

**MINUTES OF THE 97<sup>TH</sup> MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 14<sup>TH</sup>, 15<sup>TH</sup>, 16<sup>TH</sup> 17<sup>TH</sup> and 18<sup>TH</sup> SEPTEMBER, 2022**

The 97<sup>th</sup> meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup> 17<sup>th</sup> and 18<sup>th</sup> September, 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 Niranjana Lal Agarwalla - Member
4. Dr. Raju Kumar - Member
5. Dr. Ajay Govind Bhatt - Member
6. Shri Srikant Verma, IFS - Secretary

SEIAA forwarded various projects to the SEAC for the technical appraisal after the last SEAC meeting held on 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> August, 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 : September 14<sup>th</sup>, 2022 [Wednesday]**

**A. Corrigendum EC letter for Residential Building "Panchmukhi Enclave" of M/s Anaadi Group, Mauza : Hatia, Thana no. : 248, Distt. : Ranchi, Jharkhand.**

**(Proposal No. : SIA/JH/MIS/ 289046/2022)**

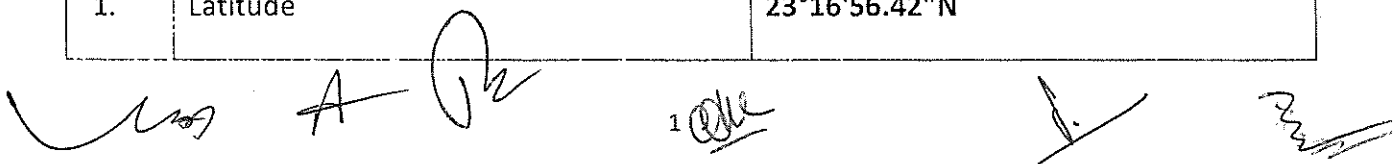
The PA's vide online application no. SIA/JH/MIS/ 289046/2022 has requested for necessary correction in Environmental Clearance issued vide letter no. EC/SEIAA/2022-23/2620/2022/205, dated 02.08.2022 with regard to change in building blocks, the revised details is being given below :

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

Anaadi Group is proposed to develop a Group housing project "Panchmukhi Enclave" on the total land area measuring 6097.95 m<sup>2</sup> located at Khesra No. 1590, Khata No. 209, Thana No. 248, Mauza - Hatia, Anchal- Namkum, Dist.-Ranchi, Jharkhand. The total build up area is 25723.67m<sup>2</sup>.

**Salient Features of the Project**

Sl. no.	Particulars	
1.	Latitude	23°16'56.42"N



Sl. no.	Particulars	
2.	Longitude	85°19'11.15"E
3.	Plot Area	6097.95 Sqm.
4.	Proposed Ground Coverage (@32.18%)	1962.63 Sqm.
5.	Proposed Built-up Area	871.79 Sqm.
6.	<b>Total (Existing + Proposed)</b>	<b>19981.04 Sqm.</b>
7.	Proposed Parking Area	5742.63 Sqm.
8.	<b>Total Built-up Area</b>	<b>25,723.67</b> <i>Note: Existing Built-up Area: 19981.04 Sq.min under construction for which EC was not required.</i>
9.	<b>Total Parking Proposed (ECS)</b>	<b>Four wheeler: 181 ECS</b> <b>Two wheeler: 179 Nos.</b>
10.	Total Green cover @20%	1220 Sqm. Greenbelt area: 914.69 Sqm. @ 15% Green cover: 307.53 Sqm. @ 5%
11.	Rain Water Harvesting Pits (with size)	4 (12.57 Cumec / hour)
12.	STP Capacity	150 KLD
13.	Maximum Height of the Building (m)	~30 m.
14.	Power Requirement	1000 KVA (Source: The source of power will be supplied by Jharkhand State Electricity Board.)
15.	Power Backup (DG sets)	2 x 200 KVA
16.	Total Water Requirement	~145 KLD
17.	Fresh / Domestic Water Requirement	~92 KLD
18.	Reuse of Recycled Water	~53 KLD
19.	Waste Water Generated	~122 KLD
20.	Solid Waste Generated (Operational)	~488 Kg/day
21.	Biodegradable Waste (Operational)	~293Kg/day

Sl. no.	Particulars		
22.	Non-Biodegradable Waste (Operational)	~195 Kg/day	
23.	Number of Tower (Residential Building)	04	
24.	Basement	01	
25.	Stories	B+G+9 (Maximum) Max. Height of the Building: 30 m.	
26.	R+U Value of Material used (Glass)	U-value-5.6 w/m <sup>2</sup> R-value- 0.17 w/m <sup>2</sup>	
27.	Total Cost of the project:	36.98 Cr.	
28.	EMP Budget	<b>During Construction:</b> Capital: 19.5 Lakhs Recurring: 20.25 Lakhs	
		<b>During Operation:</b> Capital: 78 Lakhs Recurring: 21Lakhs	
29.	Construction Phase:	i) Power Back-up	50 KVA each
		ii) Water Requirement & Source	Fresh water – 9 KLD Treated wastewater-12 KLD Source: Tanker Water
		iii) STP (Modular)	20 KLD
30.	Connectivity	Hatia Railway Station	Approx. 3.19km, NW
		BirsaMundaAirport	Approx. 3.90km,SW
31.	CER Cost	37 Lakhs	

#### Detailed Area Statement

Particulars	Area (Sqm.)
Plot Area	6097.95
Existing Built-up Area	19109.25
Proposed Built-up Area	871.79
<b>Total (Existing + Proposed)</b>	<b>19981.04</b>
Proposed Parking Area	5742.63
<b>Total Built-up Area</b>	<b>25,723.67</b>
Ground Coverage @(32.18%)	1962.63
<b>Green Cover @ 20%</b>	1220 Sqm.
	Greenbelt area: 914.69 Sqm. @ 15%
	Green cover: 307.53 Sqm. @ 5%

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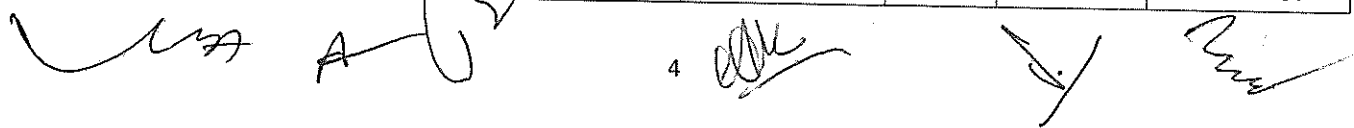
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### Details of Site Surroundings and Connectivity

Sl. No.		Description	Distance & Direction
1.	Nearest Railway Station	Hatia Railway Station Balasiring Railway Station	Approx. 3.19Km, NW Approx.4.23Km,WSW
2.	Airport	Birsa Munda Airport	Approx.3.90km,NNE
3.	Roads	Ranchi Ring Road Khunti Road Obariya Rd	Approx. 2.25km, SSW Approx. 1.11 km, West Adjacent to the project site
4.	Water bodies	Subarnarekha River Dhruwa Dam Ranchi Lake Batam Talab Hesag Talab Kadru Talab Argora Talab Chhat Talab	Approx. 0.20 km, NW Approx. 6.34 km, West Approx. 9.25 km, North Approx. 6.85 km, North Approx.10.33km, NNE Approx. 7.67 km, North Approx.7.97km, NNW Approx. 8.38 km, NE
5.	Nearest School, Hospital & Temple	<b>Schools</b> Govt. High School, Hatia Vidya Mandir School, Hatia Vidhya Memorial Public School, Hatia  <b>Hospitals</b> Summer Hospital & Research Centre Pvt. Ltd., Karma Chowk Division Railway Hospital, Ranchi Government Health Centre, Tupudana <b>List of Temples:</b> Sri Durga Mandir	Approx. 1.11 km, NW  Approx. 0.52 km, NW  Approx. 0.80 km, WNW  Approx. 2.30 km, NW  Approx. 2.93 km, NW  Approx. 1.64 km, SW  Approx. 0.68 km, NW
6.	Nearest Densely	Hatia Rajeev View Colony OberiyaChoybasato li	Approx. 1.47 km, WNW Approx. 0.76 km, West Approx. 1.38 km, East Approx. 0.78 km, WNW
7.	Nearest Town	Ranchi	Approx. 6.90 km, NNW

### Details of Building Blocks

Building Blocks	3BHK	2BHK	Shop	Community Hall	Total units	No. of Floors	Total Built-up Area (Sq.m)
Block-A	24	0	3	0	27	B+G+8	3967.35
Block-B	36	18	0	0	54	B+G+9	9973.52
Block-C	45	0	0	0	45	B+G+9	6354.02
Block-D	36	0	0	1	37	B+G+9	5428.78
<b>Total</b>	<b>141</b>	<b>18</b>	<b>3</b>	<b>1</b>	<b>163</b>	<b>--</b>	<b>25723.67</b>



### Calculation of Population

Description	No. of units / Area in Sqm.	Unit Population	Population
Main Dwelling Units (Residential) 3 BHK	141	6	846
Main Dwelling Units (Residential) 2 BHK	18	5	90
Shop	3	6	18
Community Hall	1	250	250
Visitors (15% of the residential population)	...	...	181

### Parking Details

S. No.	Parking Type	Prop No. / ECS
1.	Car Parking	157
2.	Two Stackcar	6
3.	Visitors car parking	17
4.	Ambulance	1
5.	Two wheeler parking	179

### Calculation of Green Area

Total Plot Area	6097.95Sqm.
Total green cover	1220 Sqm. Green belt area: 914.69 Sqm. @ 15% Green cover: 307.53 Sqm. @ 5%
Total No. of Trees will be Planted@ 1 tree per 80 Sqm. of Plot Area	76 Nos.

### Details of Water Requirement

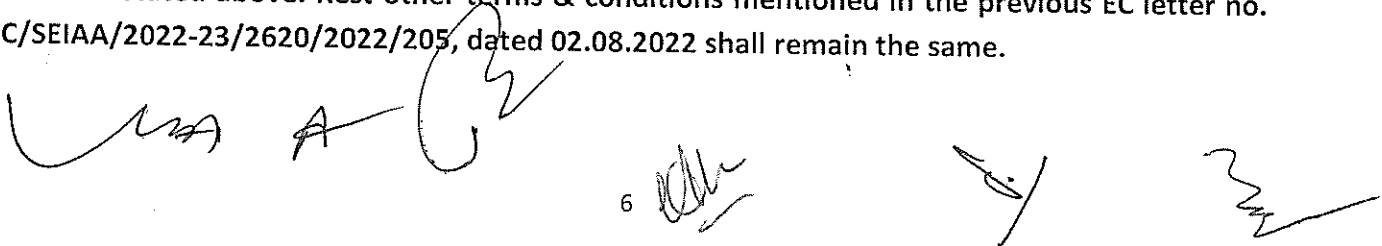
S. No.	Description	No. of units/Area in Sqm	Unit Population	Population	Unit water consumption (lpcd)	Total water required (kl)	Fresh water required (kld)	Flushing (kld)	Total Wastewater (kld) (80% of domestic + 100% Total flushing)
1	Main Dwelling Units (Residential) 3BHK	141	6	846	135 (90+45)	114	76	38.07	98.87

2	Main Dwelling Units (Residential) 2BHK	18	5	90	135 (90+45)	12	8.1	4.05	10.53
3	Shop	3	6	18	45 (25+20)	1	0.45	0.36	0.72
4	Community Hall	1	250	250	45 (25+20)	11	6.25	5	10
5	Visitors (15% of the residential population)	...	...	181	15 (5+10)	3	0.90	1.806	2.5260
Subtotal -I						141.13	92	49.286	122.65
Reuse of treated water									
1	Green cover	1220 Sqm.	...	...	3 liter/sqm of green area	4			
Subtotal II						4			
Grand Total I+II						145.13			

#### STATUTORY CLEARANCES :

1	DFO Forest Distance	:	DFO, Ranchi Forest Division vide letter no. 1466, dated 18.04.2022 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. 252, dated 16.03.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Namkum (Ranchi) vide letter no. 1078(ii), dated 21.05.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.
4	AAI NOC	:	Airport Authority of India has issued NOC vide letter no RANC/EAST /B/101920/ 503584, dated 22.10.2020.
5	Fire Department	:	A Certificate from Fire Department, Jharkhand, Ranchi vide letter no. 526 dated 28.10.2016.
6	Building Plan	:	RRDA has approved building plan vide case no. RRDA/GH/0340 /2019/ALT1, dated 28/07/2021.

The SEAC considered the same and recommends for issuance of Amended EC with corrected details as stated above. Rest other terms & conditions mentioned in the previous EC letter no. EC/SEIAA/2022-23/2620/2022/205, dated 02.08.2022 shall remain the same.


  
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**B. Consideration of Proposals :**

1. Timra Stone Deposit of Sri Josef Surin, Village : Timra, Thana no. : 83, Dist. : Khunti, Jharkhand (0.938 Ha).

(Proposal No. : SIA/JH/MIN/275895/2022).

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity- 11111.40 cu.m/annum or 30000.78 TPA

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

This is a new project which has been taken for appraisal on 14.09.2022.

**Project and Location Details :**

Sl	Parameter	Details
1	Project Name	: Timra Stone Deposit
2	Lessee:	: Sri Josef Surin S/o Late Markus Surin, At - Buruegi, Gatigarha, P.S.- Bano, Jitutoli, District- Simdega, Jharkhand
3	Lease Address	: Village – Timra, Thana No. 83, District – Khunti, State –Jharkhand.
4	Lease Area	: 0.938 ha Acres-2.32 Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: Rs. 20 Lakhs
7	EMP Budget	: Capital: 2.38 Lakhs Recurring: 3.27 Lakh / year
8	CSR / CER Budget	: Rs. 0.40 Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: Cu.m.: 58369.50 cum Tonnes: 157597.65 tons
11	Mine Life	: 5.0 years
12	Man power	: 22
13	Water Requirement	: 5.34 KLD (Drinking: 0.22 KLD, Dust Suppression: 2.63 KLD, Plantation: 2.49 KLD)
14	Water Source	: From Nearby villages by tankers
15	DG Set / power	: 5 KVA
16	Crusher	: No crusher
17	Nearest Water Body	: Karo Nadi, 6.5 km, West direction
18	Nearest Habitation	: Marikuti, 3.0km
19	Nearest Rail Station	: Karra Railway station, approx. 1.62 km towards East direction.
20	Nearest Air Port	: Birsa Munda Airport, approx. 30.21 km towards NNE direction.

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21	Nearest Forest	:	Dense Forest, 3.0 km towards NNW direction of mine site.
22	Road & Highways	:	NH-20, Approx. 2.08 km. in West direction.

#### CO-ORDINATES

1	Latitude		From 23°07'28" N	To 23°07'23" N
2	Longitude		From 85°06'59" E	To 85°07'04" E

#### LAND DETAILS

Khata No.	Plot No.
130	1367

#### STATUTORY CLEARANCES :

1	LOI/Lease docs	:	The Letter of Intent (LoI) has been issued by DMO, Khunti vide letter no. 342/M, dated 13.12.2021.
2	CO	:	The CO, Karra (Khunti) vide letter no. 357(ii), dated 12.05.2022 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyon.
3	DMO	:	DMO, Khunti vide memo no. 199/M, dated 06.04.2022 certified that no other mining area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Ranchi vide letter no. 86, dated 09.02.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	DFO, Khunti Division vide letter no. 604, dated 24.03.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC – cum – District Magistrate, Khunti vide letter no. 285/M, dated 25.09.2021 has informed that this project is part of District Survey Report (DSR) of Khunti district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	On 21.01.2021
8	Mine Plan Approval	:	Additional Director, Geology, Hazaribag vide Memo No. 66/G, dated 25.02.2022



**Working Details :**

1	Mining Method	:	Opencast Semi - Mechanized Mining method
2	Quarry Area	:	5 years-0.554ha      Life of Mine – 0.604 ha
3	Waste Generation	:	5 years-12382.79 cu.m
4	Stripping Ratio	:	1: 0.4
5	Working Days	:	300
6	Benches: size & No	:	6m x 6m
7	Elevation of Mine	:	632 AMSL to 636 AMSL
8	Ground Level Elevation	:	632 AMSL
9	Ultimate Working Depth	:	616 AMSL (14mbgl )
10	Water Table	:	612 AMSL (20mbgl)
11	Topography of Mine	:	Area represents a small hillock
12	Explosive Requirement	:	5kg/day
13	Diesel/Fuel requirement	:	30lt/day

**Production Details**

Year	Production of stone (Tonnes)	Production of stone (Cum)	Waste Generation (CuM)	Bench RL In Meters
1 <sup>st</sup>	29999.57	11110.95	3854.55	628mRL - 631mRL
2 <sup>nd</sup>	30000.17	11111.18	1884.57	616mRL - 634.50mRL
3 <sup>rd</sup>	30000.17	11111.18	2534.57	616mRL - 634.50mRL
4 <sup>th</sup>	29998.35	11110.50	1234.50	622mRL - 636mRL
5 <sup>th</sup>	30000.78	11111.40	2874.60	622mRL - 636mRL
<b>Total</b>	<b>149999.04</b>	<b>55555.21</b>	<b>12382.79</b>	

**Land Use**

Pattern of Utilization	Existing Land Use (Ha)	At the end of Plan period (Ha)	Conceptual stage (Ha)
Excavation/mining	Nil	0.554 (0.041 BACKFILL)	0.554 (entire area will be converted into water reservoir)
Road	Nil	Within mining	Within mining
Waste dump	Nil	Nil	Nil
Crusher	Nil	0.05 (included in mining)	0.05 (included in mining)

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Plantation (Green Belt)	Nil	0.334 (Within safety zone)	0.334 (Plantation within safety zone)
<b>Total lease area</b>	<b>0.938</b>	<b>0.938</b>	<b>0.938</b>

## ENVIRONMENT MANAGEMENT

### Green Belt Development

S.No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.334ha	830
2	Haul /Approach Road	:	0.160 km	160

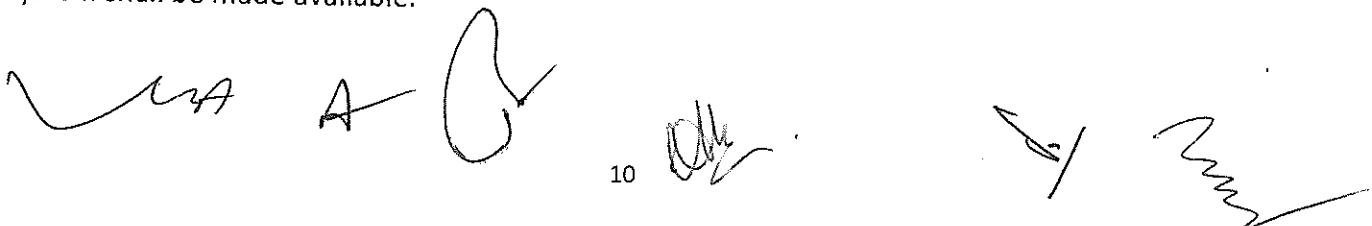
- Gabion Plantation work in the safety zone (7.5 m width around the proposed lease boundary) and on either side of approach road in two rows with the spacing of 3x3 m with suitable species such as timber & fruit bearing etc. will be done in first year of operation. Maintenance work such as h/w, mortality 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 12382.79 cum during the plan period. During plan period the proposed waste shall be temporarily dump on western side of the applied area.

### Water Quality Management

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

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

- i. Land use table to be revised.
- ii. Water balance diagram to be revised.

iii. CER budget to be revised.

The Project Authorities have submitted the above mentioned documents.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Timra Stone Deposit of Sri Josef Surin, Village : Timra, Thana, no. : 83, Dist. : Khunti, Jharkhand (0.938 Ha) is being recommended for grant of EC only for the area 19.769 Ha out of total project area 69.93 Ha. The various conditions for grant of EC is enclosed as Annexure – I

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Day 2 : September 15<sup>th</sup> , 2022 [Thursday]

#### Consideration of Proposals

1. (i) Vasundhara Elegance (ii) Vasundhara Megamart (iii) Vasundhara Radiance of M/s Vasundhara Homes Pvt. Ltd. at Mouza : Argora, Tehsil : Argora, Dist : Ranchi, Jharkhand.  
(Proposal No : SIA/JH/MIS/282659/2022).

Name of the consultant : Crystal Consultnats, Ranchi

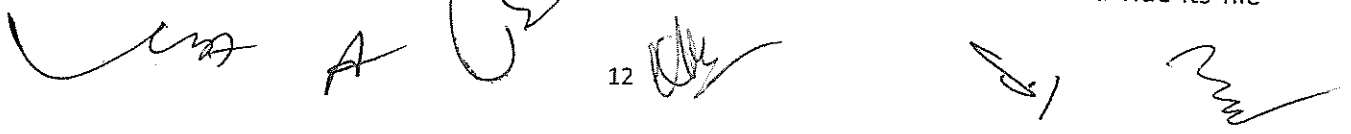
This is a case of violation which has been taken for reappraisal on 15.09.2022

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

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

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

Thus, the SEIAA, Jharkhand, in the light of Ho'ble Supreme Court order dated 9<sup>th</sup> December 2021, Office Memorandum no. F.No.22-21/2020-IA.III[E 138949] dated 28.01.2022 of MoEF&CC, Govt. of India and Standard Operating Procedure (SOP) issued by MoEF&CC, Govt. of India vide its file



number 22-21/2020-IA-III, dated 07.07.2021, the matter has been taken for consideration & recommendation of EC for violation projects.

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

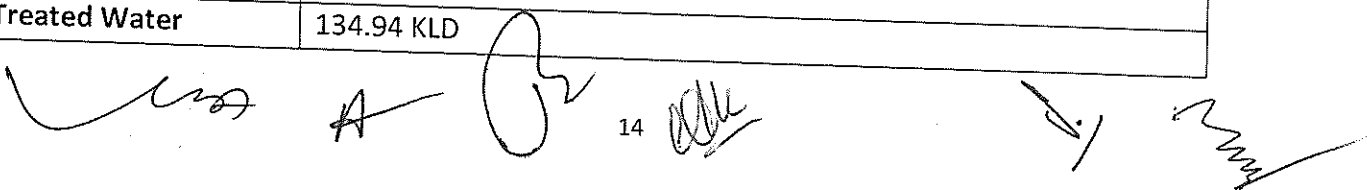
The State Expert Appraisal Committee, Jharkhand deliberated the project during its 93<sup>rd</sup> meeting held on 18-27.02.2022 and SEIAA, Jharkhand has approved the violation ToRs in 94<sup>th</sup> meeting held on 13<sup>th</sup>, 14<sup>th</sup> & 15<sup>th</sup> April, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 105, date 16.04.2022. The final EIA / EMP submitted by PP to SEIAA on 12.07.2022 and which was forwarded to SEAC on 13.07.2022.

**Salient Features of the Project :**

Particular	Details
Plot Area as per allotment	<b>Total Plot Area as per Deed : 9324.11 Sq. m.</b>
Latitude & Longitude	<b>23°21'07" N 85°17'58" E</b>
Built – Up Area	<b>Built – Up Area : 27929.00 Sq. m.</b> 1. Community Hall : 469.07 Sq. m. 2. Commercial Building (Block – A) : 2770.65 Sq. m. 3. Residential Building (Block – B) : 10469.43 Sq. m. 4. Residential Building (Block – C) : 14220.33 Sq. m.
Plot No.	1781, 1782 (P), 1735 (P)
Khata No.	34
Number of Floor	1. Community Hall : G+2 2. Commercial Building (Block – A) : LG+G+5 3. Residential Building (Block – B) : LG+G+10 4. Residential Building (Block – C) : LG+G+14
Number of Block	<b>4 Blocks</b> 1. Community Hall 2. Commercial Building (Block – A) 3. Residential Building (Block – B) 4. Residential Building (Block – C)
Building configuration	1. Commercial Building (Block – A) Shop on Street Level : 10 Shop above Street Level : 10 Office : 15 2. Residential Building (Block – B) 2 BHK : 10 3 BHK : 70 3. Residential Building (Block – C) 3 BHK : 112
FAR	2.99
Ground Covered Area	3059.04 Sq. m.

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Population	<b>1754</b> 1. Community Hall : 94 2. Commercial Building (Block – A) : 404 3. Residential Building (Block – B) : 517 4. Residential Building (Block – C) : 739
Municipal Solid Waste	1. Community Hall : 56.29 2. Commercial Building (Block – A) : 242.52 3. Residential Building (Block – B) : 310.20 4. Residential Building (Block – C) : 443.52
Bio-Degradable (40 % of MSW)	1. Community Hall : 22.52 2. Commercial Building (Block – A) : 97.01 3. Residential Building (Block – B) : 124.08 4. Residential Building (Block – C) : 177.41
Non – Biodegradable (60% of MSW)	1. Community Hall : 33.77 2. Commercial Building (Block – A) : 145.51 3. Residential Building (Block – B) : 186.12 4. Residential Building (Block – C) : 266.11
Power Requirement	Community Hall : 75 KVA Commercial Building (Block – A) : 129 KVA Residential Building (Block – B) : 400 KVA Residential Building (Block – C) : 560 KVA For Common Services : 50 KVA <b>TOTAL : 1214 KVA</b> Source – Jharkhand State Electricity Board  Back-up Power (DG Set) Community Hall : 35 KVA Commercial Building (Block – A) : 62.5 KVA Residential Building (Block – B) : 125 KVA Residential Building (Block – C) : 112 KVA For Common Services : 25 KVA <b>TOTAL : 359.5 KVA</b>
Back – Up Power	<b><u>Back-up Power (DG Set)</u></b> Community Hall : 35 KVA Commercial Building (Block – A) : 62.5 KVA Residential Building (Block – B) : 125 KVA Residential Building (Block – C) : 112 KVA For Common Services : 25 KVA <b>TOTAL : 359.5 KVA</b>
Parking	1. Community Hall : 10 Cars 2. Commercial Building (Block – A) : 12 Cars 3. Residential Building (Block – B) : 80 Cars 4. Residential Building (Block – C) : 112 Cars
Fresh Water Demand	128.32 KLD
Treated Water	134.94 KLD



<b>Demand</b>	
<b>Total Water Demand</b>	263.27 KLD
<b>STP</b>	170.00 KLD
<b>Project cost</b>	Rs. 26.61 Crores
<b>No. of RWH Pits</b>	3 Pits
<b>Height</b>	48 m

**STATUTORY CLEARANCE :**

1	DFO Certificate	: The DFO, Ranchi Division vide Letter No. 2725, Dated 28.09.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO wildlife	: The DFO, Wildlife Ranchi Vide Letter No. 836, 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.
3	CO certificate	: The CO, Argora, Ranchi vide Letter No. 89 (ii), Dated 03/02/2022 has mentioned 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 NOC ID RANC/EAST/B/021116/120948, dated 01.03.2016.
5	Fire Department	: A Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi, vide letter no. 120, Dated 15.02.2016.
6	Building Plan	: Building Plan Approved by Ranchi Municipal Corporation vide letter no. 566, [Case No. BP02/2014/930 (933/2014/A)], Dated 07/02/2017.

**During the presentation the following documents were sought :**

- i. 03 blocks [(i) Vasundhara Elegance (ii) Vasundhara Megamart (iii) Vasundhara Radiance] are declared to have one common entrance. An undertaking from the resident/ stakeholders that there is no objection for common entrance to be submitted.
- ii. Utility details (water consumption, power consumption, STP, parking etc.) for all the 03 blocks to be provided separately.
- iii. The Grievances of stake holders should be addressed and approval to be obtained.

The project will be taken up for site inspection and reconsideration after submission of the above details.

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2. Brick Soil Mining for M/s Maa Bricks, Village : Tetebanda Rampur, Thana : Silli, Thana no. : 15, Dist. : Ranchi, Jharkhand (1.42 Ha).

(Proposal No : SIA/JH/MIN/ 282756/2022).

Project Category: B2 – Application for Environment Clearance

EC Application for: Soil: 1140 Cu.M. / Year i.e. Bricks 6,00,000 Numbers / year.

Name of the consultant: M/s Crystal Consultants, Ranchi, Jharkhand.

This is a new project which has been taken for appraisal on 15.09.2022

**Project and Location Details :**

Sl	Parameter	Details
1	Project Name	: Brick Soil Mining For M/s Maa Bricks in Mouza – Tetebanda Rampur
2	Applicant:	: M/s Maa Bricks Proprietor: Sri Nirmal Sahu T.B.Rampur, P.O. – T.B.Rampur, P.S. – Silli, District – Ranchi, Jharkhand Pin Code – 835101.
3	Lease Address	: In Mouza –Tetebanda Rampur, P.O. – T.B. Rampur, Thana – Silli, Thana No – 15, District –Ranchi, Jharkhand
4	Applied Area	: Ha: 1.42 Hectares                      Acres: 3.52 Acres
5	Type of Land	: Non Forest – Rayati Land
6	Project Cost	: 10 Lakhs
7	EMP Budget	: Capital: 4.50 Lakhs                      Recurring: 2.81 Lakh / year
8	CSR / CER Budget	: Rs. 0.20 Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: Cu.M.: 16400 Cu. M.
11	Mine Life	: 14 years
12	Man power	: 09
13	Water Requirement	: 5.83 KLD (Dust Suppression: 3.00 KLD, Drinking: 0.36 KLD, Plantation: 2.47 KLD)
14	Water Source	: From nearby authorized sources.
15	DG Set / power	: No
16	Crusher	: No
17	Nearest Water Body	: Subarnarekha River is flowing approx. 0.69 km aerial distance away in North East direction
18	Nearest Habitation	: Rampur village is situated approx. 580m aerial distance away in South East direction.
19	Nearest Rail Station	: Barlanga Railway Station is situated approx. 1.75 Km aerial distance away towards North - East direction.



			Muri Railway Station is situated approx. 6.98 Km aerial distance away towards South - East direction.
20	Nearest Air Port	:	Birsa Munda Airport, Ranchi is situated approx. 52.97 Km aerial distance away towards South - West direction.
21	Nearest Forest	:	Approx 475m away from the proposed project.
22	Road & Highways	:	Approach Road: Muri – Rampur - Gola Road is approx. 80m away in East direction. Highway: SH-1 (Ranchi – Purulia Road) is about 7.59 Km away SH-1 (Ranchi – Purulia Road) is about 7.59 Km away

#### CO-ORDINATES

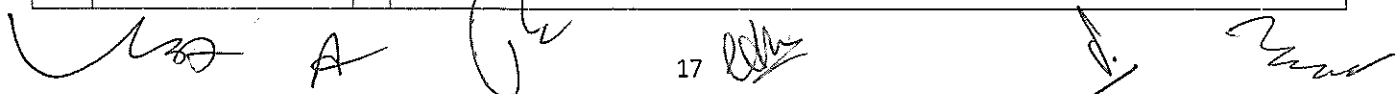
1	Latitude		From N23°25'50.51"	To N23°25'55.23"
2	Longitude		From E85°49'41.39"	To E85°49'47.02"

#### LAND DETAILS

Khata No -	59	20
Plot Nos –	1848, 1849, 1854	1850, 1851, 1852, 1853, 1855, 1856, 1857, 1863, 1864

#### STATUTORY CLEARANCES :

1	LOI / Lease docs	:	Land agreement made.
2	CO	:	The CO, Silli, Ranchi vide letter no. 472(ii), dated 08.08.2020 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar or Register II.
3	DMO	:	DMO, Ranchi vide memo no. 596/M, dated 15.07.2022 certified that no other lease exists within 500m radius from proposed project site.
4	DFO Wild Life	:	Division Forest Officer, Wildlife Division Ranchi vide memo no. 870, dated 05.12.2020 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
5	DFO Forest Distance	:	Division Forest Officer, Ranchi Forest Division vide letter no. 3692, dated 14.09.2020 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The DC-cum-District Magistrate, Ranchi vide letter no. 246/M, dated


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			02.03.2022 has informed that this project (sl no 2) is part of District Survey Report (DSR) at Ranchi district and accordingly necessary action with regard to Environmental Clearance can be taken.
7	Gram Sabha	:	Gram Sabha conducted on 26.02.2019
8	Mine Plan Approval	:	Approved by the Assistant Mining Officer, Ranchi vide Letter no. 947, dated 16.09.2017.

**Working Details :**

1	Mining Method	:	Opencast Manual Mining and transportation by tippers.	
2	Quarry Area	:	5 years – 0.35 Ha	Life of Mine – 0.95 Ha
3	Waste Generation	:	5 years– 700 Cu.M (Top Soil)	Life of Mine – 1900 Cu.M (Top Soil)
4	Stripping Ratio	:	1 : 0.12	
5	Working Days	:	200 Days	
6	Bench: size & No	:	Size: 1m X 1.5m, No. - 2	
7	Elevation of Mine	:	Highest RL 278m AMSL, Lowest RL 277m AMSL	
8	Ground Level Elevation	:	277m AMSL	
9	Ultimate Working Depth	:	275m AMSL	
10	Water Table	:	266m AMSL	
11	Topography of Mine	:	Flat Land.	
12	Explosive Requirement	:	No	
13	Diesel/Fuel requirement	:	4 KL/year ( 20 Litres/day)	

**Production Details**

Year	Production of Sub Soil (Cum)	Production of Bricks (Numbers)	Top Soil Generation (CuM)	Bench RL in Meters
1st Year	1140	6,00,000	140	278m – 276m
2nd Year	1140	6,00,000	140	278m – 276m
3rd Year	1140	6,00,000	140	278m – 276m
4th Year	1140	6,00,000	140	277m – 275m
5th Year	1140	6,00,000	140	277m – 275m
<b>Total</b>	<b>5700</b>	<b>30,00,000</b>	<b>700</b>	

**Land Use**

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

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			(Ha)		(Ha)	
1	Mining Area (Quarry)	Nil	0.35	0.95	0.95	Grass cultivation will be done on it
2	Green Belt Within Safety Barrier	Nil	0.47	0.47	0.47	Plantation
3	Unutilized	1.420	0.60	Nil	Nil	
	<b>TOTAL</b>	<b>1.420</b>	<b>1.42</b>	<b>1.42</b>	<b>1.42</b>	

## ENVIRONMENT MANAGEMENT

### Green Belt Development

SL	Location		Area/Length	No of Trees
1	Safety Zone	:	0.47 Ha	1175 trees @ 2500 trees per Ha
2	Haul /Approach Road	:	0.016	108 trees on both sides in double row - 3m distance
			i.e. Length 80m width 2m	

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

### Solid Waste Management

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

### Water Quality Management

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

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

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

#### Air Quality Management

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

#### Undertaking submitted affirming:

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated, 12.12.18 decided that the proposal for Brick Soil Mining for M/s Maa Bricks, Village : Tetebanda Rampur, Thana : Silli, Thana no. : 15, Dist. : Ranchi, Jharkhand (1.42 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

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20



Day 3 : September 16<sup>th</sup>, 2022 [Friday]

Consideration of Proposals

1. Kokpara Narsingarh Brick Earth Deposit of M/s Star Bricks (Prop. : Shri Gurudev Mahato), Village : Kokpara Narsingarh, Circle : Dhalbhumgarh, Thana no. : 173, Dist. : East Singhbhum, Jharkhand (1.541 Ha).

(Proposal No. : SIA/JH/MIN/290447 /2022)

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity-1200.00 cu.m/annum or 1560.00MTPA

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

This is a new project which has been taken for appraisal on 16.09.2022.

Project and Location Details :

Sl	Parameter	Details	
1	Project Name	: Kokpara Narsingarh Brick Earth Deposit	
2	Lessee:	: M/S Star Bricks (Prop-Shri Gurudev Mahato)	
3	Lease Address	: AT+P.O.- Dhalbhumgarh, Thana– Ghatshila, District- East Singhbhum, State- Jharkhand	
4	Lease Area	: 1.541 ha	Acres-3.81 Acres
5	Type of Land	: Non Forest – Raiyati Land	
6	Project Cost	: Rs. 20 Lakhs	
7	EMP Budget	: Capital: 3.74 Lakhs	Recurring: 3.27 Lakh / year
8	CSR / CER Budget	: Rs. 0.40 Lakhs	
9	New or Expansion	: New	
10	Mineable Reserves	: Cu.m.: 23083.16 cum	Tonnes: 30008.108 tons
11	Mine Life	: 19.23 or 19 years	
12	Man power	: 15	
13	Water Requirement	: 8.65 KLD(Drinking: 0.15 KLD, Dust Suppression: 4.40 KLD, Plantation: 4.10 KLD)	
14	Water Source	: From Nearby villages by tankers	
15	DG Set / power	: NA	
16	Crusher	: No crusher	
17	Nearest Water Body	: Subarnekhya Nadi, approx. 3.10 km, SW direction	
18	Nearest Habitation	: Dhalbhumgarh, 0.40 km	
19	Nearest Rail Station	: Dhalbhumgarh Railway Station at a distance of 0.80 km towards NE direction	

20	Nearest Air Port	:	Sonari Airport, Ranchi at a distance of 60.0 km in NW direction
21	Nearest Forest	:	Open Mixed Jungle, approx. 1.30 km, NE direction Open Mixed Jungle, approx. 3.40 km, SE direction
22	Road & Highways	:	NH-33, approx, 1.0 km towards NE direction

#### CO-ORDINATES

1	Latitude		From 22°30'20.76"N	To 22°30'26.31"N
2	Longitude		From 86°32'44.47"E	To 86°32'50.10"E

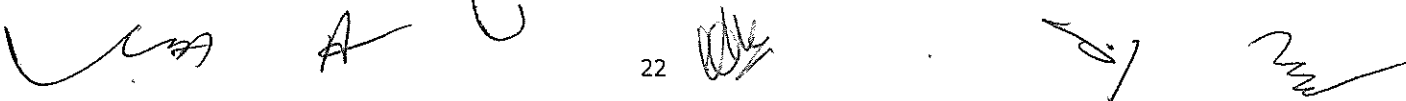
#### Land Details :

Khata No.	Plot No.
123	752, 753 & 754
124	751, 729, 755 & 756

#### Statutory Clearances :

1	LOI/Lease docs	:	Land agreement made.
2	CO	:	The CO, Dhalbhumgarh vide letter no. 573, dated 09.10.2018 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyani.
3	DMO	:	DMO, East Singhbhum vide letter no. 666/Khanan, dated 09.05.2019 certified that no other mining area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 182, dated 18.02.2020, certified that the said project is out of Dalma Wildlife Sanctuary and Eco Sensitive Zone.
5	DFO Forest Distance	:	DFO, Jamshedpur Division vide letter no. 2563, dated 05.10.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The project is already mentioned in page no. 30 of District Survey Report (DSR) of District East Singhbhum.
7	Gram Sabha	:	BDO, Dhalbhumgarh vide Letter no. 1520, dated 28.11.2018 informed that Gram Sabha conducted on 08.11.2018.
8	Mine Plan Approval	:	Deputy Director, Geology, Daltonganj, Palamau vide Letter No. 432/G, dated 16.02.2019

#### Working Details :



1	Mining Method	:	Opencast Manual Mining method
2	Quarry Area	:	5 years-0.300ha
3	Waste Generation	:	5 years-0.0 cu.m
4	Stripping Ratio	:	1: 0
5	Working Days	:	150
6	Benches: size & No	:	2m x 2m
7	Elevation of Mine	:	101 AMSL to 103 AMSL
8	Ground Level Elevation	:	101 AMSL
9	Ultimate Working Depth	:	From top surface upto a depth of 2.00m
10	Water Table	:	81 AMSL (20mbgl)
11	Topography of Mine	:	Area represents almost flat land
12	Explosive Requirement	:	NA
13	Diesel/Fuel requirement	:	NA

### Production Details

Year	Total excavation of brick earth in cum	Number of bricks	Total excavation of brick earth
			MT=Cum x 1.3
1 <sup>st</sup>	1200.00	600000	1560.00
2 <sup>nd</sup>	1200.00	600000	1560.00
3 <sup>rd</sup>	1200.00	600000	1560.00
4 <sup>th</sup>	1200.00	600000	1560.00
5 <sup>th</sup>	1200.00	600000	1560.00
<b>Total</b>	<b>6000.00</b>	<b>3000000.00</b>	<b>7800.00</b>

### Land Use

Pattern of Utilization	Existing (Ha)	Plan Period (Ha)
Quarrying	Nil	0.300
Infrastructure (Proposed Kiln)	Nil	0.164
Storage of casted bricks	Nil	0.250
Road Barrier	Nil	0.135
Proposed Road	Nil	0.305
Plantation at Safety Zone	Nil	0.387
Unused Area	1.541	0.00
<b>Total</b>	<b>1.541</b>	<b>1.541</b>

## ENVIRONMENT MANAGEMENT

### Green Belt Development

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.387 ha	970
2	Haul /Approach Road	:	0.400 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

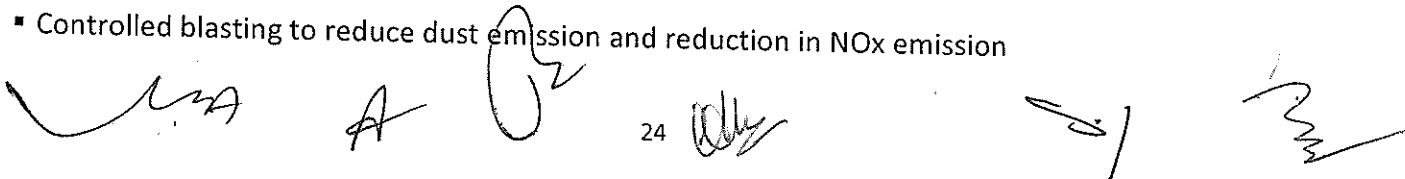
- It is proposed that the total wastes will be dumped at site & will be used in maintenance of road.

#### Water Quality Management

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

#### Air Quality Management

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

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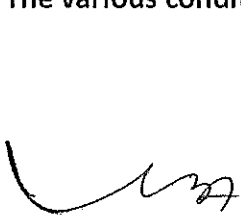
- All machineries and transport vehicles shall be properly maintained and pollution check will be done once in a year to keep the emissions from machineries and vehicle under control. Records for same to be maintained.
- Water sprinkling will be done on haul road to control emission of dust while transporting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

**Undertaking submitted affirming:**

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Kokpara Narsingarh Brick Earth Deposit of M/s Star Bricks (Prop. : Shri Gurudev Mahato), Village : Kokpara Narsingarh, Circle : Dhalbhumgarh, Thana no. : 173, Dist. : East Singhbhum, Jharkhand (1.541 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

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2. Chandanpur Brick Earth Deposit of M/s Star Bricks (Prop. : Shri Gurudev Mahato), Village : Chandanpur, Dist. : East Singhbhum, Jharkhand (1.388 Ha).

(Proposal No. : SIA/JH/MIN/288856 /2022)

Project Category: B2 – Application for Environment Clearance

EC Application for: Proposed Capacity-1200.02 cu.m/annum or 1560.026 MTPA

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

This is a new project which has been taken for appraisal on 16.09.2022.

**Project and Location Details:**

Sl	Parameter	Details
1	Project Name	: Chandanpur Brick Earth Deposit
2	Lessee:	: M/s Star Bricks, Prop. Shri Gurudev Mahato
3	Lease Address	: Duplex No.-8, Syndicate Colony Uliyan, Near Neel Surovour, Kadma, District- East Singhbhum, State- Jharkhand
4	Lease Area	: 1.388 ha Acres-3.43 Acres
5	Type of Land	: Non Forest – Raiyati Land
6	Project Cost	: Rs. 40 Lakhs
7	EMP Budget	: Capital: 2.605 Lakhs Recurring: 3.27 Lakh / year
8	CSR / CER Budget	: Rs. 0.80 Lakhs
9	New or Expansion	: New
10	Mineable Reserves	: Cu.m.: 20039.74 cum Tonnes: 26051.662 tons
11	Mine Life	: 16.70 or 17 years
12	Man power	: 21
13	Water Requirement	: 6.50 KLD(Drinking: 0.21 KLD, Dust Suppression: 2.90 KLD, Plantation: 3.40 KLD)
14	Water Source	: From Nearby villages by tankers
15	DG Set / power	: NA
16	Crusher	: No crusher
17	Nearest Water Body	: Subarnekhya Nadi, approx. 0.46 km, WNW direction
18	Nearest Habitation	: Chandanpur, 0.15 km
19	Nearest Rail Station	: Kokpara Railway Station at a distance of 9.0 km towards NNE direction
20	Nearest Air Port	: Birsa Munda Airport, Ranchi at a distance of 163.9 km in NW direction
21	Nearest Forest	: Dumaria Hill Forest, approx. 6.27 km, W direction
22	Road & Highways	: NH-18, approx, 3.21 km towards ENE direction

CO-ORDINATES

*(Handwritten signatures and initials)*

1	Latitude	From 22°24'10.15"N	To 22°24'14.28"N
2	Longitude	From 86°35'24.27"E	To 86°35'30.48"E

**Land Details :**

Khata No.	Plot No.
193	130
81	139 (P) & 145

**Statutory Clearances :**

1	LOI/Lease docs	:	Land agreement made.
2	CO	:	The CO, Chakuliya, East Singhbhum vide letter no. 830, dated 06.09.2021 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatyan & Register II.
3	DMO	:	DMO, East Singhbhum vide letter no. 2060/Khanan, dated 20.11.2018 certified that no other mining area exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Dalma Elephant Project vide letter no. 183, dated 18.02.2020 certified that the said project is out of Dalma Wildlife Sanctuary and Eco Sensitive Zone.
5	DFO Forest Distance	:	DFO, Jamshedpur Division vide letter no. 2260, dated 14.09.2021 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
6	DSR	:	The project is already mentioned in page no. 30 of District Survey Report (DSR) of District East Singhbhum.
7	Gram Sabha	:	Gram Sabha conducted on 01.07.2018.
8	Mine Plan Approval	:	Deputy Director, Geology, Palamau vide Memo No. 221/G, dated 11.09.2018.

**Working Details :**

1	Mining Method	:	Opencast Manual Mining method
2	Quarry Area	:	5 years-0.802ha Life of Mine - 1.388 ha
3	Waste Generation	:	5 years-0.0 cu.m
4	Stripping Ratio	:	1:0
5	Working Days	:	200

6	Benches: size & No	:	2m x 2m
7	Elevation of Mine	:	85 AMSL to 87 AMSL
8	Ground Level Elevation	:	85 AMSL
9	Ultimate Working Depth	:	From top surface upto a depth of 2.00m
10	Water Table	:	65 AMSL (20mbgl)
11	Topography of Mine	:	Area represents almost flat land
12	Explosive Requirement	:	NA
13	Diesel/Fuel requirement	:	NA

**Production Details :**

Year	Total excavation of brick earth in cum	Number of bricks	Total excavation of brick earth
			MT=Cum x 1.3
1 <sup>st</sup>	1199.96	600000	1559.948
2 <sup>nd</sup>	1199.92	600000	1559.896
3 <sup>rd</sup>	1199.94	600000	1559.922
4 <sup>th</sup>	1199.90	600000	1559.870
5 <sup>th</sup>	1200.02	600000	1560.026
<b>Total</b>	<b>5999.74</b>	<b>3000000.00</b>	<b>7799.662</b>

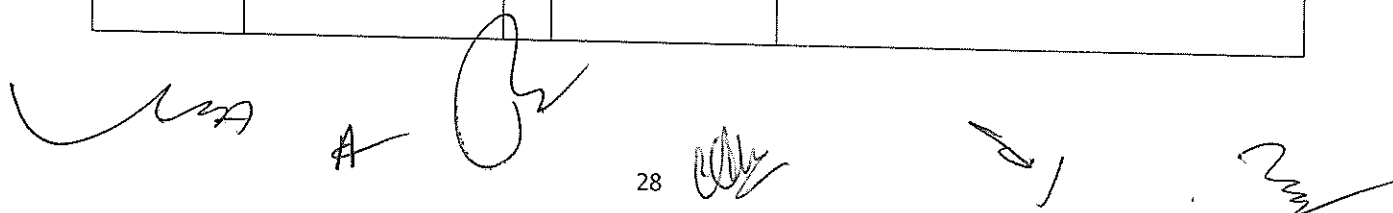
**Land Use**

Pattern of Utilization	Existing (Ha)	At the end of Plan Period (Ha)
Quarrying	Nil	0.300
Infrastructure (Proposed Kiln)	Nil	0.652
Storage of Bricks	Nil	0.050
Plantation at Safety Zone	Nil	0.386
<b>Total</b>	<b>1.388</b>	<b>1.388</b>

**ENVIRONMENT MANAGEMENT**

**Green Belt Development**

S. No.	LOCATION		Area/Length	No of Trees
1	Safety Zone	:	0.386 ha	965
2	Haul /Approach Road	:	0.150 km	150



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

#### **Solid Waste Management**

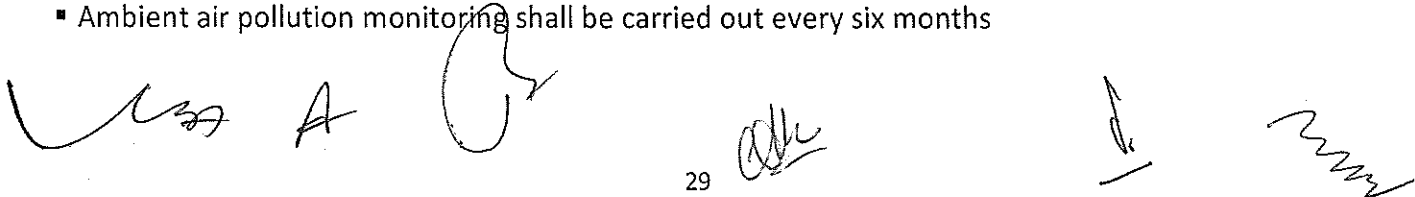
- It is proposed that the total wastes will be dumped at site & will be used in maintenance of road.

#### **Water Quality Management**

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

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**Undertaking submitted affirming:**

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

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 decided that the proposal for Chandanpur Brick Earth Deposit of M/s Star Bricks (Prop. : Shri Gurudev Mahato), Village : Chandanpur, Dist. : East Singhbhum, Jharkhand (1.388 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I.

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3. Expansion of proposed Project "Infinity Sapphire Square / Mall of Ranchi" of M/s Pranami Estates Pvt. Ltd. at Ratu Road, Tehsil : Ranchi Sahar, Dist. : Ranchi, Jharkhand.  
(Proposal No. : SIA/JH/MIS /290992 /2022).

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

EC Application for: Expansion of proposed project: Total built-up area is 27783.41 sq m.  
(Existing B.U.A-25819.44 sq.m. and Expansion-1963.97 sq.m).

Name of the consultant: P & M Solution, Noida

Expansion of proposed project "Infinity Sapphire Square/ Mall of Ranchi" at Plot No-171- 174 on Ratu Road, Town-Ranchi, Tehsil-Ranchi Sahar, District-Ranchi, Jharkhand by M/s Pranami Estates Pvt. Ltd. Project involves development of 96 no.of commercial shops and cinema hall with 692

seats with ancillary facilities on a plot area of 5487.57 m<sup>2</sup>. Previous Built-up area of the project is 25819.44 for which Environment clearance has been obtained vide letter no. EC/SEIAA/2014-15/523/2014/846 dated 30.04.2015. The project is going for expansion and the total Built-up area of the project after expansion is 27783.41 sq.m. Green area of 823.13 m<sup>2</sup> (15% of plot area) is being provided.

**Project and Location Details :**

Parameters	Description
Plot Area	5487.57 sq. m. (approx. 1.35 acre)
Project Cost	INR 59 Crores
Built-up Area (@ 3.32 F.A.R)	27783.41 sq. m.
Green Area (@ 15 % of plot area)	823.13 sq m
Population	1700
Water Requirement	71 KLD
Fresh Water Requirement	21 KLD
Wastewater Generation	55 KLD
STP Capacity	70 KLD
Total Municipal Waste	361 kg/day
Power Requirement	2500 KVA (Jharkhand State Electricity board)
DG Sets	3 no. of DG set of Total 2645 KVA (2*1010 +1*625) kVA
RWH Pits	02 no.
Parking Area	2-wheelers: 70, Cars: 18, Cycle: 139, Other vehicles (loading & unloading): 83
Connecting road	Road (Adjacent, N direction) SH 2 ( 0.29 km, N)
National Highway	NH 39 (8.19,W)
Nearest Railway Station	Ranchi Junction Railway Station (3.67 km, S)
Airport	Birsa Munda Airport (6.83 km, S)
Nearest Hospitals	Nagar Nigamdevkamal (0.17 km, NE) Vivekananda Hospital (1.03km, NW)
Nearest Water Bodies	Kanke Dam (1.60 km, NE) Ranchi Lake (0.89km, S)

Suberneka River (7.4 km, E) Potpoto River (5.28 km, N) Jumar River (7.52 km, N)
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**Plot Details**

M.S. Plot No.	Area
171, 172, 173 & 174	135.60 (Decimal)

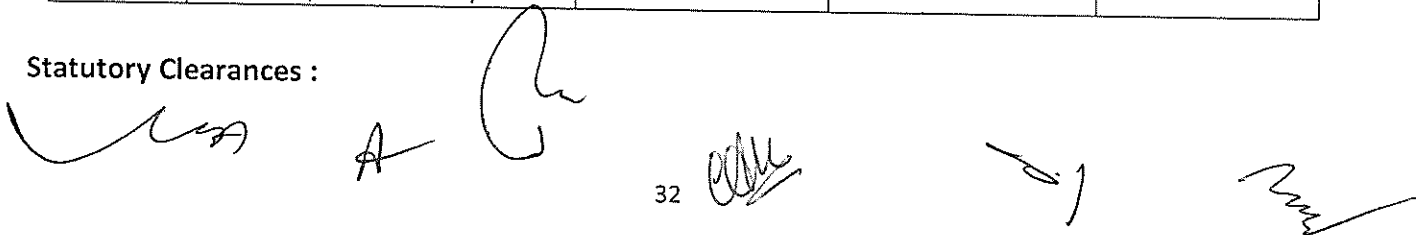
**CO-ORDINATES :**

S. No.	Latitude	Longitude
1.	23°22'44.26"N	85°18'52.60"E
2.	23°22'44.06"N	85°18'53.82"E
3.	23°22'39.85"N	85°18'53.33"E
4.	23°22'40.27"N	85°18'51.44"E

**Area Summary :**

S. No.	Description	Previous area (sq m)	Proposed area after expansion (sq m)	Expansion area (Previous area- Proposed area)(sq m)
1.	<b>Plot Area</b>	5487.57	<b>5487.57</b>	-
2.	Road widening area	147.52	147.52	-
3.	<b>Net Plot area</b>	5340.05	5340.05	-
4.	Ground Coverage	2663.71 (49.88%)	2812.50(52.66%)	148.79 (2.78%)
5.	FAR Commercial	16222.16 (@2.95)	18222.75 (@3.32)	8662.09
6.	Non-FAR Area including basement area	9597.28	9560.66	-36.62
7.	<b>Built-up Area</b>	<b>25819.44</b>	<b>27783.41</b>	1963.97
8.	Green Area (@of plot area)	639.516 (11.65%)	823.13(15%)	183.61 (3.35%)
9.	Road + Paved area	2036.98 (37.11%)	1851.94 (33.74%)	-185.04 (-3.31%)
10.	Basement area	7145.92	6641.78	-
11.	Height	32.40	33.90	-
12.	No. of Floors	B1+B2+SB+G+6	B1+B2+SB+G+6	-
13.	No of shops in commercial area (Carpet area-7954.84)	135	96	-39
14.	No. of Seat in Theater (Cinema Hall)	692	692	-

**Statutory Clearances :**





1	DFO Forest Distance	:	DFO, Ranchi Forest division vide letter no. 1467, dated 18.04.2022 certified that the distance of reserved/protected forest is more than 250 m from proposed project site.
2	DFO wildlife	:	DFO, Wildlife division vide letter no. 372, dated 20.04.2022 certified that national park & sanctuary is not within 10 km from the project site and proposed project is not situated in any ESZ.
3	CO certificate	:	The CO, Shahar, Ranchi vide letter no. 327, dated 09.04.2022 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyar & Register II.
4	AAI NOC	:	Airport authority of India issued NOC vide NOC ID AAI/ER/NOC(453/I2)/2639-2641, dated 01.10.2012 (Previous) and NOC ID AAI/ER/NOC/(453/I2)-10/184 dated 29.09.2017 (NOC extension).
5	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand Ranchi vide letter no. 155, dated 28.04.2014.
6	Building Plan	:	Municipal Corporation has approved building plan vide B.P. no. 2013/1058 dated 06.09.2014 and building plan has been revised vide B.P. case no. BP02/2013/1058(Revision) dated – 18.03.2021
7	CTE from JSPCB	:	Consent to Establish (CTE) issued by JSPCB vide Ref. no. : GJ673, dated 14.12.2015.
8	Previous EC Detail	:	The Environmental Clearance has been issued by SEIAA, Jharkhand vide letter no EC/SEIAA/2014-15/523/2014/846, dated : 30.04.2015
9	Certified Compliance Report	:	Jharkhand State Pollution Control Board has certified the compliance report vide ref. no. 664, dated 25.08.2022.
10	CGWA	:	Ground water will not be used without taking permission from competent authority.

#### 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)
<b>Domestic</b>					
Staff	1008	45	46	14	32
Visitors	692	15	11	7	4
<b>Total Domestic Water Demand</b>			<b>57</b>	<b>21</b>	<b>36</b>
Landscape	823.13 Sq.m	3ltr/sqm	3	-	3
Fire Fighting			1	-	1
DG/HVAC cooling	2645 (2*1010 +1*625)	0.9l/KVA/hr	10	--	10
<b>Total</b>			<b>71</b>	<b>21</b>	<b>50</b>

Category	Total Quantity (KLD)
Domestic water Req.	21
Flushing water Req.	36
Sewage generation (@90% of the fresh + 100% flushing water requirement)	55
<b>Capacity of STP</b>	<b>70</b>
Recovered water from STP (90% of Waste water)	50
1. Flushing	36
2. Landscaping	3
3. Fire Fighting	1
4. DG/HVAC cooling	10

### 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.	Staff	1008	0.25	252	202	50
2.	Visitors	692	0.15	104	83	21
3.	Landscape waste	0.203 acres	0.2 kg/acres	1	-	1
4.	STP sludge	70KLD	--	4	-	4
<b>Total Waste Generated</b>				<b>361</b>	<b>285</b>	<b>76</b>

### ENVIRONMENT MANAGEMENT

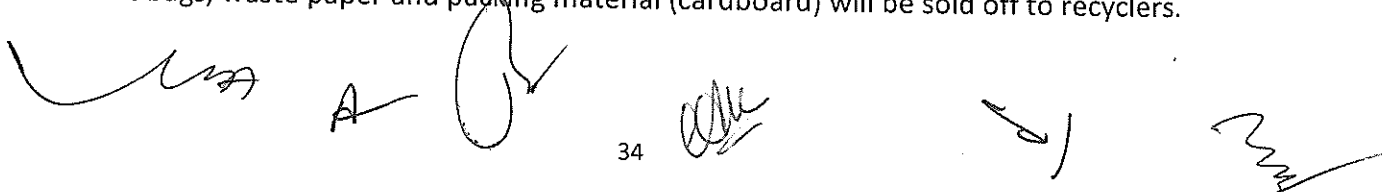
#### Green Belt Development

- Combination of local trees and shrubs are planned within the project site.
- Total green area provided at the site is Green Area (@ 823.13 % of plot area) which will enhance the beauty of the site and help combat air and noise pollution.
- The plant species will be selected on the basis of Guidelines for Developing Green Belts, CPCB March 2000.

#### Solid Waste Management

##### During Construction Phase

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



## During Operation Phase

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

## Water Quality Management

### During Construction Phase

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

### During Operation Phase

- STP of capacity i.e. 70 KLD is proposed for treatment of wastewater.
- Treated waste water would be reused for Horticulture, DG/HVAC cooling, flushing, fire fighting.
- Use of water efficient plumbing fixtures to conserve water.
- Approx. 21 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 Power generation will be atleast 10% of the total power requirement.

During the presentation the following undertaking was sought :

- i. Undertaking affirming that ground water can be used with permission from competent authority.

The Project Authorities have submitted the above mentioned undertaking.

Based on the presentation made and information provided, the Committee decided that the proposal for Expansion of proposed Project "Infinity Sapphire Square / Mall of Ranchi" of M/s Pranami Estates Pvt. Ltd. at Ratu Road, Tehsil : Ranchi Sahar, Dist. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II alongwith the following specific conditions :

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



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

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

Name of the consultant : Pollution & Ecology Control Services (PECS)

This is a modification cum expansion project which has been taken for appraisal on 16.09.2022.

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 63<sup>rd</sup> meeting held on 05-06.11.2018 and SEIAA, Jharkhand has approved the ToRs in 64<sup>th</sup> meeting held on 10<sup>th</sup> & 11<sup>th</sup> December, 2018. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 308, dated 13.12.2018. The final EIA / EMP submitted by PP to SEIAA on 10.02.2022 and which was forwarded to SEAC on 15.02.2022.

**Salient features:**

1.	Name of the project	Modification-cum-Expansion of existing Re-Rolling at Mouza : Mohanpur, P.S. : Mahtodih, District : Giridih (JHK)
2.	Name of the promoters	M/s Saluja Steel & Power (P) Ltd
3.	Area of Plant	5.68945 Acres
4.	Latitude/longitude	<ul style="list-style-type: none"><li>• Lat: 24° 08' 37.98" N Long: 86° 20' 21.88" E</li><li>• Lat: 24° 08' 31.83" N Long: 86° 20' 39.46" E</li><li>• Lat: 24° 08' 23.40" N Long: 86° 20' 37.62" E</li><li>• Lat: 24° 08' 28.09" N Long: 86° 20' 27.43" E</li></ul>
5.	Proposed capacity	TMT Bars -2,40,000 TPA
6.	Existing Capacity	TMT Bars - 90 TPD (27,000 TPA)
7.	Cost of Project	18 Crs
8.	Plant & Equipment	<ul style="list-style-type: none"><li>• Re-Rolling Mill(TMT Mill) - 1x90 TPD (27,000 tons per annum operating)-existing</li><li>• Induction Furnace - 4x20 t(4 cell standby) New</li><li>• Matching Concast facilities for Billets manufacturing- Two Line-New Cap-2,40,000t per annum billets-new</li><li>• Re-Rolling Mill(TMT Mill): 1x400 TPD-modification in existing TMT mill and - modification 1x400 tpd new Re-Rolling mill Capacity after expansion 240,000 tons per annum MS Bar-new</li></ul>
9.	Fuel used	Electricity Power supplied by DVC

10.	Water Sources	Ground water Bore well
11.	Power requirement	The power requirement for the plant has been envisaged to be made available from DVC is near about 19 MVA for both phases of plant.
12.	Water required per day	30 KLD tentative
13.	Emission from Stack	Limited to 100 mg/Nm <sup>3</sup>
14.	Slag generation	37,540 TPA
15.	No of working days in a year	330 days
16.	Chimney Heights	30 m de-dusting stack
17.	Nearest Railway station	Giridih – 6 kms

**Khata no. & Plot no. of the Project :**

Khata No.	Plot No.	Area (Acre)
34	5, 86, 588	0.06
1	52	0.28
40	55	0.18375
73	29,30	0.12
38	53	0.56
1	47, 51	0.3666
1	47, 51	0.3666
40, 2	55, 50	0.4275
65	578	0.16
40	55, 50	0.0875
45, 5	37, 40	0.51
48	593	0.0625
1, 29	39, 38	0.60
40, 2	55, 50	0.31125
40, 2	55, 50	0.31125
43, 61, 109	59, 55, 94, 603	1.02
40	55,50	0.2625
	<b>Grand Total</b>	<b>5.68945</b>

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Manufacturing Process : Project shall be implemented in two phases: phase-1(New SMS-I And modification in existing TMT mill with matching production and Phase-II all new SMS-II and New TMT mill as follows:

Proposed Sms With CONCAST (in each phase)				
Description Of Proposed Steel Melting Shop With Ccm.				
Sms With Ccm Basic Parameters At A Glance				
Units / Particulars	Installed Capacity	Working Days	Annual Production /	
Induction Furnace	2x20 T = 400TPD	330	132,000 MT	
Water Requirement	Make Up Water	330	2m <sup>3</sup> /hr & 32m <sup>3</sup> /day	
Induction Furnace	Raw Material	Mix Ratio	Quantity (Tons / Annum)	
	Sponge Iron	0.79	104,280.00	
	Steel Scrap	0.20	26,400.00	
	Pig Iron	0.12	15,840.00	
	FeMn, FeSi, Al etc	0.015	1,980.00	
	<b>TOTAL</b>	<b>1.125</b>	<b>148,500.00</b>	

TABLE : INDUCTION FURNACE CAPACITY (in each phase)

Production of cast billets, tons/year	1,30,680
Equivalent liquid steel, tone	1,32,000
No. of operating days	330
Production of liquid steel/days, tone	400
Tap-to-tap cycle time/min	144
Number of heat/day	10
Furnace capacity, tons	2 x 20T = 40T

TABLE : SELECTION OF BILLET CASTER

Heat size, liquid steel, tons	48	48
Size of the billet mm x mm	100 x100	130 x 130
Length of cast billet / heat, m	460	272
Average casting speed, m/min	2.5	2.0

Casting time in one strand, min / maximum I.F. tap cycle time, min	90/184	90/136
No. of strand required	2	1.51
Number of strand provided	2	2

The salient features of the casting machine:

TABLE : BILLET CASTER PARTICULARS	
Machine type	Bow type with low head
Steel grades proposed to cast	Carbon and low alloy steels
Nominal heat size, tons	40
Type of ladle	Bottom pour fitted with slide gate
Base casting radius, m	Preferably 5m
No. of strands	2
Design range of cast billets	100-130 mm X mm
Billet cutting device	Manual oxy-fuel torch
Cut length, m	3-6
Casting speed, m/min	2.0-3.0
Billet discharge	Via horizontal roller table to cooling bed

PRODUCTION OF MS BILLET IN CCM (in each phase) :

S. No	Particulars	Size	MT (Qty)
1.	MS Billet	100 x100	75,000.00
2.	MS Billet	130 x130	55,680.00
	<b>TOTAL</b>		<b>130,680.00</b>

Rolling Mill (Augmenting the existing capacity)

Description of Rolling Mill Unit :

Rolling Mill Basic Parameters at a Glance :

Units / Particulars	Installed Capacity	Working Days	Annual Production /
Rolling Mill Unit	400 TPD	300	120,000 MT / Annum
Water Requirement	Make Up Water	300	7m <sup>3</sup> /day
Rolling Mill Unit	Raw Material	Size (mm)	Quantity (Tons /

*[Handwritten signatures and marks at the bottom of the page, including a large signature on the left, a signature with '40' in the middle, and a signature on the right.]*



			Annum)
	M.S. Billet	100 x 100	60,000
		130 x 130	60,000
	<b>TOTAL</b>		<b>120,000.00</b>

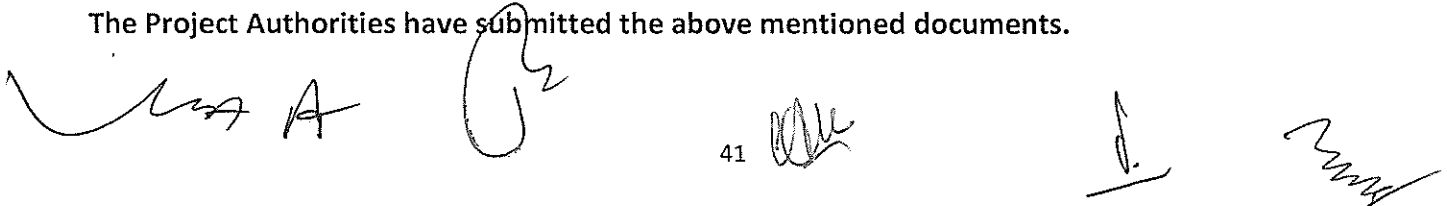
**STATUTORY CLEARANCES :**

1	CO	:	The CO, Giridih vide memo no. 2621, dated 10.09.2018 & memo no. 2813, dated 04.10.2018 have mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyan.
2	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 1966 , dated 14.11.2021 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.
3	DFO Forest Distance	:	DFO, Giridih East Division vide letter no. 1479, dated 25.06.2018 certified that the distance of forest is 1649.25 m from proposed project site.
4	CGWA	:	No Objection Certificate for Ground Water Abstraction vide NOC no. : CGWA/NOC/IND/ORIG/2022/16232, dated 16.06.2022

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

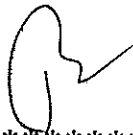
- i. Revised plant layout showing 33% green belt.
- ii. Undertaking in the form of affidavit that the slag generated shall not be stored within the premises and that will be sold to its prospective buyers. The names of buyers to be provided.
- iii. Socio economic study carried out will be submitted duly signed by the SE expert.
- iv. Disaster management plan to be submitted duly signed by the expert.
- v. Report of risk and hazards study carried out will be submitted duly signed by RH expert.
- vi. All the lab reports to be submitted in original on the letter pad of the laboratory with NABL logo.
- vii. The NABL scope of the laboratory to be submitted.
- viii. Undertaking that the existing Re-heating furnace shall be removed after the proposed expansion.
- ix. Comprehensive list of industries within the study area to be provided.

The Project Authorities have submitted the above mentioned documents.

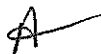


Based on the presentation made and information provided, the Committee decided that the proposal for Modification cum Expansion of existing Re-Rolling Mill of M/s Saluja Steel & Power (P) Ltd., Mouza : Mohanpur, P.S. : Mahtohdih, Dist. : Giridih, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – III alongwith the following specific conditions :

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



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**A. Deputy Commissioner, East Singhbhum, Jamshedpur or through authorized representative and Atmos Sustainable Solution Pvt. Ltd.**

**I. Draft District Survey Report (DSR) of sand, East Singhbhum**

The DSR was submitted by Deputy Commissioner, East Singhbhum. He was represented by District Mining Officer, East Singhbhum Sri Sanjay Kumar Sharma and Assistant Director, Geology, East Singhbhum Sri Karun Kumar Chandan at the SEAC meeting on 17.09.2022.

During the meeting the consultant Atmos Sustainable Solution Pvt. Ltd. submitted as follows :

1. The DSR submitted was at a draft stage and it was not a final & complete DSR.
2. No field survey and primary data collection has been done.
3. The DSR submitted is based only on secondary data.
4. The consultant declared that he has not received the work order from the concerned authorities.
5. The consultant admitted that the Enforcement and Monitoring Guidelines for Sand Mining 2020 has not been followed in the preparation of the draft DSR submitted for appraisal.

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

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

**B. Consideration of Proposals**

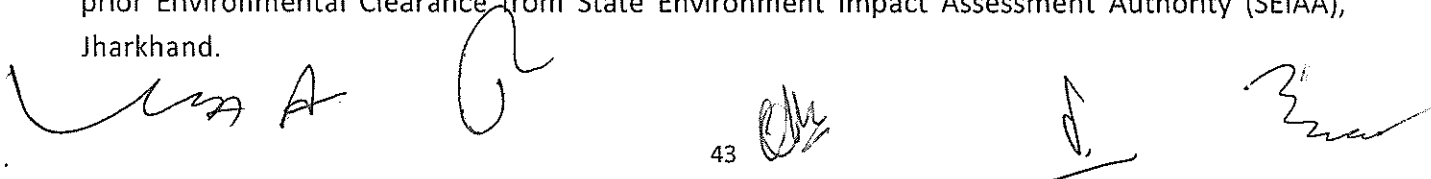
1. Group Housing Project "Gemini Eastern" of M/s Gemini Swavlambi Sahkari Samiti Ltd., Village : Oyana, Thana : Pithoria, Tehsil : Kanke, Dist. : Ranchi, Jharkhand.

(Proposal No. : SIA/JH/MIS /288017 /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 17.09.2022.

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



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

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

Thus, the SEIAA, Jharkhand, in the light of Ho'ble Supreme Court order dated 9<sup>th</sup> December 2021, Office Memorandum no. F.No.22-21/2020-IA.III[E 138949] dated 28.01.2022 of MoEF&CC, Govt. of India and Standard Operating Procedure (SOP) issued by MoEF&CC, Govt. of India vide its file number 22-21/2020-IA-III, dated 07.07.2021, the matter has been taken for consideration & recommendation of EC for violation projects.

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

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94<sup>th</sup> meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the **violation ToR** in 95<sup>th</sup> meeting held on 14<sup>th</sup>, 15<sup>th</sup> & 16<sup>th</sup> June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 152A, date 18.06.2022. The final EIA / EMP submitted by PAs to SEIAA on 16.08.2022 and received by SEAC on 16.08.2022.

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 :**

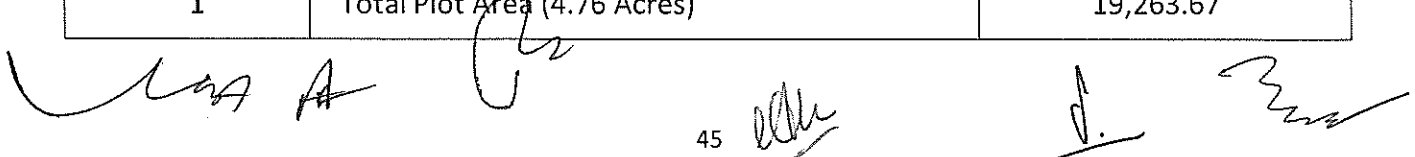
Pillar points	Latitude	Longitude
1	23°27'34.09"N	85°24'29.80"E
2	23°27'34.36"N	85°24'30.03"E
3	23°27'34.35"N	85°24'30.50"E
4	23°27'34.39"N	85°24'30.60"E
5	23°27'35.34"N	85°24'31.14"E
6	23°27'35.37"N	85°24'31.30"E

44

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 <sup>2</sup> )
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	57,079.32
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	Total Project cost (Land + Development cost)	Rs. 3550 Lakh
13	RWH Pits	05 Pits
14	Height of the building	35 m

**Parking required**

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

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
<b>Total</b>				<b>2013</b>

**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.

*MS A R*

*RRR*

*1/1*

*2/1*

**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
<b>Total Water Requirement</b>				<b>184.2325</b>		<b>100.74425</b>

**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,	12.397Km	SSW

A 47

		Namkum Ranchi, Jharkhand		
		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 Highway	NH33	3.03 Km	E
5.	Nearest School/College	Govt Primary school , Nueri	1.02 Km	NE
		Kalpna 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

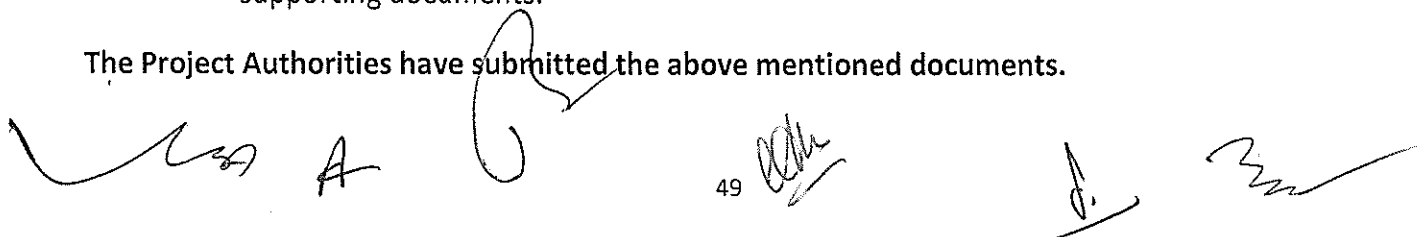
**STATUTORY CLEARANCES :**

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 "Jangle Jhari" in R.S. Khatiyon & 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 fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide 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

**During the presentation the following documents were sought :**

- i. The remediation plan to be revised & submitted.
- ii. Justification for the requirement of water alongwith water balance and final mode of disposal of treated water.
- iii. Rain Water Harvesting calculation to be submitted on an annual basis.
- iv. Table providing incremental GLC to be corrected & submitted.
- v. Undertaking that ground water will not be used for construction activities.
- vi. The PAs has requested for exemption of CER / CSR activities as it was a Non-Profit making organization. They were asked to submit a request in this regard alongwith supporting documents.

**The Project Authorities have submitted the above mentioned documents.**



This being a Non-Profit making co-operative society, the Committee agreed to recommend exemption of the proposal from CER / CSR activities.

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

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of Rs. 117.81 Lakh as per CPCB guidelines towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

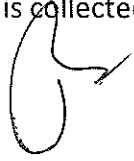

S. No.	Environment Aspects	Cost Analysis	Capital cost (INR)	
1	Air Environment	Enhanced Green Belt To Be Developed With Plantation With Link Road To Highway In Number Of Trees In The Row Of The Roads In Consultation With Competent Authority/ Gram Panchayat Total Length = 1.8 Km @ Effective Length One Side Of The Road Area = 3600 Sq.M = 1.5 * 1.5 M = 2500 Trees Approx. Cost Of Per Tree = 240 /- +Maintainence	8	Lakhs
2	Water Environment	Creation Of Artificial Recharge Structures In Public Areas (2 No)	3	Lakhs
3	Energy Conservation	Solar Based Street Lights/Appliances In The Village Roads/Community Areas/Panchayat Bhavan Of Village Oyna (Within Stretch Of 2 Km Length On Around The Project Site)	12.81	Lakhs
4	Natural Resource Conservation	Eco-Tourism Project Through Dfo Ranchi	14	Lakhs
5	Community Resource Augmentation	Construction Of Public Community Hall In The Owned Land	75	Lakhs
		Construction & Maintenance of Private road from the project site to the nearby project towards ring road for public benefit	5	Lakhs
<b>Total</b>			<b>117.81</b>	<b>Lakhs</b>

- I. The Committee visited the project site on 16.09.2022 to verify the details submitted by PAs.
- II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. 117.81 Lakh.
- III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 117.81 Lakh towards remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board and evidence of the same submitted to SEJAA/Jharkhand prior to grant of EC.

- IV. The bank guarantee shall be released after successful completion of remediation plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.
- V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.
- VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.
- VII. STP of adequate capacity shall be established within the project premises.
- VIII. Energy conservation measures adhering to part of ECBC norms shall be complied with.
- IX. The penalty of Rs. 25.3578 Lakh being 1% of the project cost incurred (Rs. 25.3578 Crores) shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft and evidence of the same to be submitted to SEIAA, Jharkhand prior to grant of EC.
- X. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

**Based on the presentation made and information provided, the Committee decided that the proposal for Group Housing Project "Gemini Eastern" of M/s Gemini Swavlambi Sahkari Samiti Ltd., Village : Oyana, Thana : Pithoria, Tehsil : Kanke, Dist. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II alongwith the following specific conditions :**

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.



- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging point to be installed.

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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 /288263 /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 17.09.2022.

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

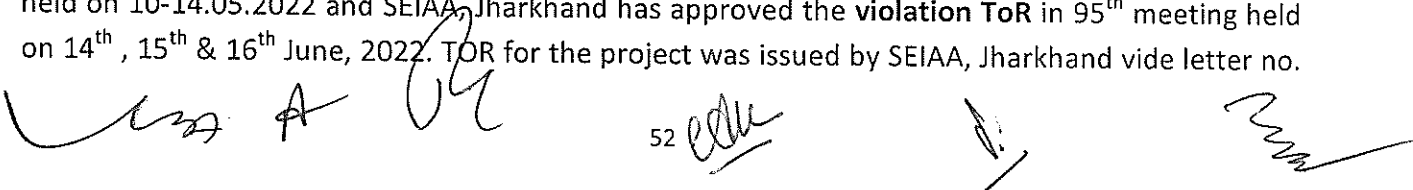
However, The Honourable Supreme court in its order dated 9<sup>th</sup> December 2021 In the matter of the Civil appeal No 7576-7577 of 2021 in the Electro steel Steels Limited Vs Union of India and Ors in its para 93 has inter- alia observed the following :

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

Thus, the SEIAA, Jharkhand, in the light of Ho'ble Supreme Court order dated 9<sup>th</sup> December 2021, Office Memorandum no. F.No.22-21/2020-IA.III[E 138949] dated 28.01.2022 of MoEF&CC, Govt. of India and Standard Operating Procedure (SOP) issued by MoEF&CC, Govt. of India vide its file number 22-21/2020-IA-III, dated 07.07.2021, the matter has been taken for consideration & recommendation of EC for violation projects.

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

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94<sup>th</sup> meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the **violation ToR** in 95<sup>th</sup> meeting held on 14<sup>th</sup>, 15<sup>th</sup> & 16<sup>th</sup> June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no.

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137, date 18.06.2022. The final EIA / EMP submitted by PAs to SEIAA on 16.08.2022 and received by SEAC on 16.08.2022.

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 <sup>2</sup> )
(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 & Common Road Area	30,008.87
(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
Total Project cost(Land Cost + Development cost)	Rs. 47.8 Crore
RWH Pits	08 Pits
Height of the building	35 m

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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
	<b>Total</b>	<b>260</b>

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
	<b>Total</b>			<b>4807</b>

Water Requirement :

The water requirement will be met by Municipal Source and ground water . 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

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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
		Tatisilwai - Train station Purulia Rd	10.216 Km	SSE

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	Nearest Railway Station	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. Khatiyon & 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 fire advisory has been issued by Fire Department, Jharkhad, 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.

During the presentation the following documents were sought :

- The remediation plan to be revised & submitted.
- Justification for the requirement of water alongwith water balance and final mode of disposal of treated water.

58

- iii. Rain Water Harvesting calculation to be submitted on an annual basis.
- iv. Table providing incremental GLC to be corrected & submitted.
- v. Undertaking that ground water will not be used for construction activities.

The Project Authorities have submitted the above mentioned documents.

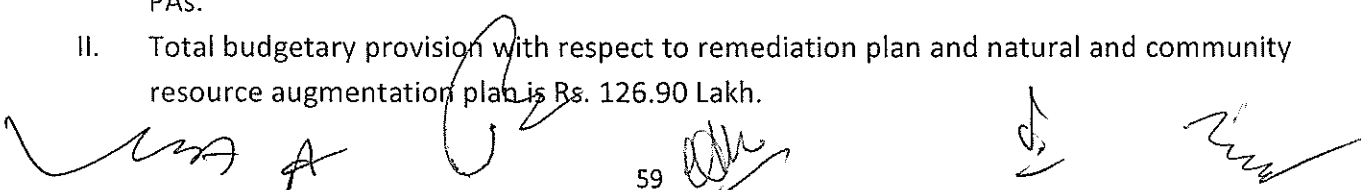
The PAs has proposed the remediation plan and natural & community resource augmentation plan before the Committee.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommended an amount of Rs. 126.90 Lakh as per CPCB guidelines towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

S. No.	Environment Aspects	Cost Analysis	Capital cost (INR)	
1	Air Environment	Enhanced Green belt to be developed with plantation with link road to highway in number of trees in the ROW of the roads in consultation with competent authority/ Gram Panchayat Total Length = 1.8 Km @ effective length one side of the road area = 3600 sq.m = 1.5 * 1.5 m = 2500 trees approx. cost of per tree with tree guard = 240 /-	7	Lakhs
2	Water Environment	Creation of artificial recharge structures in public areas (2 No)	4	Lakhs
3	Energy Conservation	Solar based street lights/appliances in the village roads/community areas/panchayat bhavan of Village Oyna (within stretch of 2 km length on around the project site)	8.90	Lakhs
4	Natural Resource Conservation	Eco-tourism project through DFO Ranchi	19	Lakhs
5	Community Resource Augmentation	Construction of Public community hall in the owned land	78	Lakhs
		Construction & Maintenance of Private road from the project site to the nearby project towards ring road for public benefit	05	Lakhs
		Development of Temple on Public land	05	Lakhs
<b>Total</b>			<b>126.90</b>	<b>Lakhs</b>

- I. The Committee visited the project site on 16.09.2022 to verify the details submitted by PAs.
- II. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. 126.90 Lakh.

59



- III. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. 126.90 Lakh towards remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board and evidence of the same submitted to SEIAA, Jharkhand prior to grant of EC.
- IV. The bank guarantee shall be released after successful completion of remediation plan, duly recommended by the SEAC, Regional Office - MoEF&CC, Govt. of India and approval of regulatory authority. Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.
- V. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.
- VI. PAs shall take necessary other clearances / permissions under various act and rules if any, from the respective authorities / departments.
- VII. STP of adequate capacity shall be established within the project premises.
- VIII. Energy conservation measures adhering to part of ECBC norms shall be complied with.
- IX. The penalty of Rs. 21.78 Lakh being 1% of the project cost incurred (Rs. 21.78 Crores) shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft and evidence of the same to be submitted to SEIAA, Jharkhand prior to grant of EC.
- X. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

Based on the presentation made and information provided, the Committee decided that the proposal for Residential Complex "Diamond City" of M/s Eastern Estate Construction & Developer Pvt. Ltd., Village : Oyana, Thana : Pithoria, Tehsil : Ranchi, Dist. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II alongwith the following specific conditions :

- I. Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continual Improvement and periodical management review.
- II. All raw material to be stored only under covered shed.
- III. PAs to offset (upto20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- IV. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load. It is to be achieved by solar panels etc meeting ECBC norms.
- V. Trees should be developed & maintained not less than 15% of project area.
- VI. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- VII. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.

- VIII. Developers/Company to install Rain water harvesting structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.
- IX. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging point to be installed.

\*\*\*\*\*

3. Group Housing Project "Aastha Majestic – (Agneya & Rudra Block)" of M/s Rukmani Property Project Pvt. Ltd. at Taluka : 16, Mouja : Moharda, Dist. : East Singhbhum, Jamshedpur, Jharkhand.

(Proposal No. : SIA/JH/MIS /290266 /2022).

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

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

This is a new project which has been taken for appraisal on 17.09.2022.

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

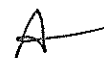
The proposed project is construction of Group Housing Project "AASTHA MAJESTIC – (Agneya & Rudra Block)" of M/s Rukmani Property Project Pvt. Ltd., Located at Taluka 16, Mouja: Moharda, District: East Singhbhum, Jamshedpur, Jharkhand. The total plot area of the project is 12,301.08 m<sup>2</sup>. The Built-up area for project is 48,103.55 Sq.m.

**Background:**

- That Project Proponent has proposed construction of Group Housing Project "Aastha majestic-(Agneya & Rudra Block)" located at Village: Moharda, District: East Singhbhum, Jamshedpur, Jharkhand.
- The project consists of 2 blocks named Agneya (G+21) and Rudra (G+24) Blocks for which EC application has been done.
- Approved building drawing from Jamshedpur NAC of two blocks named Agneya and Rudra Blocks for vide Memo No. JNAC/GH/0052/W17/2021, dated 21/08/2021 and JNAC/GH /0112 /W17/2021, dated 21/01/2022, for 48,103.55 m<sup>2</sup> built-up area.



61



**Salient features of the project:**

S. No.	Particulars	Total Area (m2 )
1	Total plot Area	12301.08 (3.061 acres)
2	Total Net Plot Area	11265.62
3	Permissible Coverage Area (@ 35% of Total Plot Area)	4305.381
4	Proposed Coverage Area (@ 25.14% of Total Plot Area)	3093.53
5	Total Permissible FAR area	36903.24
6	Total Proposed FAR Area	33970
7	Total Residential FAR	34179.61
8	Commercial FAR	60.52
9	Special FAR	550.48
10	Total Non-FAR (Ground Floor as Parking)	2950.32
11	Services (Guard room, STP, lift, Lobby etc.)	11183.23
12	Total Proposed Built up Area (FAR + Non FAR + Services)	48103.55
13	Green Area (@31.73% of Total Area)	3904.3386
14	Road Area (@10% of Total Area)	1230.108
15	Height of Building (AGL) in meters tallest	90 m
16	No of Towers	2
17	No. of Rain Water Harvesting Pits	03

**Floor Wise Area Details:**

S. No.	Floor name	Agneya block	Rudra block
		FAR Area (sq.mt.)	FAR Area (sq.mt.)
1	Parking Floor	26.44	66.78
2	First Floor	1026.54	1026.27
3	Second Floor	1026.54	984.28
4	Third Floor	1026.54	984.28
5	Fourth Floor	1032.18	984.28
6	Fifth Floor	1032.18	984.28
7	Sixth Floor	1032.18	984.28
8	Seventh Floor	1007.73	984.28
9	Eighth Floor	894.41	959.86
10	Ninth Floor	895.79	959.86
11	Tenth Floor	895.79	959.86
12	Eleventh Floor	941.71	933.77
13	Twelfth Floor	637.35	933.77
14	Thirteen Floor	630.33	933.77

62

15	Fourteen Floor	630.33	933.77
16	Fifteen Floor	454.22	858.16
17	Sixteen Floor	709.93	868.19
18	Seventeenth Floor	406.90	626.83
19	Eighteenth Floor	361.45	626.83
20	Nineteenth Floor	356.07	476.86
21	Twentieth Floor	356.07	481.81
22	Twenty First	0.0	479.70
23	Twenty Second	0.0	284.50
24	Twenty Third	0.0	273.01
25	Terrace Floor	0.0	0.0
	<b>Total FAR</b>	<b>15380.68</b>	<b>18589.28</b>

Khata no. & Plot no. of project:

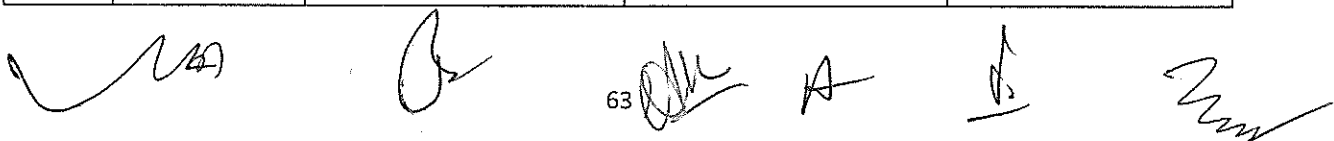
Khata No.		Plot No.	
Khata no. (Old)	Khata no. (New)	Plot No. (Old)	Plot No. (New)
7	34	4685 4688	900, 903, 902(P)
23	38 44	4689 4698	944(P), 946, 947

Latitude & Longitude:

Pillars	LATITUDE	LONGITUDE
1	22°47'36.05"N	86°15'56.36
2	22°47'39.75"N	86°15'55.94
3	22°47'40.15"N	86°15'57.68
4	22°47'39.41"N	86°15'59.47
5	22°47'38.17"N	86°15'57.92
6	22°47'36.83"N	86°15'57.62
7	22°47'36.51"N	86°15'59.53
8	22°47'34.30"N	86°15'58.69
9	22°47'33.33"N	86°15'56.17
10	22°47'34.59"N	86°15'55.12

Population Break up:

S. No.	Particulars	Total No of Tenements	PPU/No. of person/m <sup>2</sup>	Total Population
1	Residents	347	@5 Person Per Unit	1735
2	Staff		@10% of Residential	174
3	Visitors		@ 10% of Residential	174



Site Surroundings:

S. No	Particulates	Name of Places	Distance (km)	Direction
1.	Nearest Airport	Sonari Airport	9.60 Km	WNW
2.	Nearest Railway Station	Salga Jhari West Railway Station	5.48 Km	WSW
3.	Nearest Bus Stand	Ghari Park Bus Stand	2.11 Km	SW
		Ram Mandir Bus Stand	2.17 Km	SSW
4.	Nearest State Highway/Any other road	Straight Mile Road	1.63 Km	W
5.	Nearest National Highway	NH 33	19.55 Km	NNW
6.	Nearest School/College	Kidzee Bharti	0.40 Km	W
		Oriya School Moharda	0.48 Km	W
7.	Nearest Temple	Ma Mansa Mandir	1.78 Km	W
		New Shiv Mandir	0.33 Km	NW
		Krishna Mandir, Gokul Nagar	0.31 Km	NW
		Bhubaneshwari Temple	1.75 Km	SSW
8.	Nearest Hospital	Mercy Hospital	2.2 Km	ESE
		Apex Hospital	5.94 Km	ESE
9.	Nearest Police Station	Police Station	1.73 Km	WSW
		Sidhgora Police Station	309 Km	NW
10.	Nearest Fire Station	Tata Motors Fire Station	4.07 Km	SSW
		Fire Brigade	5.02 Km	W
11.	Commissioner Office	Office Of The Commissioner	0.31 Km	W
12.	Gram Panchayat	Kitadih North Gram Panchayat	7.82 Km	SE
13.	Nearest Pond	Makdhumpur Pond	6.58 Km	SW
14.	Nearest River/Nallah/ Canal	Subarnarekha River	1.12 Km	N
15.	Wild Life Sanctuary	Dalma Wildlife Sanctuary	12.97 Km	NNW
16.	Zoological Park	Bhagwan Birsa Biological Park	8.35 Km	WNW
17.	Nearest Defense Installation	106 RPF colony	8.95 Km	SW



### Water Requirement:

The water requirement will be met by Municipal Supply. The total water requirement for operational phase of the project is 256 KLD. Total Fresh water requirement is envisaged to be approx. 161 KLD.

### Calculations for Daily Water Demand:

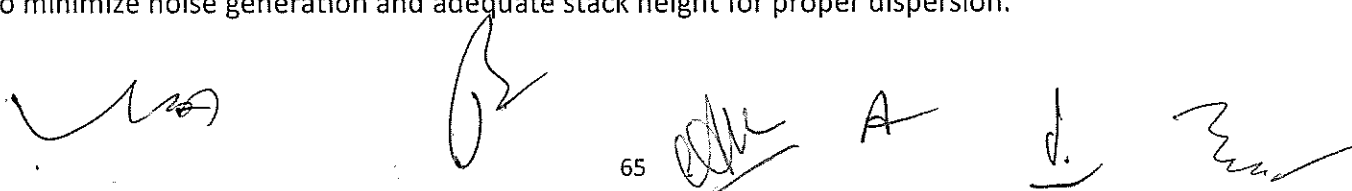
S. No.	Particulars	Occupancy/ Area/ No's	Fresh Water Demand		Treated Water Demand	
			LPCD	Quantity (KLD)	LPCD	Quantity (KLD)
1	Residents	1735	90	156	45	78
2	Staff	174	25	4	20	3
3	Visitors	174	5	0.87	10	2
4	Landscape	3904.96	Nil	Nil	3	12
Fresh water demand				161	Treated water	95

### Summary of Water and Waste water:

S. No.	Particulars	In KLD
1	Total Water Requirement	256
2	Fresh Water Requirement	161
3	Treated Water	169
4	Wastewater Generated (80% of Fresh + 100% Flushing)	212
5	STP Capacity (20% higher than the wastewater generated)	255

### Power Requirement:

There is requirement will be 2500 kW power supply. Power for the proposed project will be supplied by Jharkhand Bijli Vitran Nigam Limited. There is provision of three DG sets of total capacity 1250 KVA (1 x 250 KVA; 2x 500KVA). The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.



Calculation of Solid Waste generation:

S. No.	Category	Kg per capita per day	Waste generated (kg/day)
1	Residents	1735 @0.5 kg/day	867.5
2	Staff	174 @ 0.15kg/day	26.1
3	Visitor	174 @ 0.25 kg/day	43.5
4	Landscape waste	1.003 acre @0.2 kg/acre/day	0.201
Total Solid Waste Generated			937.301 kg/day

Parking :

S.No.	Vehicle type	Total Proposed Count / Quantity/No
1	Car	296
2	Two Stack Car	80
3	<b>Total Car</b>	<b>376</b>
4	Visitors Car Parking	36
5	<b>Total Visitors Car Parking</b>	<b>36</b>
6	Two Wheeler	406
7	<b>Total Two wheeler</b>	<b>406</b>
8	Other Parking	Nil
Total		412 cars & 406 Two wheelers

STATUTORY CLEARANCES :

1	DFO Forest Distance	: DFO, Jamshedpur Forest Division vide letter no. 3333, dated 21.12.2021 & letter no. 877, dated 16.04.2022 certified that the distance of reserved / protected forest is more than 250 m from proposed project site.
2	DFO Wild Life	: DFO, Dalma Elephant Project vide letter no. 580, dated 05.05.2022 & letter no. 813, dated 09.06.2022 certified that the proposed project is not situated in any ESZ.
3	CO certificate	: The CO, Jamshedpur, East Singhbhum vide letter no. 2096, dated 27.10.2021 & letter no. 1096, dated 24.06.2022 has certified that the plot no. of the project is not recorded as "Jangle Jhari" in R.S. Khatiyani & Register II.

4	Fire Department	:	A Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi, vide letter no. 1078/Tech./2021, dated 17.03.2021 & letter no. 3807/Tech./ 2021, dated 29.11.2021.
5	Airport Authority of India	:	Airport Authority of India has issued NOC vide letter no. JAMS/EAST /B/ 041421/ 539096 dated 28.04.2021.
6	Building Plan	:	Conceptual Plan submitted.

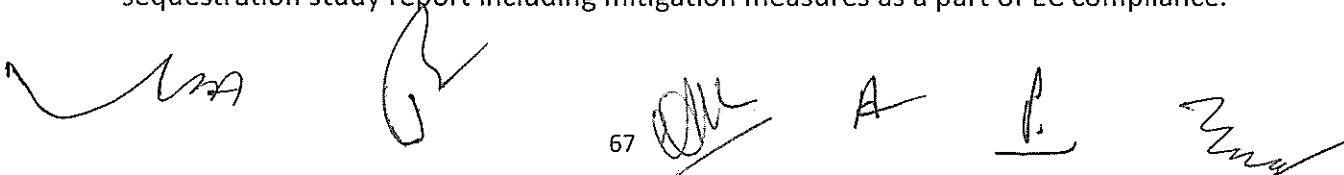
During the presentation the following documents were sought :

- i. Undertaking affirming that ground water can be used with permission from competent authority.
- ii. Undertaking for Harnessing solar power.
- iii. Revised landscape plan with breakup of green belt.

The Project Authorities have submitted the above mentioned document & undertaking.

Based on the presentation made and information provided, the Committee decided that the proposal for Group Housing Project "Aastha Majestic – (Agneya & Rudra Block)" of M/s Rukmani Property Project Pvt. Ltd. at Taluka : 16, Mouja : Moharda, Dist. : East Singhbhum, Jamshedpur, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II alongwith the following specific conditions :

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


  
 67

- X. Water runoff originating from open non constructed areas of project premises to be harvested /guided in such a way that it does not create water logging condition outside.
- XI. Sufficient number of EV fast charging point to be installed.

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4. Expansion of cement production capacity of Bokaro Cement manufacturing Works, a standalone Grinding Unit from 2.0 Million TPA to 3.1 Million TPA of M/s Dalmia Cement (Bharat) Limited, Village : Gorabali, Notified Bokaro Industrial Area under JIADA, Balidih Phase – 4, Tehsil : Chas, Dist. : Bokaro, Jharkhand.

(Proposal No. : SIA/JH/IND /400155 /2022)

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

This is a new project which has been taken for appraisal on 17.09.2022.

Brief Summary :

- M/s. Dalmia Cement (Bharat) Limited is Proposing Expansion of Cement Production Capacity of Bokaro Cement Manufacturing Works, A Standalone Grinding Unit of Dalmia Cement (Bharat) Limited, from 2.0 Million TPA to 3.1 Million TPA at Plot No. IV/a-7(p)4, Village- Gorabali, Notified Bokaro Industrial Area Under JIADA, Balidih Phase-4, Bokaro, Jharkhand. Project lies between Latitude 23.6949533° N to 23.6978843° N and Longitude 86.0628558° E to 86.0661843° E. Falls on SOI Toposheet number F45C2.
- **Environmental Clearance** of Existing Grinding unit has been obtained from SEIAA, Jharkhand for production of 2.0 MTPA PSC cement vide letter EC/SEIAA/2021-22/2534/2022, EC identification no EC22B009JH152802 dated 21.04.2022. **Consent to Establish** has been obtained for existing GU from Jharkhand State Pollution Control Board vide letter no JSPCB/HO/RNC/CTE-12699959/2022/195 dated 28.04.2022. **Construction of the unit is under progress.**
- It is Proposed to manufacture Portland Composite Cement (PCC) / Portland Slag Cement (PSC) / Portland Pozzolana Cement (PPC) using various waste products such as fly ash, slag etc. **Expansion is proposed within the same premises with the same equipment mainly by change in product mix and increasing the number of working days & operating hours of the mill.**
- No major construction is involved. However, in order to accommodate the additional storage and associated facilities, existing plant layout has been optimized based on detailed engineering.
- As per EIA Notification dated 14th Sept., 2006, as amended from time to time; this project falls in Category "B" under S. No. 3 (Material Production), Project Activity '3 (b)' Cement Plants.

 68

- Baseline data for Ambient Air, Soil, Noise, Ground and Surface water has already been collected for Summer Season (from March, 2022 – May, 2022).

#### Plant configuration of existing EC and Proposed expansion

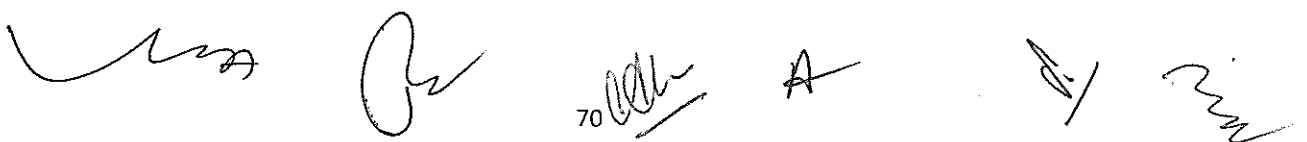
S. No.	Particulars (Units)	Details		Total quantity after expansion
		As per EC	Proposed	
1	Cement (Million TPA)	2.0	1.1	3.1 (PSC/PCC/PPC)
2.	DG set (KVA)	2x 500	--	2x 500 KVA
3.	Area (Acres)	15.75	No additional land	15.75
4.	Greenbelt /Plantation	5.2	No Change	5.2 (33% of total land area)
5.	Water requirement (KLD)	150	No Change	150
6.	Power requirement (MW)	12	No Change	12
7.	Project Cost (Rs in Cr)	576	35.5	611.5
8	EMP (Capital cost)	31.6	0.85	32.45
9	EMP (Recurring Cost)	1.1	No Change	No Change

#### Salient Features of the Project :

S. No.	PARTICULARS	DETAILS
A.	<b>Area Details</b>	
	Total Project Area	Plant area- 15.75 Acres (6.374 ha). No additional Land is required for proposed expansion.
	Greenbelt area	5.2 Acres (33% of total land area)
B.	<b>Environmental Setting Details (with approximate aerial distance &amp; direction from proposed project site)</b>	
1.	Nearest Village	Village Gorabali (0.5 km in SW)
2.	Nearest Town	Phusro (9.8 km in North-West direction)
3.	Nearest City	Bokaro (9.9 km in South-East direction)
4.	Nearest National Highway / State Highway	<ul style="list-style-type: none"> <li>○ NH - 320 (earlier NH-23) 4 km in South direction</li> <li>○ NH - 18 (15 km in South-East direction)</li> </ul>
5.	Nearest Railway station	<ul style="list-style-type: none"> <li>○ Bokaro Steel City Railway Station (4.4 km in SSE direction)</li> <li>○ Tupkadih Railway Station (1.4 km in North direction)</li> </ul>
6.	Nearest Airport	Ranchi Airport (~86 km in South-West direction)
7.	National Parks, Wildlife Sanctuaries, Biosphere Reserves, Reserve Forest (RF) / Protected Forest (PF)	No National Park, Wildlife Sanctuary, Biosphere Reserve, Reserve Forest (RF) falls within 10 km radius of the project site. However, few patches of PF and open jungle exist within study area.

S. No.	PARTICULARS	DETAILS
	within 10 km radius.	NOC DFO Territorial & DFO Wildlife has been obtained in this regard vide Letter no. 3546 dated 21.12.2021 and 2058 dated 28.11.2021 respectively. These are 1. Dakbera Open Jungle- 3.5km W 2. Barwapani Fairly dense jungle-7.5kmW 3. PF in North Direction – 6.3 km 4. Chiubera PF -4.7km NE
8.	Water Bodies (within 10 km radius)	1. Damodar River (5.15 km in NE direction) 2. Garga Dam (6.4 km in South direction) 3. KhanjoNadi (5.5 km in West direction)
9.	Archaeological Sites	No Archaeological Sites Within 10 km radius
10.	Seismic Zone	The project site lies in Zone - III of Seismic Zoning Map of India, Bureau of Indian Standards.
<b>G.</b>	<b>Basic Requirements for the project</b>	
	Water Requirement	150 KLD <i>Source:</i> JIADA water supply. Rain water harvesting plan will be adopted to reduce fresh water demand. No additional water for proposed expansion.
	Power Requirement	12 MW <i>Source:</i> DVC and D.G. Set for emergency back-up. Roof Top Solar Panels will also be installed within plant premises. No additional power for proposed expansion.
	<b>Manpower Requirement (Persons):</b>	
	Construction/Implementation phase (no.)	64
	<b>Operation phase (no.)</b>	
	Regular	39
	Contractual	250
	<b>Total</b>	<b>289</b>
	<b>Total (no.)</b>	<b>353</b>
	Locals will be given preference in employment as per their eligibility. No additional Manpower for proposed expansion.	

The details of composition required for the cement manufacturing have been envisaged as below:



**Capacities and sizing of major equipment's proposed**

S. No.	Plant/Equipment /Facility	Existing Configuration submitted for 2 MTPA	Total Configuration after 3 MTPA
(1.)	Truck Loaders	2x120 TPH	9x120 TPH
(2.)	Truck Tippler & Box Feeder	3x300 TPH	2x300 TPH
(3.)	Stacker Reclaimer	1800/300 TPH	1800/300 TPH
(4.)	Cement Mill(VRM)	2 Million TPA	3.1 Million TPA
(5.)	Coal Crusher (Hammer/Roll Crusher)	50 TPH	Removed (crushed coal will be used)
(6.)	Packer	2 x 240 TPH	3 x 240 TPH
(7.)	Wagon Tippler	1800 TPH	1800 TPH
(8.)	Startup FBC/HAG	25 Mkcal/hr	30 Mkcal/hr
(9.)	Coal Hopper	-	2X75 Tonnes

**Proposed Storage Capacities**

S. No.	Materials detail	Storage Capacity (Tonnes)		Storage Type
		Earlier	After detailed Engineering	
1.	Clinker	1 x 50,000	1 x 30000	RCC Silo
2.	Gypsum	1 x 5000	1 x 5000	Covered Shed
3.	Slag	1 x 25000	1 x 13000	Covered Shed
4.	Dry Fly ash	00	1x 3000	RCC Silo
5.	Pond Ash	00	1x 3300	Covered Shed
6.	Cement	2 x 5000	2 x 5000	RCC Silo
7.	LSHS/ HSD	1x30 KL	1x30 KL	Container/ Drum
8.	Coal	1 x 4500	0 Utilized for pond ash	Replaced with Coal hopper

**Raw Material Requirement**

S. No.	Raw material	Quantity (MTPA)*			Source	Mode of Transportation	Distance (Kms.)		
		PSC		PPC			PCC	Earlier	After Expansion
		Earlier	After Expansion						

*WA*

*B*

71 *CDM*

*A*

*D*

*Mud*

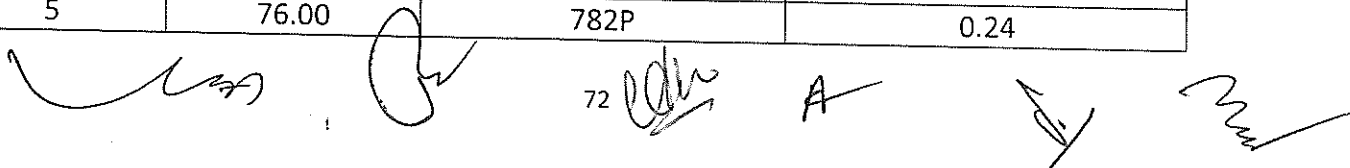
1.	Clinker	0.66	1.09	1.9 2	1.0 2	Unit of DCBL at Rajgangpur, Odisha	Rail/Road	323	323
2.	Gypsum	0.04	0.06	0.0 9	0.0 6	Paradip, Odisha	Rail/Road	500	500
3.	Slag	1.30	1.95	0	0.9 3	BSL /RSP/TATA STEEL	Rail/Road	287	287
4.	Fly Ash	0	0	1.0 9	1.0 9	BTPS, Vedanta	Road	NA	80-100

**STATUTORY CLEARANCES :**

1	CO	:	The CO, Chas (Bokaro) vide letter no. 2436, dated 29.11.2021 has mentioned the plot no. of the project is recorded as "Kadim / Dhan / Parti Jadid" in Khatiyon.
2	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 2058, 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.
3	DFO Forest Distance	:	DFO, Bokaro Forest Division vide letter no. 3546 dated 21.12.2021 certified that the distance of Reserved Forest / Protected Forest from the project site is more than 250 m.
4	Previous Environmental Clearance		Previous Environmental Clearance granted by SEIAA vide letter no. EC/SEIAA/2021-22/2534/2022, dated 21/04/2022
5	Consent to Establish		Consent to Establish (CTE) (Earlier) vide Ref. no. JSPCB/HO/RNC /CTE-12699959/2022/195 dated 28/04/2022
6	Land allotment letter		Land Allotment letter from JIADA vide allotment order No. LA/BO/SW/00771/2021 dated 20/10/2021
7	Water approval		Water Approval from JIADA dated 13/04/2022

**Land Schedule: Details of land/Plot/Plots/Shed to be leased out**






S. No.	Khata No.	Survey Plot No.	Area in Sq.ft/Acre
1	134	781P	0.14
2	76	779P	0.26
3	134	777F	0.40
4	76	778P	0.07
5	76.00	782P	0.24


  
 72



S. No.	Khata No.	Survey Plot No.	Area in Sq.ft/Acre
6	134.00	784P	0.05
7	76.00	783P	0.02
8	177.00	880P	1.31
9	46.00	850P	0.02
10	45.00	884F	0.04
11	177.00	852P	0.19
12	171.00	776P	0.37
13	76.00	887P	0.06
14	47.00	882F	0.42
15	145.00	881F	0.29
16	145.00	879F	0.74
17	78.00	878F	0.61
18	177.00	891F	1.13
19	171.00	883F	0.18
20	47.00	875F	0.09
21	65.00	874F	0.16
22	65.00	863F	0.48
23	135.00	861F	0.15
24	47.00	862F	0.44
25	160.00	960P	0.31
26	65.00	866F	0.90
27	72.00	867P	0.48
28	46.00	893P	0.52
29	76.00	890F	0.47
30	134.00	892F	0.50
31	45.00	885F	0.13
32	45.00	886F	0.04
33	65.00	873F	0.77
34	65.00	864F	0.47
35	72.00	865F	0.14
36	45.00	851P	0.19
37	76.00	888P	0.12
38	65.00	868P	0.13
39	46.00	858P	0.27
40	47.00	876F	0.22
41	46.00	871F	0.14
42	46.00	957P	0.55
43	46.00	870P	0.65
44	46.00	958F	0.89
Total			15.75

**Production of wastes during construction or operation or decommissioning**

Name of the waste	Source	Qty (TPA)	Mode of disposal
		73 	A  

	Name of the waste	Source	Qty (TPA)	Mode of disposal
1.	Municipal Solid Waste	Plant office, canteen etc.	20	Biodegradable waste will be composted and non-degradable wastes shall be disposed off suitably
2.	Plastic bags & other packing material	Plant & other	690	To authorized vendor
3.	Used lead acid batteries	Plant/vehicles/Solar	150 nos	Authorised vendor/buy back
4.	<b>Hazardous wastes</b>			
	Used or spent oil (Cat. 5.1)		13	Authorised vendor
	Wastes or residues containing oil (Cat. 5.2)	Plant, Machineries & Vehicles	15	Authorised vendor
	Contaminated cotton rags or other cleaning materials (Cat. 33.2)	Plant, Machineries & Vehicles	0.2	Authorised vendor
	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes (Cat. 33.1)	Plant	2 TPA/100 nos	Authorised vendor
5.	E-waste	Office, machineries	1	Authorised vendor
6.	APCD Dust	All APCEs		Dust collected in air Pollution Control Equipment will be recycled back to process.

The Consultant submitted that baseline data have been generated 03 times between October, 2021 and May, 2022. The Committee have asked to collect the additional baseline data for one month during October, 2022.

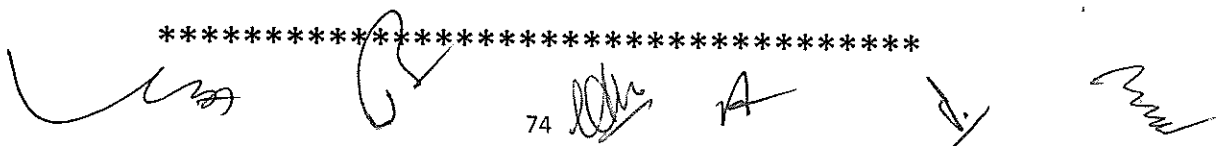
The PAs vide letter dated 17.09.2022 requested for waiver of the additional one month baseline data collection.

The Committee did not agree to waive the additional baseline data collection but reduce the period of one month to 02 weeks.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 14, 15, 16, 17 & 18.09.2022, the Committee recommends for issuing of TOR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure IV alongwith the following specific conditions :

- I. 02 weeks additional monitoring data to be conducted for the month October, 2022 and report to be submitted alongwith EIA/EMP report.
- II. Solid Waste management plan to be submitted alongwith EIA/EMP report.

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Day 5 : September 18<sup>th</sup>, 2022 [Sunday]

Consideration of Proposals

1. 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/CMIN/400471/2022)

**Project Category :** The State Expert Appraisal Committee, Jharkhand deliberated the project during its 94<sup>th</sup> meeting held on 10-14.05.2022 and SEIAA, Jharkhand has approved the Amendment of ToR in 95<sup>th</sup> meeting held on 14<sup>th</sup>, 15<sup>th</sup> & 16<sup>th</sup> June, 2022. TOR for the project was issued by SEIAA, Jharkhand vide letter no. 148, date 18.06.2022. The final EIA / EMP submitted by PAs to SEIAA on 18.09.2022 and received by SEAC on 18.09.2022.

**EC Application for: Coal : 0.75 MTPA**

**Name of the consultant : Crystal Consultants**

This is a project which has been taken for appraisal on 18.09.2022.

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 -	

75

			<ul style="list-style-type: none"> <li>• Manpower 10 KLD</li> <li>• Plantation 80 KLD</li> <li>• Dust suppression in Mines and for approach road 120 KLD</li> <li>• Other Uses 4 KLD</li> <li>• Quarters for staff 10 KLD</li> <li>• Misc. 10 KLD</li> </ul>
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"

#### Background of the project :

1. Pursuant to e-auction conducted by Ministry of Coal, M/s Fairmine Carbons Pvt. Ltd. became the successful bidder and subsequently block was vested vide Vesting Order no. NA-104/11/2020-NA dt.03.03.2021.
2. Allottees got Mining Plan approved with capacity of 0.75 MTPA by Ministry of Coal vide MoC letter no. 13016/52/2008-ca-j (part) dt 16/12/2011.
3. Earlier SEIAA issued a TOR for project this AMP area of 117.80 vide its Letter No. : EC/SEIAA/2021-22/2378/2021/107, dated 14/08/2021.
4. The project area was reduced to 116.80 ha against 117.80 ha in revision of Mine Plan (August 2011) as :-
  - a. 6.95 ha area (on east of the allotted block), which was previously included for infrastructure facilities was excluded during boundary certification from CMPDI.
  - b. Also Ministry of Coal instructed that the area left between Geological Boundary and Proposed Mining Lease Boundary should be the part of proposed Mining Lease and it cannot be left, therefore Project Boundary has been extended upto the Geological Boundary and 5.95 ha area was added to the Project boundary.
5. Revised Mine Plan Approved by the Ministry of Coal in a meeting dated : 13/04/2022.

76

6. Subsequently SEIAA issued a ToR (Amendment) vide its Letter No. EC/SEIAA/2022-23/2573/2022/148, dated 18/06/2022.
7. A meander of Sadabah River will be diverted before end of 3<sup>rd</sup> year of mining. PP has approached Water Resource Department, Govt. of Jharkhand & WRD (GOJ) recommended the proposal for preparation of DPR & model testing vide Letter No. : 3/PMC/Work/465/2021-31/Ranchi dated : 19/01/2022. DPR & model testing report has been prepared and vetted by IIT, Roorkee & the same was submitted to WRD vide Letter No. : FCPL/RNC/2021-22/061 dated 18/08/2022.
8. NH-75 will be diverted before end of 17<sup>th</sup> year of mining. Nominated authority MOC has requested Secretary MoRTH to re-alignment of NH – 75 vide DO Letter : NA-104/11/2020-NA dated : 02/07/2021.

#### 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 ,157,158,161,164,168,172,177,182,184,187,188,192,201,206,211,214,216,219,220,222,224,226,2 27,235,236,240,242,243,244,247,251,253,256,261,263,264,266,267,268,270,272,273,274,275,277 ,278,280,281,285,286,288,290,291,293,295,296,297,298,299,300,301,304,305,306,307,308,309,3 11,312,313,314,318,319,320,322,323,326

**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,

77

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)

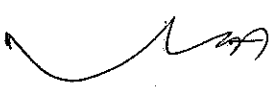





### Working Details

1	Mining Method	:	Semi-Mechanized Opencast Mining Method
2	Quarry Area	:	89.28 ha
3	Waste Generation	:	34.1 Cu.M
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 to 15m
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

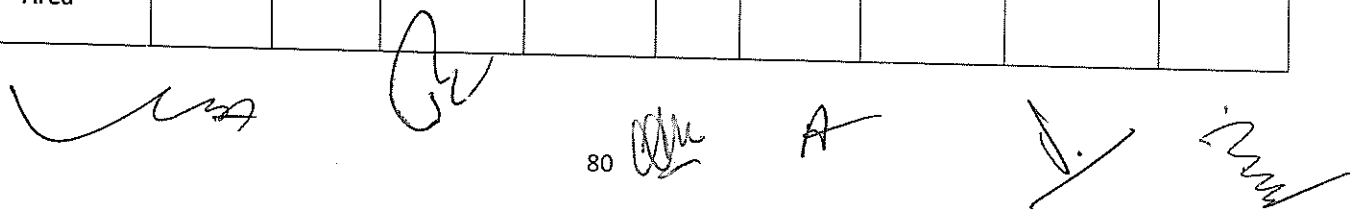


79 




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 Area	2.71	2.710	2.710						2.7100





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

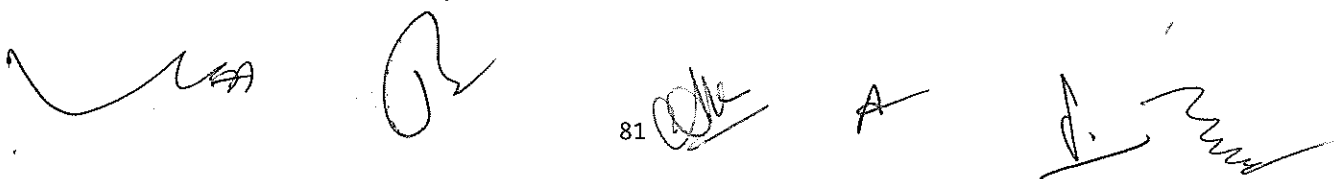
- Waste Generation will be 34.1 Cu.M. during the life of Mine. The Waste generated shall be backfilled.

### Water Quality Management

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

### Undertaking submitted affirming:

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



- 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 Khatiyon & Register II
- The Member Secretary, JSPCB has forwarded the proceeding of Public Hearing vide Ref. no. PC/PH/RNC/01/2022/B-1933, dated 16.09.2022.

#### Sadabah River Diversion

A meander of Sadabah River will be diverted before end of 3<sup>rd</sup> year of mining. PP has approached Water Resource Department, Govt. of Jharkhand & WRD (GOJ) recommended the proposal for preparation of DPR & model testing vide Letter No. : 3/PMC/Work/465/2021-31/Ranchi dated : 19/01/2022. DPR & model testing report has been prepared and vetted by IIT, Roorkee & the same was submitted to WRD vide Letter No. : FCPL/RNC/2021-22/061 dated 18/08/2022. Sadabah River occupies 5.95 Ha. of land within lease area.

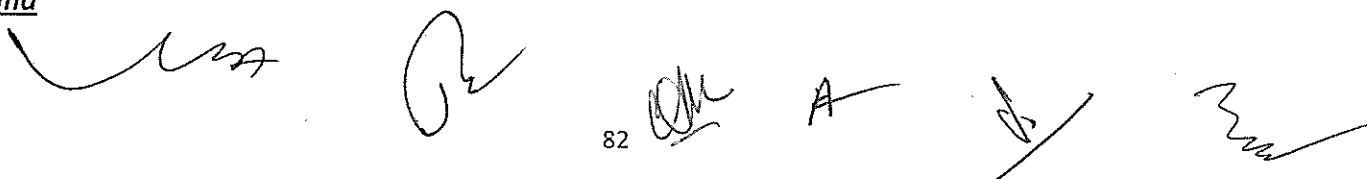
Project Proponent will ensure that a safety barrier of 15 m on both side of the river will be maintained and no mining activity will be carried out in the safety barrier. After getting the permission for diversion of said river from the competent authority, the copy of the permission for diversion shall be submitted to SEIAA/SEAC, Jharkhand alongwith the 06 monthly compliance report.

#### NH-75 Diversion

NH-75 will be diverted before end of 17<sup>th</sup> year of mining. Nominated authority MOC has requested Secretary MoRTH to re-alignment of NH – 75 vide DO Letter : NA-104/11/2020-NA dated : 02/07/2021. 0.92 Ha. + 5.85 Ha. (Safety Barrier) i.e. 6.77 Ha. Area involved in this diversion of NH – 75.

Project Proponent will ensure that a safety barrier of 45 m on both side of NH 75 will be maintained and no mining activity will be carried out in the safety barrier. After getting the permission for diversion of NH 75 from the competent authority, the copy of the permission for diversion shall be submitted to SEIAA/SEAC, Jharkhand alongwith the 06 monthly compliance report.

#### Land

A series of handwritten signatures and initials in black ink, including a large cursive signature, a stylized 'A', and several other marks.

Private Land- Private Land will be acquired after obtaining prior permission under CNT 1908 and will be registered.


Government Land (GM)- Application for transfer of GM land is applied vide FCPL/DTO/20-21/011 (GM AAM), FCPL/DTO/20-21/012 (GM KHAS) for Nawa Bazar Block & FCPL/DTO/20-21/022 (GM AAM), FCPL/DTO/20-21/023 (GM KHAS) for Pandwa Block, process of transfer of land is initiated by GOJ.

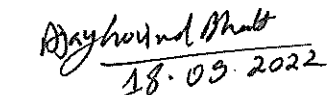
Based on the presentation made and information provided, the Committee decided that the proposal for Rajhara North (Central & Eastern) Coal Mine Opencast Project of M/s Fairmine Carbons Pvt. Ltd., Mouza : Rajhara & Pandwa, Thana : Nawa Bazar & Pandwa, Thana no. : 132 & 198, Dist. : Palamu, Jharkhand (116.80 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – V alongwith the following specific conditions :


- I. Vegetal cover should be developed on the top soil dump within mining lease area to keep the top soil fertile for further use.
- II. CER budget should be implemented as per the guideline of Ministry of Environment, Forest & Climate Change, Govt. of India.

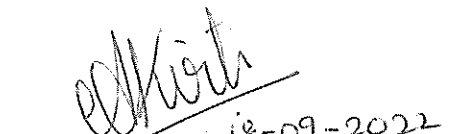
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The meeting concluded with thanks to all present.

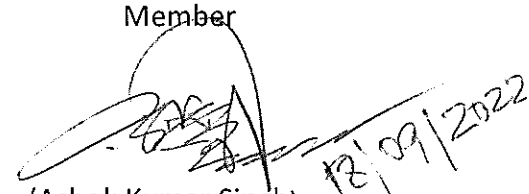
  
(Dr. Raju Kumar)  
Member  
18/09/2022

  
(Dr. Ajay Govind Bhatt)  
Member  
18.09.2022

  
(Niranjan Lal Agarwalla)  
Member  
18/09/2022

  
(Dr. Kirti Avishek)  
Member  
18-09-2022

  
(Srikant Verma)  
Secretary  
18/09/2022

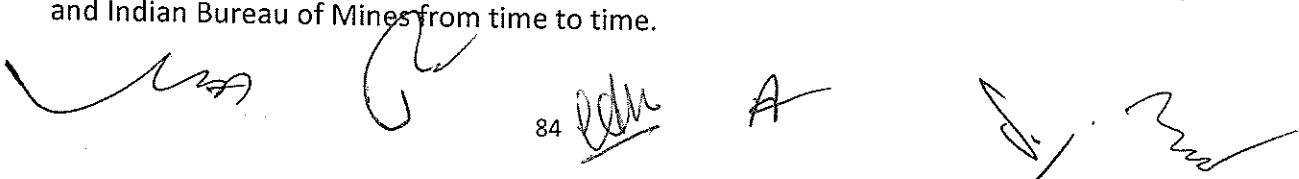
  
(Ashok Kumar Singh)  
Chairman  
18/09/2022

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. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- iii. The Project proponent complies with all the statutory requirements and judgement of Hon'ble Supreme Court dated 2<sup>nd</sup> August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- iv. The Hon'ble Supreme Court vide order dated 08.01.2020 in W.P. (Civil) No.114/2014 in the matter of Common Cause vs. Union of India has directed that the area which has been mined should be restored so that grass and other vegetation including trees can grow in the mining area for the benefit of animals.

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

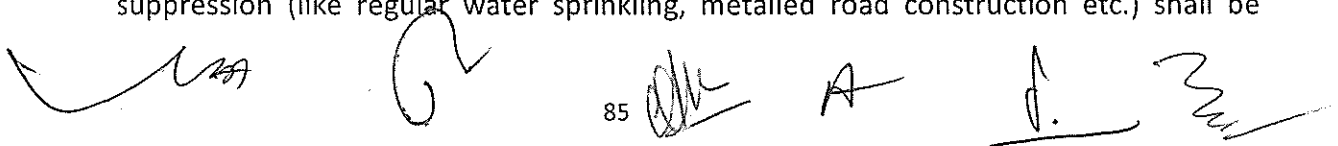
- v. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgement of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- vi. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- vii. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- viii. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.
- ix. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.



- x. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- xi. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-11013/57/2014-IAJI (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- xii. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- xiii. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- xiv. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- xv. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change ([www.Environmentclearance.nic.in](http://www.Environmentclearance.nic.in)). A copy of the advertisement may be forwarded to the concerned MoEF & CC Regional Office for compliance and record.
- xvi. The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

## II. Air quality monitoring and preservation

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

 85

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

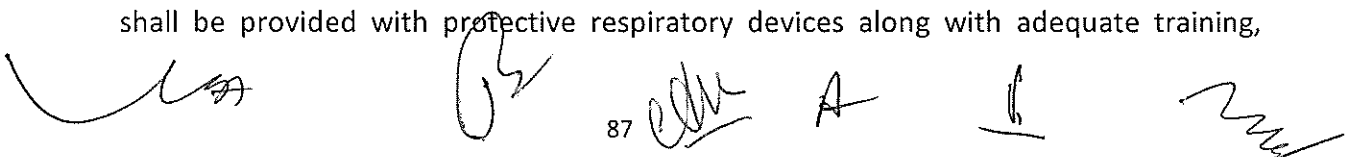
- i. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that 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,

 87

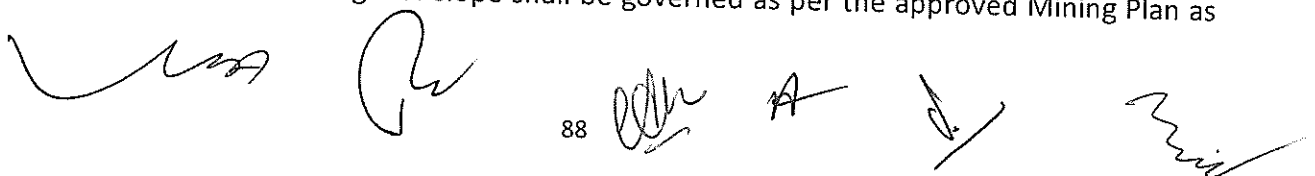
awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

#### 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

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

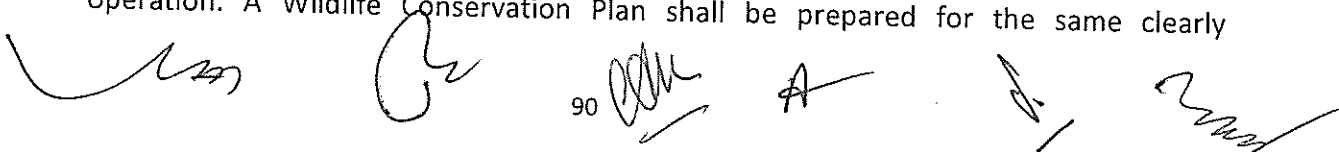
## VII. Transportation

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

- 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

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delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.

- v. And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

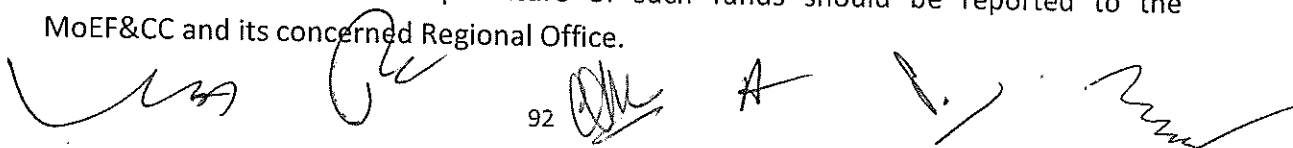
#### IX. Public hearing and human health issues

- i. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.
- ii. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- iii. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium-Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes

- and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
- iv. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there, should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.
  - v. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
  - vi. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
  - vii. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

#### X. Corporate Environment Responsibility (CER)

- i. The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
- ii. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF&CC and its concerned Regional Office.

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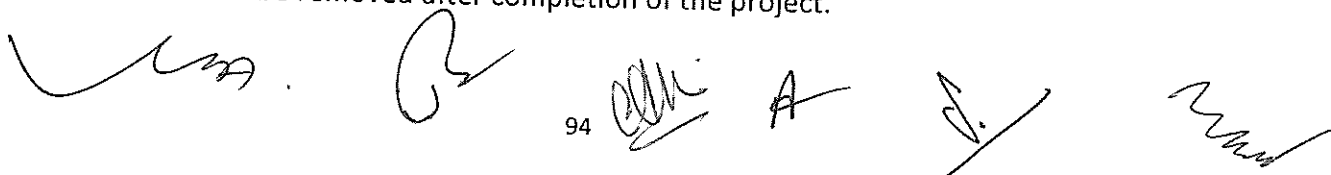
## XI. Miscellaneous

- i. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- ii. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- iii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- iv. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
- v. The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
- vi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- vii. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- viii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- ix. The Environmental Clearance accorded shall be valid for the period of lease of the mine, the PP does not increase production rate and alter lease area during the validity of Environmental Clearance.



## 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. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- v. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vii. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- x. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- xi. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.



- xiii. Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.
- xiv. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.
- xv. All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peaking hours.
- xvi. Accumulation/stagnation of water shall be avoided ensuring vector control.
- xvii. Water during construction phase should be preferred from Municipal supply.
- xviii. Unskilled construction labourers shall be recruited from the local areas.
- xix. Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.
- xx. Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.
- xxi. Rest room facilities shall be provided for service population.
- xxii. Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.
- xxiii. Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.

## II. Air quality monitoring and preservation

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.
- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act,

1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xii. For indoor air quality the ventilation provisions as per National Building Code of India.

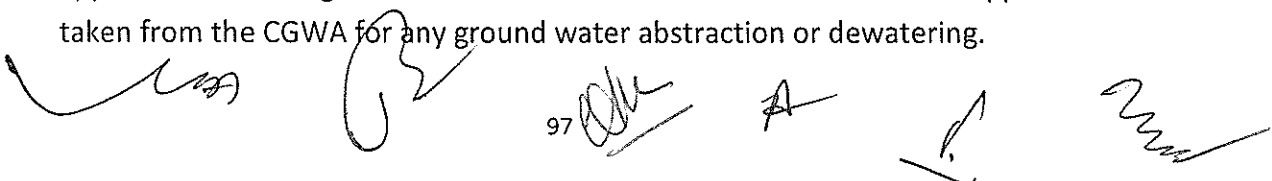
### III. Water quality monitoring and preservation

- i. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
- ii. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
- iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

  96    



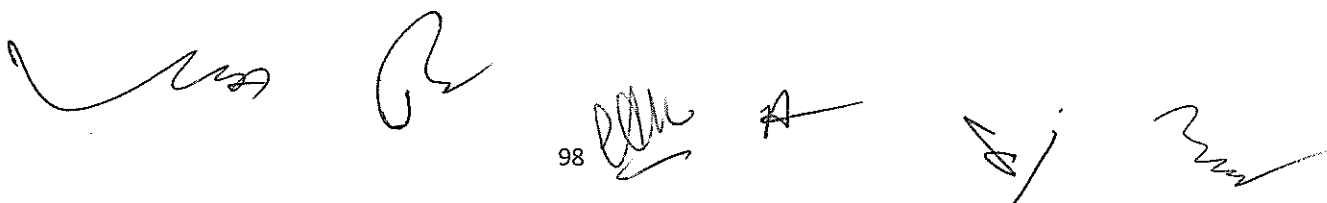
- iv. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- v. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
- vi. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
- vii. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
- viii. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- ix. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
- x. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xi. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
- xii. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
- xiii. All recharge should be limited to shallow aquifer.
- xiv. No ground water shall be used during construction phase of the project.
- xv. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.

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- xvi. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
- xvii. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
- xviii. No sewage or untreated effluent water would be discharged through storm water drains.
- xix. Onsite sewage treatment of capacity of treating 100% waste water to be installed based on the MBBR/MBR/SBR technology. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
- xx. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
- xxi. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

#### IV. Noise monitoring and prevention

- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

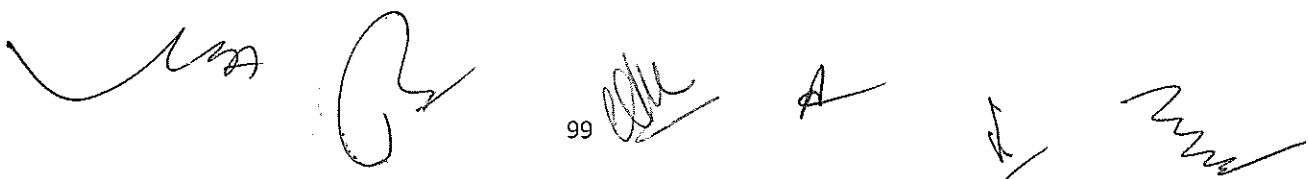
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## V. Energy Conservation measures

- i. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
- ii. Outdoor and common area lighting shall be LED.
- iii. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- iv. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
- v. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.
- vi. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

## VI. Waste Management

- i. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
- ii. Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- iii. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
- iv. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.
- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.

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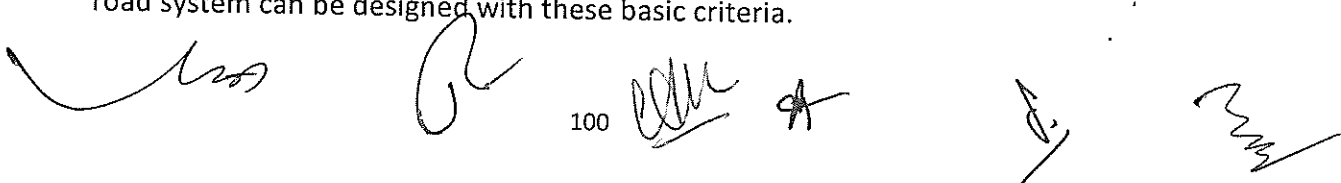
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25<sup>th</sup> 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.

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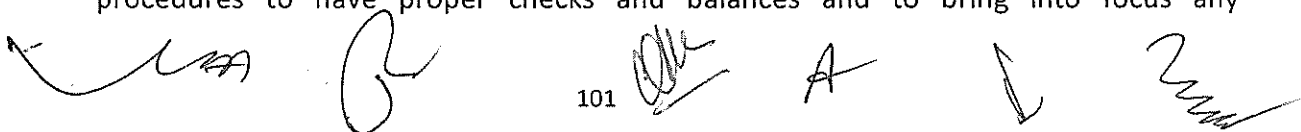
- a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
  - b. Traffic calming measures.
  - c. Proper design of entry and exit points.
  - d. Parking norms as per local regulation
- ii. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
  - iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

#### **IX. Human Health Issues**

- i. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
- ii. For indoor air quality the ventilation provisions as per National Building Code of India.
- iii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Occupational health surveillance of the workers shall be done on a regular basis.
- vi. A First Aid Room shall be provided in the project both during construction and operations of the project.

#### **X. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any

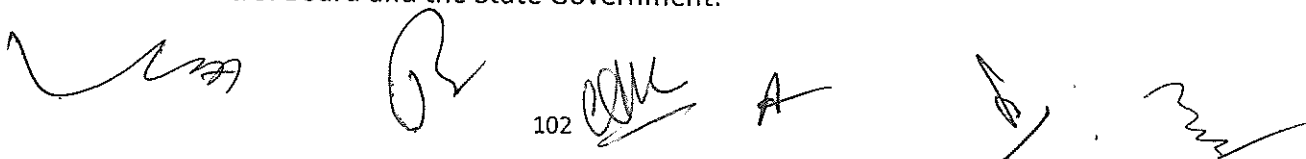
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infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

#### XI. Miscellaneous

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website, and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

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- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.



## I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

## II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31<sup>st</sup> March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015(Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released

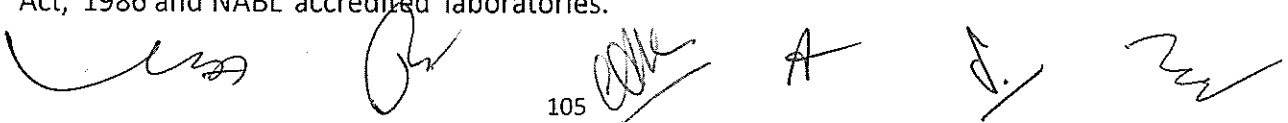


(e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six- monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after *briquetting* agglomeration.
- ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.
- xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

### III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF / EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

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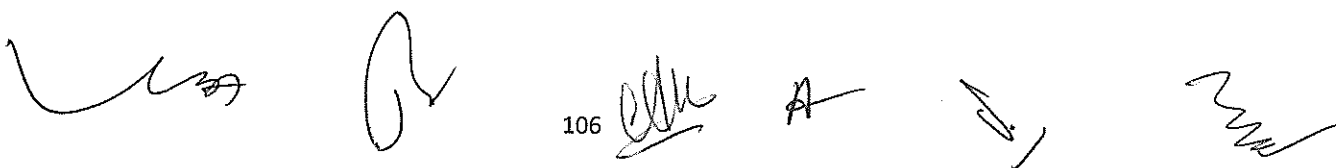
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31<sup>st</sup> March 2012 (applicable to IF/EAF) as amended from time to time.
- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

#### IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB (A) during day time and 70 dB(A) during night time.

#### V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- ii. Practice hot charging of slabs and billets/blooms as far as possible.
- iii. Ensure installation of regenerative type burners on all reheating furnaces.
- iv. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- v. Provide the project proponent for LED lights in their offices and residential areas.

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## VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The waste oil, grease and other hazardous waste shall be disposed of as per the
- v. Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- vi. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

## VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

## VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

## IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> 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 for shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.


- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

#### X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.



- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.



- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

**C. Other Conditions:**

- i. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority or for that matter for any other Administrative reason.
- ii. In view of MoEF & CC O.M. No.- 22-27/2015-IA-III, dated- 12.04.2016 The Environmental Clearance accorded shall be valid for a period of Seven (07) years. The PP shall not increase production rate and make modifications in process during the validity of Environmental Clearance.
- iii. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.



**A. STANDARD TERMS OF REFERENCE (TOR)**

**1. Executive Summary of the project.**

**2. Introduction**

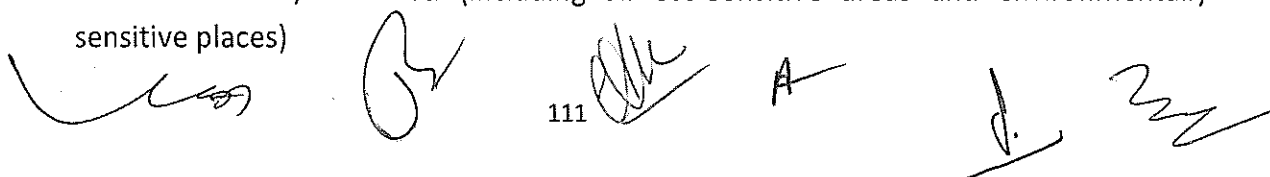
- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent.
- iii. Importance and benefits of the project

**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)

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- 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. Land use 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. Land use 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.







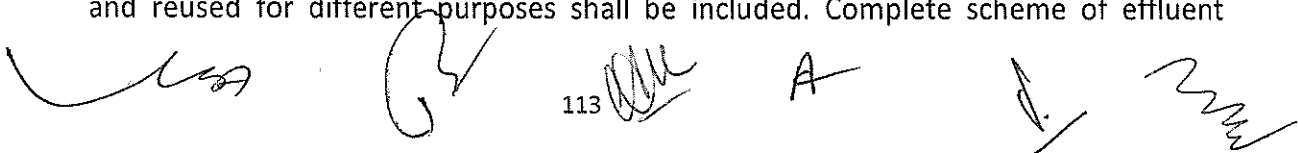



## 6. Environmental Status

- 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 Environmental 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

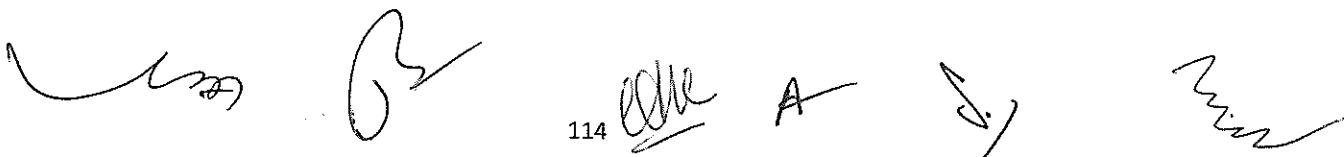
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treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E (P) Rules.

- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

#### 8. Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

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## 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.

14. Beside the above, the below mentioned general points should also be followed:

- a) A note confirming compliance of the ToR, with cross referencing of the relevant sections/pages of the EIA report should be provided.
- b) All documents may be properly referenced with index and continuous page numbering
- c) Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
- d) Where the documents provided are in a language other than English, an English translation should be provided.
- e) The questionnaire for environmental appraisal of LPG Bottling projects as prescribed by the Ministry shall also be filled and submitted.
- f) All statutory clearances obtained for the project shall be included in the EIA report.
- g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M No. J-11013/41/2006-IA.II(I) dated 4<sup>th</sup> August, 2009, which are available on the website of this Ministry should also be followed.




115



15. 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.
16. 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.

**B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR CEMENT PLANTS**

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
3. For large Cement Units, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
4. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. If the raw materials used have trace elements, an environment management plan shall also be included.
6. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
7. Energy consumption per ton of clinker and cement grinding
8. Provision of waste heat recovery boiler
9. Arrangement for use of hazardous waste

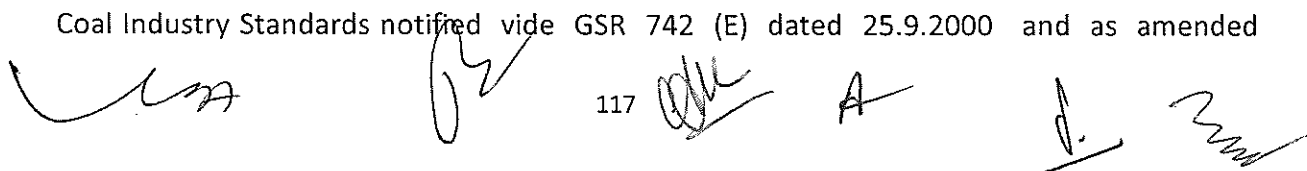


**I. Statutory compliance**

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- vii. Solid waste/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016 as amended from time to time.

**II. Air quality monitoring and preservation**

- i. Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended



from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.

- iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water / mist sprinkling / rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM2.5) such as haul road, loading/ unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- iv. The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- v. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- vi. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- vii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

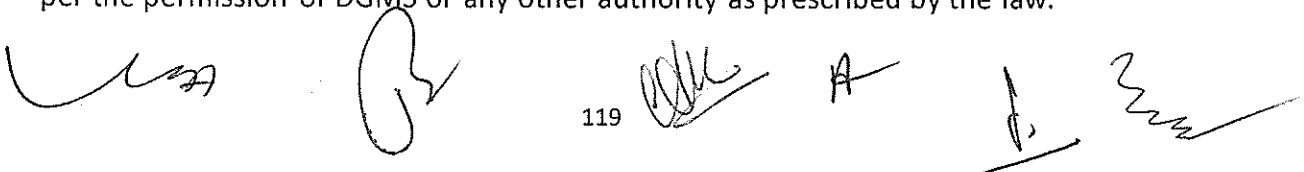
### III. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The



ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

- iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change / Regional Office.
- v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- vi. Catch and or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
- vii. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- viii. Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP / STP needs to be provided.
- ix. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- x. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.

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- xi. The project proponent shall take all precautionary measures to ensure reversal of riparian ecosystem in and around the coal mine upto a distance of 5 km. A riparian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

#### IV. Noise and Vibration monitoring and prevention

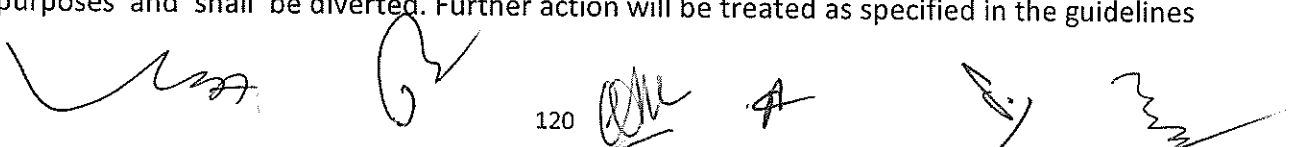
- i. Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs / muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
- ii. Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.
- iii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

#### V. Mining Plan

- i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- ii. Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- iii. No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980
- iv. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

#### VI. Land reclamation

- i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEF&CC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- ii. The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural /forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines

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for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27<sup>th</sup> August, 2009 and subsequent amendments.

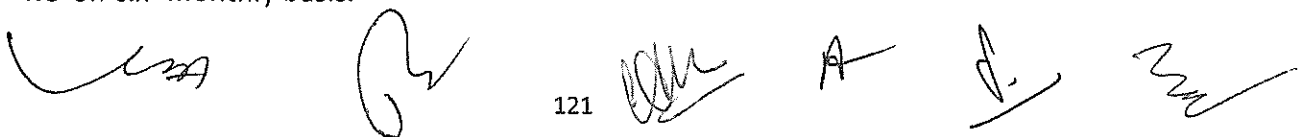
- iii. The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining" / "post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
- iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3<sup>rd</sup> November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- v. Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
- vi. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

#### VII. Green Belt

- i. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- ii. Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

#### VIII. Public hearing and Human health issues







- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six- monthly basis.

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- ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any. as amended time to time.
- iii. Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- v. The project proponent shall follow the mitigation measures provided in this Ministry'S OM No.Z-11013/5712014-IA.11 (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

#### IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1<sup>st</sup> 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.

  122    

v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

**X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely;  $PM_{10}$ ,  $SO_2$ ,  $NO_x$  (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form- V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIAIEMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.



- x. No further expansion or modifications in the plant shall be carried out without approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010
- xvii. The Environmental Clearance accorded shall be valid for the period of lease of the mine, the PP does not increase production rate and alter lease area during the validity of Environmental Clearance.

