushing
Block - B (Block - B)	32.76	20.48
Block - B (Block - E	32.76	20.48
Block - B (Block - F)	32.76	20.48
Block - B (Block - G & Block - H)	65.52	40.95
Block - A (Block - A)	50.54	31.59
Block - C (Block - C & Block - D)	41.47	25.92
TOTAL WASTE WATER	**415.70**	
STP	**450.00**	

Waste Water Management

Waste Water Management	KLD
Total Treated Water	**332.56**
Flushing	159.89
Horticulture	15.00
Dust Suppression	10.00

Vehicle Washing	60.00
Discharge	87.68
20 % Loss	83.14

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no.3385, dated 03.12.2021 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. 1139, dated 15.12.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Namkum, Ranchi vide letter no. 1466 (ii), dated 20.11.2021 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 issued NOC vide letter no. RANC/EAST /B/ 090721/ 574037 dated 27.09.2021.
5	Fire Department	:	A advisory from Fire Department, Ranchi, Govt. of Jharkhand vide memo no. 3676/tech/2021, dated 18.11.2021.
7	Building Plan	:	Building Plan Approved by Ranchi Municipal Corporation vide Memo No.RRDA/GH/0167/2021 ,Date17/01/2022.

During the presentation the following documents were sought :

i. An undertaking affirming that :
   a. Ground water will not be used during construction and operation phase without permission from competent authority.

ii. Revised EMP & CER budget to be submitted.

iii. Construction and demolition wastes to be disposed as per applicable rule.

iv. Traffic impact assessment study to be conducted.

v. Plant layout showing green belt to be provided.

vi. Contour map of the project site to be provided.

The PAs have submitted the above required documents.

Based on the presentation made and information provided, the Committee decided that the proposal for Nucleus Valley of M/s Shree Ram Metalics Pvt. Ltd., Village : Mahilong, Tehsil : Namkum, Dist. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – III alongwith the following specific conditions :

I. Environment management system to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.

II. Rooftop rain water harvesting to ensure 100% Recharge/Use of rainfall raining within premises. Storm water runoff to be collected in collection chamber /settling pond and maximise its use

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

IV. PAs to ensure ZERO DISCHARGE for its process discharges.

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

VI. Green belt and Green cover to be implemented as provided in layout plan.

****

7. **Chandula – Simalgoda Opencast Stone Mine of M/s Jharkhand State Mineral Development Corporation Limited (JSMDC Ltd.), Village : Chandula - Simalgoda, Tehsil : Barharwa, Dist. : Sahibaganj, Jharkhand (69.93 Ha).**

(Proposal No. : SIA/JH/ MIN/63157 /2021).

Project Category: **B1 – Application for Environment Clearance**

EC Application for: **Boulder Stone : 4,00,000 Cu.M. / year i.e. 9,20,000 MTPA**
Waste : 139097 Cu.M. / year

DG Set : NA
Mobile Crusher : NA

Name of the consultant : CRYSTAL CONSULTANTS

This is a new project which has been taken for appraisal on 11/05/2022

TOR for the project was issued by MoEF&CC, Govt. of India vide letter no. J-11015/20/2018-IA.II(M), dated 13.04.2018. The final EIA / EMP submitted by PP to SEIAA on 01.04.2022 and which was forwarded to SEAC on 14.04.2022.

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	CHANDULA – SIMALGODA OPENCAST STONE MINE	
2	Lessee:	:	JHARKHAND STATE MINERAL DEVELOPMENT CORPORATION LIMITED	
3	Lease Address	:	REGD.OFFICE : KHANIJ NIGAM BHAWAN, DORANDA, RANCHI - 834002, JHARKHAND	
4	Lease Area	:	Ha: 69.93	Acres: 172.80
5	Type of Land	:	FOREST LAND & GM LAND	
6	Project Cost	:	94 Crore	
7	EMP Budget	:	Capital: 38.00 Lakhs	Recurring: 5.00 Lakh / year
8	CSR / CER Budget	:	Rs. 19.40 Lakhs	
9	New or Expansion	:	NEW	
10	Mineable Reserves	:	Cu.M.: 6629009.60	Tonnes .....
11	Mine Life	:	16.57 Year	
12	Man power	:	207	
13	Water Requirement	:	40.00 KLD (Drinking: 5.00 KLD, Dust Suppression: 20.00 KLD, Plantation: 15.00 KLD)	
14	Water Source	:	Ground Water	
15	DG Set / power	:	NA	
16	Crusher	:	Yes	
17	Nearest Water Body	:	Gumani River (5.1 Km)	
18	Nearest Habitation	:	Nearby Lease	
19	Nearest Rail Station	:	Barharwa Junction Railway Station (6 Km) Bakudi Junction (2 Km)	
20	Nearest Air Port	:	Birsa Munda Airport (250 Km)	
21	Nearest Forest	:	0 m within lease	
22	Road & Highways	:	NH-80 (1.80 Km)	

CO-ORDINATES

1	Latitude		From 24°53'47.710" N	To 24°54'38.354" N
2	Longitude		From 87°45'16.695" E	To 87°46'03.102" E

LAND DETAILS

Plot No. – 63, 89 to 100, 103, 106, 440, 450, 456, 12 to 15, 17, 20 to 30, 21/56, 29/56, 28/58, 28/59 to 28/61 & 60 to 68

STATUTORY CLEARANCES

1	CO	:	The CO, Pathna vide letter no. : 525, Dated 02/11/2021 has mentioned the plot no. of the project is not recorded as "Jangle

			Jhari" in R.S. Khatiyan & Register II.
2	DMO	:	DMO, Sahebganj vide memo no. 1029/M, dated 08.10.2021 certified that the no other lease mine exists within 500 m radius . **For Production Figure Certificate** : Letter No. 870 Dated 27/03/2018 & Letter No. 1638 Dated 06/11/2017.
3	Wildlife Clearance	:	The Wildlife Conservation Plan has been approved by the Principal Chief Conservator of Forest, Wildlife & Chief Wildlife Warden, Jharkhand vide Office Order no. 10, dated 18.01.2022.
4	Stage – I	:	MoEF&CC, Govt. of India has approved the Stage - I Forest Clearance vide Letter No.: 5-JHC030/2007-BHU, Dated: 06/07/2010. Later on MoEF&CC, Govt. of India has modified the Stage - I Forest Clearance vide Letter No. : 5-JHC030/2007-BHU/3944, Dated: 11/05/2020.
5	DSR	:	The project is already mentioned in page no. 43 of District Survey Report (DSR) of District Sahibganj.
6	Public Hearing	:	On Dated 17/12/2018
7	Mine Scheme Approval	:	Additional Director, Geology, Hazaribag vide Letter No. : 797 / G Date : 10/12/2021

Working Details

1	Mining Method	:	Opencast	
2	Quarry Area	:	5 years – 12.25 ha	Life of Mine – 12.769 ha
3	Waste Generation	:	5 years– 139097 Cu.M	
4	Stripping Ratio	:	0:0.25	
5	Working Days	:	300	
6	Benches: size & No	:	Height 6m & Width 10m	
7	Elevation of Mine	:	180m AMSL	
8	Ground Level Elevation		180m AMSL	
9	Ultimate Working Depth	:	97m AMSL	
10	Water Table	:	53m AMSL	
11	Topography of Mine	:	Hilly	
12	Explosive Requirement	:	69.50 to 155.68 Kg	

Production Details

Summary Of Year Wise Production Of O.B. And Stone				
YEARS	Production of Stone in Cum/Year	Over Burden in Cum/Year	Production of Stone in Tonnes/Year	Production of Stone in Cft/Year
2021-22	390524	62122	898205	22455130
2022-23	392879	26822	903622	22590554
2023-24	391894	14558	901357	22533921
2024-25	388212	22243	892888	22322190
2025-26	400000	13352	920000	23000000
Total	**1963509**	**139097**	**4516072**	**112901795**

Land Use

Project activities during plan period will be confined to already degraded area of 19.769 Ha.

Sl. NO.	Pattern of Utilization	Existing Land Use in Ha.	Proposed Land Use (5 Years Scheme Period) in Ha.	Conceptual Land Use in Ha.	Status of land at the end of the life of the mine
1.	Mining Activities	5.34	12.25	12.769	Water Reservoir
2.	Infrastructure etc.	1.50	0.20	0.20	Greenery
3.	Dumping	0.25	1.09	1.09	Greenery
4.	Mining Road	0.25	0.73	0.73	Greenery
5.	Garland Drain	0.25	0.25	0.25	
6.	Safety Zone	2.80	4.73	4.73	Greenery
7.	Stone Stock Yards	0.00	-		
8.	Utilized	10.39	19.25	19.769	
9.	Un-utilized	9.379	0.519	0.00	Greenery
TOTAL		**19.769**	**19.769**	**19.769**	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	4.517	3613
2	Haul /Approach Road	:	3.00 Km	1980

- 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 139097 Cu.M. during the life of Mine. Dump area proposed for waste storage is 1.09Ha. The Waste shall be handled as detailed below:

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 25m above the Ground Water Table.
- The rain water during rainy season will be collected in a pit and shall be use for dust suppression and plantation. Excess water, if any shall be discharged in natural stream after settling of suspended particles in the pit. Pump having required capacity will be installed to lift accumulated rain water from working pit and pumped to the settling tank.
- Garland drain shall be made around the Waste dump and the rain water shall be collected in garland drain and allowed to settle in a small pit for settling suspended particles before allowing discharge to natural drainage system. Check Pits and Retainer walls shall be constructed to prevent water flowing into the lease area from outside or from inside the lease area to the outside
- For domestic waste water Septic Tank with Soak Pit shall be provided, discharge from Soak Pit, if any shall be used for plantation.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system shall be made available.

Air Quality Management

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

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

Undertaking submitted affirming:

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

During the presentation the following documents were sought :

i. Clarification regarding dump site shown in conceptual plan to be provided.
ii. Clarification regarding back filling and reclaimation to be provided.
iii. Atleast 01 monitoring location should be within 500 m in down wind direction.
iv. Time bound action plan of issues raised during Public Hearing to be provided.
v. Need based socio economic study to be conducted.
vi. Ecology & Bio-Diversity, Risk & Hazard and LULC study to be conducted for study area.
vii. There is no clarity about EMP budget and budget for addressing public hearing issues.
viii. One month addtional environmental monitoring data to be generated.

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

****

8. **Rajhara North (Central & Eastern) Coal Mine Opencast Project of M/s Fairmine Carbons Pvt. Ltd., Mouza : Rajhara & Pandwa, Thana : Nawa Bazar & Pandwa, Thana no. : 132 & 198, Dist. : Palamu, Jharkhand (116.80 Ha).**

(Proposal no. : SIA/JH/MIN/269430/2022).

Project Category : B1 – Amendment in TOR from project area 117.80 Ha to 116.80 Ha.
EC Application for: Coal : 0.75 MTPA

Name of the consultant : Crystal Consultants

This is a project which has been taken for appraisal on 11.05.2022.

Sl	Parameter		Details	
1	Project Name	:	**Rajhara North (Central & Eastern)** Coal Block Opencast Project	
2	Lessee:	:	M/s Fairmine Carbons Pvt. Ltd.	
3	Lease Address	:	Mouza- Pandwa & Rajhara Block- Pandwa & Kawabata PS- Padwa ,Dist.: Palamau, Jharkhand Zilla Parisad: PO & P.S – Pandwa District: Palamau, Jharkhand	
4	Lease Area	:	116.80 Ha	Acres: 288.62
5	Type of Land	:	GM & Raiyati	
6	Project Cost	:	126 crores	
7	New or Expansion	:	Amendment	
8	Mineable Reserves	:	15.609 MT	
9	Mine Life	:	22 years	
10	Man power	:	208	
11	Water Requirement	:	Total **234 KLD** for various purposes. Water required for - • • Manpower 10 **KLD** • • Plantation 80 **KLD** • • Dust suppression in Mines and for approach road **120 KLD** • • Other Uses **4 KLD** • • Quarters for staff **10 KLD** • • Misc. **10 KLD**	
12	Water Source	:	Dug wells / Bore wells	
13	DG Set / power	:	DG sets (2 x 500KW)	
14	Crusher	:	300 TPH	

15	Nearest Water Body	:	Sadabah River
16	Nearest Habitation	:	Pandwa and Rajhara
17	Nearest Rail Station	:	Kajri (4 km)
18	Nearest Air Port	:	Ranchi(175 Km)
19	Nearest Forest	:	None
20	Road & Highways	:	NH-75

CO-ORDINATES

1	Latitude		From N24°09'41"	To N24°10'04"
2	Longitude		From E84°02'59"	To E84°04'13

LAND DETAILS

Mauja: Rajhara, Thana & Thana No.: Nawa Bazar(132), Anchal: Nawa Bazar, District: Palamu (Daltonganj) Area 13.43 Ha.

Khata No.:-

92,136,222,237,320,328

Plot No.:-

1677(P), 1607, 1609, 1610, 1612, 1613, 1611, 1642(P), 1606, 1608, 1600(P), 1678, 1683(P), 1625(P), 1597(P), 1604, 1618(P), 1614(P), 1643, 1603(P), 1605(P), 1679(P)

Mauja: Pandwa, Thana & Thana No.: Pandwa(198), Anchal: Pandwa, District: Palamu (Daltonganj) Area 103.37 Ha.

Khata No. :-

3,4,6,7,10,14,15,17,19,21,25,27,28,29,34,36,44,47,53,54,57,59,60,64,68,74,75,80,81,87,88,92,93,97,
102,107,108,109,110,112,117,123,127,129,130,131,132,136,140,144,146,148,149,151,152,156,157,
158,161,164,168,172,177,182,184,187,188,192,201,206,211,214,216,219,220,222,224,226,227,235,236,240,242,243,244,247,251,253,256,261,263,264,266,267,268,270,272,273,274,275,277,278,280,281,285,286,288,290,291,293,295,296,297,298,299,300,301,304,305,306,307,308,309,311,312,313,314,318,319,320,322,323,326

Plot No. : -

48(P), 571(P), 572, 573(P), 578(P), 579(P), 657(P), 658(P), 659, 660, 661, 662, 663, 664(P), 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680(P),

681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697(P), 698(P), 700(P), 706(P), 707(P), 742(P), 743(P), 744(P), 745(P), 746(P), 747(P), 751(P), 758(P), 759(P), 760(P), 767(P), 768, 769, 770(P), 778(P), 779, 780(P), 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791(P), 801(P), 802(P), 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837(P), 838, 839(P), 842(P), 843(P), 943(P), 944, 945, 946(P), 947(P), 953(P), 954(P), 955(P), 956(P), 957(P), 958, 959(P), 960(P), 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031(P), 1032(P), 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067(P), 1068(P), 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079(P), 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099(P), 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109(P), 1110, 1111(P), 1112(P), 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157(P), 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172(P), 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180(P), 1181, 1182(P), 1183(P), 1185(P), 1192(P), 1193(P), 1194, 1195(P), 1212(P), 1214(P), 1215, 1216, 1217, 1218(P), 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226(P), 1241(P), 1242(P), 1243, 1244, 1245, 1246, 1247, 1248(P), 1250, 1251, 1252, 1253, 1254, 1255(P), 1256(P), 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279(P), 1280(P), 1283(P), 1284(P), 1285(P), 1368(P), 1470(P), 1471(P), 1472(P), 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487(P), 1488, 1492(P), 1898, 1900(P)

Working Details

1	Mining Method	:	Semi-Mechanized Opencast Mining Method	
2	Quarry Area	:	89.28 ha	Life of Mine –22 YEars
3	Waste Generation	:	34.1 Cu.M	Life of Mine – 22 Years
4	Stripping Ratio	:	2:1	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Average height of working benches 10m Average width of working benches 10m to15m	
7	Elevation of Mine	:	192.10 m to 212 m	

8	Ground Level Elevation	:	192.10 m to 212 m
9	Ultimate Working Depth	:	86 AMSL
10	Water Table	:	PRE-MONSOON 14.12 M BELOW BGL POST MONSOON 10.07 M BGL.
11	Topography of Mine	:	Almost flat having a gentle southerly slope.
12	Explosive Requirement	:	350 ton/year
13	Diesel/Fuel requirement	:	1252 KL/year (4.17 KL/day)

Production Details

Year		Coal Production Schedule			OB MM3	SR
Year of Operation	Calendar Year	UG	OC	Total		
1	2025-26	0	0.3	0.3000	0.62	2.0667
2	2026-27	0	0.75	0.7500	1.44	1.9200
3	2027-28	0	0.75	0.7500	1.20	1.6000
4	2028-29	0	0.75	0.7500	1.20	1.6000
5	2029-30	0	0.75	0.7500	1.40	1.8667
6	2030-31	0	0.75	0.7500	1.71	2.2800
7	2031-32	0	0.75	0.7500	1.69	2.2533
8	2032-33	0	0.75	0.7500	1.69	2.2533
9	2033-34	0	0.75	0.7500	1.69	2.2533
10	2034-35	0	0.75	0.7500	1.69	2.2533
11	2035-36	0	0.75	0.7500	1.50	2.0000
12	2036-37	0	0.75	0.7500	1.50	2.0000
13	2037-38	0	0.75	0.7500	1.50	2.0000
14	2038-39	0	0.75	0.7500	1.50	2.0000
15	2039-40	0	0.75	0.7500	1.50	2.0000
16	2040-41	0	0.75	0.7500	1.50	2.0000

17	2041-42	0	0.75	0.7500	1.50	2.0000
18	2042-43	0	0.75	0.7500	1.50	2.0000
19	2043-44	0	0.75	0.7500	1.50	2.0000
20	2044-45	0	0.75	0.7500	1.50	2.0000
21	2045-46	0	0.75	0.7500	1.50	2.0000
22	2046-47	0	0.3090	0.3090	0.57	1.8447

Note: Calendar Plan/Production Plan for the entire life of the mine.

Proposed Land use

Type	Land use (Proposed)	Land Use (End of Life)	Land Use (Post Closure)						
			Agricultural land	Plantation	Water Body	Public / Company Use	Forest Land (Returned)	Undisturbed	Total
Excavation Area	89.28								
Backfilled Area		73.51	73.51						73.5100
Excavated Void		15.77			15.77				15.7700
Without Plantation									
Top Soil Dump									
External Dump									
Safety Zone	5.95	5.95						5.95	5.9500
Haul Road between quarries									
Road diversion	0.92	0.920				0.920			0.9200
Diversion Or Below River Or Nala Or Canal	4.69	4.690			4.690				4.6900
Settling Pond	0.50	0.500	0.500						0.5000
Road And Infrastructure	2.71	2.710	2.710						2.7100

Area									
Rationalization Area									
Garland Drains									
Embankment	0.84	0.840				0.840			0.8400
Greenbelt	11.91	11.910		11.910					11.9100
TOTAL	116.80	116.80							116.80

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	5.95	
2	Other Reclaimed Area	:	11.91	

Solid Waste Management

- Waste Generation will be 34.1 Cu.M. during the life of Mine. The Waste generated shall be backfilled.

Water Quality Management

- **Ground Water will be intersected and in this respect we are under peocess for NOC from CGWA**

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.

For Nawa Bazar : Deputy Director, Palamu Tiger **Project**, North Division, Medinagar vide letter no. 339, dated 08.04.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

For Pandwa : Deputy Director, **Palamu** Tiger Project, North Division, Medinagar vide letter no. 338, dated 08.04.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.

For Nawa Bazar : DFO, Palamu Division vide letter **no.** 1860, dated 22.06.2021 certified that the distance of reserved / protected forest is 250 m from proposed project site.

For Pandwa : DFO, Palamu Division vide letter **no.** 1861, dated 22.06.2021 certified that the distance of reserved / protected forest is 250 m from proposed project site.

The **CO, Pandwa** vide memo no. 242, dated 07.07.2021 & **The CO, Nawa Bazar** vide letter no. 58, dated 02.03.2021 has mentioned all plot & khata no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyan & Register II.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of Amended TOR for project area 116.80 Ha to SEIAA for undertaking detailed EIA / EMP study and the terms & conditions in earlier ToR letter no. EC/SEIAA/2021-22/2378/2021/107, dated 14.08.2021 shall remain the same.

****

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

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

   As there has been no response from the project authorities continuously from last 06 meeting of SEAC, the committee is of the view that the project authorities are no longer interested in the project and therefore, the committee has taken a decision to recommend delisting of the project proposal to SEIAA.

****

10. **Tirildih-Turi Stone Deposit of M/s Kiran Construction & Infrastructure Pvt. Ltd at Vill. Tirildih & Turi, Ghatsila, East Singhbhum (8.90 Ha).**

(Proposal No. : SIA/JH/ MIN/61903 /2017).

Initially this project proposal was applied under EC category for 8.90 Ha. In mean time Hon'ble NGT vide order dated 13.09.2018 has given direction that area > 5 Ha should be taken for ToR. The MoEF&CC, Govt. of India vide OM dated 12.12.2018 issued directives to all SEIAA's for compliance of direction issued by Hon'ble NGT.

As per the Direction of Hon'ble NGT and MoEF&CC, Govt. of India this project comes under perview of EIA / EMP as the area of this project is > 5 Ha and thus PA's are directed to file a fresh application under ToR category. As the PA's has already submitted the required scrutiny fees to SEIAA, Jharkhand. Hence, the Committee is requesting SEIAA that the scrutiny fee deposited for EC should be adjusted for ToR application and accordingly, this project proposal is recommended for delisting to SEIAA.

****

11. **Manatu Stone Deposit of Sri Jai Ganesh at Vill. – Manatu, Kanke, Ranchi (2.53 Ha).**

(Proposal No. : SIA/JH/MIN/67459 /2017).

This proposal was pending at Project Authority (PA's) level since 25th - 27th February, 2019 for submission of requisite documents i.e.

(i) CO certificate regarding class of land (recorded as Jangle Jhari or not).

(ii) DFO wildlife certificate regarding distance of National Park, Sanctuary, Biodiversity , Eco Sensitive Zone.

PA's are directed to submit the above mentioned documents within 02 months. Else the proposal will be recommended for delisting.

****

12. **Ichak Stone Mine of M/s Rajshree Construction, Mouza : Ichak, P.S. : Gidhaur, Dist. : Chatra, Jharkhand (1.14 Ha).**

(Proposal No. : SIA/JH/MIN/259957 /2022).

Project Category: **B2 – Application for EC**

EC Application for: **Boulder Stone : 17,684 Cu.M. / year i.e. 47,747 TPA**
DG Set : 20 KVA

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

PROJECT and LOCATION Details:

Sl	Parameter		Details	
1	Project Name	:	Ichak Stone Mine Project Type – Stone Mine	
2	Lessee:	:	M/s Rajshree Construction, Shri Parmeshwar Saw	
3	Lease Address	:	Mouza – Ichak, Block & P.S. - Gidhaur, P.O. -Gangpur, Dist. – Chatra, State – Jharkhand.	
4	Lease Area	:	Ha: 1.14 ha	Acres: 2.82 Acres
	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 48.68 Lakhs	
7	EMP Budget	:	Capital: 12.225 Lakhs	Recurring: 01.74 Lakhs
8	CSR / CER Budget	:	1.40 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 1,43,640 Cum	Tonnes: 3,87,828 Tons
11	Mine Life	:	8 Years 4 Months	
12	Man power	:	24	
13	Water Requirement	:	12.72 KLD (Drinking:0.36 KLD, Dust Suppression: 3.36 KLD, Plantation:9 KLD	
14	Water Source	:	Water will be Sourced from Abandon Mine at a distance of 1.50 Km for Dust Suppression and Plantation. Water will be sourced from Water Tankers, to be purchased locally for Drinking and Domestic Consumption.	
15	DG Set / power	:	20 KVA DG Set proposed	
16	Crusher	:	NA	
17	Nearest Water Body	:	Mohana River 0.90 Km – East	
18	Nearest Habitation	:	Ichak Village: 0.28 Km, Chatra- 25.70 KM	
19	Nearest Rail Station	:	Katkamasandi Railway Station - 10 km- SE	
20	Nearest Air Port	:	Gaya International Airport- 64.80- NW Birsa Munda International Airport, Ranchi- 100 Km in SE direction.	
21	Nearest Forest	:	Protected Forest - 0.300 Kms	
22	Road & Highways	:	Pakka Road – 0.42 Kms. in West Katkamsandi – Kullu Road at a distance 3.20 Kms. in South direction. Ranchi – Patna Road – 26 Km in East direction from the ML area.	

CO-ORDINATES

Sl.no.	Latitude	Longitude
A	24°11'20.03"N	85° 7'45.26"E
B	24°11'20.76"N	85° 7'45.31"E

C	24°11'20.75"N	85° 7'47.84"E
D	24°11'22.96"N	85° 7'48.57"E
E	24°11'22.89"N	85° 7'49.54"E
F	24°11'21.93"N	85° 7'49.39"E
G	24°11'21.53"N	85° 7'50.48"E
H	24°11'18.19"N	85° 7'49.62"E
I	24°11'18.08"N	85° 7'46.95"E
J	24°11'19.36"N	85° 7'46.67"E

LAND DETAILS

Mouza	Khata No.	Plot No.
Ichak	47	664, 837
	65	665, 667, 669, 682, 684
	44	666, 683
	19	668 (P)
	12	670 (P), 681
	40	679 (P)
	08	680
	36	713 (P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Chatra vide letter no. 135/M dated 02.02.2021
2	CO	:	The CO, Gidhaur, Chatra vide letter no. 178, dated 21.07.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Chatra vide memo no. 143, dated 05.02.2021 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. 1052 , dated 06.06.2020 certified that the National Park & Sanctuary is not within 10 k from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Chatra South Division vide letter no. 1396, dated 27.06.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	DC letter no. 669, dated 30.07.2021 followed by DMO Chatra letter no. – 273 /M, dated 04.03.2022 has informed that this project is part of District Survey Report (DSR) of Chatra district and accordingly necessary action with regard to Environmental

			Clearance can be taken.
7	Gram Sabha	:	On 11.04.2020
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. 510/G dated 19.04.2021

Working Details

1	Mining Method	:	Semi Mechanised. Jack Hammer Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 1.14Ha	End of Mine – 1.14 Ha
3	Waste Generation	:	5 years– 8,640 Cu.M	Life of Mine (Waste Gen.) – 8,640 Cu.M
4	Stripping Ratio	:	1:0.04	
5	Working Days	:	300	
6	Benches: size & No	:	3 m x 4/5 m , Bench No.- 1 to 10	
7	Elevation of Mine	:	Maximum Elevation – 486.58 AMSL Minimum Elevation – 483.58 AMSL	
8	Ground Level Elevation		483.58 AMSL	
9	Ultimate Working Depth	:	453.58 AMSL	
10	Water Table	:	449.58AMSL (34 m bgl)	
11	Topography of Mine	:	Flat Terrain	
12	Explosive Requirement	:	7.13 Tons/year	
13	Diesel/Fuel requirement	:	88.8 KL/year (296 Litres/day)	

Production Details

Year	Production of Stone		Over Burden (OB)	Bench RL in meters
	Cubic meters	Tons	Cubic meters	
1st Year	17,528	47,324	8,640	432.27 – 426.27
2nd Year	16,492	44,528	0	429.27 – 423.27
3rd Year	16,781	45,308	0	426.27 – 420.27
4th Year	16,656	44,972	0	423.27 – 417.27

5th Year	17,684	47,747	0	417.27 – 411.27
Total	**85,141**	**2,29,880**	**8,640**	**Depth Plan Period – 21 metre**

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.00
Total area in use	**0.00**
Balance area unused	1.14
Total Leasehold area	**1.14**

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	0.64
Office	0.01
Dump	0.03
Road	0.01
Green Belt / Safety Zone	0.40
Garland Drain	0.02
Total area in use	**1.11**
Balance area unused	0.03
Total Leasehold area	**1.14**

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

Category	Area in Hectares
Quarry	0.64 Water Body after reducing the depth partially by backfilling 8640 Cum. of O.B.
Green Belt/ Safety Zone	0.40 (Plantation)

Office + Dump + Road + Garland Drain + Unused (0.03 Ha.)	0.10 (Plantation)
Total area in use	**1.14**
Total Leasehold area	**1.14**

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.40 ha	1000 trees @ 2500 trees per ha
2	Haul /Approach Road	:	0.42 KM	560 trees on both sides – 3 m distance (Two row plantation)
3	Conceptual Period (Dump, Road, Garland Drain, Office)		0.10 Ha.	250 trees (0.10 Ha. @ 2500)

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

Waste Generation

- A total of **8,640 Cum** of wastes (Over Burden) will be generated from entire Ichak Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

- **Table 3.7: Generation of Waste during Planned Period**

Year	Waste Generation, In Cum
1st Year	8,640
2nd Year	0
3rd Year	0
4th Year	0
5th Year	0
Total	**8,640**

Source: Mining Plan

Disposal of Waste from the Quarry

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

Water Quality Management

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

Air Quality Management

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

Undertaking submitted affirming:

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

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

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

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

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Ichak Stone Mine of M/s Rajshree Construction, Mouza : Ichak, P.S. : Gidhaur, Dist. : Chatra, Jharkhand (1.14 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

13. **Khanupur Stone Mine of M/s Om Shriram Enterprise, Mouza : Khanupur, Block : Pakur, P.S. : Pakur (ML), Dist. : Pakur, Jharkhand (1.166 Ha).**

(Proposal No. : SIA/JH/MIN/269577 /2022).

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

Project Category: B2 – Application for EC

EC Application for: Boulder Stone : 36,960 Cu.M. / year i.e. 99,791 TPA
DG Set : 20 KVA

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Khanupur Stone Mine Project Type – Stone Mine	
2	Lessee:	:	M/S OM Shriram Enterprise, Smt. Saroj Bhakat,	
3	Lease Address	:	Mouza – Khanupur, Block - Pakur, P.S. – Pakur (ML) , District- Pakur, State- Jharkhand.	
4	Lease Area	:	Ha: 1.166 ha	Acres: 2.88 Acres
	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 77.35 Lakhs	
7	EMP Budget	:	Capital: 15.3505 Lakhs	Recurring: 01.74 Lakhs
8	CSR / CER Budget	:	2.20 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 1,21,242.80 Cu. M.	Tonnes: 3,27,355.56 Tonnes

11	Mine Life	:	5.01 years
12	Man power	:	28
13	Water Requirement	:	11.28 KLD (Drinking:0.42 KLD, Dust Suppression: 3.36 KLD, Plantation: 7.50 KLD
14	Water Source	:	Water will be Sourced from Abandon Mine for Dust Suppression and Plantation. Water will be sourced from Water Tankers, to be purchased locally for Drinking and Domestic Consumption.
15	DG Set / power	:	20 KVA DG Set proposed
16	Crusher	:	NA
17	Nearest Water Body	:	Bansloi River – 10 km – SW
18	Nearest Habitation	:	Khanupur– 0.40 km, Pakur – 8 KM
19	Nearest Rail Station	:	Nagarnabi Railway Station- 4.60 Km in NE direction
20	Nearest Air Port	:	Kazi Nazrul Islam Airport, Durgapur – 121 km – SW
21	Nearest Forest	:	Protected Forest - 6 Km in NW direction
22	Road & Highways	:	Pakka Road – 0.80 Km in East direction. SH 7 – 3.50 Km in East direction.

CO-ORDINATES

Geo-Coordinates of all corner points of Demarcated Block Boundary (GPS Co-ordinates) Datum : WGS 84		
Corner Point	**Latitude**	**Longitude**
1	24° 33' 45.970" N	87° 50' 8.291" E
2	24° 33' 45.680" N	87° 50' 8.752" E
3	24° 33' 44.278" N	87° 50' 8.677" E
4	24° 33' 41.862" N	87° 50' 8.365" E
5	24° 33' 41.635" N	87° 50' 4.886" E
6	24° 33' 41.875" N	87° 50' 3.077" E
7	24° 33' 42.264" N	87° 50' 3.031" E
8	24° 33' 44.117" N	87° 50' 5.661" E

LAND DETAILS

Mouza	Khata No.	Plot No.
Khanupur	22	212 (P)
	28	213 (P)
	16	214 (P)
	05	216 (P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Pakur vide letter no. 1645/M dated 18.09.2020
2	CO	:	The CO, Pakur vide letter no. 1123 /R, dated 24.07.2020 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. 724/M, dated 21.04.2022 and Memo no. 1986/M, dated 09.11.2020 certified that only 02 projects bearing area 5.78 Acre & 2.88 Acre exists within 500 m radius from proposed project site & Total lease area is less than 5 Ha.
4	DFO Wild Life	:	DFO Wildlife Hazaribagh vide letter no. 1098 , dated 19.06.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Pakur Forest Division vide letter no. 986, dated 15.06.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	Project name is mentioned in page no. 73 of District Survey report (DSR), Pakur.
7	Gram Sabha	:	On 30.07.2020
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. 105/G dated 08.10.2020

Working Details

1	Mining Method	:	Semi Mechanised. Wagon Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 1.166 Ha	End of Mine – 1.166 Ha
3	Waste Generation	:	5 years– 19,578 Cu.M	Life of Mine (Waste Gen.) – 19,578 Cu.M
4	Stripping Ratio	:	1:0.06	
5	Working Days	:	300	
6	Benches: size & No	:	3 m x 3/4 m , Bench No.- 1 to 8	
7	Elevation of Mine	:	Maximum Elevation – 95.40 m AMSL Minimum Elevation – 95 m AMSL	
8	Ground Level Elevation		95 AMSL	
9	Ultimate Working Depth	:	73.40 AMSL	
10	Water Table	:	65 AMSL (30 m bgl)	
11	Topography of Mine	:	Undulating Terrain	

12	Explosive Requirement	:	8.1 Tons/year
13	Diesel/Fuel requirement	:	249 .6 KL/year (832 Litres/day)

Production Details

SUMMARY OF YEARWISE OF PRODUCTION						
Years	Production In Cum/Year	Production In Cum/Day	O.B Production In Cum/Year	Production In Tons/Year	Prod. In Tons./Day	Bench RL in meters
1st	36960	123	19578	99791	332.64	42.4 – 36.4
2nd	22230	74	0	60021	200.07	36.4 – 33.4
3rd	34514	115	0	93186	310.62	33.4 – 27.4
4th	22386	75	0	60442	201.47	27.4 – 21.4
5th	4921	16	0	13287	44.29	21.4 – 19.4
Total	**121010**	**81**	**19578**	**326727**	**217.82**	**Depth 23 m**

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.00
Total area in use	**0.00**
Balance area unused	1.166
Total Leasehold area	**1.166**

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	0.78
Office	0.008
Dump	0.02
Road	0.01
Green Belt / Safety Zone	0.338
Garland Drain	0.01
Total area in use	**1.166**
Balance area unused	0.00
Total Leasehold area	**1.166**

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

Category	Area in Hectares
Quarry	0.78 Water Body
Green Belt/ Safety Zone	0.338 (Plantation)
Office + Dump + Road + Garland Drain	0.048 (Plantation)
Total area in use	**1.166**
Total Leasehold area	**1.166**
Plantation	**0.386** **(33% of lease area)**

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.338 ha	845 trees @ 2500 trees per ha
2	Haul /Approach Road	:	0.80 KM	534 trees on both sides – 3 m distance
3	Conceptual Period (Dump, Road, Garland Drain, Office)	:	0.048 Ha.	120 (0.048 Ha. @ 2500 trees per Ha.)

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

Waste Generation

A total of 19,578 Cum of wastes (Over Burden) will be generated from entire Khanupur Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

Table 3.7: Generation of Waste during Planned Period

Year	Waste Generation, In Cum

Year	Waste Generation, In Cum
1st Year	19578
2nd Year	0
3rd Year	0
4th Year	0
5th Year	0
Total	**19578**

Source: Mining Plan

Disposal of Waste from the Quarry

Over burden will be dumped in the waste dump within the mining lease area in 0.02 Ha. waste dump area inside the lease. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance.

Water Quality Management

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

Air Quality Management

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

Undertaking submitted affirming:

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Khanupur Stone Mine of M/s Om Shriram Enterprise, Mouza : Khanupur, Block : Pakur, P.S. : Pakur (ML), Dist. : Pakur, Jharkhand (1.166 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

i4. Rano Stone Mine of M/s Jai Shankar Stone Mines, Mouza : Rano, P.S. : Hunterganj, Dist. : Chatra, Jharkhand (2.82 Ha).

(Proposal No. : SIA/JH/MIN/ 268933 /2022).

Name of the Consultant : **Sathi Planners Pvt. Ltd., Ranchi**

Project Category: **B2 – Application for EC**

EC Application for: **Boulder Stone : 52,358 Cu.M. / year i.e. 1,41,368 TPA**
DG Set : 20 KVA

Project and Location Details:

Sl	Parameter		Details
1	Project Name	:	Rano Stone Mine Project Type – Stone Mine
2	Lessee:	:	M/s Jai Shankar Stone Mines,

			Shri Kameshwar Singh & Partner	
3	Lease Address	:	Mouza – Rano, Block & P.S. - Hunterganj, Dist. – Chatra, State – Jharkhand.	
4	Lease Area	:	Ha: 2.82 ha	Acres: 6.96 Acres
	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 60.50 Lakhs	
7	EMP Budget	:	Capital: 12.626 Lakhs	Recurring: 01.69 Lakhs
8	CSR / CER Budget	:	1.50 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 3,96,615.60 Cum	Tonnes: 10,70,852.12 Tons
11	Mine Life	:	8 Years 9 Months	
12	Man power	:	20	
13	Water Requirement	:	13.68 KLD (Drinking:0.30 KLD, Dust Suppression: 1.36 KLD, Plantation:12.02 KLD	
14	Water Source	:	Water will be Sourced from Pond owned by applicant for Dust Suppression and Plantation. Water will be sourced from Water Tankers, to be purchased locally for Drinking and Domestic Consumption.	
15	DG Set / power	:	20 KVA DG Set proposed	
16	Crusher	:	NA	
17	Nearest Water Body	:	Satwahini Nala- 5 km –SE.	
18	Nearest Habitation	:	Rano Village: 0.62 Km, Chatra- 24.30 KM	
19	Nearest Rail Station	:	Gaya Railway Station – 52.00 Km in NE	
20	Nearest Air Port	:	Gaya International Airport- 45 NE Birsa Munda International Airport, Ranchi- 133 Km in SE direction.	
21	Nearest Forest	:	Protected Forest - 3.00 Kms in East direction	
22	Road & Highways	:	Pucca Road – 170 metre in West direction. NH 22 – 6.35 KM in East direction.	

CO-ORDINATES

Sl.no.	Latitude	Longitude
1	24° 23' 32.27" N	84° 44' 44.30" E
2	24° 23' 35.40" N	84° 44' 43.77" E
3	24° 23' 39.41" N	84° 44' 43.36" E
4	24° 23' 39.47" N	84° 44' 51.86" E
5	24° 23' 33.29" N	84° 44' 45.41" E

LAND DETAILS

Mouza	Khata No.	Plot No.
Rano	1/7	27,28,32,35
	8/4	25,26,30,31
	10	29,34
	11	33

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Chatra, vide letter no. 360/M dated 16.04.2021
2	CO	:	The CO, Hunterganj, Chatra, vide letter no. 761, dated 18.09.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Chatra vide memo no. 623, dated 22.07.2021 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. 1543 , dated 27.08.2020 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, Chatra North Division vide letter no. 2682, dated 11.11.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	DC letter no. 669, dated 30.07.2021 followed by DMO Chatra letter no. – 358 /M, dated 29.03.2022 has informed that this project is part of District Survey Report (DSR) of Chatra district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 13.03.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. 626/G dated 26.07.2021

Working Details

1	Mining Method	:	Semi Mechanised. Jack Hammer Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 2.82 Ha	End of Mine – 2.82 Ha
3	Waste Generation	:	5 years– 1,54,970 Cu.M	Life of Mine (Waste Gen.) –

				1,54,970 Cu.M
4	Stripping Ratio	:	1:0.26	
5	Working Days	:	300	
6	Benches: size & No	:	5 m x 5/6 m , Bench No.- 1 to 06	
7	Elevation of Mine	:	Maximum Elevation – 272.97 AMSL Minimum Elevation – 271.86 AMSL	
8	Ground Level Elevation		271.86 AMSL	
9	Ultimate Working Depth	:	226.86 AMSL	
10	Water Table	:	214.86 AMSL (57 m bgl)	
11	Topography of Mine	:	Flat Terrain	
12	Explosive Requirement	:	18 Tons/year	
13	Diesel/Fuel requirement	:	99 KL/year (330 Litres/day)	

Production Details

Production Summary					
Years	**Production In Cum/Year**	**O.B Production In Cum/Year**	**Production In Tons/Year**	**Prod. In Tons./Day**	**Depth (R.L. in metre)**
1st	36540	94888	98658	328.86	216.11 – 201.11
2nd	39816	9744	107503	358.34	215.33 – 196.11
3rd	45601	11554	123123	410.41	215.23 – 191.11
4th	47541	8282	128360	427.87	215.12 – 186.11
5th	52358	30502	141368	471.23	215.02 – 186.11
Total	**221856**	**154970**	**599012**	**399.34**	**Depth – 30 metre**

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.00
Total area in use	**0.00**
Balance area unused	2.82
Total Leasehold area	**2.82**

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.95
Infrastructure	0.02

Dump	0.16
Road	0.01
Green Belt / Safety Zone	0.54
Garland Drain	0.14
Total area in use	**2.82**
Total Leasehold area	**2.82**

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

Category	Area in Hectares
Quarry	1.95 Water Body
Green Belt/ Safety Zone	0.54 (Plantation)
Office + Dump + Road + Garland Drain	0.33 (Plantation)
Total area in use	**2.82**
Total Leasehold area	**2.82**
Plantation	**0.87 (31% of area)**

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.54 ha	1350 trees @ 2500 trees per ha
2	Haul /Approach Road	:	0.17 KM	228 trees on both sides – 3 m distance (Two row plantation)
3	Conceptual Period (Dump, Road, Garland Drain, Office)		0.33 Ha.	825 trees (0.33 Ha. @ 2500)

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

Waste Generation

A total of 1,54,970 Cum of wastes (Over Burden) will be generated from entire Ra: Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

Table 3.7: Generation of Waste during Planned Period

Year	Waste Generation, In Cum
1st Year	94888
2nd Year	9744
3rd Year	11554
4th Year	8282
5th Year	30502
Total	**154970**

Source: Mining Plan

Disposal of Waste from the Quarry

Over burden will be dumped in the waste dump within the mining lease area in 0.16 Ha. waste dump area inside the lease. OB will be utilized for internal mine road construction & berm along the approach road construction & maintenance.

Water Quality Management

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

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

Undertaking submitted affirming:

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

b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

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

d. The Boundary Pillars of the proposed mine lease area will be maintained properly.

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

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

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

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

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Rano Stone Mine of M/s Jai Shankar Stone Mines, Mouza : Rano, P.S. : Hunterganj, Dist. : Chatra, Jharkhand (2.82 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

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

(Proposal No. : SIA/JH/MIN/74901 /2022).

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

Project Category: **B1 – Application for ToR**

EC Application for: **Boulder Stone : 88,888.88 Cu.M. / year i.e. 2,40,000 TPA**
DG Set : 25 KVA

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Shivam Stone Mine Project Type – Stone Mine and Proposed Crusher of 100 TPH Capacity	
2	Lessee:	:	Partners - Shri Umakant Prasad Jaiswal & Shri Nitin Gupta	
3	Lease Address	:	Mouza – Jaura, Thana - Chhatarpur, Dist - Palamu, State- Jharkhand.	
4	Lease Area	:	Ha: 2.87 ha	Acres: 7.10 Acres
	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 88.50 Lakhs	
7	EMP Budget	:	Capital: 17.80 Lakhs	Recurring: 02.14 Lakhs
8	CSR / CER Budget	:	2.70 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 8,88,888.88 Cu. M.	Tonnes: 24,00,000 Tonnes
11	Mine Life	:	10 years	
12	Man power	:	15	
13	Water Requirement	:	17.38 KLD (Drinking:0.23 KLD, Dust Suppression: 4.16 KLD, Plantation:12.99 KLD	
14	Water Source	:	Water will be sourced from Abandoned Mine through Water Tanker for Dust Suppression and Plantation. Water will be sourced from Bore Well within the lease area for Drinking and Domestic Consumption.	
15	DG Set / power	:	25 KVA DG Set proposed	
16	Crusher	:	Proposed Crusher of 100 TPH Capacity	
17	Nearest Water Body	:	Sadabah River - 14 km - SW	
18	Nearest Habitation	:	Jaura – 0.75 km, Palamu- 17.50 KM	
19	Nearest Rail Station	:	Japla Railway station – 34 km – NW	
20	Nearest Air Port	:	Gaya Airport, Gaya – 93 km – NE	
21	Nearest Forest	:	Protected Forest - 1 Km- SW	
22	Road & Highways	:	Naza Bazar Patan Road – 0.52 Km – North	

			Patan Chhatarpur Road – 1.10 - East NH 139– 8.20 – West

CO-ORDINATES

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

Land Details :

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

STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Palamau, Medininagar vide letter no. 1124 /M dated 23.09.2021
2	CO	:	The CO, Chhatarpur, Palamu, vide letter no. 806, dated 11.09.2020 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.

3	DMO	:	DMO, Palamu, Medninagar vide memo no. 1180/M, dated 06.10.2021 certified that two more lease area exists within 500 m radius from proposed project site & Total lease area is more than 5 Ha.
4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 187 , dated 08.03.2022 certified that the National Park, Bio-Diversity & Sanctuary is not within 10 km from proj site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Medninagar Division vide letter no. 4276, dated 12.09.2018 certified that the distance of notified forest is 260 metre from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Palamu, Medninagar vide letter no. 1276/ M, dated 16.10.2021 has informed that this project is part of District Survey Report (DSR) of Palamu district and accordingly necessary action with regard to Environmen Clearance can be taken.
7	Gram Sabha	:	On 05.11.2018
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. 699/G dated 29.09.2021

Working Details

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

	requirement		

Production Details

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

Land Use

Existing Land Use pattern

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

Proposed Land Use for Current Plan Period

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

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

Category	Area in Hectares
Quarry	1.96 Water Body after reducing the depth partially by backfilling 29,000 Cum. of O.B.
Green Belt/ Safety Zone	0.70

	(Plantation)
Road + Crusher+ Infrastructure+ Garland Drain / Settling Tank	0.21 (Plantation)
Total area in use	**2.87**
Total Leasehold area	**2.87**
Plantation	**0.90 (31.5 % of area)**

ENVIRONMENT MANAGEMENT

Green Belt Development

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

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

Waste Generation

A total of 29,629.68 Cum of wastes (Over Burden) will be generated from entire Shivam Stone Mine up to conceptual stage. Year-wise waste generation during the planned period is given below:

Table 3.7: Generation of Waste during Planned Period

Year	Waste Generation, In Cum
1st Year	14,814.84
2nd Year	Nil
3rd Year	14,814.84
4th Year	Nil
5th Year	Nil
Total	**29,629.68**

Source: Mining Plan

Disposal of Waste from the Quarry

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

Water Quality Management

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

Air Quality Management

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

Undertaking submitted affirming:

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

b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

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

d. The Boundary Pillars of the proposed mine lease area will be maintained properly.

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

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

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

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

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

Consultant (M/s Sathi Planners, Ranchi) has requested to prepared common EIA as the project namely (i) Shivam Stone Mine of Shri Umakant Prasad Jaiswal & Shri Nitin Gupta, (2.87 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (ii) Stone Mine of M/s Jai Sri Sokha Baba Stone Works, (1.22 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (iii) Stone Mine & Crusher of M/s Jai Baba Vishwanath Stone Works, (2.46 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand exist within periphery of 500 m which has been accepted by the Committee.

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 10, 11, 12, 13 & 14.05.2022, 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 IV.

****

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

(Proposal No. : SIA/JH/MIN/ 75047 /2022).

Project Category: **B1 – Application for ToR**

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

DG Set : 10 KVA

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

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	M/S Jai Sri Sokha Baba Stone Works Project type – Stone Mine	
2	Lessee:	:	M/S Jai Sri Sokha Baba Stone Works, Signatory Partner – Sri Sankat Mochan Jha.	
3	Lease Address	:	Mouza – Jaura, Thana - Chhatarpur, Dist - Palamu, State- Jharkhand.	
4	Lease Area	:	Ha: 1.22 ha.	Acres: 3.03 Acres
	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 66.50 Lakhs	
7	EMP Budget	:	Capital: 13.6535 Lakhs	Recurring: 1.54 Lakhs
8	CSR / CER Budget	:	1.75 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 4,67,210 Cum	Tonnes: 12,61,467 Tons
11	Mine Life	:	10.25 years	
12	Man power	:	15	
13	Water Requirement	:	15.75 KLD (Drinking:0.23 KLD, Dust Suppression: 6.80 KLD, Plantation:8.72 KLD	
14	Water Source	:	Water will be sourced from abandoned Mine through Water Tanker for Dust Suppression and Plantation. Water will be sourced from Bore Well within the lease area for Drinking and Domestic Consumption.	
15	DG Set / power	:	10 KVA DG Set proposed	
16	Crusher	:	Nil	
17	Nearest Water Body	:	Sadabah River – 13 km – SW	
18	Nearest Habitation	:	Jaura – 0.75 km, Daltonganj – 27.50 KM	
19	Nearest Rail Station	:	Japla Railway station – 34 km , NW	
20	Nearest Air Port	:	Gaya Airport– 93.60 km, NE	
21	Nearest Forest	:	Protected Forest - 0.80 Km- SE	
22	Road & Highways	:	Patan Chhatarpur road - 0.85 Km in East National Highway (NH 139) - 8 Km in West	

CO-ORDINATES

Sl.No.	Latitude	Longitude
1	24^0 16' 31.27" N	84^0 10' 43.05" E
2	24^0 16' 31.92" N	84^0 10' 41.58" E
3	24^0 16' 32.62" N	84^0 10' 41.71" E
4	24^0 16' 32.01" N	84^0 10' 40.64" E

5	24°16'32.25" N	84°10'39.87" E
6	24°16'32.82" N	84°10'38.92" E
7	24°16'33.92" N	84°10'39.15" E
8	24°16'35.61" N	84°10'44.14" E
9	24°16'35.23" N	84°10'44.45" E
10	24°16'32.03" N	84°10'43.70" E

LAND DETAILS

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

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Palamu, Medninagar vide letter no. 1123 /M dated 23.09.2021
2	CO	:	The CO, Chhatarpur, Palamu vide letter no. 630, dated 16.09.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyan
3	DMO	:	DMO, Palamu, Medninagar vide memo no. 1178 /M, dat 06.10.2021 certified that two other lease area (6.08 acre & 7.1(acre) exists within 500 m radius from proposed project site & Total lease area is 16.21 Acre (6.563 Ha).
4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 908, dated 05.10.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Medninagar Division vide letter no. 3796, dated 04.08.2019 certified that the distance of notified forest is 270 metre from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Palamu, Medninagar vide letter no. 1276/ M, dated 16.10.2021 has informed that this project is part of District Survey Report (DSR) of Palamu district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 11.06.2019

8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. 700/G dated 29.09.2021

Working Details

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

Production Details

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

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	0.00
Road	0.01
Total area in use	**0.00**

Balance area unused	1.21
Total Leasehold area	**1.22**

Proposed Land Use for Current Plan Period

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

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

Category	Area in Hectares
Quarry / O.B. Dump	0.75 Water Body after reducing the depth partially by backfilling 1600 Cum. of O.B
Green Belt / Safety Zone	0.37 (Plantation)
Garland Drain, Infrastructure, Road	0.10 (Plantation)
Total area in use	**1.22**
Total Leasehold area	**1.22**
Plantation	**0.47 (38.5 % of area)**

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone, Infrastructure, Mining Road , Garland drain	:	0.47 ha	1175 trees @ 2500 trees per ha.
2	Haul /Approach Road	:	0.85 KM	568 trees on both sides – 3 m distance

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

Waste Generation

A total of **1625 cum** of waste (Over Burden) will be generated from entire M/S Jai Sri Sokha Baba Stone Works up to conceptual stage. Year-wise waste generation during the planned period is given below:

Table 3.7: Generation of Waste during Planned Period

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

Source: Mining Plan

Disposal of Waste from the Quarry

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

Water Quality Management

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

Air Quality Management

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

Undertaking submitted affirming:

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

Consultant (M/s Sathi Planners, Ranchi) has requested to prepared common EIA as the project namely (i) Shivam Stone Mine of Shri Umakant Prasad Jaiswal & Shri Nitin Gupta, (2.87 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (ii) Stone Mine of M/s Jai Sri Sokh Baba Stone Works, (1.22 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (iii) Stone Mine & Crusher of M/s Jai Baba Vishwanath Stone Works, (2.46 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand exist within periphery of 500 m which has been accepted by the Committee.

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 10, 11, 12, 13 & 14.05.2022, 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 IV.

****

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

(Proposal No. : SIA/JH/MIN/ 76681 /2022).

Project Category: B1 – Application for ToR

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

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

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	M/S Jai Baba Vishwanath Stone Works, Project type – Stone Mine & Crusher (50 TPH Capacity)	
2	Lessee:	:	M/S Jai Baba Vishwanath Stone Works, Signatory Partner - Shri Vikas Kumar Pathak,	
3	Lease Address	:	Mouza – Jaura, Thana- Chhatarpur, Dist - Palamu, State- Jharkhand.	
4	Lease Area	:	Ha: 2.46 ha	Acres: 6.08 Acres
	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 67.45 Lakhs	
7	EMP Budget	:	Capital: 15.0955 Lakhs	Recurring: 02.14 Lakhs
8	CSR / CER Budget	:	1.75 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 5,77,410.00 Cum	Tonnes: 15,59,007.00 Tons
11	Mine Life	:	10.60 years	
12	Man power	:	15	
13	Water Requirement	:	23.88 KLD (Drinking:0.23 KLD, Dust Suppression: 7.60 KLD, Plantation:16.05 KLD	
14	Water Source	:	Water will be sourced from abandoned Mine through Water Tanker for Dust Suppression and Plantation. Water will be sourced from Bore Well within the lease area for Drinking and Domestic Consumption.	

15	DG Set / power	:	25 KVA DG Set proposed
16	Crusher	:	Proposed Crusher of 50 TPH Capacity
17	Nearest Water Body	:	North Koel River- 20 km – SW
18	Nearest Habitation	:	Jaura – 2.30 km, Daltonganj - 28 KM
19	Nearest Rail Station	:	Japla Railway station – 34 km – NW
20	Nearest Air Port	:	Gaya Airport, Gaya – 94 km – NE
21	Nearest Forest	:	Protected Forest - 1 Km- SE
22	Road & Highways	:	Patan Chhatarpur Road – 0.95 Km in East direction, NH-139 – 7.80 Km in West direction from project site

CO-ORDINATES

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

LAND DETAILS

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

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Palamu, Medninagar vide letter no. 1122 /M dated 23.09.2021
2	CO	:	The CO, Chhatarpur, Palamu vide letter no. 584, dated 24.08.2018 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyan.
3	DMO	:	DMO, Palamu, Medninagar vide memo no. 1179 /M, dated 06.10.2021 certified that two more lease area (3.03 acre & 7.1… acre) exists within 500 m radius from proposed project site & Total lease area is 16.21 acre (6.563 Ha).

4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 906, dated 05.10.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Medninagar Division vide letter no. 3794, dated 04.08.2018 certified that the distance of notified forest is 280 metre from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Palamu, Medninagar vide letter no. 1276/ M, dated 16.10.2021 has informed that this project is part of District Survey Report (DSR) of Palamu district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 11.06.2019
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. 698/G dated 29.09.2021

Working Details

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

Production Details

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

Land Use

Existing Land Use pattern

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

Proposed Land Use for Current Plan Period

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

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

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

ENVIRONMENT MANAGEMENT

Green Belt Development

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

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

Waste Generation

A total of **1890 cum** of waste (Over Burden) will be generated from entire M/S Jai Baba Vishwanath Stone Works up to conceptual stage. Year-wise waste generation during the planned period is given below:

Table 3.7: Generation of Waste during Planned Period

Year	Waste Generation, In Cum

Year	Waste Generation, In Cum
1st Year	1890
2nd Year	0
3rd Year	0
4th Year	0
5th Year	0
Total	**1890**

Source: Mining Plan

Disposal of Waste from the Quarry

There is only 1890 cum overburden will be generated in mining plan period which will used in maintenance of mine road and village road, so there is no requirement of waste dumping Plan for this mining plan.

Water Quality Management

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

Air Quality Management

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

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

Undertaking submitted affirming:

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

b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

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

d. The Boundary Pillars of the proposed mine lease area will be maintained properly.

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

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

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

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

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

Consultant (M/s Sathi Planners, Ranchi) has requested to prepared common EIA as the project namely (i) Shivam Stone Mine of Shri Umakant Prasad Jaiswal & Shri Nitin Gupta, (2.87 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (ii) Stone Mine of M/s Jai Sri Sokha Baba Stone Works, (1.22 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand (iii) Stone Mine & Crusher of M/s Jai Baba Vishwanath Stone Works, (2.46 Ha) Mouza : Jaura, Thana : Chhatarpur, Dist. : Palamu, Jharkhand exist within periphery of 500 m which has been accepted by the Committee.

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 10, 11, 12, 13 & 14.05.2022, 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 IV.

****

18. **Umakant Prasad Jaiswal Stone Mine of Shri Umakant Prasad Jaiswal, Mouza : Nawa, Block : Nawa Bazar, Dist. : Palamu, Jharkhand (2.10 Ha).**

(Proposal No. : SIA/JH/MIN/ 270641 /2022).

Project Category: **B2 – Application for EC**

EC Application for: **Boulder Stone : 83,850 Cu.M. / year i.e. 2,26,395 TPA**
DG Set : 25 KVA

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

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Umakant Prasad Jaiswal Stone Mine Project Type – Stone Mine	
2	Lessee:	:	Shri Umakant Prasad Jaiswal,	
3	Lease Address	:	Mouza – Nawa, Block – Nawa Bazar, District- Palamu, State- Jharkhand.	
4	Lease Area	:	Ha: 2.10 ha	Acres: 5.20 Acres
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	Capital Cost – 84 Lakhs	
7	EMP Budget	:	Capital: 16.506 Lakhs	Recurring: 02.04 Lakhs
8	CSR / CER Budget	:	2.20 Lakhs	
9	New or Expansion	:	New Project	
10	Mineable Reserves	:	Cu.M.: 8,84,947.80 Cum	Tonnes: 23,89,359.06 Tons
11	Mine Life	:	10.03 years	
12	Man power	:	12	
13	Water Requirement	:	21.40 KLD (Drinking:0.18 KLD, Dust Suppression: 8 KLD, Plantation: 13.22 KLD	
14	Water Source	:	• Water will be sourced from Abandoned Mine through Water Tanker for Dust Suppression and Plantation. • Water will be sourced from Bore Well within the lease area for Drinking and Domestic Consumption.	
15	DG Set / power	:	25 KVA DG Set proposed	
16	Crusher	:	NA	
17	Nearest Water Body	:	Sadabah River – 9 km - South	
18	Nearest Habitation	:	Nawa– 1.50 km - NE, Palamu – 21 KM	
19	Nearest Rail Station	:	Japla Railway station – 31 km – NW	
20	Nearest Air Port	:	Gaya Airport, Gaya – 101 km – NE	
21	Nearest Forest	:	Protected Forest - 3.50 Km in West direction	
22	Road & Highways	:	N.H. – 139 (Aurangabad – Rajhara- Daltonganj) Road – 1 Km in East	

CO-ORDINATES

Geo-Coordinates of all corner points of Demarcated Block Boundary (GPS Co-ordinates) Datum : WGS 84		
Corner Point	**Latitude**	**Longitude**
1	24°16'31.05"N	84°05'15.05"E
2	24°16'33.22"N	84°05'15.98"E
3	24°16'36.60"N	84°05'18.13"E
4	24°16'36.97"N	84°05'19.36"E
5	24°16'36.50"N	84°05'20.63"E
6	24°16'36.16"N	84° 5'22.11"E
7	24°16'34.30"N	84°05'22.73"E
8	4°16'33.75"N	84° 5'22.73"E
9	24°16'32.05"N	84°05'22.40"E
10	24°16'32.27"N	84°05'19.90"E
11	24°16'33.36"N	84°05'19.76"E
12	24°16'33.58"N	84°05'18.87"E
13	24°16'31.34"N	84°05'18.22"E
14	24°16'31.05"N	84°05'15.95"E

LAND DETAILS

Mouza	**Khata No.**	**Plot No.**
Nawa	26	1024
	21	1026 (P)
	59	1027 (P)
	06	1067

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Palamu, Medininagar vide letter no. 353/M dated 15.02.2022
2	CO	:	The CO, Nawabazar (Palamu) vide letter no. 38, dated 25.01.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Palamu, Medininagar vide memo no. 669/M, dated 22.03.2022 certified that no lease area exists within 500 m radius from proposed project site & Total lease area is less than 5 Ha.
4	DFO Wild Life	:	Deputy Director, Palamu Tiger Project, North Division, Medininagar vide letter no. 170 , dated 04.03.2022 certified that the National Park & Sanctuary is not within 10 km from project site and

			proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Medninagar vide letter no. 239, dated 23.01.2022 certified that the distance of reserved / protected forest is more than 250 metre proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Palamu, Medninagar vide letter no. 365/ M, dated 17.02.2022 has informed that this project is part of District Survey Report (DSR) of Palamu district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 04.12.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Letter No. 61/G dated 21.02.2022

Working Details

1	Mining Method	:	Semi Mechanised. Wagon Drilling & Blasting to be used	
2	Quarry Area	:	5 years – 2.10 Ha	End of Mine – 2.10 Ha
3	Waste Generation	:	5 years– Very minimal O.B. (Dead Rock Mixed with soil) will be generated.	Life of Mine (Waste Gen.) – Very minimal O.B. (Dead Rock Mixed with soil) will be generated.
4	Stripping Ratio	:	1:0	
5	Working Days	:	300	
6	Benches: size & No	:	6 m x more than 6 m , Bench No.- 1 to 4 (Conceptual period)	
7	Elevation of Mine	:	Maximum Elevation – 365 m AMSL Minimum Elevation – 355 m AMSL	
8	Ground Level Elevation		355 AMSL	
9	Ultimate Working Depth	:	332 AMSL	
10	Water Table	:	319 AMSL (36 m bgl)	
11	Topography of Mine	:	Undulating Terrain	
12	Explosive Requirement	:	82.8 Tons/year	
13	Diesel/Fuel requirement	:	HSD – 516 liters / day (154.80 KL/year)	

Production Details

Year	Production of Stone		OB	Bench RL in meters
	Cubic meters	Tons	Cubic meters	
1st Year	41,925.00 41,925.00	1,13,197.50 1,13,197.50	Nil	309 – 306 (First Slice) 306 – 303 (Second Slice)
2nd Year	41,925.00 41,925.00	1,13,197.50 1,13,197.50	Nil	303 – 300 (Third Slice) 300 – 294 (First Bench)
3rd Year	83,850.00	2,26,935.00	Nil	300 – 294 (First Bench)
4th Year	83,850.00	2,26,935.00	Nil	294 – 288 (Second Bench)
5th Year	83,850.00	2,26,935.00	Nil	294 – 288 (Second Bench)
Total	**4,19,250.00**	**11,31,975.00**	**Nil**	**Depth – 21 m**

Land Use

Existing Land Use pattern

Category	Area in Hectares
Quarry	Nil
Road	Nil
Total area in use	Nil
Balance area unused	Nil
Total Leasehold area	2.10

Proposed Land Use for Current Plan Period

Category	Area in Hectares
Quarry	1.31
Road	0.04

Green Belt / Safety Zone	0.69
Garland Drain / Settling Tank	0.06
Total area in use	**2.10**
Balance area unused	0.00
Total Leasehold area	**2.10**

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

Category	Area in Hectares
Quarry	1.31
Green Belt/ Safety Zone	0.69 (Plantation)
Road + Garland Drain / Settling Tank	0.10 (Plantation)
Total area in use	**2.10**
Total Leasehold area	**2.10**
Plantation	**0.79 (37.6 % of area)**

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.69 ha	1725 trees @ 2500 trees per ha
2	Haul /Approach Road	:	1 KM	668 trees on both sides – 3 m distance
3	Conceptual Period (Road, Garland Drain/ Settling Tank)	:	0.10 Ha.	250 (0.10 Ha. @ 2500 trees per Ha.)

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

Waste Generation

Very minimal O.B. (Dead Rock Mixed with soil) will be generated. OB will be utilized for backfilling, internal mine road construction & berm along the approach road construction & maintenance, so there is no requirement of waste dumping Plan for this mining plan.

Water Quality Management

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

Air Quality Management

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

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

Undertaking submitted affirming:

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

b. The District survey Report has been prepared by a competent authority. Project Authorities will abide by any directives issued by any court of law in future.

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

d. The Boundary Pillars of the proposed mine lease area will be maintained properly.

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

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

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

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

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Umakant Prasad Jaiswal Stone Mine of Shri Umakant Prasad Jaiswal, Mouza : Nawa, Block : Nawa Bazar, Dist. : Palamu, Jharkhand (2.10 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

A. Consideration of Proposals

1. **Group Housing Project "Gemini Eastern" of M/s Gemini Swavlambi Sahkari Samiti Ltd., Village : Oyana, Thana : Pithoria, Tehsil : Kanke, Dist. : Ranchi, Jharkhand.**

   (Proposal No. : SIA/JH/MIS /70789 /2022).

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

   This is a case of violation which has been taken for appraisal on 12.05.2022 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 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 Gemini Swavlambi Sahkari Samiti Ltd. is developing a Residential Project Located at Village: Oyana, Tehsil: Kanke, District: Ranchi, Jharkhand. On a land admeasuring 19263.67 Square meter (4.76 Acres).

   Khata no. & Plot no. of the project :

Khata no.	Plot no.
16	306 (p)
83	157 (p)
55	297 (p), 300 (p)
151	301 (p)
81	129 (p), 130 (p)

   Latitude & Longitude of the project :

Pillar points	Latitude	Longitude
1	23°27'34.09"N	85°24'29.80"E
2	23°27'34.36"N	85°24'30.03"E
3	23°27'34.35"N	85°24'30.50"E
4	23°27'34.39"N	85°24'30.60"E
5	23°27'35.34"N	85°24'31.14"E
6	23°27'35.37"N	85°24'31.30"E
7	23°27'35.32"N	85°24'31.60"E
8	23°27'35.44"N	85°24'31.85"E
9	23°27'35.34"N	85°24'32.16"E
10	23°27'34.99"N	85°24'32.15"E
11	23°27'34.60"N	85°24'31.88"E
12	23°27'33.81"N	85°24'31.56"E
13	23°27'33.69"N	85°24'31.57"E

14	23°27'33.43"N	85°24'31.90"E
15	23°27'32.75"N	85°24'33.09"E
16	23°27'32.69"N	85°24'33.49"E
17	23°27'31.84"N	85°24'34.84"E
18	23°27'31.61"N	85°24'35.45"E
19	23°27'31.62"N	85°24'36.07"E
20	23°27'31.77"N	85°24'36.35"E
21	23°27'32.47"N	85°24'36.79"E
22	23°27'33.34"N	85°24'37.03"E
23	23°27'33.29"N	85°24'37.18"E
24	23°27'32.64"N	85°24'37.08"E
25	23°27'31.72"N	85°24'36.59"E
26	23°27'31.40"N	85°24'36.02"E
27	23°27'31.43"N	85°24'35.22"E
28	23°27'30.99"N	85°24'35.10"E
29	23°27'30.70"N	85°24'35.14"E
30	23°27'29.68"N	85°24'34.50"E
31	23°27'28.07"N	85°24'33.69"E
32	23°27'27.74"N	85°24'33.78"E
33	23°27'27.67"N	85°24'33.71"E
34	23°27'27.65"N	85°24'33.48"E
35	23°27'27.73"N	85°24'33.34"E
36	23°27'27.67"N	85°24'33.25"E
37	23°27'27.53"N	85°24'33.20"E
38	23°27'27.73"N	85°24'32.81"E
39	23°27'27.65"N	85°24'32.63"E
40	23°27'28.69"N	85°24'31.57"E
41	23°27'29.01"N	85°24'31.50"E
42	23°27'29.82"N	85°24'30.87"E
43	23°27'30.32"N	85°24'30.21"E
44	23°27'30.40"N	85°24'30.08"E
45	23°27'31.00"N	85°24'30.32"E
46	23°27'31.12"N	85°24'30.46"E
47	23°27'32.13"N	85°24'30.94"E
48	23°27'32.58"N	85°24'30.04"E
49	23°27'32.68"N	85°24'30.01"E
50	23°27'33.68"N	85°24'30.55"E

Salient Features of the Project:

S. No.	Particulars	Total (m^2)
1	Total Plot Area (4.76 Acres)	19,263.67
2	Net Plot Total plot Area (4.70 Acres)	19,026.44
3	Permissible Coverage Area (@ 35% of Total Plot Area)	6,659.25
4	Proposed Coverage Area (@ 30.47% of Total Plot Area)	5,796.66
5	Total Permissible FAR area	15,804.96
6	Proposed FAR Area	54,158.963

7	Non FAR	7338.239
8	Parking Floor (Stilt)	372
9	Built up Area(5+6+7)	61497.202
10	Green Area & open area	6659.25
11	Road Area	2853.96
12	Project cost	Rs. 3550 Lakh
13	RWH Pits	05 Pits
14	Height of the building	35 m

Parking required

COVERED PARKING IN STITLS		
BLOCK -A-1,2	STILT	44
BLOCK- B-1,2,3,4	STILT	152
BLOCK-C(L.I.G)	STILT	22
	TOTAL	**218**

Open Car Parking = 150 Cars
Total Proposed Parking = 150+218+04 = 372 Cars

Total required for parking = 273 Nos

Population Break up

S. No.	Particulars	No. of Flats	PPU/No. of person/m2	Total
1	Residents	350	@5 Person Per Unit	1750
2	Staff	-	@5% of Residential	88
3	Visitors	-	@ 10% of Residential	175
Total				**2013**

WATER REQUIREMENT

The water requirement will be met by Municipal Source and ground water. The total water requirement for operational phase is approx. 285 KLD. Fresh water requirement is approx 184 KLD.

Calculation for Daily Water Demand

S. No.	Particulars	Occupancy/ Area/ No's	Fresh Water Demand		Treated Water Demand	
			lpcd	Quantity	lpcd	Quantity
1	Residents	2013	90	181.17	45	90.585
2	Staff	87.5	25	2.1875	20	1.75
3	Visitors	175	5	0.875	10	1.75

4	Horticulture	6659.25	NIL	NIL	1l/ sqm	6.65925
Total Water Requirement				**184.2325**		**100.74425**

Summary of Water Requirement & Wastewater Generated

S. No.	Particulars	In KLD
1	Total Water Requirement (184+101)	285
2	Fresh Water Requirement	184
3	Treated Water	101
4	Wastewater Generated (80% of Fresh + 100% Flushing)	241
5	STP Capacity (Approx. 20% higher than the wastewater generated)	300

POWER REQUIREMENT

The power supply is supplied by Jharkhand Bijli Vitran Nigam Limited; the connected load for Project is approx. 4719 KW.

Details of D.G Sets

There is provision of 10 DG set of total capacity of 500 KVA. The DG sets are equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

Site Connectivity :

Sl. No	Particulates	Name of Places	Distance (Km)	Direction
1.	Nearest Airport	Birsa Munda Airport, Ranchi	17.9 Kms	SSW
	Nearest Railway Station	Tatisilwai - Train station Purulia Rd	10.216 Km	SSE
		Namkon - Train station TetryTolly Basti, Namkum Ranchi, Jharkhand	12.397Km	SSW
		Ranchi Junction	14.337 Km	S
2.	Nearest Bus Stand	Khadgarha Bus Stand	12.705 Km	SSW
		Ranchi Kanta Toli Bus Stand	12.44 Km	SSW
3.	Nearest State Highway/Any other road	SH-2	9.19 Km	W
4.	Nearest National	NH33	3.03 Km	E

	Highway			
5.	Nearest School/College	Govt Primary school , Nueri	1.02 Km	NE
		Kalpana Chawla High School	2.46 Km	NNW
		Ranchi college of Technology and research centre	3.78 Km	SE
6.	Nearest Temple	Radha Krishna Mandir	10.07 Km	ESE
		Shiv Mandir	1.554 Km	WNW
		Hanuman Mandir	6.46 Km	NE
7.	Nearest Hospital	Medanta Hospital Ranchi	2.88 Km	SW
		Raj Superspeciality Hospital	14.49 Km	NE
8.	Nearest Police Station	Tatisilwai Police Station	10.129 Km	SSE
		Lalpur Police Station	12.42 Km	SSW
		Dhurwa Police Station	22.64 Km	NNE
9.	Nearest Fire Station	Fire Station, Doranda ,Ranchi	15.62 Km	NNE
10.	Commissioner Office	commissioner office , Ranchi	12.524Km	WSW
11.	Gram Panchayat	Panchayat Sachivalay, Malsiring	17.217 Km	SE
12.	Nearest Pond	Pond	25 Km	ENE
13.	Nearest River/Nallah/ Canal	Getalsud Dam	6 Km	E
14.	Wild Life Sanctuary	Dalma Wildlife Sanctuary	>15 Km	ESE
15.	Zoological Park	Tata Steel Zoological Park	>15Km	WNW
16.	Nearest Defense Installation	CAP Ground	6.016 Km	SE

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no.2464, dated 31.07.2018 certified that the distance of notified forest is 1000 m from proposed project site.

2	DFO Wild Life	:	DFO, Wildlife Ranchi Division vide memo no. 1356, dated 10.12.2019 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Kanke, Ranchi vide letter no. 587 (ii), dated 26.07.2021 has mentioned the plot no. of the project is not recorded as "Jangie Jhari" in R.S. Khatiyan & Register II.
4	AAI NOC	:	Airport Authority of India has issued a NOC vide letter no. RANC/EAST /B/ 062521/ 552636 dated 29.06.2021.
5	Fire Department	:	A advisory from Fire Department, Jharkhand, Ranchi, vide letter no 441, dated 20.10.2017.
6	CGWA	:	The applicant has made application to CGWA vide application no. 21-4/723/JH/INF/2021, dated 18.01.2021
7	Building Plan	:	Building Plan approved by RRDA vide letter no. 1654, dated 26.06.2018

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 10, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure V alongwith following specific condition :

i. PA's to submit environmental damage assessment as per CPCB guidelines.

ii. PA's to submit status of construction of individual towers separately certified by RMC / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

iii. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

iv. Environmental monitoring locations decided in both core and buffer zone including in downwind direction as per CPCB guidelines.

v. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

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

****

2. **Residential Complex "Diamond City" of M/s Eastern Estate Construction & Developer Pvt. Ltd., Village : Oyana, Thana : Pithoria, Tehsil : Ranchi, Dist. : Ranchi, Jharkhand.**

(Proposal No. : SIA/JH/MIS /65999 /2021).

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

This is a case of violation which has been taken for appraisal on 12.05.2022 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 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 Eastern Estate Construction and Developers Pvt. Ltd is developing a Group Housing Project Located at Thana no. 46, Thana- Pithoria, Village- Oyana District: Ranchi Jharkhand on a land admeasuring 34,762.63 Square meter (8.58 Acre).

Khata no. & Plot no. of the project :

Khata no	Plot no
1	308(P)
67	310(P),311(P),312(P)
160	313(P), 314(P)
154	315(P), 324(P)
76	317(P), 318(P), 319(P), 325(P), 326(P), 327(P), 328(P), 329(P), 330(P), 387(P).
150	331(P)
163	332(p)
16	374(P)

Latitude & Longitude of the project :

Pillar points	Latitude	Longitude
1	23°27'31.74"N	85°24'44.73"E
2	23°27'32.01"N	85°24'43.88"E
3	23°27'32.83"N	85°24'43.64"E
4	23°27'33.54"N	85°24'43.65"E
5	23°27'33.70"N	85°24'43.18"E
6	23°27'35.67"N	85°24'43.02"E
7	23°27'35.69"N	85°24'43.20"E

8	23°27'36.90"N	85°24'43.14"E
9	23°27'36.94"N	85°24'43.02"E
10	23°27'37.98"N	85°24'43.23"E
11	23°27'40.14"N	85°24'37.34"E
12	23°27'40.02"N	85°24'37.09"E
13	23°27'40.10"N	85°24'36.86"E
14	23°27'39.34"N	85°24'36.62"E
15	23°27'39.44"N	85°24'36.22"E
16	23°27'37.66"N	85°24'35.62"E
17	23°27'37.80"N	85°24'34.92"E
18	23°27'36.86"N	85°24'34.50"E
19	23°27'36.64"N	85°24'35.31"E
20	23°27'34.59"N	85°24'34.68"E
21	23°27'34.45"N	85°24'35.00"E
22	23°27'34.47"N	85°24'35.16"E
23	23°27'33.63"N	85°24'36.44"E
24	23°27'33.29"N	85°24'37.19"E
25	23°27'32.65"N	85°24'37.09"E
26	23°27'31.40"N	85°24'42.11"E
27	23°27'33.34"N	85°24'42.66"E
28	23°27'33.31"N	85°24'42.88"E
29	23°27'32.44"N	85°24'42.90"E
30	23°27'31.99"N	85°24'43.02"E
31	23°27'31.60"N	85°24'43.52"E
32	23°27'31.27"N	85°24'44.46"E

Salient Features of the Project:

Particulars	Total (m^2)
(A) Total Plot as per site	34,762.63
(B) Total Plot as per deed	32,432.36
(C) Road Widening Area	187.26
(D)Excess Land	3,906.06
(E) Plot area after leaving excess land (Net Plot Area)	30,855.57
(F) Provided common road	659.44
(G) Plot area after leaving Road Widening &	30,008.87

Common Road Area	
(H) Net FAR	87,137.745
Net Plot Area (7.624 Acres)	30855.57
Ground Coverage Area (34.6%)	10383.855
Proposes FAR Area	87137.745
Non FAR including Services	11977.45
Parking Floor (Stilt)	764
Built up Area	99115.195
Green Area (33%)	10200
Project cost	Rs. 47.8 Crore
RWH Pits	08 Pits
Height of the building	35 m

Parking required

Covered Parking In Basement And Stilts		
Block -A-1	Stilt	16
Block- A-2,3	Stilt	32
Block-B-1,2	Basement	40
Block -B-3,4,5	Stilt	78
Block -B-6,7	Stilt	52
Block-C-1,	Stilt	22
Block-D-1,2	Stilt	0
Commercial	Stilt	20
	Total	**260**

Car parking in open spaces =

multilayer= 250x2 =500 cars Other parking in open spaces = 4 nos.

Total proposed parking (4w) = 260+500+4 = 764 cars

Total proposed parking (2w) = 436 no's

Population Break up

S. No.	Particulars	No. of Flats	PPU/No. of person/m2	Total
1	Residents	836	@5 Person Per Unit	4180
2	Staff	-	@5% of Residential	209
3	Visitors	-	@ 10% of Residential	418
	Total			**4807**

Water Requirement :

The water requirement will be met by Municipal Source. The total water requirement for operational phase is approx. 591 KLD. Fresh water requirement is approx. 384 KLD;

Calculation for Daily Water Demand

S. No.	Particulars	Occupancy/ Area/ No's	Fresh Water Demand		Treated Water Demand	
			lpcd	Quantity	lpcd	Quantity
1	Residents	4180	90	376.2	45	188.1
2	Staff	209	25	5.225	20	4.18
3	Visitors	418	5	2.09	10	4.18
4	Horticulture	10200	NIL	NIL	1l/ sqm	10.2
Total Water Requirement				**384**		**207**

Summary of Water Requirement & Wastewater Generated

S. No.	Particulars	In KLD
1	Total Water Requirement (384+207)	591
2	Fresh Water Requirement	384
3	Treated Water	207
4	Flushing Water	196.5
5	Wastewater Generated (80% of Fresh + 100% Flushing)	503.7
6	STP Capacity (20% higher than the wastewater generated)	600

Power Requirement

The power supply is supplied by Jharkhand Bijli Vitran Nigam Limited; the connected load for Project is approx. 3236 KVA.

Details of D.G Sets

There is provision of 17 DG set of total capacity of 200 KVA. The DG sets are equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

Site Connectivity :

SR. No	Particulates	Name of Places	Distance (Km)	Direction
1.	Nearest Airport	Birsa Munda Airport, Ranchi	17.9 Kms	SSW
	Nearest Railway Station	Tatisilwai - Train station Purulia Rd	10.216 Km	SSE
		Namkon - Train station Tetry Tolly Basti, Namkum Ranchi, Jharkhand	12.397Km	SSW
		Ranchi Junction	14.337 Km	S
2.	Nearest Bus Stand	Khadgarha Bus Stand	12.705 Km	SSW
		Ranchi Kanta Toli Bus Stand	12.44 Km	SSW
3.	Nearest State Highway/Any other road	SH-2	2.006 Km	W
4.	Nearest National Highway	NH33	3.03 Km	E
5.	Nearest School/College	Govt Primary school , Nueri	1.02 Km	NE
		Kalpana Chawla High School	2.46 Km	NNW
		Ranchi college of Technology and research centre	3.78 Km	SE
6.	Nearest Temple	Radha Krishna Mandir	10.07 Km	ESE
		Shiv Mandir	1.554 Km	WNW
		Hanuman Mandir	6.46 Km	NE
7.	Nearest Hospital	Medanta Hospital Ranchi	2.88 Km	SW
		Raj Superspeciality Hospital	14.49 Km	NE

8.	Nearest Police Station	Tatisilwai Police Station	10.129 Km	SSE
		Lalpur Police Station	12.42 Km	SSW
		Omanjhi Police Station	7.2 Km	ENE
9.	Nearest Fire Station	Army Fire Station	8.68 Km	NNE
10.	Commissioner Office	Commissioner office , Ranchi	12.524Km	WSW
11.	Gram Panchayat	Bargain Panchayat Bhavan	7.217 Km	SE
12.	Nearest Pond	Titartoli Pond	9.8 Km	NE
13.	Nearest River/Nallah/ Canal	Getalsud Dam	14.75 Km	E
14.	Wild Life Sanctuary	Dalma Wildlife Sanctuary	>15 Km	ESE
15.	Zoological Park	Tata Steel Zoological Park	>15Km	WNW
16.	Nearest Defense Installation	CAP Ground	6.016 Km	SE

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no.2464, dated 31.07.2018 certified that the distance of notified forest is 1000 m from proposed project site.
2	DFO Wild Life	:	DFO, Wildlife Ranchi Division vide memo no. 1356, dated 10.12.2019 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Kanke, Ranchi vide letter no. 588 (ii), dated 26.07.2021 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 letter no. RANC/EAST /B/ 062021/ 552243 dated 29.06.2021.
5	Fire Department	:	A Certificate from Fire Department, Jharkhand, Ranchi, vide letter no. 440, dated 20.10.2017.

6	CGWA	:	The CGWA has issued a permission for withdrawal of water vide letter no. 21-4/723/JH/INF/2021, dated 18.01.2021
7	Building Plan	:	Building Plan approved by RRDA vide letter no. 549, dated 28.02.2018.

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 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure V alongwith following specific condition :

i. PA's to submit environmental damage assessment as per CPCB guidelines.

ii. PA's to submit status of construction of individual towers separately certified by RMC / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

iii. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

iv. Environmental monitoring locations decided in both core and buffer zone including in downwind direction as per CPCB guidelines.

v. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

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

****

3. **Sugasarwa Stone Deposit of Smt. Deepa Devi, Village : Sugasarwa, Thana : Chainpur, Dist. : Gumla, Jharkhand (1.21 Ha).**

(Proposal No. : SIA/JH/ MIN/252563 /2022).

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

EC Application for: **Proposed Capacity-52275 cum/annum or 141142.50 TPA**

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

This is a new project which has been taken for appraisal on 12.05.2022

Project and Location Details:

Sl	Parameter		Details
1	Project Name	:	Sugasarwa Stone Deposit

2	Lessee:	:	Smt. Deepa Devi W/o- Sri Manoj Kumar At+PO.-kereng,PS.-Chainpur,District-Gumla,State-Jharkhand,	
3	Lease Address	:	Village – Sugasarwa, Thana- Chainpur, District – Gumla, State – Jharkhand.	
4	Lease Area	:	1.21ha	Acres-3.00Acres
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 25 Lakhs	
7	EMP Budget	:	Capital: 2.54Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.50Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.:261300.00 cum	Tonnes: 705510.00 tons
11	Mine Life	:	5.00 years	
12	Man power	:	20	
13	Water Requirement	:	6.5 KLD(Drinking: 0.2KLD,Dust Suppression:2.84 KLD, Plantation:3.06 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	-	
16	Crusher	:	No crusher	
17	Nearest Water Body	:	Shankh River, 1.70 km, WSW direction	
18	Nearest Habitation	:	Bhelwatola, 3.0km	
19	Nearest Rail Station	:	Lohardaga Railway station, 60 km	
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi Airport, 120 km	
21	Nearest Forest	:	Kereng Protected Forest, Approx. 4.5 km N NW side Protected Forest near Kereng village, approx. 4.00 km, NW side Protected Forest near Bishunpur Village, approx. 2.50 km, WSW side	
22	Road & Highways	:	SH-9, Approx. 16.0 km	

Co-Ordinates :

1	Latitude		From 23°11'11.21"N	To 23°11'16.13"N
2	Longitude		From 84°11'21.30"E	To 84°11'26.65"E

Land Details :

Sugasarwa	Khata no.	Plot no.
	02	788(P)

STATUTORY CLEARANCES

1	LOI/Lease docs	:	The LOI has been issued by District Mining Office, Gumla vide letter no. 1163/M , dated 27-11-2021.
2	CO	:	The CO, Chainpur vide letter no. 82, dated 01.02.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Gumla vide memo no. 15/M, dated 07.01.2022 certified that the no other lease mine exists within 500 m radius from proposed project and total area is less than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide letter no. 1126, 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	:	DFO, Gumla Forest Division vide letter no. 2405 dated 26.12.2020 certified that the distance of reserved / protected forest is more than 250 m from the project site.
6	DSR	:	The DC-cum-District Magistrate, Gumla vide letter no 1216/M dated 18/12/2021 has informed that this project is part of District Survey Report (DSR) of Gumla district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Conducted on 18-01-2021 and NOC was forwarded by CO, Chainpur letter no. 216, dated 18.03.2021
8	Mine Plan Approval	:	DMO, Gumla vide letter no. 1197/M dated 13.12.2021

Working Details

1	Mining Method	:	Opencast Semi - Mechanized Mining method	
2	Quarry Area	:	5 years–0.882 ha	Life of Mine – 0.882 ha
3	Waste Generation	:	5 years–2250.00 cu.m	
4	Stripping Ratio	:	1: 0.03	
5	Working Days	:	300	
6	Benches: size & No	:	6m x 6m	
7	Elevation of Mine	:	738 AMSL to 740 AMSL	
8	Ground Level Elevation	:	715 AMSL	
9	Ultimate Working Depth	:	710 AMSL (5mbgl)	
10	Water Table	:	700 AMSL (15mbgl)	

11	Topography of Mine	:	Area represents a Flat topography
12	Explosive Requirement	:	Class – III (special gelatin)& Class –VI explosive (detonator, electric detonator) is used
13	Diesel/Fuel requirement	:	10 liter/day

Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1st	139725.00	51750.00	1950.00	739mRL - 734mRL
2nd	140625.00	52083.33	300.00	740 mRL - 728 mRL
3rd	141142.50	52275.00	-	734mRL - 722mRL
4th	141122.25	52267.50	-	728 mRL - 716 mRL
5th	137700.00	51000.00	-	722mRL - 710mRL
Total	**700314.75**	**259375.83**	**2250.00**	

Land Use

Pattern of Utilization	Existing (Ha)	Plan period (Ha)	Conceptual stage (Ha)
Quarry	Nil	0.882	0.882 (entire area will be converted into water reservoir)
Road	0.006	0.0	0.0
Safety Zone Plantation	Nil	0.328	0.328
Total	**0.006**	1.210	1.210
Unused Area	**1.204**	0.0	0.0
Total leasehold area	**1.21**	**1.21**	**1.21**

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees

1	Safety Zone	:	0.328 ha	820
2	Haul /Approach Road	:	0.20 km	200

- 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

- Pit layout has been shown in development plan & section and there is 2250.00 cum waste generated during this Mining Plan period, so there is no requirement of waste dumping Plan for this mining plan but it will be used for village road and approach road maintenance.

Water Quality Management

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

Air Quality Management

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

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

Undertaking submitted affirming:

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Sugasarwa Stone Deposit of Smt. Deepa Devi, Village : Sugasarwa, Thana : Chainpur, Dist. : Gumla, Jharkhand (1.21 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

4. **Thambh Stone Deposit of M/s Panchshool Minerals, Village : Thambh, Thana : Chandwara, Dist. : Koderma, Jharkhand (0.692 Ha).**

(Proposal No. : SIA/JH/ MIN/ 268059 /2022).

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

EC Application for: **Proposed Capacity- 7777.77 cu.m/annum or 21000 TPA**

Name of the consultant : P and M Solution, Noida.

This is a new project which has been taken for appraisal on 12.05.2022.

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Thambh Stone Deposit	
2	Lessee:	:	M/s Panchshool Minerals. Partners - 1. Sh. Ramchandra Mehta, S/o Sh. Chotelal Mehta At - Bigha, P.O. - Phulwaria, P.S.- Nawalsahi, District- Koderma, Jharkhand 2. Sh. Uday Kumar, S/o Late Sh. Dhani Singh, At- Eknar, P.O. – Dhanwa, P.S.- Hiswa, District- Nawada, Bihar	
3	Lease Address	:	Village – Thambh, Thana-Chandwara, District – Koderma, State :- Jharkhand.	
4	Lease Area	:	0.692 ha	Acres- 1.71 Acre
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 25 Lakhs	
7	EMP Budget	:	Capital: 5.29 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.50 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.: 72,540.00 cum	Tonnes: 1,95,858 tons
11	Mine Life	:	9.46 or 9.50 years	
12	Man power	:	16	
13	Water Requirement	:	10.0 KLD (Drinking: 0.16 KLD, Dust Suppression: 6.50 KLD, Plantation: 3.30 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	-	
16	Crusher	:	No	
17	Nearest Water Body	:	Margoja Nadi, Approx. 3.0 km towards WNW direction of mine site. Tilaiya Reservoir, Approx. 2.0 km towards SW direction of mine site.	
18	Nearest Habitation	:	Thambh, 0.70 km	
19	Nearest Rail Station	:	Urwan Railway station, approx. 6.50 km towards SE direction.	
20	Nearest Air Port	:	Gaya Airport, approx. 62.0 km towards NW direction.	
21	Nearest Forest	:	Protected Forest near Nawada Village at approx. 1.5 km towards NNW direction of mine site.	
22	Road & Highways	:	NH-20, Approx. 5.0 km. in SSE direction. NH-19, Approx. 7.5 km in SW direction.	

Co-Ordinates

1	Latitude		From 24°23'10.30"N	To 24°23'13.60"N

2	Longitude		From 85°24'50.06"E	To 85°24'56.76"E

Land Details

Khata No.	Plot No.
42	4612/5271
43	4612/5273
102	4612/5274
109	4612/5272

Statutory Clearances :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Koderma vide memo no. 481, dated 12.03.2022.
2	CO	:	The CO, Chandwara, Koderma vide letter no. 651, dated 16.09.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Koderma vide memo no. 614, dated 29.03.2022 certified that 02 other lease area (1.57 acre & 6.95 acre) exists within 500 m radius from proposed project site and total area is 10.23 acre.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1212 , dated 26.07.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Koderma Forest Division vide letter no. 2949, dated 22.09.2021 certified that the distance of reserved / protected forest is 260 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Koderma vide letter no. 640/M, dated 01.04.2022 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 16.10.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Memo No. G/2022-23-03 dated 04.04.2022

Working Details

1	Mining Method	:	Opencast mechanized mining method	
2	Quarry Area	:	5 years– 0.369 ha	Life of Mine – 0.369 ha

3	Waste Generation	:	5 years– 3953.00 cu.m	
4	Stripping Ratio	:	1: 0.4	
5	Working Days	:	300	
6	Benches: size & No	:	6 m x 6 m	
7	Elevation of Mine	:	379 AMSL to 380 AMSL	
8	Ground Level Elevation	:	379 AMSL	
9	Ultimate Working Depth	:	370 AMSL (9 mbgl)	
10	Water Table	:	350 AMSL (29 mbgl)	
11	Topography of Mine	:	Area represents a flat terrain	
12	Explosive Requirement	:	Class – III (special gelatin 80% strength) & Class –VI explosive (detonator/electric detonator and safety length) shall be used.	
13	Diesel/Fuel requirement	:	7 liter/day	

Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1st	19200	7111.11	788	380 mRL – 374 mRL
2nd	20100	7444.44	789	380 mRL – 374 mRL
3rd	20700	7666.66	792	380 mRL – 374 mRL
4th	21000	7777.77	792	380 mRL – 374 mRL
5th	21000	7777.77	792	380 mRL – 374 mRL
Total	**102000**	**37,777.75**	**3953**	

Land Use

Pattern of Utilization	Existing (Ha)	Plan period (Ha)	Conceptual stage (Ha)
Quarry	Nil	0.369	0.369 (entire area shall be left as water reservoir for rain water harvesting).
Road	0.006	0.003	0.003
Plantation	Nil	0.320	0.320
Total	**0.006**	**0.692**	**0.692**
Unused Area	0.686	0.000	0.000

Total applied area	0.692	0.692	0.692

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.320 ha	800
2	Haul /Approach Road	:	0.82 km	820

- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease bounda and on either side of approach road in two rows with the spacing of 3x3 m with suitable specie 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 3953 cum (intercalated waste) during the plan period. The generated waste shall be used in making and maintenance of haul road and village road, there is no requirement of waste dumping Plan for this mining plan period.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 11m 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 is required a permission should be taken from competent authority.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Thambh Stone Deposit of M/s Panchshool Minerals, Village : Thambh, Thana : Chandwara, Dist. : Koderma, Jharkhand (0.692 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

5. **Thambh Stone Deposit of M/s Ganpati Minerals, Village : Thambh, Thana : Chandwara, Dist. : Koderma, Jharkhand (0.372 Ha).**

(Proposal No. : SIA/JH/ MIN/ 268157 /2022).

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

EC Application for: **Proposed Capacity- 4444.44 cu.m/annum or 12000 TPA**

Name of the consultant : P and M Solution, Noida.

This is a new project which has been taken for appraisal on 12.05.2022.

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Thambh Stone Deposit	
2	Lessee:	:	M/s Ganpati Minerals Partners - 1. Sh. Ramchandra Mehta S/o Sh. Chotelal Mehta At - Bigha, P.O. - Phulwaria, P.S.- Nawalsahi, District- Koderma, Jharkhand 2. Sh. Captain Anand S/o Late Banwari Lal, At - Village & P.O. – Jhumritilaiya, District- Koderma, Jharkhand 3. Smt. Aparna Devi, W/o Sh. Mahesh Rai, At - Village - Dhothakola, Thana-Domchanch, District-Koderma, Jharkhand	
3	Lease Address	:	Village – Thambh, Thana-Chandwara, District – Koderma, State :- Jharkhand.	
4	Lease Area	:	0.372 ha	Acres- 0.92 Acre
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 20 Lakhs	
7	EMP Budget	:	Capital: 2.21 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.40 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.m.: 43,800.00 cum	Tonnes: 1,18,260 tons
11	Mine Life	:	9.93 or 10 years	
12	Man power	:	16	
13	Water Requirement	:	4.50 KLD (Drinking: 0.16 KLD, Dust Suppression: 2.60 KLD, Plantation: 1.60 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	-	
16	Crusher	:	No	
17	Nearest Water Body	:	Margoja Nadi, Approx. 2.5 km towards WNW direction of mine site. Tilaiya Reservoir, Approx. 3.50 km towards SSW direction of mine	

			site.
18	Nearest Habitation	:	Thambh, 0.70 km
19	Nearest Rail Station	:	Urwan Railway station, approx. 7.50 km towards SE direction.
20	Nearest Air Port	:	Gaya Airport, approx. 61.0 km towards NW direction.
21	Nearest Forest	:	Protected Forest near Nawada Village at approx. 0.4 km towards NNW direction of mine site.
22	Road & Highways	:	NH-20, Approx. 7.0 km. in E direction. NH-19, Approx. 9.0 km in SSW direction.

Co-Ordinates

1	Latitude		From 24°24'10.12" N	To 24°24'13.62" N
2	Longitude		From 85°24'56.39" E	To 85°24'59.30" E

Land Details

Khata No.	Plot No.
19	76
59	78
61	77
74	80, 81
88	75
121	79

Statutory Clearances :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Koderma vide memo no. 276, dated 24.02.2022.
2	CO	:	The CO, Chandwara, Koderma vide letter no. 652, dated 16.09.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DMO	:	DMO, Koderma vide memo no. 245, dated 19.02.2022 certified that 01 other lease area (1.00 acre) exists within 500 m radius from proposed project site and total area is 1.92 acre.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1211 , dated 26.07.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Koderma Forest Division vide letter no. 3298, dated 11.12.2021 certified that the distance of reserved / protected

			forest is 255 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Koderma vide letter no. 640/M, dated 01.04.2022 has informed that this project is part of District Survey Report (DSR) of Koderma district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 16.10.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Memo No. G/2022-23-04 dated 04.04.2022

Working Details

1	Mining Method	:	Opencast mechanized mining method	
2	Quarry Area	:	5 years– 0.053 ha	Life of Mine – 0.153 ha
3	Waste Generation	:	5 years– 900.00 cu.m	
4	Stripping Ratio	:	1: 0.4	
5	Working Days	:	300	
6	Benches: size & No	:	3 m x 3 m	
7	Elevation of Mine	:	390 AMSL to 391 AMSL	
8	Ground Level Elevation	:	390 AMSL	
9	Ultimate Working Depth	:	381 AMSL (9 mbgl)	
10	Water Table	:	360 AMSL (30 mbgl)	
11	Topography of Mine	:	Area represents a flat terrain	
12	Explosive Requirement	:	Class – III (special gelatin 80% strength) & Class –VI explosive (detonator/electric detonator and safety length) shall be used.	
13	Diesel/Fuel requirement	:	5 litre/day	

Production Details

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1st	11400	4222.22	300	390 mRL – 387 mRL
2nd	11700	4333.33	300	390 mRL – 387 mRL
3rd	12000	4444.44	300	390 mRL – 387 mRL
4th	12000	4444.44	-	390 mRL – 387 mRL

5th	12000	4444.44	-	390 mRL – 387 mRL
Total	**59,100**	**21888.87**	**900**	

Land Use

Pattern of Utilization	Existing (Ha)	Plan period (Ha)	Conceptual stage (Ha)
Quarry	Nil	0.053	0.153 (Entire area shall be left as water reservoir for rain water harvesting).
Road	0.006	0.003	0.003
Plantation	Nil	0.216	0.216
Total	**0.006**	**0.272**	**0.372**
Unused Area	0.366	0.100	0.000
Total applied area	**0.372**	**0.372**	**0.372**

ENVIRONMENT MANAGEMENT

Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.216 ha	540
2	Haul /Approach Road	:	0.25 km	250

- 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 900 cum (intercalated waste) during the plan period. The generated waste shall be used in making and maintenance of haul road and village road, so there is no requirement of waste dumping Plan for this mining plan period.

Water Quality Management

- Mining is planned to above the ground water table. In case any intersection is likely, mining activities will be stopped 11m 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 is required a permission should be taken from competent authority.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Thambh Stone Deposit of M/s Ganpati Minerals, Village : Thambh, Thana : Chandwara, Dist. : Koderma, Jharkhand (0.372 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

6. **Rohra Stone Deposit of Sri Amlan Kusum Sinha & Sri Chandan Kumar Tiwari, Village : Rohra, Thana : Taljhari, Dist. : Sahebganj (2.83 Ha).**

(Proposal No. : SIA/JH/MIN/270727/2022)

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 45,070 Cu.M. / year i.e. 1,35,210 Tonnes / year

Name of the consultant : P and M Solution, Noida.

This is a new project which has been taken for appraisal on 12.05.2022.

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Rohra Stone Deposit	
2	Applicant Address:	:	Sri Amlan Kusum Sinha At Village – Harindanga Bazar, P.O. + P.S. + Dist. – Pakur, State – Jharkhanad. & Sri Chandan Kumar Tiwari	
3	Lease Address	:	In Mouza – Rohra, Thana – Taljhari, Thana No. – 24, District – Sahebganj, Jharkhand.	
4	Applied Area	:	Ha: 2.83 Hectares	Acres: 7.00 Acres
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	66 Lakhs	
7	EMP Budget	:	Capital: 19.01 Lakhs	Recurring: 3.51 Lakh / year
8	CSR / CER Budget	:	Rs. 1.32 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 5,00,858 Cu. M.	Tonnes: 15,02,574 Tonnes
11	Mine Life	:	11 years	
12	Man power	:	36	
13	Water Requirement	:	13.53 KLD	

			Dust Suppression: 6 KLD, Drinking: 1.44 KLD, , Plantation: 6.09 KLD
14	Water Source	:	From Gumani River by tankers
15	DG Set / power	:	60 KVA
16	Crusher	:	No
17	Nearest Water Body	:	Gumani River is flowing approx. 1.10 Km aerial distance away in South direction
18	Nearest Habitation	:	Rohra village is approx. 0.62 Km aerial distance away in East direction.
19	Nearest Rail Station	:	Bakudi Railway Station is approx. 11.82 Km aerial distance away in North-East direction. Barharwa Railway Station is approx. 12.62 Km aerial distance away in South-East direction.
20	Nearest Air Port	:	Netaji Subhash Chandra Bose International Airport, Kolkata, West Bengal is approx. 262.58 Km aerial distance away in South - East direction.
21	Nearest Forest	:	Nearest Forest is more than 250m away from the proposed project.
22	Road & Highways	:	Approach Road: Dumaria – Rohra - Asanbani Road is approx. 290m away in South - East direction. Highway: SH-18 is approx. 6.06 Km away in South-West direction.

Co-Ordinates :

1	Latitude		From N24°54'39.67"	To N24°54'46.47"
2	Longitude		From E87°39'45.66"	To E87°39'52.49"

Land Details :

Khata No -	4
Plot Nos –	162 &163 (P)

Statutory Clearances :

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Sahebganj, vide letter no. 941/M dated 14.09.2021.
2	CO	:	The CO, Taljhari vide letter no. 156, dated 25.03.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan or Register II.
3	DMO	:	DMO, Sahebganj, vide memo no. 942/M, dated 14.09.2021 certified that no other lease exist within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh, vide letter no. 2068, dated 28.11.2021

			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, Sahebganj Forest Division vide letter no. 721, dated 09.03.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Sahebganj, vide letter no. 1154/M, dated 29.11.2021 has informed that this project is part of District Survey Report (DSR) of Sahebganj district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On dated 07.01.2021
8	Mine Plan Approval	:	Approved by the District Mining Officer, Sahebganj vide Letter No. 314/M dated 08.04.2022.

Working Details

1	Mining Method	:	Opencast Mechanized Mining.	
2	Quarry Area	:	5 years – 1.85 Ha	Life of Mine – 2.21 Ha
3	Waste Generation	:	5 years– 22496 Cu.M (Gritty Soil)	Life of Mine – 36390 Cu.M (Gritty Soil)
4	Stripping Ratio	:	1 : 0.1	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Size: 6m x 6m, No. - 9	
7	Elevation of Mine	:	Highest RL 102m AMSL, Lowest RL 76m AMSL	
8	Ground Level Elevation		50m AMSL	
9	Ultimate Working Depth	:	46m AMSL	
10	Water Table	:	34m AMSL	
11	Topography of Mine	:	Sloppy Hilly 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	45,070	1,35,210	8,338	100m – 82m
2nd	45,000	1,35,000	7,216	100m – 82m
3rd	44,994	1,34,982	3,918	94m – 82m
4th	45,015	1,35,045	3,024	88m – 76m
5th	45,000	1,35,000	-	82m – 76m

Total	2,25,079	6,75,237	22,496	

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	1.850 (including backfilling 0.09 Ha)	2.21 [including backfilling (plan period – 0.09 + conceptual period – 0.210) = 0.30 Ha]	2.21	0.09 Ha Backfilled + 1.61 Ha Water Body + 0.51 Ha Dead bench Plantation
2	Green Belt Within Safety Barrier	Nil	0.490	0.490	0.490	Plantation
3	Road	0.009	0.005	Nil	Nil	-
4	Dump	Nil	0.060 (4th year)	Nil	-	-
5	Parapet Wall	Nil	0.002	Nil	-	-
6	Garland Drain	Nil	0.004	Nil	-	-
7	Blocked Area Due To Forest Safety	0.130	0.130	0.130	0.130	Plantation
8	Unutilized	2.691	0.289	Nil	Nil	-
	TOTAL	**2.830**	**2.830**	**2.830**	**2.830**	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.49 Ha	1225 trees @ 2500 trees per Ha
2	Dead Bench Plantation	:	0.51 Ha	1275 trees @ 2500 trees per Ha
3	Haul /Approach Road	:	0.058 Ha i.e. Length 290 width 2m	194 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 36390 Cu.M. during the life of Mine.

  The area is covered with a layer of Gritty soil of about 1.5m in thickness. During quarry development in 1st & 2nd year huge amount of gritty soil will be removed and this soil will be temporarily dumped [1st year (L x W x H =63m x 31m x 5m) & 2nd year (L x W x H =77m x 21m x 5m)] at the eastern part of the applied area with suitable precautions like constructing parapet wall and garland drain & in 3rd year's removal gritty soil & existing dumped gritty soil will be backfill within the exhausted quarry & in 4th year's removal gritty soil will be temporarily dumped [4th year (L x W x H =28m x 25m x 5m) at the eastern part of the applied area with suitable precautions like constructing parapet wall and garland drain. In conceptual period's total removal gritty soil and in 4th year's removal gritty 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 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. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.

b. 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.

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 applied 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 Rohra Stone Deposit of Sri Amlan Kusum Sinha & Sri Chandan Kumar Tiwari, Village : Rohra, Thana : Taljhari, Dist. : Sahebganj (2.83 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

7. **Rohra Stone Deposit of Smt. Chathrin Hembrom, Village : Rohra, Thana : Taljhari, Thana no. : 24, Dist. : Sahebganj (2.14 Ha).**

(Proposal No. : SIA/JH/MIN/271488 /2022)

Project Category: B2 – Application for Environment Clearance

EC Application for: Stone: 22,394 Cu.M. / year i.e. 67,183 Tonnes / year

Name of the consultant : P and M Solution, Noida.

This is a new project which has been taken for appraisal on 12.05.2022.

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Rohra Stone Deposit	
2	Applicant Address:	:	Smt. Catherine Hembrom At Village - Bangalipara, P.O. + P.S. – Barharwa, District - Sahebganj, State – Jharkhanad.	
3	Lease Address	:	In Mouza – Rohra, Thana – Taljhari, Thana No. – 24, District – Sahebganj, Jharkhand	
4	Applied Area	:	Ha: 2.14 Hectares	Acres: 5.30 Acres
5	Type of Land	:	Non Forest – Rayati Land	
6	Project Cost	:	62 Lakhs	
7	EMP Budget	:	Capital: 22.03 Lakhs	Recurring: 3.84 Lakh / year
8	CSR / CER Budget	:	Rs. 1.24 Lakhs	
9	New or Expansion	:	New	
10	Mineable Reserves	:	Cu.M.: 2,23,944 Cu. M.	Tonnes: 6,71,832 Tonnes
11	Mine Life	:	10 years	
12	Man power	:	30	
13	Water Requirement	:	23.02 KLD Dust Suppression: 11 KLD, Drinking: 1.20 KLD, , Plantation: 10.82 KLD	
14	Water Source	:	From Gumani River by tankers	
15	DG Set / power	:	60 KVA	
16	Crusher	:	No	
17	Nearest Water Body	:	Gumani River is flowing approx. 1.22 Km aerial distance away in Southern direction.	
18	Nearest Habitation	:	Rohra village is approx. 0.98 Km aerial distance away in East direction.	
19	Nearest Rail Station	:	Bakudi Railway Station is approx. 12.14 Km aerial distance away in North-East direction. Barharwa Railway Station is approx. 12.87 Km aerial distance away in South-East direction.	
20	Nearest Air Port	:	Netaji Subhash Chandra Bose International Airport, kolkata, West Bengal is approx. 263.64 Km aerial distance away in South - East direction.	

21	Nearest Forest	:	Nearest Forest is more than 250m away from the proposed project.
22	Road & Highways	:	Approach Road: Dumaria – Rohra - Asanbani Road is approx. 420m away in South - East direction. Highway: SH-18 is approx. 5.87 Km away in South-West direction.

Co-Ordinates :

1	Latitude		From N24°54'39.82"	To N24°54'45.63"
2	Longitude		From E87°39'33.08"	To E87°39'41.07"

Land Details :

Jamabandi No -	4
Plot Nos –	163 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Office, Sahebganj vide letter no. 1097/M dated 13.11.2021.
2	CO	:	The CO, Taljhari vide letter no. 157, dated 25.03.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan or Register II.
3	DMO	:	DMO, Sahebganj vide letter no. 231/M, dated 14.03.2022 certified that one other lease (7.00 Acres) exist within 500 m radius from proposed project site & Total lease area is 12.30 Acres i.e. 4.98 Ha. which is less than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1155, dated 16.07.20[illegible] 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, Sahebganj Forest Division vide memo no. 1303, dated 20.07.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Sahebganj, vide letter no. 1273/M, dated 31.12.2021 has informed that this project is part of District Survey Report (DSR) of Sahebganj district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On dated 01.06.2021

8	Mine Plan Approval	:	Approved by the District Mining Officer, Sahebganj vide Letter No. 141 dated 17.02.2022

Working Details

1	Mining Method	:	Opencast Mechanized Mining.	
2	Quarry Area	:	5 years – 1.06 Ha	Life of Mine – 1.61 Ha
3	Waste Generation	:	5 years -14,627 Cu.M (Gritty Soil)	Life of Mine – 25,418 Cu.M (Gritty Soil)
4	Stripping Ratio	:	1 : 0.13	
5	Working Days	:	300 Days	
6	Benches: size & No	:	Size: 6m x 6m, No. - 10	
7	Elevation of Mine	:	Highest RL 220m AMSL, Lowest RL 160m AMSL	
8	Ground Level Elevation		50m AMSL	
9	Ultimate Working Depth	:	159m AMSL	
10	Water Table	:	34m AMSL	
11	Topography of Mine	:	Sloppy Hilly 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	22,394	67,183	7,000	219m – 201m
2nd	22,393	67,180	4,602	207m – 195m
3rd	22,394	67,183	2,100	201m – 195m
4th	22,393	67,180	275	195m – 189m
5th	22,394	67,183	650	195m – 183m
Total	**1,11,968**	**3,35,909**	**14,627**	

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	1.060	1.610 (including backfilling 0.033 Ha)	1.610	0.18 Ha Backfill + 1.43 Ha Dead bench Plantation
2	Green Belt Within Safety Barrier	Nil	0.530	0.530	0.530	Plantation
3	Road	0.008	0.020	Nil	Nil	-

4	Dump	Nil	0.274	Nil	-	-
5	Parapet Wall	Nil	0.011	Nil	-	-
6	Garland Drain	Nil	0.012	Nil	-	-
7	Unutilized	2.132	0.233	Nil	Nil	-
	TOTAL	**2.140**	**2.140**	**2.140**	**2.140**	

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.53 Ha	1325 trees @ 2500 trees per Ha
2	Dead Bench Plantation	:	1.43 Ha	3575 trees @ 2500 trees per Ha
3	Haul /Approach Road	:	0.136 Ha i.e. Length 680 width 2m	456 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 25,418 Cu.M. during the life of Mine.

  The area is covered with a layer of Gritty soil of about 1.5m in thickness. During quarry development in 1st , 2nd & 3rd year huge amount of gritty soil will be removed and this soil will be temporarily tracing dumped [1st year {L x W x (H) =57m x 24m x (5m, 5m, 5m), area 0.14 Ha}, 2nd year (L x W x H =23m x 32m x 5m), area 0.092 Ha & 3rd year (L x W x H =39m x 32m x 5m), area 0.042 Ha] at the north-eastern part of the area with suitable precautions like parapet wall and garland drain & 4th & 5th year little amount of gritty soil will be removed which will be use in haul road dressing & plantation. In conceptual period total removal 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 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. Ground water will be used only for domestic purpose and not be used for any mining activities or any other use.

b. 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.

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 applied 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 Rohra Stone Deposit of Smt. Chathrin Hembrom, Villa : Rohra, Thana : Taljhari, Thana no. : 24, Dist. : Sahebganj (2.14 Ha) is recommended for grant o EC. The various conditions for grant of EC is enclosed as Annexure – I.

****

8. **Rajbandh Stone Deposit of M/s Jial Das & Company, Village : Rajbandh, Thana : Pakur, Dist. : Pakur, Jharkhand (1.554 Ha).**

(Proposal No. : SIA/JH/MIN/271577 /2022).

The PA's has requested vide letter dated 12.05.2022 to withdrawal of project as DMO, Pakur has issued a revised contiguous report vide memo no. 868 / M, dated 10.05.2022 which shows that total leases / LoI within 500 m is 29.81 Acre or 12.06 Ha. As this project is applied under EC category whose appraisal has not been done yet by SEAC. So, the scrutiny fees of this project should not be charged for revised proposal which has to be submitted by PA's later at SEIAA.

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

****

9. **Karaundajore Stone Mine of Sri Hemant Kumar Ohdar, Village : Karaundajore, Thana : Bharno, Dist. : Gumla, Jharkhand (2.83 Ha).**

(Proposal No. : SIA/JH/MIN/ 270427/2022)

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

EC Application for: **Proposed Capacity- 147036.0 TPA or 54457.77 cum/annum**

Existing capacity- 75,665 TPA

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

This is a expansion project which has been taken for appraisal on 12.05.2022.

Project and Location Details :

Sl	Parameter		Details	
1	Project Name	:	Karaundajore Stone Mine (EC expansion)	
2	Lessee:	:	Sri. Hemant Kumar Ohdar S/o Sri. Basant Kumar Ohdar, Village – Karaundajore, P.S.- Bharno, District–Gumla, State – Jharkhand	
3	Lease Address	:	Village – Karaundajore, P.S.- Bharno, District – Gumla, State :- Jharkhand.	
4	Lease Area	:	2.83 ha	Acres- 7.0 Acre
5	Type of Land	:	Non Forest – Raiyati Land	
6	Project Cost	:	Rs. 35 Lakhs	
7	EMP Budget	:	Capital: 6.52 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	:	Rs. 0.70 Lakhs	
9	New or Expansion	:	Expansion	
10	Mineable Reserves	:	Cu.m.: 6,90,300 cum	Tonnes: 18,63,810 tons
11	Mine Life	:	12.67 or 13.0 years	
12	Man power	:	33	
13	Water Requirement	:	12.35 KLD (Drinking: 0.33 KLD, Dust Suppression: 6.50 KLD, Plantation: 5.52 KLD)	
14	Water Source	:	From Nearby villages by tankers	
15	DG Set / power	:	-	
16	Crusher	:	No crusher	
17	Nearest Water Body	:	South Koel River, Approx. 11.20 km towards SW direction.	
18	Nearest Habitation	:	Karaundajore, 1.0 km	
19	Nearest Rail Station	:	Bakaspur Railway station, approx. 19.0 km toward SE direction.	
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi at approx. 56.30 km towards NE direction.	
21	Nearest Forest	:	Paila Pahar Protected Forest at approx. 4.0 km towards E direction. Protected Forest near Bartoli village at approx. 2.50 km towards N direction.	
22	Road & Highways	:	NH-43,Approx. 8.0 km. in NNW direction.	

Co-Ordinates

1	Latitude		From 23°06'18.70"N	To 23°06'27.42"N
2	Longitude		From 84°49'22.79"E	To 84°49'32.15"E

Land Details

Karaundajore	Khata No.	Plot No.
	167	2147 (P)

Statutory Clearances

1	LOI/Lease docs	:	The Lease deed has been issued by District Mining Office, Gumla dated 15.03.2016.
2	CO	:	The CO, Bharno certificate dated 20.10.2014 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan.
3	DMO	:	DMO, Gumla vide letter no. 134/M dated 29.01.2015 certified that total lease within 500 m radius from proposed project is less than 5 Ha.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide letter no. 369, daed 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	:	DFO, Gumla Forest Division vide memo no. 2503 dated 16.12.2014 certified that the distance of forest from the project site is 03 KM.
6	DSR	:	Project's name is mentioned in page no 44 of District Survey report (DSR) Gumla.
7	Gram Sabha	:	Conducted on 07-10-2014 & NOC has been forwarded by BDC, Bharno (Gumla) vide letter no. 654(ii), dated 10.10.2014.
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide letter No. 85/G dated 15.03.2022
9	EC		This project had already been granted EC in favor of Sri. Hemant Kumar Ohdar by SEIAA vide letter no. EC/SEIAA/2014-15/707/ 2015/1147 dated on 27-07-2015 for the proposed capacity of 75,665 TPA

Working Details

1	Mining Method	:	Opencast Mechanized Mining method	
2	Quarry Area	:	5 years– 0.866 h	Life of Mine – 2.007 ha
3	Waste Generation	:	5 years– Nil	
4	Stripping Ratio	:	1: 0.00	
5	Working Days	:	300	
6	Benches: size & No	:	6m x 6 m	
7	Elevation of Mine	:	648 AMSL to 668 AMSL	
8	Ground Level Elevation	:	635 AMSL	
9	Ultimate Working Depth	:	631 AMSL (4 mbgl)	
10	Water Table	:	620 AMSL (15 mbgl)	
11	Topography of Mine	:	Area represents a gently undulating terrain.	
12	Explosive Requirement	:	Class-III (Special Gelatin 80% strength) and class-VI explosive (detonator/ Electric detonator, delay and safety length) shall be used.	
13	Diesel/Fuel requirement	:	10 litre/day	

Production Details

Year	Production of stone (cum)	Production of stone (Tonnes)	Waste Generation (CuM)	Bench RL in Meters
2022-23	53280.00	143856.00	Nil	667 mRL – 661 mRL
2023-24	53730.00	145071.00	Nil	661 mRL – 655 mRL
2024-25	54457.77	147036.00	Nil	667 mRL – 649 mRL
2024 – till 14.03.2026	54457.77	147036.00	Nil	655 mRL – 649 mRL
Total	**215925.54**	**582,999.00**		

Land Use

Pattern of Utilization	Existing (Ha)	Plan period	Conceptual Plan
Quarry	0.290	0.866 ha (0.003 ha. area comes under road)	2.007 ha (entire area shall be converted as water reservoir for rain water harvesting)
Road	0.048	0.045	0.009
Waste Dump	Nil	Nil	Nil
Safety Zone Plantation	0.563	0.817	0.817
Total	**0.901**	**1.728**	**2.830**

Unused Area	1.929	1.102	0.000
Lease Hold Area	2.83	2.83	2.83

ENVIRONMENT MANAGEMENT

Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.817 ha	2360
2	Haul /Approach Road	:	0.40 km	400

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

Solid Waste Management

- There is no waste generated during this Mining scheme period, so there is no requirement of waste dumping plan for this mining scheme.

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 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 Karaundajore Stone Mine of Sri Hemant Kumar Ohdar, Village : Karaundajore, Thana : Bharno, Dist. : Gumla, Jharkhand (2.83 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I alongwith

following project specific condition as the Secretary, SEAC is also having charge of DFO, Gumla who observed that some wildlife (Sloth Bear) related incident happens in the impact area :

i. Water management for local habitant of wildlife to be ensured.

****

10. Proposed Rungta Enclave Residential Colony of M/s Rungta Mines Limited, Mouza : Chaibasa (European Quarters, Policeline), Tehsil : Chaibasa, Dist. : West Singhbhum, Jharkhand.

(Proposal No. : SIA/JH/MIS /249708 /2022).

Name of the consultant : P and M Solution, Noida

This is a new project which has been taken for appraisal on 12.05.2022.

M/s Rungta Mines Limited has planned to develop a "Proposed Residential cum Commerc Building" located at Khata no.11 & Plot no. 2796, 2797 (Old) & New Plot No. 198 a to j, 262 a to & 199 a to i, Mouza- Chaibasa, District- West Singhbhum, State-Jharkhand. Total land required for this proposed project is 4.18 Acre /16917.10 SQM. Total Plot Area of the project is 16917.10 m2. Built-up area of the project after development will be 42026.08 Sq.m.

Salient Features of the Project :

Parameters	Description
Plot Area	16917.10 sq.m.(or 4.18 acres)
Khata No.	Khata no.11 & Plot no. 2796, 2797 & New Plot No. 198 a to j, 262 a to d &199 a to i,
Project Cost	INR 69.85 Crores
Built-up Area	42026.08 m^2
Green Area	2689.68 sq m (@15.90 % of plot area)
Population	1532
Water Requirement	197 KLD
Fresh Water Requirement	128 KLD
Wastewater Generation	159 KLD
STP Capacity	200 KLD
Total Municipal Waste	720 kg/day
Power Requirement	1617 KVA (Jharkhand State Electricity board)
DG Sets	1 no. of DG set of Total 250 KVA

RWH Pits	07 no.
Parking	532
Connecting road	Project site is well connected with road.
National Highway	SH-20 (0.17 km, East)
Nearest Railway Station	Chaibasa Railway railway station (1.27 km, East)
Airport	Sonari Airport, (46.29 km, NE)
Nearest Hospitals	Sadar Hospita Chiabasa (0.56 km, SE)
Nearest Water Bodies	Dhobi Talab (0.15 km NW)

Co-Ordinates

1	Latitude		22°33'09.53"N	22°33'14.81"N
2	Longitude		85°47'59.24"E	85°48'4.16"E

Area Summary :

Sl. no.	DESCRIPTION	AREA (SQ M)
A.	**Plot Area**	**16917.10**
B.	Proposed Ground Coverage (@30.10% of plot area)	5091.79
C.	FAR area	32013.99
D.	**Non-FAR area**	10012.09
E.	Built-up Area (C+D)	**42026.08**
F.	**F.A.R**	**1.89**
G.	Green Area (@ 15.90% of the plot area)	2689.68
H.	Road Area(@ 36.43% of the plot area)	6162.58
I.	Paved area (@6.29 % of the plot area)	1064.03
J.	Open area (@2.7% of the plot area)	456.74
K.	Height	30 m
L.	No. of Dwelling Units	296

Statutory Clearances :

1	DFO Forest Distance	:	DFO, Chaibasa Forest Division vide letter no. 389, dated 04.03.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO Wild Life	:	The applicant has made application to Wildlife Warden or DFO, Dalma to issue a certificate whether this project comes under ESZ or not. The Wildlife Warden or DFO, Dalma made comment that this

			project does not related to Dalma Wildlife division.
3	CO certificate	:	The CO, Sadar Chaibasa vide letter no. 39, dated 10.01.2022 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 a NOC vide letter no. JAMS/EAST /B/ 022522/ 657118, dated 04.05.2022.
5	Fire Department	:	A Certificate from Fire Department, Ranchi, Govt. of Jharkhand vi.. memo no. 800/tech/2022, dated 15.02.2022.

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	1332	135	180	126	54
Staff	67	45	3	0.9	2.1
Visitors	133	15	2	1.4	0.6
Total Domestic Water Demand			**185**	**128**	**57**
Landscape	2689.68Sq.m	3ltr/sqm	8	-	8
Fire			2	-	2

Category	Total Quantity (KLD)
Domestic water Req. (Fresh)	128
Flushing water Req.	57
Sewage generation (@80% of the fresh + 100% flushing water requirement)	**159**
Capacity of STP	**200**
Recovered water from STP (90% of Waste water)	143
1. Flushing	57
2. Landscaping	8
3. Fire Fighting	2
4. DG cooling	2
5. Construction in nearby areas/road washing e.t.c	74

Solid Waste Requirement

S. No	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation	Recyclable (kg/day)	Non Recyclable (kg/day)

				(kg/day)		
1.	Residents	1332	0.5	666	533	133
2.	Staff	67	0.25	17	14	3
3.	Visitors	134	0.15	20	16	4
4.	Landscape waste	0.67 acres	0.2 kg/acres	1	1	-
5.	STP sludge	200KLD	--	16	13	3
Total Waste Generated				**720**	**577**	**143**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 2689.68 sq m sq m (@15.90 % 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. 200 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. 159 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. Details regarding green cover area to be provided.
ii. Details regarding energy conservation calculation to be provided.
iii. Buffer map of 10 km on toposheet to be provided.
iv. Source of water for construction and operation phase to be provided.
v. Details of tree inventory within core zone to be provided.
vi. Details regarding treated water discharged in seware with dimension of design to be provided.
vii. CER budget to be provided.

The PAs have submitted the above required documents.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Rungta Enclave Residential Colony of M/s Rungta Mines Limited, Mouza :

Chaibasa (European Quarters, Policeline), Tehsil : Chaibasa, Dist. : West Singhbhum, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – III alongwith the following specific conditions :

I. Environment management system to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.

II. Rooftop rain water harvesting to ensure 100% Recharge/Use of rainfall raining within premises. Storm water runoff to be collected in collection chamber /settling pond and maximise its use

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

IV. PAs to ensure ZERO DISCHARGE for its process discharges.

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

VI. Green belt and Green cover to be implemented as provided in layout plan.

****

11. Proposed Common Bio-Medical Waste Treatment and Disposal Facility of M/s Prakriti Waste Management, Village : Ambatari, Thana : Rikhiya, Tehsil : Mohanpur, Dist. : Deoghar, Jharkhand.

(Proposal No. : SIA/JH/MIS /73348 /2022).

This is a new project which has been taken for appraisal on 12.05.2022 and PA's has presented the project before the Committee.

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 7 (d) (a) (Bio-Medical Waste Treatment Facilities) of the Schedule-Gazette Notification dated 17th April 2015 of MoEF&CC, Govt. of India.

The total plot area of the unit is 4087.74 sq.m. The land for the proposed project is taken on lease in name of M/s Prakriti for the purpose of establishment of a Common Biomedical Waste Treatment Facility only. The total project cost for the proposed project will be Rs. 98 lacs.

Salient Features of the project :

S. No.	Items	Details			
1.	Project name	Proposed Common Bio-Medical Waste Treatment Facility at Deoghar.			
2.	Project Proponent	M/s Prakriti Waste Management			
3.	Category	B			
4.	Project address				
	Khata no. & Plot no.	Khata no. 03, Plot no. 65 (P).			
	Village	Ambatari			
	Tehsil	Mohanpur			
	District	Deoghar			
	State	Jharkhand			
	Coordinates	Pt. 1	Latitude: 24°35'46.02"N Longitude: 86°45'25.34"E	Pt. 2	Latitude: 24°35'43.31"N Longitude: 86°45'24.91"E
		Pt. 3	Latitude: 24°35'42.80"N Longitude: 86°45'25.99"E	Pt. 4	Latitude: 24°35'45.70"N Longitude: 86°45'27.28"E
		Pt.5	Latitude: 24°35'45.79"N Longitude: 86°45'25.75"E		
5.	Nearest CBWTF	At Dhanbad ~94.53 km from the proposed site			
6.	Total Plot area	4087.74 sq.m. (1.01 acre)			
7.	Waste to be handled	7500 kg/day			
8.	No. of shifts	3			
9.	No. and types of vehicles for transportation/ collection of waste	10 nos. Diesel vehicles			
10.	Trips to be made per day	10 trips/day			
	Environmental sensitivity				
11.	Nearest Town/City	Deoghar	10.57 km	S	
12.	Nearest railway station	Deoghar Junction	9.89 km	SW	
13.	Nearest highway	NH 133	10.67 km	S	
		SH 22	8.84 km	W	
14.	Nearest airport	Sidho Kanhu airport	45.46 km	SW	

15.	Nearest river/ waterbody	Seasonal River	0.36 km	S
		Mayurakashi River	11.59 km	SW
		Nala		
		canal		
		Densely mixed Forest	4.0 km	NE
		Fairly mixed Forest	4.13	NW

Treatment capacity of the proposed CBWTF

S. No.	Particular	No.	Capacity
1	Incinerator	**1**	300 kg/hr
2	Autoclave	**1**	100 lt/batch Batch (60 min) i.e 100 kg/hr
3	Shredder	**1**	50 kg/hr
4	ETP	**1**	5 KLD
5	Sharp pit	**1**	-
6	Ash pit	**1**	-

Raw Material

The project involves treatment of bio medical waste and the raw material for the process is collected from various health care establishments as defined and specified under Bio Medical Waste Management Rules, 2016. Details and the quantity of raw material are provided belowin table below:

Raw material requirement

S. No.	Particular
1	Biomedical waste
2	Colour coded Trollies
3	Non Chlorinated Colour coded bags
4	Diesel
5	Spares

6	**Chemicals:** • Sodium Hypochlorite • Caustic soda • Lime • Alum • Disinfectant
7	Personal Protection Equipment (PPE)

Water Requirement and Source:

The one time water demand for the proposed CBWTF will be 10.1 KLD, wherein the daily fresh water requirement will be 6.5 KLD and the recycled water demand will be 3.6 KLD. Water will be required for industrial purpose i.e. for venturi scrubber and autoclave, domestic usage, floorand vehicle washing, and green belt.

The detailed water demand calculation and break up is elaborated under:

Water demand calculation :

S. No.	Particulars	Details	Basis	Water demand (KLD)	Waste Water Generation (KLD)	Management
1	Domestic	32 persons	@ 45 lpcd	1.5	1.35	Septic tank followed by Soak Pit
2	Industrial	Venturi scrubber & autoclave effluent		6	3	ETP
3	Others	Floor & vehicle washing		1.2	1	
4	Green Belt	1340.06 Sq.m	@1 lt/sq.m	1.34	Nil	Nil
				10.1	**5.35**	

Power Requirement and Source :

The power demand for the proposed CBWTF will be 65 kVA that will be sourced through DG set.

Solid Waste Management

The wastes will be generated from the CBWTF including hazardous waste during operation phase & their treatment/disposal methods are given below:

Waste generation & disposal :

S. No	Treated Waste Category	Treatment and disposal options
1	Plastic waste after disinfection and shredding	Plastic waste will not be sent to land fill sites. Treated plastic waste is sent to registered orauthorized recyclers.
2	Disinfected sharps (including needles and syringes)	Autoclaving followed by shredding & encapsulation in metal container or cement concrete and sent for final disposal to
		designated concrete waste sharp pit.
3	Incineration ash	Incineration ash (200 Kgs per day) will be temporarily stored in ash pit at site & then final disposal through authorized treatment, storage and disposal facility (TSDF).
4	Other treated solid wastes like glass waste	Autoclaving and then sent for recycling
5	Oil and Grease	Incineration
6	ETP Sludge	Incineration after drying in sludge drying beds or removal of moisture content using filter press.
7	Hazardous waste	Disposal through TSDF located nearby following the manifest as per hazardous and other waste (Management and Transboundary Movement) Rules.

STATUTORY CLEARANCE

1	DFO Wildlife	:	The DFO, Wildlife Hazaribagh Vide Letter No. 1509, Dated 09/09/2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
2	CO certificate	:	The CO, Mohanpur vide Letter No. 489, Dated 28/05/2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S Khatiyan.
3	DFO Territorial	:	The DFO, Deoghar Forest Division vide Letter No. 145, Dated 01/02/2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
4	Civil Surgeon	:	The Civil Surgeon, Deoghar vide letter no. 2024, dated 24.12.2021

	certificate		has certified that there is no CBWTF plant exist within 75 km.

During the presentation the following documents were sought :

i. Drainage map showing contour level to be provided.
ii. Details of power requirement to be provided.
iii. Undertaking regarding ground water usage from competent authority to be provided.
iv. Revise layout plan showing locations of DG set, green area, vehicle entry point and RWH pit to be provided.
v. Treatment capacity of CBWTF to be provided.
vi. Revise project layout diagram to be provided.

The PAs have submitted the above required documents.

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 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure VI.

****

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

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

Originaly the project had applied under EC category. In meantime PA's vide letter dated 21.02.2022 has informed that this project comes under violation category. The fresh proposal for obtaining ToR will be submitted to SEIAA. PA's has intimated that Rian Enviro Pvt. Ltd. will be the consultant.

The Committee is of the view that there is no more relevence of this project. Hence, recommended for delisting of project to SEIAA with intimation that the appraisal of this project has not been done by SEAC. Hence, the Committee is requesting SEIAA that the scrutiny fee deposited for EC should be refunded to the PA's and accordingly, this project proposal is recommended for delisting to SEIAA.

****

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

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

This proposal was pending at Project Authority (PA's) level since 29th - 30th August, 2019 (77th MOM of SEAC) for submission of requisite documents i.e.

i. Status of LoI

ii. DFO (Wildlife) certificate whether project is located within notified ESZ or not

iii. CO certificate regarding class of land (Jungle Jhari or not)

PA's are directed to submit the above mentioned documents within 02 months. Else the proposal will be recommended for delisting.

****

14. **Proposed production capacity of the M.S. billets is ~500 MT/day (1,50,000 TPA) ~500 MT/day (1,50,000 TPA)rolling mill of (using CCM) ~500 TPD. & Slag crushing unit -~10 TPH of M/s. Ramkripal Steels Pvt. Ltd. at Village : Barwadih, Tehsil : Koderma, Dist. : Koderma, Jharkhand.**

(Proposal No. : SIA/JH/IND/76808/2022)

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

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

S. No	Parameters	Description
1	Identification of project	Project falls under Metallurgical Industries (secondary metallurgical processing) Item 3(a) of the schedule of EIA notification of Sept 14, 2006 issued by MOEF & CC.
2	Project Proponent	M/s. Ramkripal Steels Pvt. Ltd.
3	Brief description of nature of the project	The unit is for manufacturing of Bars & Rods using
4	**Salient Features of the Project**	
4.1	Proposed production capacity	Proposed production capacity is ~500 MT/day (1,50,000 TPA) of M.S. billets and ~500 MT/day (1,50,000 TPA)rolling mill of (using CCM ~500 TPD). & Slag crushing unit -~10 TPH.
4.2	Total Plot Area	Total Plot Area –7.40 Acre **Khata No.** 27,57, 58, 65, 100,113, 119, 122 **Khasra No.** – 130, 134, 135, 136, 137,138, 139, 141, 144, 148
4.3	Location	Jhumri Telaiya, Jharkhand (India)

S. No	Parameters	Description
4.4	Water requirement	Water is only required to meet the process cooling water and its make-up (~80 m3/day) and domestic requirement (~20 m3/day). The cooling water will be normal raw water for rolling mill activities and RO treated water for induction furnaces.
4.5	Source of water	Borewell
4.6	Wastewater	The domestic water consumption will result in generation of ~12 m3/day of domestic wastewater. The wastewaters will be treated and entirely reused.
4.7	Man Power	Around 300 person
4.8	Electricity/Power requirement	The electrical power requirement will increase to ~45.5 MVA. One DG set of 500 kVA will be installed (as power back-up).
4.9	Alternative site	The proposed addition will be established in the existing plant premises only.
4.10	Land form, Land use and land ownership	Private land, owned by M/s. Ramkripal Steels Pvt. Ltd.
4.11	Project Cost	94.00 Crore

Site Coordinate

Corners	Latitude	Longitude
Corner –I	24°25'37.660"N	85°29'30.331"E
Corner –II	24°26'39.810"N	85°29'32.512"E
Corner –III	24°26'40.130"N	85°29'30.603"E
Corner –IV	24°25'45.359"N	85°29'39.056"E

Plant obtained CTE from Jharkhand State Pollution Control Board (JSPCB) vide letter no JSPCB/HO/RNC/CTE-9340615/2021/188 for the establishment of production of billets of capacity 26400 TPA and Slag crushing unit of 4800 TPA dated on 2021.09.05.

Sl. No	Plant Facilities	Proposed production details
1.	Induction Furnace	Induction furnaces (2 x 15 Tons + 1 x 20 Tons) 1,50,000 TPA
2.	Rolling Mill	500 TPD
3.	Re-heating Furnace	1x30 TPH (max. 99,000 TPA)
4.	Slag Crusher	1x10TPH (max.33,000 TPA)

Raw Material Requirement :

Raw Materials	Total Raw materials required After Expansion
Billets (Total production: 500 TPD)	
Sponge Iron, Pig iron/MS scrap	600 MT/day
Ingot/billet	30 MT/day
Ferro Alloys (SiMn/FeSi)	10 MT/day
Metal scrap from in house metal extraction	10 MT/day
Total Raw Materials	**650 TPD**
Rolling Mill – TMT Bars/Rods (Total production: 500 TPD)	
Hot Billets/M.S. Billets	40 TPD
Coal/Furnace Oil for re-heating furnace	70 Kg/ton

Breakup of land use for the proposed expansion is as follows :

SL No	TYPE OF USE	AREA (sq. mt)
1	Production & Allied facilities	13937
3	Entrance, Roads and Pavements	4300
4	Storage yard, vacant area etc.	725.69
5	Labour quarter	1000
6	Green Belt	9984.01
	TOTAL	29946.7

- Approx 1.40 Acre of land within the site is having existing tree plantation which is considered as green belt for the proposed project
- All the existing trees will be retained at site and no tree will be cut without having permission from the competent authority

Air Pollution Control Details

Name of Units	Name of APCD	Stack Height (mtr)	Emission Design
Induction Furnace	Fume extraction with Bag filter)	30	<50mg/Nm3
Hot Rolling Mill	Dust extraction with Bag filter)	30	<50mg/Nm3
Reheating Furnace (Standby) (Furnace oil /PNG as fuel)	Wet scrubber	30	<50mg/Nm3
Slag crushing	Dust extraction system	30	<100mg/Nm3
DG Set	Stack	10	<150 mg/Nm3

Industrial Solid waste and Hazardous waste

Units	Solid Wastes	Qty In TPA	Disposal practice
Induction Furnace	Slag	3900	In-house metal recovery in slag crusher and supplied outside for further reuse in construction work.
Bag Filter Dust from process	Dust from process	600	Partly recycled (metal content). R supplied outside for further reuse i construction work and Low land filling
Rolling Mill	End cuttings & Mill Scale	300	Recycled in-house along with scrap in the induction furnace.
Re-heating furnace	Ash & Bag filter dust	94.5	Supplied to Fly Ash block manufacturers.

			*No generation if furnace oil is used.

There is no hazardous waste from the plant except for used oil (approx. 0.2 – 0.3 KL/Year) from equipment, which will be stored properly as per norms and is saleable to the registered recyclers in the market

1	DFO Forest Distance	:	DFO, Koderma Forest Division vide letter no. 3092, dated 24.12.2020 certified that the distance of reserved / protected forest is 260 m from proposed project site.
2	DFO Wild Life	:	DFO, Wildlife Hazaribagh Division vide letter no. 156, dated 27.01.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Koderma vide letter no. 59, dated 07.05.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.

During the presentation the following undertakings were sought :

i. Undertaking affirming that :
   a. Without the permission of competent authority no tree cutting will be done.
   b. No ground water will be used without obtaining permission from competent authority.

The PAs have submitted the above required undertakings.

Baseline data is being generated from 15th March, 2022 to 15th June, 2022.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure II alongwith following project specific condition :

i. **TCLP test report of the slag from existing plant to be provided in the EIA / EMP report.**

****

B. Corrigendum of EC

15. **Sundarpahari Stone Deposit of M/s Maa Tara Stone Works, Village : Sundarpahari, Thana : Maheshpur, Dist. : Pakur, Jharkhand (2.387 Ha).**

(Proposal No. : SIA/JH/ MIN/271940 /2022).

The PA's vide online application no. SIA/JH/ MIN/271940/2022 has requested for necessary correction in Environmental Clearance issued vide letter no. EC/SEIAA/2021-22/2487/2021/11, dated 16.04.2022 with regard to the production capacity :

The corrected revised capacity is 25,621.50 cum /annum or 74,302.35 TPA.

The production capacity mentioned earlier in EC was 31,666.05 cum /annum or 85,498.33 TPA.

The SEAC recommends to issue the EC with corrected production details as stated above i.e. 25,621.50 cum /annum or 74,302.35 TPA. Rest other terms & conditions mentioned in EC letter no. EC/SEIAA/2021-22/2487/2021/11, dated 16.04.2022 shall remain the same.

****

16. **Rajbandh Stone Deposit of M/s Otandas & Co. (Mining) Pvt. Ltd., Village : Rajbandh, Thana : Pakur (M), Dist. : Pakur, Jharkhand (2.22 Ha).**

(Proposal No. : SIA/JH/ MIN/271903 /2022).

The PA's vide online application no. SIA/JH/ MIN/271903/2022 has requested for necessary correction in Environmental Clearance issued vide letter no. EC/SEIAA/2021-22/2533/2021/0..., dated 16.04.2022 with regard to the following :

Production details as mentioned in earlier EC letter is as follow :

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL in Meters
1st	83034	249102	21681	54 mRL - 42mRL
2nd	83014	249042	00	48 mRL - 30 mRL
3rd	83074	249222	8256	54 mRL - 30 mR...
4th	83020	249060	00	30 mRL - 12 mRL
5th	83028	249084	7452	54 mRL - 18 mRL
Total	**415170**	**1245510**	**37389**	

The correct production details needs to be mentioned in amended EC are as follows :

Year	Production of stone (Cum)	Production of stone (Tonnes)	Waste Generation (CuM)	Bench RL in Meters
1st	83034	249102	21681	54 mRL - 42mRL
2nd	83014	249042	00	48 mRL - 30 mRL
3rd	83074	249222	8256	54 mRL - 30 mRL
4th	83020	249060	00	30 mRL - 12 mRL
5th	83028	249084	7452	54 mRL - 18 mRL
Total	**415170**	**1245510**	**37389**	

The SEAC recommends to issue the EC with corrected production details as stated above. Rest other terms & conditions mentioned in EC letter no. EC/SEIAA/2021-22/2533/2021/07, dated 16.04.2022 shall remain the same.

****

Day 4 : May 13th , 2022 [Friday]

Consideration of Proposals

1. **"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 /73378 /2022).

   Name of the consultant : P and M Solution, Noida

   Project Category: 8 (a) Category B1 – Application for TOR

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

   This is a case of violation which has been taken for appraisal on 13.05.2022 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 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 Oceanic Buildtech & Construction Pvt. Ltd. has planned to develop a **"Proposed Multistoried Apartment B+G+10" located at Khata no. 254,234 & plot no. 2756, 2760, 2765, Thana no. 207, Thana-Argora, village - 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 appr **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 08.03.20[illegible] 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 letter no. RANC/EAST /B/ 032018/ 287480 dated 04.04.2018.
5	Fire Department	:	A Certificate from Fire Department, Ranchi, Govt. of Jharkhand vi[illegible] 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.

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.

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 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure V alongwith following specific condition :

i. PA's to submit environmental damage assessment as per CPCB guidelines.

ii. PA's to submit status of construction of individual towers separately certified by RMC / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

iii. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

iv. Environmental monitoring locations decided in both core and buffer zone including in downwind direction as per CPCB guidelines.

v. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

vi. One month additional monitoring to be conducted.

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

****

2. **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 /74718 /2022).

Project Category: 8 (a) Category B1 – Application for TOR.

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

Name of the consultant : P and M Solution, Noida

This is a case of violation which has been taken for appraisal on 20.02.2022 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 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.

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 approx. 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 Certificate from Fire Department, Ranchi, Govt. of Jharkhand 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.

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 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.

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 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure V alongwith following specific condition :

i. PA's to submit environmental damage assessment as per CPCB guidelines.

ii. PA's to submit status of construction of individual towers separately certified by RMC / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

iii. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

iv. Environmental monitoring locations decided in both core and buffer zone including in downwind direction as per CPCB guidelines.

v. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

vi. One month additional monitoring to be conducted.

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

****

3. **Proposed Residential cum Commercial Complex "Symphony City" of M/s Odin Homes, Village : Mesra, Tehsil : Mesra, Dist. : Ranchi, Jharkhand.**

(Proposal No : SIA/JH/MIS/75313/2022).

Name of the consultant: **P & M SOLUTION, Noida**

Project Category: 8 (a) Category B1 – Application for Environment Clearance

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

This is a case of violation which has been taken for appraisal on 13.05.2022 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 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 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, Thana Sadar, Thana 169, Khewat No-08

Statutory Clearances :

1	DFO Certificate	:	Divisional Forest Officer (DFO), Ranchi Forest Division vide lett 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, Wild life 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 issued NOC vide letter no. RANC/EAST/B/ 012921/523426 dated 02.02.2021 .
5	Fire Department	:	A Certificate from 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)	385
6. Flushing	157
7. Landscaping	
8. Road Washing &Misc	18
9. Usage for HVAC Cooling	
10. Discharge to Sewer	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
7.	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 Waste (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.

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 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure V alongwith following specific condition :

i. PA's to submit environmental damage assessment as per CPCB guidelines.

ii. PA's to submit status of construction of individual towers separately certified by RMC / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

iii. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

iv. Environmental monitoring locations decided in both core and buffer zone including in downwind direction as per CPCB guidelines.

v. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

vi. One month additional monitoring to be conducted.

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

****

4. **Affordable Housing Project "Assotech Hills Sec-1" of M/s Assotech Sun Growth Abode LLP - Tagore Hill Road (Adjoining Bank Colony), Village : Boreya, Tehsil : Kanke, Dist : Ranchi, Jharkhand**

(Proposal No : SIA/JH/MIS/271491/2022).

This is a case of violation which has been taken for appraisal on 13.05.2022

Project Category : **8(a) Category B1 – Application for Environment Clearance**

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 93rd meeting held on 18-27.02.2022 and SEIAA, Jharkhand has approved the **violation ToR** in 94th meeting held on 13th , 14th & 15th Apr 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no 101, date 16.04.2022. The final EIA / EMP submitted by PP to SEIAA on 07.05.2022 and which was forwarded to SEAC on 07.05.2022.

EC Application for: Residential buildings: Total built-up area of 45753.62 m2 (Existing 11438.4 sq.m + Proposed 34315.2 sq.m)

Name of the consultant: P & M SOLUTION, Noida

Salient Features of the Project :

Parameters	Description
Plot Area	11238.20 m^2 (approx. 2.78 acre)
Project Cost	INR 68.92 Crores
Built-up Area	45753.62 m^2
Green Area	2341.54 m^2 (@ 20.83% of plot area)
Population	4195
Water Requirement	297 KLD

Fresh Water Requirement	212 KLD
Wastewater Generation	245.8 KLD
STP Capacity	300.0 KLD
Total Municipal Waste	1553.75 kg/day
Power Requirement	1690 KVA (Jharkhand State Electricity board)
DG Sets	2 no. of DG set of Total 760 kVA
RWH Pits	04 no.
Parking	612 no.
Connecting road	The project site is well connected with Boreya Road.
National Highway	NH-20, 4.50 km SE SH-2, 3.50 km W
Nearest Railway Station	Ranchi Railway station, 7.47 km, SW
Airport	Birsa Munda Airport,(11.39 km, S)
Nearest Hospitals	RIMS–3 (48 Km, S)
Nearest Water Bodies	Potpoto River (0.50 km, NW) Jumar River (2.50 km, N) Subarnarekha River (9.50, S)

Area Summary :

Particular	Proposed	Permissible
Plot Area	11238.20 sqm	
Net Plot Area	11238.20 sqm	--
Ground Coverage	3526.30(31.38%)	5619.01 (50%)
FAR (Floor Area Ratio)	39324.55(3.5)	39333.07 (3.5)
Built up Area	**45753.62 sqm**	--
Maximum Height	41 m	--
Road Area	3881sqm	--
Stilt Parking	2571.92 sqm	
Open Parking	1753.5 sqm	
Total Parking	4325.42 sqm	2376.50 sqm
Green Belt Area	2341.54(20.83%)	2247.67(20%)
Maximum No. of Floor	S+13	--
Power/Electricity Requirement & Sources	1690 KVA	--
No. of DG sets	2x380 KVA	--
Water requirement	212.0 KLD (Fresh)	--

Sewage Treatment Plant	STP Capacity - 300 KLD	--
Estimated Population- Residential, Commercial, Floating / Visitors	4195 nos.	--

Built up area details :

Sl. No.	Floor Name	Building Name				Total Built up Area (sqm)
		A (Building)	B (Building)	C (Building)	D (Building)	
1	Ground Floor	878.28	936.96	798.33	928.94	3542.51
2	1st Floor	894.04	882.8	750.60	1022.79	3550.23
3	2nd Floor	806.55	882.8	736.74	808.74	3234.83
4	3rd Floor	806.55	882.8	736.74	807.34	3233.43
5	4th Floor	806.55	882.8	736.74	807.34	3233.43
6	5th Floor	806.55	882.8	736.74	807.34	3233.43
7	6th Floor	806.55	882.8	736.74	807.34	3233.43
8	7th Floor	806.55	882.8	736.74	807.34	3233.43
9	8th Floor	806.55	882.8	736.74	807.34	3233.43
10	9th Floor	806.55	882.8	736.74	807.34	3233.43
11	10th Floor	806.55	882.8	736.74	807.34	3233.43
12	11th Floor	806.55	882.8	736.74	807.34	3233.43
13	12th Floor	806.55	882.8	736.74	807.34	3233.43
14	13th Floor	806.55	741.12	736.74	807.34	3091.75
15	Terrace Floor					
Total		**11450.92**	**12271.68**	**10389.91**	**11641.21**	**45753.62**

CO-ORDINATES

1	Latitude		From 23°25'05.20"N	To 23°25'07.0"N
2	Longitude		From 85°20'50.00"E	To 85°20'55.40"E

LAND DETAILS

1	Village - Boreya, Tehsil- Kanke		**Khata No.**	**Plot No.**
			298	1874, 1875

			369	1877

STATUTORY CLEARANCES

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no. 2207, dated 19.08.2021 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. 709, dated 13.08.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Kanke, Ranchi vide letter no. 425, dated 24.06.2020 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 letter no RANC/EAST /B/122718/ 358660, dated 27.12.2018.
5	Fire Department	:	A Certificate from Fire Department, Ranchi, Govt. of Jharkhand vide letter no. 122/tech/2019 dated 13.01.2019
6	CGWA	:	The CGWA has issued a NOC vide letter no. CGWA/NOC/INF/ORIG/ 2022/14339, dated 18.01.2022
7	Building Plan	:	Ranchi Municpal Corporation has approved building plan vide memo no. RMC/BP/0371/W04/2018, dated 11.04.2019

Water and waste water Requirement Details

Sl. No.	Description	Total Population	Per Capita Consumption (ltr/day)		Water Requirement (KLD)		
					Domestic	Flushing	Total
1.	Apartments	2795 nos.	Fresh (65)	Flushing (21)	181.675	58.695	240.37
2.	Club	300 nos.	Fresh (25)	Flushing (20)	7.50	6.00	13.50
3.	Floating	300nos	Fresh (5)	Flushing (10)	1.50	3.00	4.50
4.	Staff	150 nos.	Fresh (25)	Flushing (20)	3.75	3.00	6.75
5.	Permanent Population	150 nos.	Fresh (25)	Flushing (20)	3.75	3.00	6.75

	(Shopping)						
6.	Transient Population (Shopping)	500 nos.	Fresh (5)	Flushing (10)	2.50	5.00	7.50
7.	Filter Backwash				6.00		6.00
8.	Makeup Water for Swimming Pool				5.00		5.00
9.	Horticulture					5.86	5.86
				TOTAL	**211.675 ≈ 212**	**84.55 ≈ 85**	**296.23 ≈ 297**

Details	Water (KLD)
Water requirement for domestic purpose	**212.0**
Wastewater generated from domestic use (@ 80% of domestic water requirement)	160.8
Water requirement for Flushing Purpose	85.0
Wastewater generated from Flushing (@ 100% of flushing requirement)	85.0
Total Wastewater generated	**160.8+85 = 245.8 KLD**
STP Capacity (by adding 20% as per MoEF)	**294.8**
STP Capacity proposed (STP Layout design is attached in **Annexure-3**)	**300.0 KLD**

Solid Waste Requirement

S. No.	Category	Counts (heads)	Waste generated (kg/day)
1.	Residents	2795 @ 0.45 kg/day	1257.75
2.	Floating Population	300 @ 0.15 kg/day	45.0
3.	Others (Club House, Staff, Shopping)	1100 @ 0.15 kg/day	165.0
3.	STP sludge		86.0
	TOTAL SOLID WASTE GENERATED		**1553.75kg/day**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 2341.54 m^2 (@ 20.83% 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. 300.0 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. 212.0 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 (approx 21 Nos of solar panels will be used to save around 10 % of the total power requirement).

The consultant has presented the EIA / EMP report before Committee. During the presentati the PA's discussed damage assessment, remediation plan and natural & community resourc augmentation plan. The Committee has suggested to submit the following :

i. PA's to submit environmental damage assessment as per CPCB guidelines.

ii. PA's to submit status of construction of individual towers separately certified by RM / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

iii. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

iv. Environmental monitoring locations decided in both core and buffer zone including ir downwind direction as per CPCB guidelines.

v. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

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

****

5. **Green Residential Project "ESTATE ECO SYMPHONY" of M/s Estate Buildcon Pvt. Ltd., Village : Gari, Tehsil : Sahar (Bargain), Dist : Ranchi, Jharkhand.**

(Proposal No : SIA/JH/MIS/271526/2022).

Name of the consultant : P & M SOLUTION, Noida

This is a case of violation which has been taken for appraisal on 13.05.2022

Green Residential Project "ESTATE ECO SYMPHONY" located at plot no. Plot Nos. 24 &25, Cheshire Home Road, Bariatu, Village - Gari, Tehsil – Ranchi Sahar (Bargain), District - Ranchi, Jharkhand by M/s Estate Buildcon Pvt. Ltd. on a plot area of 6552.79 m2. The total built up area of the project is 29955 m2. Approx.100% part of the project has already been constructed. So the project has been applied under violation case.

Project Category : 8(a) Category B1 – Application for Environment Clearance

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 93rd meeting held on 18-27.02.2022 and SEIAA, Jharkhand has approved the **violation ToR** in 94th meeting held on 13th , 14th & 15th April, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 82, date 16.04.2022. The final EIA / EMP submitted by PP to SEIAA on 07.05.2022 and which was forwarded to SEAC on 07.05.2022.

Salient Features of the Project :

Parameters	Description
Plot Area	6552.79 sq.m.(or 1.62 acres)
Khata No.	Khata no. 135 & Plot Nos. 24 & 25
Project Cost	INR 50.24 Crores
Built-up Area	29955.79 m^2
Green Area	1411.4 sq m (@21.54% of plot area) and additional approx. 1278.1 m2 of terrace green area.
Population	720
Water Requirement	97 KLD
Fresh Water Requirement	61 KLD
Wastewater Generation	75 KLD
STP Capacity	100 KLD
Total Municipal Waste	761 kg/day
Power Requirement	1500 KVA (Jharkhand State Electricity board)

DG Sets	2 no. of DG set of Total 200 KVA
RWH Pits	06 no.
Parking	322 no.
Connecting road	Project site is well connected with road. Site abuts the adjacent road in South direction.
National Highway	NH-20(2 km, E) Adjacent road (in South Direction)
Nearest Railway Station	Ranchi junction Railway station, (6.16 km, S)
Airport	Birsa Munda Airport, (9.81 km, S)
Nearest Hospitals	Orchid medical centre (4.04 km, SW)
Nearest Water Bodies	Kanke Dam (5.20 km, E) Getalsud Dam (10.10 km NE) Ranchi Lake (5.66 km, N) Jumar River (4 km , NE) Subarnarekha River (4.81 km SSE)

Area Summary :

Sl. no.	Description	Area (SQ M)
A.	**Plot Area(B+F+G)**	**6,552.79**
B.	Proposed Ground Coverage (@26.41% of net plot area)	1730.44
C.	Proposed FAR (@ of plot area	20673.58
D.	Non FAR (Strain case, Lift, Balcony, Ramp, Accessory Use, Parking, Basement Parking)	9282.21
E.	**Built-up Area (C+D)**	**29955.79**
F.	Ground Green Area (@21.54%)	1411.4
	Terrace green area	1278.1
	Total Green area	**2689.5**
G.	Total Hardscape area (Road, STP, OWC, Pool, Transformer, Main Gate, guard room, Open parking e.t.c(52.05 % of the plot area)	3410.95
H.	Highest Building (Excluding parapet)	48.1 m

I.	No of Dwelling Units	139

Block Wise Dwelling Units Details :

Sl. no.	Building Blocks (Residential Building)	Number of Floors	DU's
1.	Block A (B+S+GF+11Terrace Floor)	12	88
2.	Block B (B+S+GF+15Terrace Floor)	16	15
3.	Block C (B+S+GF+13Terrace Floor)	14	36
	Total		**139**

CO-ORDINATES :

1	**Latitude**	From 23°21'0.8"N	To 23°21'3.1"N
2	**Longitude**	From 85°17' 22.8"E	To 85°17' 26.8"E

LAND DETAILS :

1	Village - Gari, Tehsil – Ranchi Sahar (Bargain), District - Ranchi	**Khata no.** 135	**Plot Nos.** 24 & 25

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	625	135	85	60	25
Staff	32	45	2	0.6	1.4
Visitors	63	15	1	0.7	0.3
Total Domestic Water Demand			**88**	**61**	**27**
Landscape	1411.4 Sq.m	3ltr/sqm	5	-	5
Fire Fighting			1	-	1
DG cooling	400KVA (1*200KVA + 1*200 KVA)	0.9 l/kVA/hr	3	-	3

Total		-	**97**	**61**	**36**

Category	Total Quantity (KLD)
Domestic water Req.	23
Flushing water Req.	11
Sewage generation (@80% of the fresh + 100% flushing water requirement)	30
Capacity of STP	40
Recovered water from STP (90% of Waste water) 1. Flushing 2. Landscaping 3. Fire Fighting 4. DG cooling 5. Road washing/sewer	27 11 5 1 3 7

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	625	0.5	313	250	63
2.	Staff	32	0.25	8	6.4	1.6
3.	Visitors	63	0.15	10	8	2
4.	Landscape waste	0.34 acres	0.2 kg/acres	1	1	-
5.	STP sludge	100 KLD	--	9	7	2
Total Waste Generated				**341**	**272**	**69**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 1411.4 sq m (@21.54% of plot area) and additional approx. 1278.1 m2 of terrace green 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. 40.0 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. 23.0 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 (approx. 18 Nos of solar panels will be used to save around 10 % of the total power requirement).

Statutory Clearances :

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no. 393, dated 07.02.2022 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 letter no. 148, dated 21.02.202.. 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, Baragai, Ranchi vide letter no. 691, dated 06.10.2020 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 letter no RANC/ EAST/B /032818/ 291828 dated 28.03.2018
5	Fire Department	:	A Certificate from Fire Department, Ranchi, Govt. of Jharkhand vide letter no. 413/tech dated 04.04.2018.
6	Building Plan approval	:	Ranchi Municpal Corporation has approved building plan vide memo no. BP/RMC/ 0277/2018, dated 30.07.2018

The consultant has presented the EIA / EMP report before Committee. During the presentation the PA's discussed damage assessment, remediation plan and natural & community resource augmentation plan. The Committee has suggested to submit the following :

i. PA's to submit environmental damage assessment as per CPCB guidelines.

ii. PA's to submit status of construction of individual towers separately certified by RMC / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

iii. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

iv. Environmental monitoring locations decided in both core and buffer zone including in downwind direction as per CPCB guidelines.

v. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

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

****

6. **Affordable Housing Project "Assotech Hills Sec-2" of M/s Assotech Sun Growth Abode LLP at Tagore Hill Road (Adjoining Bank Colony), Village : Boreya, Tehsil : Kanke, Dist : Ranchi, Jharkhand.**

(Proposal No : SIA/JH/MIS/271609/2022).

Project Category: 8 (a) Category B1 – Application for Amendment of TOR.

EC Application for: Residential buildings: Total built-up area of 90996.97 m2

This is a case of violation which has been taken for appraisal on 13.05.2022 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 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.

Name of the consultant: P & M SOLUTION, Noida

Comparative Statement of TOR vs Proposed Area etc

Particular	Proposed	As per TOR	Reasons for Amendments
Project Name	Assotech Hills RanchiSec-2	Assotech Hills Ranchi Sec-2	
Plot Area	18857.11sqm	18857.11sqm	
Gift Deed	2541.27 sqm	2541.27 sqm	
Net Plot Area	16316.11sqm	16316.11sqm	

Project Cost	165 Crs	165 Crs	
Ground Coverage	8149.119 (49.95%)	6387.79 (36.8%)	Area increased to accommodate more parking spaces under Podium
FAR (Floor Area Ratio)	65999.5 (3.5)	65517.06 (3.47)	
Built up Area	90996.97 sqm	65517.06 sqm	Built up area increased due to addition of semi basement and podium floor for parking and addition of Fire Towers as per norms
Maximum Height	53 m	49 m	
Road Area	5010 sqm	1514.2 sqm	Road area is now at differe levels
Stilt Parking	3866.65 sqm	4749.24 sqm	
Open Parking	2528.84 sqm	5954.65 sqm	
Podium Parking	3400 sqm	0.00	
Basement parking	6800sqm	0.00	
Total Parking	16595sqm	10703.89 sqm	Parking area is increased to accommodate adequa parking spaces
Green Belt Area	3500 sqm (21.45%)	3500 sqm (21.45%)	
Maximum No. of Floor	S+16	S+16	
Power/Electricity Requirement & Sources	2750 KVA	2720 KVA	
No. of DG sets	1x750 KVA + 1x380 KVA	1x750 KVA + 1x380 KVA	
Waterrequirement	272 KLD (Fresh)	276 KLD (Fresh)	
Sewage Treatment Plant	STP Capacity - 350 KLD	STP Capacity - 350 KLD	

Estimated Population-Residential, Commercial, Floating/visitors	5130 nos.	5200 nos.	

PROJECT and LOCATION Details:

Parameters	Description
Plot Area	18857.11 m^2 (approx. 4.66 acre)
Khata No.	Khata No. 61, 74, 76, 237, 256, 311, 356, 480 & 589 Plot No. - 1954, 1955, 1867, 1956, 1962, 1961, 1957, 1958, 1960, 1859, 1959, 1860, 1861, 1856, 1865, 1864, 1853, 1857, 1858
Project Cost	INR 165 Crores
Built-up Area	**90996.97 sqm** m^2
Green Area	3500.0 m^2 (@ 20.16 % of plot area)
Population	5130
Water Requirement	375.7 KLD
Fresh Water Requirement	276.0 KLD
Wastewater Generation	314.9 KLD
STP Capacity	350.0 KLD
Total Municipal Waste	1923.5 kg/day
Power Requirement	2720 KVA (Jharkhand State Electricity board)
DG Sets	02 no. of DG set of Total 1130 KVA
RWH Pits	05 no.
Parking	913 no.
Connecting road	The project site is well connected with Boreya Road.
National Highway	NH-20, 4.50 km SE SH-2, 3.50 km W
Nearest Railway Station	Ranchi Railway station, 7.47 km, SW
Airport	Birsa Munda Airport,(11.39 km, S)
Nearest Hospitals	RIMS–3 (48 Km, S)
Nearest Water Bodies	Potpoto River (0.50 km, NW) Jumar River (2.50 km, N)

	Subarnarekha River (9.50, S)

CO-ORDINATES

1	Latitude		From 23°25'01.30"N	To 23°25'05.48"N
2	Longitude		From 85°21'01.10"E	To 85°21'07.00"E

LAND DETAILS

Khata no.	Plot no.
356	1955, 1864
311	1956, 1957, 1961, 1962
589	1958, 1960
61	1853, 1858
74	1856
76	1857
480	1859, 1959
237	1861, 1860
256	1867

STATUTORY CLEARANCES

1	DFO Certificate	:	DFO, Ranchi Forest division vide letter no. 1050 dated 27.02.202[illegible] 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. 108 dated 06.02.2020 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, Kanke, Ranchi vide letter no. 425(ii), dated 24.06.2020 has mentioned the plot no. of the project is not recorded as "Jan[illegible] Jhari" in R.S. Khatiyan & Register II.
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID RANC/EAST/B/020119/368483 dated 04.02.2019
5	Fire Department	:	A Certificate from Fire Department, Ranchi, Govt. of Jharkhand vide letter no. 550/tech/2019 dated 28.02.2019
6	Building Plan	:	Ranchi Municpal Corporation has approved building plan vide memo no. RMC/AH/1541/W04/2019, dated 30.12.2020

Water and waste water Requirement Details

Sl. No.	Description	Total Population	Per Capita Consumption (ltr/day)		Water Requirement (KLD)		
					Domestic	Flushing	Total
1.	Apartments	3620 nos.	Fresh (65)	Flushing (21)	235.35	76.02	311.37
2.	Club	440 nos.	Fresh (25)	Flushing (20)	11.0	8.8	19.8
3.	Floating	370nos	Fresh (5)	Flushing (10)	1.85	3.7	5.55
4.	Staff	200 nos.	Fresh (25)	Flushing (20)	5.0	4.0	9.0
5.	Permanent Population (Shopping)	110 nos.	Fresh (25)	Flushing (20)	2.75	2.20	4.95
6.	Transient Population (Shopping)	420 nos.	Fresh (5)	Flushing (10)	2.1	4.2	6.3
7.	Office Population	40 nos.	Fresh (25)	Flushing (20)	1.0	0.8	1.8
7.	Swimming Pool				10.0	-	10.0
8.	Filter Backwash				7.0	-	7.0
				TOTAL	**276.0**	**99.7**	**375.7**

Details	Water (KLD)
Water requirement for domestic purpose	**276.0**
Wastewater generated from domestic use (@ 80% of domestic water requirement)	215.2
Water requirement for Flushing Purpose	99.7
Wastewater generated from Flushing (@ 100% of flushing requirement)	99.7
Total Wastewater generated	**215.2+99.7 = 314.9 KLD**
Recycled water form STP @ 90% of wastewater generated	**283.41KLD**

Solid Waste Requirement

S. No.	Category	Counts (heads)	Waste generated (kg/day)
1.	Residents	3620 @ 0.45 kg/day	1629.0
2.	Floating Population	370 @ 0.15 kg/day	55.5
3.	Others (Club House, Staff, Shopping)	1220 @ 0.15 kg/day	183.0
3.	STP sludge		56.0
	Total Solid Waste Generated		**1923.5 kg/day**

ENVIRONMENT MANAGEMENT

Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Green area will be provided in 3500.0 m^2 (@ 20.16 % 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. 350.0 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. 276.0 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 (approx. 34 Nos. of solar panels will be used to save around 10 % of the total power requirement).

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 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of amended TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in earlier ToR letter no. EC/SEIAA/2021-22/2518/2021/91, dated 16.04.2022 alongwith following specific condition :

i. PA's to submit environmental damage assessment as per CPCB guidelines.

ii. PA's to submit status of construction of individual towers separately certified by RMC / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

iii. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

iv. Environmental monitoring locations decided in both core and buffer zone including in downwind direction as per CPCB guidelines.

v. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

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

****

7. **Kujam 1 Bauxite Mine of M/s Hindalco Industries Ltd. (HIL), Village : Kujam, Dewragini & Chatam, Taluka : Bishunpur, Dist. : Gumla, Jharkhand (80.87 Ha).**

(Proposal No. : SIA/JH/MIN/29236/2018).

Name of the consultant : J.M. Enviro Net Pvt. Ltd., Haryana

This is a existing mine which has been taken for appraisal on 13.05.2022

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 & 2(b) Mineral Beneficiation as per EIA Notification, 2006.

Hindalco Industries Limited (HIL) is a flagship company of Aditya Birla Group and is non-ferrous power house. The company is a public limited company registered under Indian Companies Act, 1956 havingits Registered Office at Mumbai, India.

Jharkhand Bauxite Mines division of HIL caters Bauxite requirement of its alumina refineries located at MURI in Jharkhand and Renukoot in Sonbhadra district of U.P. M/s. Hindalco Industries Limited is operating an existing Kujam I Bauxite Mine (Area- 80.87 ha) with production Capacity of Bauxite 150000 TPA in Villages: Kujam, Dewragini & Chatam, Taluka: Bishunpur, District: Gumla, Jharkhand. Total Mining Lease area is 80.87 ha out of which 74.27 Ha Rayati land and 6.60 Ha is GM land.

Environment Clearance for Existing Kujam I Bauxite Mine (Area- 80.87 ha) with granted production capacity 150000 TPA was granted by MoEF& CC, Govt. of India vide letter no. J-11015/240/2005-IA.II(M), dated 14.08.2006.

Initially Mining lease was granted to M/s Indian Aluminium Co. Limited by Department of Mines and Geology, State Government of Jharkhand vide letter no 3/97-964/M dated 07.07.2005 for 20 years. Mining lease was transferred in favor of M/s Hindalco Industries

Limited by Department of Mines and Geology, State Government of Jharkhand vide order no. 407/M dated 21.02.2006. Mining lease was executed in favor of M/s Hindalco Industries Limited on 13.03.2006. Validity of Mining lease was extended up to 12.03.2056 as per sub section 8A (3) of MMDR Amendment Act 2015 by State Govt. of Jharkhand vide letter dated 07.01.2017.

Khata no. & Plot no. of the project :

Khata No.	Plot No.
34	431
34	430
5	429
22	433
77	435
77	436
16	437
55	438
32	439
34	440
51	441
51	442
34	443
77	444
34	445
91	446
58	447
77	448
51	449
58	450
77	451
23	452
78	453
77	455
77	456
23	457
91	458
32	459
23	460
8	461
77	462
10	463
34	464
34	465
77	467
78	468
8	469

23	470
8	471
16	472
77	473
91	474
16	475
16	476
91	477
10	478
77	480
78	481
23	482
91	483
8	413
78	414
77	415
16	416
16	417
91	419
16	420
17	421
16	422
32	423
34	424
32	425
34	426
51	427
51	428
8	1
66	2
76	3
54	5
66	6
8	7
54	15
30	404
30	405
4	406
32	407
32	408
4	409
3	411
3	412
3	413
4	414
4	415

4	416
30	417
30	418
30	419
37	420
32	421
32	423
4	424
15	425
3	426
37	427
4	428
4	429
4	430
3	431
4	432
51	433
37	434
4	435
30	436
30	438
37	439
30	440
32	441
32	442
32	444
3	446
37	445
4	447
37	448
37	449
51	450
30	1177
32	1178
37	451
15	453
4	454
15	55
4	56
3	57
3	59
51	60
4	61
51	62
4	63
19	1179

4	464
3	465
3	466
15	468
15	469
22	470
19	472
19	473
51	474
22	475
22	476
3	477
3	478
4	479
4	480
3	481
3	482
3	483
4	485
4	486
32	487
4	489

Salient Features of the project :

S. No.	Particulars	Details
A.	Nature of the Project	Kujam I Bauxite Mine
B.	Size of the Project	
1.	Mining LeaseArea	80.87ha
2.	Bauxite Production capacity	150000 TPA
C.	**Location Details**	
1.	Villages	Kujam, Dewragini & Chatam
2.	Taluka	Bishunpur
3.	District	Gumla
4.	State	Jharkhand
5.	Mine area coordinates	Latitude - 23°17'37.24"N to 23°18'38.31"N Longitude- 84°18'35.81"E to 84°19'21.68"E
6.	Toposheet No of study area	73A/3, 73 A/4, 73A/7 & 73 A/8
D.	**Cost Details**	
1.	Total Project Cost	Rs. 8.0 Crore/-

2.	Cost for Environment Protection Measures.	Capital Cost: Rs200.0 Lac/- Recurring Cost: Rs 29.00lacs/- per annum
E.	**Requirements of The Project**	
1.	Water Requirement	23 KLD, Source: Existing rain water harvesting pond created by us during the course of mining.
2.	Manpower Requirement	Approx. 294 persons

Mining details :

S. No.	Particulars	Details
1.	Method of mining	Fully Mechanized Opencast mining
2.	Total Geological Reserves	0.76 million tonnes (as on 01.04.2020)
3.	Total Mineable reserves	0.63 million tonnes (as on 01.04.2020)
4.	Life of the Mine	5 Years @ 0.15 million TPA
5.	Bench Height	6 m
6.	Bench Width	6m (Minimum)
8.	Elevation Range	1020 to 1046 m AMSL
9.	Present working depth	10 - 12 m
10.	Ultimate Working Depth	10 - 12 m
11.	ROM/Waste Ratio (Tonnes: Cum)	1 : 1.68
12.	Number of Working Days	300 days
13.	Number of shifts per day	2 Shifts

Land use details :

S. No.	Type of land use	At present (Ha)	At the end of Plan/Conceptual Period (Ha)
1.	Excavated area (Backfilled)	15.02	22.19
	Excavated area (Water Reservoir)	0.86	10.95
	Excavated area (Re-grassing)	4.65	20.73
	Total	19.67	53.87
2.	Road	1.63	0.61
3.	OB Dump	0.52	0.52
4	Greenbelt	3.16	7.86

.			
5.	Undisturbed area	55.89	18.01
	Total	**80.87**	**80.87**

STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Lohardaga Forest Division vide memo no. 1386, dated 09.06.2021 certified that the proposed project site is adjacent to the forest land.
2	DFO Wild Life	:	Deputy Director, Palamau Tiger Project, South Division, Medininagar vide letter no. 457, dated 19.03.2021 certified th. the National Park, Bio-Diversity & Sanctuary is not within 10 kn. from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Bishunpur (Gumla) vide letter no. 412, dated 11.10.2021 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyan & Register II.

During the presentation the following documents were sought :

i. Details of CSR expenditure to be provided.

ii. Receipt copy of recently submitted EC compliance to MoEF&CC to be provided.

iii. Receipt copy of certified EC compliance by MoEF&CC to be provided.

iv. Receipt copy of certified CTO compliance from JSPCB, Ranchi to be provided.

v. Revise land use with demarcation of safety zone to be provided.

vi. Details of occupational health report to be provided.

The PAs have submitted the above required documents.

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 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure VII.

****

8. **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/ 76795/2022)

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

Project Category: 8 (a) Category B1 – Application for Environment Clearance

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

This is a case of violation which has been taken for appraisal on 13.05.2022 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 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.

Project and Location Details:

Parameters	Description
Plot Area	8585.50 Sqm. (or 0.8585 Ha.)
Project Cost	INR 50.00 Crores
Built-up Area	85810.83 m^2
Green Area	1160.74 Sq.m (@13.51 % of plot area)
Population	Residential: 972 Nos. & Commercial: 30 Nos. Visitors & Staff: 70 Nos.
Water Requirement	149 KLD
Fresh Water Requirement	99 KLD
Wastewater Generation	126 KLD
STP Capacity	151 KLD
Total Municipal Waste	453 kg/day Biodegradable Waste: ~ 272 Kg/day Non-Biodegradable Waste: ~181 Kg/day
Power Requirement	1487 KVA (Jharkhand State Electricity board)
DG Sets	1440 KVA 4x360 KVA + 320 KVA
RWH Pits	3 (35.42 Cumec / hour)

Parking	299 (Four wheeler), 467 (Two wheeler), 24 (Visitors car Parking), 1 (Loading/Unloading Parking), 12 (Other parking).
Connecting road	Project site is well connected with road. Site is well connected with NH 33, SH 1, Namkum Main road.
National Highway	NH 33 (Approx. 3.29 km, SE) Adjacent road (Namkum Main road is in South Direction)
Nearest Railway Station	Ranchi junction Railway station, (2.57 km, NW)
Airport	Birsa Munda Airport, (Approx. 3.5 km, SW)
Nearest Hospitals	St. Barnabas Hospital (Approx. 3.76 km, NW) Jharkhand National Hospital (Approx. 3.78 km, N)
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

Area Summary

S. No.	Description	Area (sq m)
1.	Plot Area at Site	8856.76
3.	Green Belt Area	1160.74
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.	Green Area (@13.10% of net plot area)	1160.74
11.	Height	47 m

Co-Ordinates:

1	Latitude		23°19'55.73"N
2	Longitude		85°21'20.63"E

Land Details:

1	Village - Bada Ghaghra, Tehsil – Argora, District - Ranchi		**Khata no.** 271, 272	**Plot No.** 1937, 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 meter from project site.
2	DFO wildlife	:	DFO, Wild life 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 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 Certificate from Fire Department, Jharkhand, Ranchi, vide letter no. 961 dated 15.04.2019.
6	Building Plan	:	Ranchi Municipal Corporation approved building plan vide case no. BP/W47/0647/18 dated 27.09.2018

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 Wastewater (kld)(80% of domestic +100% Total fl ng)
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
5	Swimming Pool		...	10	...	10	...	...	10
	Subtotal -I					143.62	89	44.54	125.80
	Reuse of treated water								
1	Horticulture	1160.74	3 liter/sqm of Landscape area	...		4			
2	DG Cooling	1440 KVA				1			
	Subtotal II					5			
	Grand Total I+II					149			

Category	Total Quantity (KLD)
Fresh water Req. for domestic purpose	99
Flushing water Req.	45
Sewage generation (@80% of the fresh water consumption + 100% flushing water & swimming Pool)	126 (71+40+10)
Capacity of STP	151
Recovered water from STP (80% of Waste water)	111
11. Flushing	45
12. Landscaping	5
13. Discharge to Sewer	61

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	972	437.4	262.44	174.96
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 1160.64 sq m (@13.10 % 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. 151 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. 99 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 information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 10, 11, 12, 13 & 14.05.2022, the Committee recommends for issuing of TOR to SEIAA for undertaki detailed EIA / EMP study as mentioned in Annexure V alongwith following specific condition :

I. PA's to submit status of construction of individual towers separately certified by RMC / Competent Authority empanelled Architects only. PA's are also required to submit data of commencement of project activity.

II. PA's also to submit Financial audit statement conducted by registered CA's only for cost incurred in completing the stated construction with supported documents.

III. Environmental monitoring locations decided in both core and buffer zone including in downwind direction as per CPCB guidelines.

IV. Committee has decided to undertake Site inspection on notified date and time before finalizing its recommendations.

V. One month additional monitoring to be conducted.

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

****

9. **Mosabani Copper Ore Concentration Plant of M/s Hindustan Copper Ltd at Village : Badia, Mosabani, Dist.: East Singhbhum, Jharkhand.**

(Proposal No. : SIA/JH/ IND/20226 /2014).

Name of the consultant : MECON Limited, Ranchi.

This is a reconsideration of the project which has been taken for appraisal on 13.05.2022.

Sector No.-2 (b);
Project Category-B1– Application for Environment Clearance;

The TOR for project was issued by SEIAA, Jharkhand vide letter no. 297, date 05.03.2014 & Revision of ToR vide letter no. 66, dated 09.02.2016 based on the recommendation of SEAC. The PA's has submitted final EIA / EMP to SEIAA on 09.02.2018. Due to essential clarifications the project was pending at PA's level since 09.02.2018.

EC Application for: Capacity Expansion of Mosabani Copper Ore Concentrator Plant from 0.612 MTPA to 0.90 MTPA located at Village-Badia, Mosabani, Rangamatia; Block-Mosabani, District-East Singhbhum, Jharkhand

Project and Location Details:

Sl	Parameter		Details	
1	Project Name	:	Mosabani Copper Ore Concentrator Plant of M/s Hindustan Copper Ltd, Indian Copper Complex (ICC)	
2	Applicant Address:	:	Sri Smarajit Dey, Executive Director & Unit Head –cum- Occupier, Hindustan Copper Ltd., Indian Copper Complex, P.O. Moubhandar, Singhbhum (East), PIN - 832103.	
3	Plant Address	:	Mosabani Copper Ore Concentrator Plant Indian Copper Complex, Hindustan Copper Ltd. Village-Badia, Mosabani, Rangamatia; Block-Mosabani, District-East Singhbhum, Jharkhand PIN - 832104	
4	Plant Area	:	Ha: 38.45 Hectares	Acres: 95.01 Acres
5	Type of Land	:	Non Forest – Rayyati Land	
6	Project Cost	:	98 crore	
7	EMP Budget	:	Capital: 240 Lakhs	Recurring: 50 Lakh / year
8	CSR / CER Budget	:	CSR- 36.55 Lakhs for ICC including Mosaboni	

			CER – 102.27 Lakhs
9	New or Expansion	:	Expansion
10	Plant Capacity	:	0.90 Mtpa
11	Plant Life	:	>30 years
12	Man power	:	420
13	Water Requirement	:	3210m^3/day Industrial Purpose: 3000 m^3/day; Drinking: 130 m^3/day, Plantation & Dust Suppression: 80 m^3/day.
14	Water Source	:	From Subarnarekha river
15	DG Set / power	:	No DG set envisaged UPS system for Control System (backup for 30 min)
17	Nearest Water Body	:	Subaranarekha River ~2 km East and Sankh Nadi ~2.20 km ESE
18	Nearest Habitation	:	Mosabani (Adjacent on N), Ghatsila (~ 7.0 km on NE), Dhalbhumgarh: (~9 km on E)
19	Nearest Rail Station	:	Ghatsila (~8.5 km ENE) on Howrah – Mumbai main line
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi, Jharkhand is approx. 150 Km on NW.
21	Nearest Forest	:	Nearest notified Forest is approx. 1100 m away from the proposed project as per 1934-35 survey map
22	Road & Highways	:	NH-33 (7.5 km on E)

CO-ORDINATES

1	Latitude		From 22°30'35" N	To 22°31'15" N
2	Longitude		From 86°27'30" E	To 86°28'20" E

Land Details as per Form-I submitted by PA's :

Khata No.	Plot No.
84	428
21	758

STATUTORY CLEARANCES:

1	Circle Officer, Mosabani	:	CO, Mosabani vide letter no. 625, dated 23.08.2018 & letter no. 888, dated 03.11.2021 has certified the plot no.758 of the project is recorded as "type Makaan in name of ICC, Mosabani" in Survey Khatiyan & Register II and plot no. 428 is recorded as "Karkhanamay hata" as a nature of land.

2	Divisional Forest Officer, Jamshedpur	:	DFO, Jamshedpur Division vide letter no. 917/Jamshedpur, dated 22.04.2022 certified that the plots are not notified as forest land.
3	Divisional Forest Officer, Jamshedpur	:	DFO, Jamshedpur vide their letter no. 2339 & 2340 dated 26.07.2019 certified that the National Park, Wildlife Sanctuary and Notified biodiversity area are not within 10 km from project site and proposed project is not situated in any ESZ.

Working Details

1.	Beneficiation Method	:	Crushing, grinding followed by froth floatation	
2.	Plant Area	:	38.45 Ha	Life of Plant – > 30 ys.
3.	Waste Generation	:	0.866 Mt/yr of tailings	
4.	Working Days	:	330 Days	
5.	Working Regime	:	3 shifts per day	
6.	Elevation of Plant	:	Highest RL 115 m AMSL, Lowest RL 104 m AMSL	
7.	Topography of Plant	:	Gentle slope	
8.	Power Requirement	:	5.0 MW	
9.	Raw material requirement	:	Sodium Isopropyl Xanthate, 2700 kg/yr. Pine Oil, 14516 liter /yr	

Production Details

Beneficiate 0.900 Mt / yr of Copper Ore (~0.9% Cu by wt.) to produce 0.0338 Mt/yr Copper Concentrate (~25% Cu by weight) and 0.866 Mt/yr of tailings.

Land Use

Sl. No.	Activities	Area (ha)
1	Plant Proper	0.43
2	Offices and other infrastructure	1.76
3	Tailing pond	18.36
4	Roads	1.98
5	Ore Storage	0.90
6	Green belt and plantation	4.00
7	Vacant area	6.01
8	Drains and Catchpits	0.42
9	Vacant Diverted Forest Land	4.59
	Total	**38.45**

The proposed expansion activities will be confined within the existing project area (38.45 ha). No additional land will be required.

ENVIRONMENT MANAGEMENT

Green Belt Development

SL	Location		Area/Length	No of Trees
1	Existing Green Belt	:	4.0 Ha	3000 trees @ 750 trees per Ha
2	Proposed Plantation	:	4.17 Ha (plant, infrastructure, roads & drain/ catch pit)	7000 saplings @ 1600 trees per Ha
3	Other areas	:	20.54 Ha (area undertailing pond and ore storage)	33000saplings@ 1600 trees per Ha

- Inexpansion phase, tree density in the existing green belt will be furtherincreased by gap filling @500 trees per ha. The tree density in the proposed areas (i.e.fresh plantations) shall be planted @1600 trees per ha.
- Maintenance work such as h/w, mortality replacement, protection and watering shall be undertaken for the life of plant 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 (tailing) Generation will be 0.866 Mt/yr

Tailing generation 0.866 Mt/yr of tailings consisting of coarse fraction @0.606 Mt/yr (70% of total tailings) and fine fraction @0.260 Mt/yr (30% of total tailings). The coarse tailing will be transported in covered trucks to Mines for stowing and fine tailings will be stored in designated tailing pond. The area of existing Tailing Pond will be increased if required to accommodate the tailings generated during expansion phase. The designed capacity of proposed tailing pond is ~4.92 Mm^3, sufficient to keep total ~4.32 Mm^3 of tailing estimated for expansion phase. Decanted water from tailing pond will be pumped back (recycled) for use in beneficiation process. Garland drains will be provided all along tailing pond to control run-off.

Water Quality Management

- No water is discharged from the plant operation. Ground water will be not be intersected during any stage of plant operation.

- Effluents from the canteen and rest areas will be diverted through drains for irrigation of plantations. Sanitary sewage generated in office area etc. will be treated in septic tanks and soak pits.
- Overflow tailing pond is recycled back to beneficiation circuit. Decanted water from tailing pond will be pumped back (recycled) to beneficiation process.
- About ~2280 m^3/d quantity of water will be circulated for industrial purpose within plant.
- The water for greenbelt development / afforestation / developing garden (about 60 m^3/d) and water for dust suppression (20 m^3/d) will be met by treated recycled water.
- Rainwater harvesting structures are being developed in Ghatsila-Mosabani area by HCL as per approved Rainwater Harvesting system from State Ground Water Directorate.
- Artificial recharge techniques is planned near the office buildings (viz. plant office, canteen, Workshop, loading and unloading point etc.).

Air Quality Management

- Main fugitive dust source -material handling (ore, concentrate and dried tailings) and movement of trucks carrying ore, concentrate and tailings. To reduce fugitive dust following measures have been / will be taken:
  - Material transport within the plant by covered conveyor
  - Concentrate is despatched by covered trucks.
  - Internal roads are metalled and are periodically maintained.
  - Overloading of transport vehicles / machineries prohibited.
  - Lower speed limits of vehicles involved in transportation.
  - All the vehicles involved in the project shall have valid PUC certification and shallbe maintained periodically (e.g. cleaning of fuel injector in diesel engines).
  - Green belt development program using local species around ore handling units, tailing pond etc.
  - Water sprinkling system at ore handing unit.
  - Periodical water sprinkling, just sufficient to wet the road surface
  - Monitoring of ambient air quality and equipment emission will be conducted regularly to check ambient air quality.

Undertaking submitted affirming:

a. No ground water will be used.Only surface water will be used for industrial purpose.
b. The Boundary Pillars of the proposed Plant area will be maintained properly.
c. One day post monsoon baseline data related to environment monitoring will be submitted with the first compliance report.

d. The plantation work will be completed in a phase manner of operation. Thereafter the same will be maintained during entire Plant operation.

e. Sufficient water spray using water tankers will be done for effective dust suppression within the Plant premises and on roads.

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

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

In the 83rd meeting of SEAC held on 24-26 November, 2020 the following documents were sought :

i. The legal status regarding forest land in report of CO and DFO.

ii. The certified compliance of CTO conditions from RO, JSPCB.

iii. PP shall comply by putting HDPE liner at the base of pond to make it leak proof.

iv. Details report regarding legal status of Surda Mines which is the source of raw material for the proposed project.

The PAs have submitted the above required documents.

Based on the presentation made and information provided, the Committee decided that the proposal for Mosabani Copper Ore Concentration Plant of M/s Hindustan Copper Ltd at Village : Badia, Mosabani, Dist.: East Singhbhum, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – VIII.

****

The meeting concluded with thanks to all present.

(Dr. Raju Kumar)
Member

(Dr. Ajay Govind Bhatt)
Member

(Niranjan Lal Agarwalla)
Member

(Dr. Kirti Avishek)
Member

(Srikant Verma)
Secretary

(Ashok Kumar Singh)
Chairman

14/05/2022

I. Statutory compliance

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

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

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

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

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

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

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

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

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

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

x. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-11013/57/2014-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".

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

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

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

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

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

II. Air quality monitoring and preservation

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

ii. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance: Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust

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 pit/ 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-yea basis.

ii. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.

iii. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).

iv. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1),Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.

v. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

vi. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

vii. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

X. Corporate Environment Responsibility (CER)

i. The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

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

XI. Miscellaneous

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

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

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

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

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

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

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

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

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

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

A. Standard Terms of Reference

1. Executive Summary

2. Introduction

i. Details of the EIA Consultant including NABET accreditation.
ii. Information about the project proponent
iii. Importance and benefits of the project

3. Project Description

i. Cost of project and time of completion.
ii. Products with capacities for the proposed project.
iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
iv. List of raw materials required and their source along with mode of transportation.
v. Other chemicals and materials required with quantities and storage capacities
vi. Details of Emission, effluents, hazardous waste generation and their management.
vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
ix. Hazard identification and details of proposed safety systems.
x. Expansion/modernization proposals:

a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing / existing operation of the project from SPCB shall be attached with the EIA-EMP report.
b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification, 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details

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

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

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

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

6. **Environmental Status**

i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

7. **Impact and Environment Management Plan**

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modelling - in case of discharge in water body

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor- cum-rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment.

Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.
vi. Measures for fugitive emission control.
vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle / reuse recover techniques, Energy conservation, and natural resource conservation.
viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
xii. Action plan for post-project environmental monitoring shall be submitted.
xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. **Occupational health**

i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so th health of the workers can be preserved,
iv. Annual report of heath status of workers with special reference to Occupational Health and Safety.

9. **Corporate Environment Policy**

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. **Enterprise Social Commitment (ESC)**

i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. A tabular chart with index for point wise compliance of above TOR.

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

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3. Details on installation/activation of opacity meters with recording with proper calibration system
4. Details on toxic metals including mercury, arsenic and fluoride emissions
5. Details on stack height requirement for integrated steel
6. Details on ash disposal and management -Non-ferrous metal
7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
8. Raw materials substitution or elimination
9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
10. Details on Holding and de-gassing of molten metal from primary and secondary aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium
11. Details on solvent recycling

12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery
18. Trace metals in water

C. Other

1. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered.
2. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M), dated 12.01.2017.

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 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 authorit

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 e... 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 syste... In case of single stack system separate recirculation lines for flushing by giving du... 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 lo...al 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 th... 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. 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 generati equivalent to 1% of the demand load or as per the state level/ local building bye-law 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 i facilitating segregation of waste. Solid waste shall be segregated into wet garbage an 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 Cont 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.

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 environment 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.

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 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 amou 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 ar a, 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.

Annexure - VI

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

A . Standard Terms of Reference

1. Reasons for selecting the site with details of alternate sites examined/rejected/selected on merit with comparative statement and reason/basis for selection. The examination should justify site suitability in terms of environmental damages, resources sustainability associated with selected site as compared to rejected sites. The analysis should include parameters considered along with weightage criteria for short-listing selected site.
2. Submit the details of the road/rail connectivity along with the likely impacts and mitigative measures
3. Submit the present land use and permission required for any conversion such as forest, agriculture etc
4. Examine the details of transportation of Hazardous wastes, and its safety in handling.
5. Examine and submit the details of on line pollutant monitoring.
6. Examine the details of monitoring of Dioxin and Furon.
7. MoU for disposal of ash through the TSDF.
8. MoU for disposal of scrubbing waste water through CETP.
9. Examine and submit details of monitoring of water quality around the landfill site.
10. Examine and submit details of the odour control measures.
11. Examine and submit details of impact on water body and mitigative measures during rainy season.
12. Environmental Management Plan should be accompanied with Environmental Monitoring Plan and environmental cost and benefit assessment. Regular monitoring shall be carried out for odour control.
13. Water quality around the landfill site shall be monitored regularly to examine the impact on the ground water.
14. The storage and handling of hazardous wastes shall be as per the Hazardous Waste Management Rules.
15. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
16. Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.

17. A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.

18. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

19. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

20. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website http://moef.nic.in/Manual/Incinerator

21. 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.

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

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

1(a) Mining of Minerals & 2 (b) Mineral Beneficiation

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 con. 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 Zo 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 the 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 o 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 b 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.

2 (b) Mineral Beneficiation

i. The alternate sites considered, the relative merits and demerits and the reasons for selecting the proposed site for the Beneficiation Plant should be indicated.

ii. Details of the technology and process involved for beneficiation should be given. .

iii. Location of the proposed Plant w.r.t. the source of raw material and mode of transportations of the ore from mines to the beneficiation plant should be justified.

iv. Treatment of run of mine (ROM) and or of the fines/waste dump should be spelt out.

v. Estimation of the fines going into the washings should be made and its management described.

vi. Details of the equipment, settling pond etc. should be furnished.

vii. Detailed material balance should be provided.

viii. Sources of raw material and its transportation should be indicated. Steps proposed to be taken to protect the ore from getting air borne should be brought out.

ix. Management and disposal of tailings and closure plan of the tailing pond, if any after the project is over, should be detailed in a quantified manner.

x. 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 also be indicated.

xi. A copy of the document in support of the fact that the Proponent is the rightful lessee of the unit should be given.

xii. All documents including EIA and public hearing should be compatible with one another in terms of the production levels, waste generation and its management and technology and should be in the name of the lessee.

xiii. All corner coordinates of the Unit, superimposed on a High Resolution Imagery/Toposheet should be provided. Such an Imagery of the proposed Unit should clearly show the land use and other ecological features of the study area (core and buffer zone).

xiv. It should be clearly indicated 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.

xv. Issues relating to Safety should be detailed. The proposed safeguard measures in each case should also be provided. Disaster management plan shall be prepared and included in the EIA/EMP Report.

xvi. The study area will comprise of 10 km zone around the Plant.

xvii. Cumulative impact study of both Beneficiation Plant with suggested mitigation measures as per the study should be described.

xviii. Location of Railway siding with its handling capacity and safety measures should be indicated.

xix. Option to provide only silo for storage of minerals instead of open stacking to avoid fugitive dust should be explored and arrangements finalized justified.

xx. 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 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.

xxi. Details of the land for any Over Burden Dumps outside the lease, such as extent of land area, distance from lease, its land use, R&R issues, if any, should be given.

xxii. 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.

xxiii. 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.

xxiv. Implementation status of recognition of forest rights under the Scheduled Tribes and otl Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.

xxv. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

xxvi. A study shall be got done to ascertain the impact of the 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.

xxvii. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, 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 Chi 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.

xxviii. 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 along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnish Necessary allocation of funds for implementing the same should be made as part of the project cost.

xxix. Proximity to Areas declared as 'Critically Polluted' shall also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB/CPCB shall be secured and furnished to the effect that the proposed activities could be considered.

xxx. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the unit w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

xxxi. 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 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.

xxxii. 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 unit in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

xxxiii. 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.

xxxiv. 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.

xxxv. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be secured and copy furnished. .

xxxvi. 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.

xxxvii. 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.

xxxviii. 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.

xxxix. 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. 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 the pollution.

xl. 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.

xli. Details of the onsite shelter and facilities to be provided to the workers should be included in the EIA report.

xlii. 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 should be be detailed.

xliii. 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.

xliv. 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.

xlv. Public hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

xlvi. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.

xlvii. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

xlviii. A brief background of the Project, its financial position, Group Companies and legal issues etc should be provided with past and current important litigations if any.

xlix. Benefits of the Project, if the project is implemented should be outlined. The benefits of the projects shall clearly indicate environmental, social, economic, employment potential, etc.

l. 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.

li. 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.

lii. 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.

Standard EC Conditions

I. Statutory compliance:

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

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

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)

iv. 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.

v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.

vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.

ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.

iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering

upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.

vi. The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.

vii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

viii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

iv. The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.

v. Adhere to 'Zero Liquid Discharge'.

vi. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

viii. The project proponent shall practice rain water harvesting to maximum possible extent.

ix. The project proponent shall make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

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

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;

ii. Provide LED lights in their offices and residential areas.

VI. Waste management

i. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Trans boundary Movement) Rules, 2016.

ii. Kitchen waste shall be composted or converted to biogas for further *use.(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt and EMP

i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

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

ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.

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

iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.I1I dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

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

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive who will directly to the head of the organization.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out

vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.

X. Miscellaneous

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities commencing the land development work and start of production operation by the project.

a. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

b. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

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

x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders

passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act.