

MINUTES OF THE 132ND MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 09TH, 10TH, 11TH, 12TH, 13TH, 14TH AND 15TH JUNE, 2026.

The 132nd meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 09th, 10th, 11th, 12th, 13th, 14th and 15th June, 2026 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. Shri Niranjan Lal Agarwalla - Member
3. Dr. Raju Kumar - Member
4. Shri Ashok Kumar Dubey, IFS (Retd.) - Member (Not present)
5. Dr. Ajay Govind Bhatt - Member
6. Shri Srikant Verma, IFS - Member Secretary

The various projects applied in SEAC for the technical appraisal after the last SEAC meeting held on 24th, 25th, 26th, 27th and 28th April, 2026. 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 : 09th June, 2026 [Tuesday]

A. Matter referred by SEIAA, Jharkhand.

- i. A Complain received from bhaaratnida703@gmail.com vide e-mail dated 17.04.2026.

The complain is regarding illegal mining activities being carried out by Lufal Haque Stone at Village : Pratappur, Thana no. 104, Hiranpur, Distt. :Pakur, Jharkhand.

SEAC recommends that SEIAA may write a letter to Deputy Commissioner, Pakur to inquire in to the matter and take necessary action.

- ii. A Complain received from Sayma Khatun, Bindudham Path, Barharwa, Distt. :Sahibganj vide letter dated 22.05.2026.

The complain is regarding dispute in the land ownership and not related to SEIAA, Jharkhand.

SEAC recommends that SEIAA may write a letter to Deputy Commissioner, Sahibganj to inquire in to the matter and take necessary action.

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- i. Letter no. 208A, dated 28.05.2026 from Steel Authority of India Ltd., Bokaro Steel Plant , Bokaro regarding non-applicability of prior Environmental Clearance (EC) for existing Bokaro Airport under EIA Notification, 2006 and subsequent amendments/Office Memorandums.

This letter is addressed to Member Secretary, SEIAA, Jharkhand which has been forwarded to SEAC, Jharkhand for its comments and observations.

This matter has been discussed earlier also in the 115th meeting of SEAC held on 23rd to 27th July, 2024 and 126th meeting of SEAC held on 09th to 13th September, 2025 in which very clear opinion of SEAC was provided.

In the present case this matter was listed for discussion on 09th June, 2026. The Project Authorities or their representative were requested to be present during the discussion vide SEAC letter no. 39, dated 05.06.2026. Further a mail was received on 09th June, 2026 from CGM (ECS), Bokaro Steel Plant, SAIL stating that due to some unavoidable circumstances they were unable to attend the SEAC meeting on 09th June, 2026 with a request to list this matter for discussion on 11th June, 2026 at 11.30 AM. Confirmation mail was sent by SEAC on 09th June, 2026 to CGM (ECS), Bokaro Steel Plant, SAIL fixing the time for discussion on 11th June, 2026 at 11.30 AM.

Shri Rajiv Srivastava, CGM (ECS), Bokaro Steel Plant, SAIL and Shri P.K. Swain, AGM, Aviation, Bokaro Steel Plant, SAIL were present for discussion with SEAC at 11.30 AM on 11th June, 2026.

The focus of discussion were mainly only following aspects :

- i. Applicability of requirement of EC under EIA Notification, 2006 to the proposed conversion of private Airport of Bokaro Steel Plant to commercial airport for public use.
- ii. Applicability of OMs and Notification issued by MoEF&CC, Govt. of India vide S.O. No. 1886 (E), dated 20.04.2022, S.O. No. 3194 (E), dated 14.07.2022, OMF.No. 22-47/2018-IA.III [E 114368], dated 12.10.2022&OM F.No. IA3-10/9/2025-IA-III (INFRA-II)(E. NO. 279043), dated 30.09.2025.

As per EIA notification, 2006 as amended for time to time, Airport projects are listed under serial 7(a) of the scheduled. The projects are classified as follows :

- a. All new projects including airstrips, which are for commercial use are categorized as Category 'A' projects and to be appraised at the Central Level.
- b. All expansion projects, including airstrips which are for commercial use are categorized as Category 'B' projects and to be appraised at the State Level.

Notes specified in the column no. (5) of General Condition reads as follows :

- (i) Air strips which do not involve bunkering / refueling facility and or Air Traffic Control, are exempted.
- (ii) Only expansion of terminal buildings and allied buildings within the existing Airport premises >20,000 shall require Environmental Clearance, and such

expansion up to 1,50,000 sqm shall be appraised as per provisions of item 8(a) of the Schedule of this notification provided there is no increase in the existing area of the Airport”.

During discussion a consensus was arrived at that the Airport under discussion is coming as a Commercial Airport for the 1st time and has no previous Environmental Clearance (EC) for the Airport. Hence this can not be considered to be an existing airport in the perview of EIA Notification, 2006 as no earlier EC has been obtained.

The airport can not be considered as an existing airport having lawful environmental status merely on the basis of its physical existance.

Further, the Bokaro Steel Plant representative stated that Air Traffic Control Facilities shall be installed and hence it does not attract clause no. (i) of column (5).

Clause no. (ii) of column (5) is applicable only to airport having valid EC and proposing an expansion of Terminal Building 20,000 Sqm and above and up to 1,50,000 Sqm irrespective of whether the airport is private or commercial and to be considered under schedule 8(a) of the EIA Notification, 2006.

Hence, it is considered as a new Commercial Airport and requires EC as per scheduled 7(a) of the EIA Notification, 2006 and classified as a Category ‘A’ Project. Accordingly, EC is to be obtained for the Proposed Commercial Airport from MoEF&CC, Govt. of India.

- iv. E-mail dated 22.05.2026 from Regional Office, Ranchi, MoEF&CC, Govt. of India regarding monitored report on the status of compliance of the conditions imposed in the Environmental Clearance granted to Grinding Unit of M/s Nuvoco Vistas Corp. Ltd. (Formerly Lafarge India Ltd.) and 1x30 MW Captive Power Plant located at Village :Jojobera, Rahargora, Jamshedpur, East Singhbhum, Jharkhand.

The status report of Certified Compliance Report (CCR) of the said project has been forwarded by Regional Office, Ranchi, MoEF&CC, Govt. of India to SEIAA, Jharkhand vide letter F. No. 103-227/09/EPE/271, dated 22.05.2026 receipt via e-mail dated 22.05.2026. Wherein, many of the conditions of EC has been partially complied or not complied.

The Member Secretary, SEAC will forward a copy of this CCR to M/s Nuvoco Vistas Corp. Ltd. (Formerly Lafarge India Ltd.) seeking show cause explanation as to why the conditions of EC have not been complied.



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- v. Letter no. IA-Z-12011/45/2026-IA-I, dated 17.04.2026 from Ministry of Environment, Forest & Climate Change, Govt. of India regarding PG no. MOEAF/E/2026/0001880, dated 07.04.2026 received in the Ministry from Shri Zameer Ahmad.

The complaint is regarding taking action against Dongodih Stone Deposit of Shri Sharwan Yadav at Village :Dongodih, Tehsil :Jamua, Distt. :Giridih, Jharkhand (0.931 Ha) (Proposal no. SIA/JH/MIN/233810/2021).

As per letter F. No. IA-Z-12011/22/2026-IA-I(E – Comp. No. 291970), dated 19.02.2026 addressed to the Director General of Forest (C), Regional Office, Ranchi, MoEF&CC, Govt. of India with copy to SEIAA, Jharkhand and further letter F. No. IA-Z-12011/45/2026-IA-I, dated 29.04.2026 addressed to Member Secretary, SEIAA, Jharkhand with copy to Director General of Forest (C), Regional Office, Ranchi,MoEF&CC, Govt. of India with a direction to Regional Office, Ranchi,MoEF&CC, Govt. of India, to provide the CCR w.r.t Dongodih Stone Deposit of Shri Sharwan Yadav at Village : Dongodih, Tehsil : Jamua, Distt. : Giridih, Jharkhand (0.931 Ha) to SEIAA, Jharkhand for further necessary action.

It is recommended that Member Secretary, SEIAA will seek status of CCR with respect to Dongodih Stone Deposit of Shri Sharwan Yadav at Village : Dongodih, Tehsil : Jamua, Distt. : Giridih, Jharkhand (0.931 Ha) from Regional Office, Ranchi, MoEF&CC, Govt. of India.

After receipt of the CCR, SEIAA may take necessary action in the light of Notification dated 28.02.2014 issued under EIA Notification, 2006 and the related OM dated 09.09.2019 as requested by MoEF&CC, Govt. of India.

- vi. Letter no. 293/M, dated 03.06.2026 of District Mining Officer, Godda regarding clarification on *“The Expert Appraisal Committee shall, while granting prior environmental clearance for the projects requiring extraction or sourcing or borrowing of ordinary earth, include the environmental safeguards prescribed in this Appendix as part of the prior environmental clearance granted to them.”*

Letter received from DMO, Godda vide Letter no. 293/M, dated 03.06.2026 addressed to Member Secretary, SEIAA, Jharkhand seeking clarification w.r.t. applicability of EC in the above matter.

It is to be stated that clause no. 3 of Appendix xiv of Notification no. 1223 (E), dated 17.03.2025 clearly states about the decision to be taken in this matter by the Committee as stated in this clause.



B. Letter no. 185, dated 19.01.2026 from Ahmad Belal Anwar, IFS, DFO, Gumla Forest Division related to following projects :

- i. Loyenga Stone Deposit of M/s Balaji (Prop. : Shri Dheeraj Kumar)
- ii. Barisa Stone Deposit of Shri James Tirkey

Replies in the above matter has been received from Loyenga Stone Deposit of M/s Balaji (Prop. : Shri Dheeraj Kumar) and Barisa Stone Deposit of Shri James Tirkey and the replies are found to be satisfactory w.r.t. EC condition no. I (4 & 5).

- i. Kasira Stone Mine of Shri Rambilas Sahu

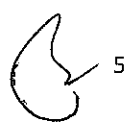
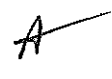
Reply received vide e-mail dated 16.04.2026. However, the copy of Compliance Report w.r.t. para 10 of EIA Notification, 2006 has not been provided alongwith the reply.

The Member Secretary, SEAC may write to the Project Authorities to provide Compliance Report of issued EC conditions.

- i. Basia Stone Deposit of Shri Manoj Kumar Jaiswal
- ii. M/s Home Bricks
- iii. Chauli Stone Mine of Shri Satyanarayan Sahu & Shri Chamru Sahu
- iv. Dunduria Stone Deposit – 1 of Shri Durgesh Kumar Mishra
- v. Asni Stone Mine of M/s RKD Construction Pvt. Ltd.
- vi. Dunduria Stone Mine of Shri Naveen Kumar Singh


No response have been received from the Project Authorities of the above mines.

The Member Secretary, SEAC may issue a final show cause as to why the projects may be recommended to SEIAA for keeping the EC of the above projects in abeyance and take necessary action as deemed fit.



C. Examination of six monthly compliance report submitted to SEIAA, Jharkhand :

- i. Phuljori Stone Deposit of M/s Sri Balajee Minerals Corporation (Partners : Shri Anant Prasad & Others), Village :Phuljori, Tehsil :Jamtara, Distt. :Jamtara, Jharkhand (1.27 Ha).
- ii. Basmata Stone Mine of M/s Otan Das & Company (Mining) Pvt. Ltd of Shri Ashok Kumar Mandhyan, Mouza : Basmata, P.S. : Pakur, Dist. : Pakur, Jharkhand (1.64 Ha).
- iii. Manjhladih Stone Deposit of Shri Aman Singh, Village :Manjhladih, Thana :Shikaripara, Distt.: Dumka, Jharkhand (1.943 Ha).
- iv. Chitragaria Stone Mine of Partners : (i) Shri Rakesh Kumar (ii) Shri Avinash Kumar (iii) Shri Ranjay Kumar (iv) Shri Surojit Kumar Sah, Village :Chitragaria, Thana :Shikaripara, Distt. : Dumka, Jharkhand (1.42 Ha).
- v. Pindra Stone Deposit of M/s M. G. Contractor Pvt. Ltd. (Prop. : Shri Asim Kumar), Village : Pindra, Thana : Ranka, Anchal : Ranka, Distt.: Garhwa, Jharkhand (2.821 Ha).
- vi. Murumatu Stone Mine of M/s Laborious Construction Pvt. Ltd., Village :Murumatu, Thana no. : 178, Anchal :Tatijhariya, Distt. : Hazaribagh, Jharkhand (1.845 Ha).
- vii. Stone Quarry at Kunharakalan of M/s Golden Stone Harvest P. Ltd. Vill-Kunharakalan, P.O+P.S-Barkatta, Dist.-Hazaribagh, Jharkhand. (1.274 Ha).
- viii. Basaria Stone Mine Project of Shri Bhagirath Yadav at vill- Basariya, P.S.- Barhi, Dist- Hazaribagh, Jhk (0.57 Ha).
- ix. Murumatu Stone Mine at vill- Murumatu, Thana- Tati Tharia, Dist- Hazaribagh, Jhk (2.37 Ha).
- x. Jugra Stone Mine of M/s Maa Jagdamba Stone Works (Partners : Shri Shailendra Kumar Mehta & Shri Baleshwar Saw), Village :Jugra, Thana :Barkagaon, Distt. : Hazaribagh, Jharkhand (1.72 Ha).
- xi. Churchu Stone Mine - I of M/s Ganesh Stone Works (Partners : Shri Suresh Kumar & Shri Vikash Kumar), Mouza :Churchu, Thana no. : 166, Anchal : Sadar, Distt. :Hazaribag, Jharkhand (1.214 Ha).
- xii. Loharsi Stone Mine of M/s Santosh Construction (Prop. : Shri Santosh Kumar Singh), Village :Loharsi, Thana :Chandwa, Distt. :Latehar, Jharkhand (2.128 Ha).
- xiii. Patratu Stone Deposit of Sri Manoj Kumar Sahu at Vill- Patratu, Dist- Lohardaga, Jhk (1.41 Ha).
- xiv. Bichlidag Stone Deposit of Smt. Rita Devi, Village :Bichlidag, P.O. + P.S. : Manika, Distt.: Latehar, Jharkhand (0.97 Ha).
- xv. Mohanpur Stone & Soil Mine of Shri Ajay Kumar Pathak, Village :Mohanpur, Thana no. : 104, Thana :Herhanj, Distt. :Latehar, Jharkhand (2.45 Ha).
- xvi. Pipradih Stone Deposit of M/s Balram Stone Mines (Prop. : Shri Kanhaiya Prasad Singh), Village : Pipradih, Thana :Balumath, Distt. :Latehar, Jharkhand (1.153 Ha).
- xvii. Chorbatiya Stone & Murrum Mine of M/s East India Stone Quarry (Prop. : Mr. Imran Khan), Village :Chorbatiya, Thana :Saraiyahat, Thana no. : 38, Distt.: Dumka, Jharkhand (2.282 Ha).



- xviii. Chorbatiya Stone & Murrum Mine of M/s East India Stone Quarry – 2 (Prop. : Mr. Imran Khan), Village : Chorbatiya, Thana : Saraiyhat, Thana no. : 38, Distt.: Dumka, Jharkhand (1.45 Ha).
- xix. Mahuabathan Stone Mine of M/s East India Stone Quarry (Prop. : Imran Khan), Village : Mahuabathan, Block : Boarijor, Thana : Rajabhita, Distt. : Godda, Jharkhand (2.54 Ha).
- xx. Bandua Stone Deposit of M/s Lotus Minerals (Partners : Shri Manoj Kumar & Shri Sanjay Kumar Pandey), Village : Bandua, Thana : Manika, Distt. : Latehar, Jharkhand (2.46 Ha).

The compliance reports were examined. All points of EC conditions are not adequately addressed and no proper evidence has been provided. Details along with evidences are required to be obtained from PAs to ascertain the status of implementation / conditions of the EC.

Member Secretary, SEAC will seek clarification and details with evidence from the Project Authorities.

The replies so received will be further examined.

- D. Matter related to Chuwa Stone Deposit of M/s Sankat Mochan Stone Mines (Partner : Shri Pankaj Kumar Yadav), Village : Chuwa, Tehsil : Mandro, Distt. : Sahibganj, Jharkhand (3.640 Ha) (Proposal no.: SIA/JH/MIN/ 530227 /2025)

The letter issued by Member Secretary, SEAC vide letter no. 21, dated 21.05.2026 regarding providing compliance report with its evidences is approved.



Day 2 : 10th June, 2026 [Wednesday]

- A. Site visit Report to 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).

The site visit was carried out on 10.06.2026 by Members of SEAC alongwith District Mining Officer, Pamalu as a representative of Deputy Commissioner, Palamu and in the presence of the PAs and their team.

The site visit report is being sent separately by Member Secretary, SEAC to SEIAA.

Day 3 : 11th June, 2026 [Thursday]

- A. Site visit Report to Residential Apartment Project " SG Exotica" of M/s Subhash Kumar Modi & Gautham Modi at Village :Lalpur, Thana no. : 02, Tehsil : Ranchi Sahar, Distt. : Ranchi, Jharkhand.

The Project Authorities, in the 130th meeting of SEAC, had submitted documented evidence of implementation of Remediation Plan and Natural &Community Resource Augmentation Plan as per EC letter no. EC/SEIAA/2022-23/2552/2022/312, dated 13.12.2022.

It was decided to have a joint site visit with the representative from IRO, MoEF&CC, Govt. of India, Ranchi and SEAC, Jharkhand as per direction of S.O. no. 804 (E), dated 14.03.2017, to evidence the implementation of the Remediation Plan and Natural &Community Resource Augmentation Plan as reported.

As per Environmental Clearance letter no. EC/SEIAA/2022-23/2552/2022/312, dated 13.12.2022, the Remediation Plan and Natural &Community Resource Augmentation Plan was as follows :-

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Sr. No.	Major Environment	Details	Cost Rs in Lacs
1	Air Environment	Provided air monitoring equipment	10.00
2	Water Environment	Repair of culverts and embankments etc or any suggestion form the local authority.	40.00
3	Soil Environment	Development of green belt along streams, ponds etc.	10.00
4.	Socio-Economic Environment	Provide equipement to charitable school Hospital and other allied services.	90.00
5.	Energy conversation	Provision of solar panel lighting in common areas etc.	10.50
Total Cost Rs. In Lacs			160.50

The utilization of the funds is done as per the above mentioned Remediation Plan and Natural & Community Resource Augmentation Plan.

The details of the utilization as evidence during the site visit is as follows :

Sr. No.	Major Environment	Details	Budget Received	Proposed Work	Expenditure Done
1	Air Environment	Provided air Monitoring Equipment	10,00,000/-	Air monitoring Equipment's	11,97,700/-
2	Water Environment	Repair of culverts and embankments or any suggestion form the local authority	40,00,000/-	Construction of PCC Road, etc in Tiril Basti.	46,92,273/-
3	Soil Environment	Development of green belt along streams, ponds etc.	10,00,000/-	Green Belt developed at St. Xavier's School, Doranda and St. Albert College	10,18,310/-
4.	Socio-Economic Environment	Provide Equipment to charitable school hospital and other allied services.	90,00,000/-	Provided Cardio vascular Ultrasound System to Nagarmal Modi Seva Hospital,	5lac+10.70 lac+11Lac + 25 Lac (51.70 lac)

				At seva Sadan, Ranchi	
				Construction of Limb Centre, Tetratoli, Bariyatu, Ranchi, etc.	23,60,000/-
				Handicapped Rickshaw from Prem Cycle.	3,80,000/-
				Paid to Shree Bhagwan Mahaveer Viklang Sahayata Samit for purchase of Limbs and Appliances	Rs 5,00,000/-
				Total	84,10,0000/-
5.	Energy conversion	Provision of solar panel lighting in common areas etc.	10,50,000/-	Solar Panel installed at Limb Centre Bariyatu.	10,89,000/-
TOTAL COST RS. IN LACS			1,60,50,000/-		1,64,06,583

Hence, it is recommended and requested for further action to felicitate the release of the Bank Guarantee of Rupees 1,60,50,000 (Rupees One Crore Sixty Lakh Fifty Thousand only) submitted to Jharkhand State Pollution Control Board, Ranchi, vide Bank Guarantee No. : 087GT02223220001 dated :18.11.2022.

Hence, the Member Secretary, SEAC will write a formal letter to SEIAA regarding above.

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A. Deputy Commissioner, Koderma or through authorized representative.

- i. **Updated District Survey Report (DSR) for Minor Minerals other than Sand Mining or River Bed Mining (Stone), Distt. Koderma.**

The final DSR was submitted by Deputy Commissioner, Koderma. He was represented by Shri Manoj Toppo, District Mining Officer, Koderma at the SEAC meeting on 12.06.2026.

During the meeting the DMO, Koderma presented the DSR before the Committee. The DSR was appraised in light of S.O. no. 3611 (E), dated 25.07.2018 of MoEF&CC, Govt. of India.

The updated DSR had been placed in the public domain for 21 days from the 15.10.2024. As per the Sub Divisional Committee no comments / observations were received.

The DSR has been prepared as per the format provided in the above notification. The DSR submitted has been approved by the Sub-Divisional Committee. All the aspects of the notification dated 25.07.2018 are incorporated in the DSR and found to be satisfactory.

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

B. Deputy Commissioner, Dhanbad or through authorized representative.

- i. **Final District Survey Report (DSR) for Minor Minerals other than Sand Mining or River Bed Mining (Earth Work), Distt. Dhanbad.**

The final DSR was submitted by Deputy Commissioner, Dhanbad. He was represented by Shri Ritesh Raj Tigga, District Mining Officer, Dhanbad at the SEAC meeting on 12.06.2026.

During the meeting the DMO, Dhanbad presented the DSR before the Committee. The DSR was appraised in light of S.O. no. 3611 (E), dated 25.07.2018 of MoEF&CC, Govt. of India.

It was found during the appraisal that the DSR is not prepared as per S.O. no. 3611 (E), dated 25.07.2018 of MoEF&CC, Govt. of India.

It will be taken up for consideration after the revised DSR as per S.O. no. 3611 (E), dated 25.07.2018 of MoEF&CC, Govt. of India.



C. Matter related to inspection and monitoring of Remediation Plan and submit the report to SEIAA for release of Bank Guarantee submitted by Project Proponent to Jharkhand State Pollution Control Board (JSPCB).

i. Affordable Housing Project "Pearl Orchid" of M/s Moti Infrastructures, Village :Argora, Tehsil : Ranchi, Dist : Ranchi, Jharkhand.

The Project Authorities have submitted evidence of having completed all the requirements of Remediation Plan and Natural &Community Resource Augmentation Plan as per EC letter no. EC/SEIAA/2021-22/2512/2021/226, dated 06.08.2022.

Accordingly, a joint site visit with officer from IRO, MoEF&CC, Govt. of India, Ranchi on a mutually convenient date. The Member Secretary, SEAC shall write a letter to IRO, MoEF&CC, Govt. of India, Ranchi in this regard.

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

The PAs vide letter dated 13.06.2026 sent via e-mail dated 13.06.2026 requested for deferment of the project.

Hence, the proposal will be taken up for consideration next meeting of SEAC.

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

The PAs vide letter dated 13.06.2026 sent via e-mail dated 13.06.2026 requested for deferment of the project.

Hence, the proposal will be taken up for consideration next meeting of SEAC.



D. Consideration of proposals :

1. Jaipur Stone Deposit of M/s Kuldip Kumar & Company (Prop. : Shri Kuldip Kumar Agarwal),
Village : Jaipur, Thana :Nirsa, Distt.: Dhanbad, Jharkhand (2.00 Ha).

(Proposal no.: SIA/JH/MIN/577971 /2026)

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

This is a new project which has been taken for appraisal on 12.06.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 46170 cum/annum or 124659 TPA

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Jaipur Stone Deposit	
2	Lessee	: M/s Kuldip Kumar & Company Prop.- Shri Kuldip Kumar Agarwal. S/o- Late Om Prakash Agarwal.	
3	Lessee Address	: At- Gram – Bhikarajpur, P.O.+ P.S. – Baliapur District- Dhanbad, Jharkhand.	
4	Lease Area	: 2.00 Ha.	4.95 Acres
5	Type of Land	: Non-Forest Raiyati Land	
6	Project Cost	: Rs. 91.773 Lakh	
7	EMP Budget	: Capital: Rs. 21,07,300/-	Recurring: Rs. 10,61,550/- per year
8	New or Expansion	: New	
9	Mineable Reserves	: 1147170 tones	424877.7 Cum
10	Mine Life	: 9.2 or 10 years	
11	Man power	: 18	
12	Water Requirement	: 15.56~ 16.0 KLD	
13	Water Source	: By authorised hired water tankers	
14	DG Set / power	: 50 KVA	
15	Crusher	: No crusher	
16	Nearest Water Body	: Seasonal Nallah approx 144 meter as per Google Earth EMP Submitted	
17	Nearest Habitation	: Nearest Habitation 430 meter towards WSW direction as per Google Earth EMP Submitted	
18	Nearest Rail Station	: Kalubathan Railway station, approx. 3.49 km towards NNE direction.	
19	Nearest Air Port	: Deoghar Airport, approx. 79.10 km towards North direction.	

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20	Road & Highways	:	MDR (Baliapur – Patlabari Road), Approx.1.80 km towards NNE direction. NH- 19, Approx 7.36 km towards North direction.
21	Approach Road	:	approx, 524 meters
22	Cluster Certificate	:	No other mine exists within 500m radius.
23	Nearest Forest	:	The distance of reserved / protected forest is approx. 1400 meters from proposed project site as per Divisional Forest Officer, Dhanbad, vide letter no.:347, dated 09.02.2026
24	Distance of nearest ESZ of Wildlife Sanctuary or National Park	:	The project location is at approx. 37.25KM from the nearest Eco Sensitive Zone of Topchanchi Wildlife Sanctuary.

CO-ORDINATES

Points	Latitude	Longitude
1	23° 43' 45.518" N	86° 38' 42.117" E
2	23° 43' 46.323" N	86° 38' 43.386" E
3	23° 43' 47.571" N	86° 38' 44.996" E
4	23° 43' 49.087" N	86° 38' 44.907" E
5	23° 43' 50.318" N	86° 38' 45.051" E
6	23° 43' 50.214" N	86° 38' 45.699" E
7	23° 43' 49.753" N	86° 38' 46.697" E
8	23° 43' 49.633" N	86° 38' 47.376" E
9	23° 43' 50.145" N	86° 38' 47.516" E
10	23° 43' 50.254" N	86° 38' 48.728" E
11	23° 43' 49.092" N	86° 38' 48.904" E
12	23° 43' 47.824" N	86° 38' 49.164" E
13	23° 43' 46.295" N	86° 38' 48.993" E
14	23° 43' 46.412" N	86° 38' 48.734" E
15	23° 43' 44.538" N	86° 38' 48.253" E
16	23° 43' 44.633" N	86° 38' 47.210" E
17	23° 43' 45.038" N	86° 38' 46.461" E
18	23° 43' 46.093" N	86° 38' 46.794" E
19	23° 43' 45.976" N	86° 38' 47.157" E
20	23° 43' 46.942" N	86° 38' 47.399" E
21	23° 43' 47.087" N	86° 38' 46.791" E
22	23° 43' 46.485" N	86° 38' 46.587" E
23	23° 43' 45.834" N	86° 38' 46.368" E
24	23° 43' 45.118" N	86° 38' 46.034" E

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25	23° 43' 45.213" N	86° 38' 44.907" E
26	23° 43' 45.290" N	86° 38' 42.946" E

LAND DETAILS

Khata no.	Plot no.
125, 83, 39, 63 & 169	151 (P), 152 (P), 153, 154, 155 & 171 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Dhanbad vide letter no. 517/M, dated 18.03.2026.
2	CO	:	The CO, Kaliasol, Dhanbad vide letter no. 85, dated 25.02.2026 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II and also mentioned that the 02 ponds at a distance of 320 meters of proposed project site. During the appraisal it was seen from the KML that habitation at a distance of 430 meters and Nala at a distance of 145 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted, Accordingly PAs has submitted EMP for the same.
3	DMO Cluster	:	DMO, Dhanbad vide memo no. 643/M, dated 10.04.2026 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Division, Hazaribag vide letter no. 448, dated 28.02.2026 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Dhanbad Forest Division vide letter no. 347, dated 09.02.2026 certified that the distance of reserved / protected forest is 1400 meters from proposed project site.
6	DSR	:	The DMO, Dhanbad has certified vide memo no. 683/M, dated 16.04.2026 that this project is mentioned in approved DSR of Dhanbad District as a potential area (Page no. 168, Sl. No. 43).
7	Gram Sabha	:	Gram Sabha conducted on 31.01.2026.
8	Mine Plan Approval	:	Approved by DMO, Dhanbad vide Memo No. 675/M, dated 13.04.2026.
9	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Opencast Semi- Mechanized Method
2	Quarry Area	:	1.380 Ha
3	Waste Generation	:	40938 cum
4	Stripping Ratio	:	1:0.23
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	183 m AMSL to 178 m AMSL
8	Ground Level Elevation	:	178 m AMSL
9	Ultimate Working Depth	:	151 m AMSL (27 mbgl)
10	Water Table	:	135 -132 m AMSL (43-46 mbgl)
11	Topography of Mine	:	Area represents undulating small hillock
12	Explosive Requirement	:	50 kg/day
13	Diesel/Fuel requirement	:	150 litre/day

Production Details

Year	Production of stone		O/B waste in cum	Intercalated waste in cum	Total Waste in cum
	Cum	MT			
1 st Year	40584	109577	22560	2136	24696
2 nd Year	41724	112655	0	2196	2196
3 rd Year	43434	117272	0	2286	2286
4 th Year	45030	121581	0	2370	2370
5 th Year	46170	124659	6960	2430	9390
Total	216942	585743	29520	11418	40938

Land Use

Pattern of Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At conceptual period (Ha)
Quarry	0.0	1.026	1.380 (0.247 ha area shall be Backfilled, 0.974 ha converted in to water reservoir & 0.159 ha shall be left as dead benches)
Waste Dump	0.0	0.306	0.00
Road	0.0	0.002	0.00
Safety zone	0.0	0.620 (Plantation)	0.620 (Plantation)
Total	0.0	1.954	2.000
Unused Area	2.00	0.046	0.00
Total		2.00	

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.620	992	1600 Tree per Hectare	1 st Year	Pipal, Gulmohar Jackfruits, Mango, Jamun, Babul, Neem, Arjun, etc.
Length of Approach Road Area (m.)	524	1048	2m X 2 m spacing in two rows both side		
Plantation at Dead bench	0.159	255	1600 Tree per Hectare	At the end of plan period	
Plantation at Backfilling	0.247	396			
Total		2691			

- 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.

BUDGETARY PROVISION (IN RS)

PROJECT COST

Particulars			Capital(Rs.)	Recurring(Rs.)
Land			49,50,000.00	4,95,000.00
Infrastructure			15,00,000.00	1,50,000.00
Mining Equipment			0.00	35,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Wagon drill	1	4,00,000		
Excavator	2	8,00,000		
Compressor	1	10,00,000		
Water Sprinkler	1	6,00,000		
Dumper	2	4,00,000		
Loader	1	3,00,000		
@Per wagon drill- 4,00,000/- @Per Excavator-4,00,000/- @Per Compressor-10,00,000/- @Per Water Sprinkler -6,00,000/- @Per Dumper-2,00,000/- @Per Loader-3,00,000/-				
Water Facility for Domestic Purpose "0.18" KLD (Annual Water Demand "54"KL @4L per Tanker, total number of tanker required ("14") and per tanker cost			0.00	7,000.00

@Rs. 500)		
Statutory Clearances.	5,00,000.00	0.00
Mine Closure Cost for fencing around mine.	1,20,000.00	0.00
Environment Management Plan (EMP) Cost	21,07,300.00	10,61,550.00
Total	91,77,300.00	52,13,550.00

ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital	Recurring
2691 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	8,07,300	1,34,550
Water Tanker @Rs. 500 per Tanker for Dust Suppression (3.14 KLD) & Horticulture (12.24 KLD) 3.14 + 12.24 = 15.38 KLD 15.38 KLD X 300 Days = 4614 KLD 4614 KLD / 4 KLD = 1154 Tankers	0	5,77,000
Environment Monitoring & Compliance	0	50,000.00
To prevent the impact of mining activities on these habitations under compliance of OM Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by MoEF & CC	8,00,000	2,00,000
Garland Drain & Retaining wall	5,00,000	1,00,000
Total	21,07,300	10,61,550

Environment Monitoring Plan





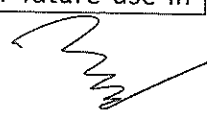
Monitoring Parameters and Frequency of Monitoring

S. no.	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	• In this applied lease area, the stone deposit is covered with 2m layer of

	<p>intermixed soil which considered as over burden. The recovery of stone is about 95%, thus intercalated waste of only 5% shall be generate from this mine.</p> <ul style="list-style-type: none"> • It has been calculated that total 40938 cum in-situ waste shall be generated during this plan period out of which 24634 cum (In situ) shall be utilized for approach & haul road maintenance. • The rest waste material 16304 cum in situ 20379.75 cum loose & 17322.79 cum compact waste shall be utilized for dumping at southern part and it will cover 0.306ha. • While excavation of insitu waste, its volume shall be increase, as it becomes loose (insitu cum X 1.25), during the dumping/backfilling these loose materials shall be compacted with the use of dozer and volume will be decreased up to 85% of loose waste. • Garland drain shall be provided along the OB dump. This drain would collect surface run off from dump body. Water collected in this drain would be stored in a sedimentation tank, the treated water shall be released for natural runoff.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in

Management	<p>plantation and reclamation.</p> <ul style="list-style-type: none"> • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same

	<p>in a dust collector specially provided for the purpose.</p> <ul style="list-style-type: none"> ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the

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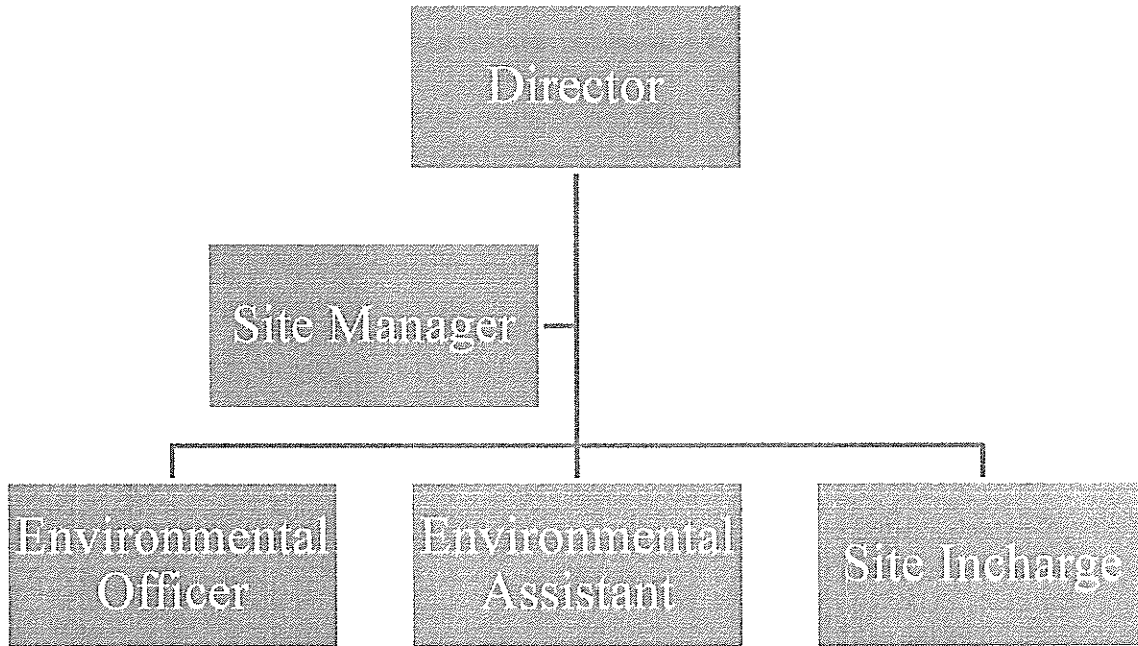
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	<p>main road (wherever required).</p> <ul style="list-style-type: none"> ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
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Organizational Structure of Environment Management Cell:








EMP Cell Structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

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.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

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 Jaipur Stone Deposit of M/s Kuldip Kumar & Company (Prop. : Shri Kuldip Kumar Agarwal), Village : Jaipur, Thana : Nirsa, Distt.: Dhanbad, Jharkhand (2.00 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. This proposal was forwarded through PARIVESH Portal to Jharkhand State Pollution Control Board (JSPCB) for providing comments / Environmental Safeguards on 06.05.2026. The proposal was returned to SEAC via same portal without providing comments / Environmental Safeguards. Hence in compliance of OM File No. Q-15012/2/2022-CPW-Part(1)/e-240741, dated 14.01.2025 and File No. Q-15012/2/2022-CPW9Part-I)/e-231973, dated 08.10.2025, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board.
- II. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- III. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- IV. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- V. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near



mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.

- VI. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VII. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VIII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- IX. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- X. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

2. Binderi Bandarkola Stone Deposit of M/s Supreme Stone Works (Partners : Shri Jagbandhu Pandit & Smt. Punam Rashmi), Village : Binderi Bandarkola, Anchal : Borio, Distt. : Sahibganj, Jharkhand (2.83 Ha).

(Proposal no.: SIA/JH/MIN/ 558225 /2025)

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

This is a new project which has been taken for appraisal on 12.06.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.

Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity –62,729 cum/annum or 1,81,915 TPA

Project and Location Details:

Sl	Parameter		Details
1	Project Name	:	Binderi Bandarkola Stone Deposit
2	Lessee	:	M/s Supreme Stone Works Partners 1) - Sri Jagbandhu Pandit

			2)- Smt. Punam Rashmi
3	Lessee Address	:	Partners 1) - Sri Jagbandhu Pandit At Village - Tapsi, P.O. - Bagjhopa, P.S. - Jama, District - Dumka, Pin Code-814118, State - Jharkhand. 2)- Smt. Punam Rashmi At-Flat No. 3/1, New Minto Road Hostel Block 1, Indraprastha, Central Delhi, Delhi, Pin Code-110002
4	Lease Area	:	2.83Ha. 7.00 Acres
5	Type of Land	:	Non-Forest Raiyati Land
6	Project Cost	:	Rs. 1,04,53,300.00
7	EMP Budget	:	Capital: Rs.13,33,300/- Recurring: Rs. 8,32,200/- per year
8	New or Expansion	:	New
9	Mineable Reserves	:	1818368 tones 627023 Cum
10	Mine Life	:	10 years
11	Man power	:	36
12	Water Requirement	:	16.35~17.00 KLD
13	Water Source	:	By authorised hired water tankers
14	DG Set / power	:	50 KVA
15	Crusher	:	No crusher
16	Nearest Water Body	:	Ganga River approx 13.0 km towards East Direction of mine site.
17	Nearest Habitation	:	Hathikhuta, Approx. 960 meters towards SSE direction of mine site.
18	Nearest Rail Station	:	Taljhari Railway Station, approx. 5.58 km towards East direction.
19	Nearest Air Port	:	Deoghar Airport, approx. 118.0 km towards SW direction.
20	Road & Highways	:	SH – 18, Approx. 3.50 km towards West direction.
21	Approach Road	:	approx, 590 meters
22	Cluster Certificate	:	No other mine exists within 500m radius.
23	Nearest Forest	:	The distance of reserved / protected forest is about 412 meters from proposed project site as per Divisional Forest Officer, Sahibganj , vide letter no.: 559, dated 01.03.2025
24	Distance of nearest ESZ of Wildlife Sanctuary or National Park	:	The project location is at approx. 13.05 KM from the nearest Eco Sensitive Zone of Udhwa Lake Wildlife Sanctuary.

CO-ORDINATES

Pillar ID	Latitude	Longitude
1	25°04'05.396"	87°39'24.263"
2	25°04'05.728"	87°39'26.004"
3	25°04'06.061"	87°39'27.756"
4	25°04'06.395"	87°39'29.510"
5	25°04'06.698"	87°39'31.104"
6	25°04'06.985"	87°39'32.613"
7	25°04'05.244"	87°39'32.923"
8	25°04'03.568"	87°39'33.221"
9	25°04'03.319"	87°39'31.498"
10	25°04'03.156"	87°39'30.364"
11	25°04'02.494"	87°39'28.832"
12	25°04'00.033"	87°39'26.886"
13	25°04'02.395"	87°39'26.140"
14	25°04'00.424"	87°39'25.545"
15	25°04'01.105"	87°39'24.874"
16	25°04'02.525"	87°39'24.675"
17	25°04'04.002"	87°39'24.406"

LAND DETAILS

Khata no.	Plot no.
15	450 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 84/M, dated 01.09.2025.
2	CO	:	The CO, Borio, Sahibganj vide letter no. 170/Ra., dated 27.02.2025 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyon & Register II.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 1810/M, dated 10.10.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	DFO – cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 621, dated 04.03.2025 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 559, dated 01.03.2025 certified that the distance of reserved /

			protected forest is 412 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 1835/M, dated 14.10.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 200).
7	Gram Sabha	:	Gram Sabha conducted on 31.01.2025.
8	Grid certificate	:	DMO, Sahibganj vide memo no. 1496/M, dated 20.08.2025 certified that said project falls under grid no. 55 and Hon'ble NGT does not decided the production capacity of that Grid. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
9	Mine Plan Approval	:	Approved by DMO, Sahibganj vide Letter No. 1854/M, dated 03.11.2025.
10	Qualified Person	:	Shri P.K. Sen was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	:	Opencast Mechanized Method
2	Quarry Area	:	2.27 Ha
3	Waste Generation	:	16502 cum intercalated waste and 13192 cum of gritty soil
4	Stripping Ratio	:	1:0.05
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m
7	Elevation of Mine	:	214 m AMSL to 184 m AMSL
8	Ground Level Elevation	:	184 m AMSL
9	Ultimate Working Depth	:	153 m AMSL (31mbgl)
10	Water Table	:	145- 140 m AMSL (39 - 44 mbgl)
11	Topography of Mine	:	Area represents hillock
12	Explosive Requirement	:	50 kg/day
13	Diesel/Fuel requirement	:	150litre/day

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Production Details

Year	Production of Stone (cum)	Production of Stone (tonnes)	Intercalated Waste (cum)	Removal of Gritty Soil (cum)	Removal of Gritty Soil (tonnes)
1 st	62678	181764	3299	7344	11017
2 nd	62694	181813	3300	3876	5814
3 rd	62702	181837	3301	340	510
4 th	62694	181813	3300	1632	2448
5 th	62729	181915	3302	0	0
Total	313497	909142	16502	13192	19789

Land Use

Type of Land	Present Land Use (Ha)	At End of Plan Period (Ha)	At End of Mine (in Ha)	Conceptual Period (in Ha.)		
				Public use	Water body	Plantation
Quarry	Nil	2.180	2.27 (incl. backfill 0.50 Ha.)	---	0.79	1.48 (Dead bench plantation)
Greenbelt within Safety Barrier	Nil	0.560	0.56	--	---	0.56
Road	0.01	0.005	Nil		---	---
Total Area in Use	0.01	2.745	2.83	--	0.79	2.04
Balanced Area unused	2.82	0.085	Nil	--	---	---
Total Applied Area	2.83	2.830	2.83	--	---	2.83

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Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.560	896	1600 Tree per Hectare	1st Year	Pipal, Gulmohar Jackfruits, Mango, Jamun, Babul, Neem, Arjun, etc.
Length of Approach Road Area (m.)	590	1180	2m X 2 m spacing in two rows both side		
Plantation At Dead Bench	1.48	2368	1600 Tree per Hectare	At the end of Plan Period	
Total		4444			

- 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.

BUDGETARY PROVISION (IN RS)

PROJECT COST

Particulars			Capital(Rs.)	Recurring(Rs.)
Land			70,00,000.00	7,00,000.00
Infrastructure			15,00,000.00	1,50,000.00
Mining Equipment			0.00	48,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Wagon drill	1	4,00,000		
Excavator	1	4,00,000		
Compressor	1	10,00,000		
Water Sprinkler	1	6,00,000		
Dumper	3	6,00,000		
Loader	1	3,00,000		
DG Set	1	15,00,000		
@@Per wagon drill- 4,00,000/-				
@Per Excavator-4,00,000/-				
@Per Compressor-10,00,000/-				
@Per Water Sprinkler -6,00,000/-				
@Per Dumper-2,00,000/-				
@Per Loader-3,00,000/-				

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@DG set -15,00,000/-		
Water Facility for Domestic Purpose "0.36" KLD (Annual Water Demand "108"KL @4L per Tanker, total number of tanker required ("27") and per tanker cost @Rs. 500)	0.00	13,500.00
Statutory Clearances.	5,00,000.00	0.00
Mine Closure Cost for fencing around mine.	1,20,000.00	0.00
Environment Management Plan (EMP) Cost	6,22,800.00	7,13,800.00
Total	1,04,53,300.00	64,95,700.00

ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital	Recurring
2076 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	6,22,800	1,03,800
2368 Tree Plantation at dead bench @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	7,10,500	1,18,400
Water Tanker @Rs. 500 per Tanker for Dust Suppression (3.54 KLD) & Horticulture (12.45 KLD) 3.54 + 12.45 = 15.99 KLD 15.99 KLD X 300 Days = 4797 KLD 4797 KLD / 4 KLD = 1120 Tankers	0	5,60,000
Environment Monitoring & Compliance	0	50,000.00
Total	13,33,300	8,32,200

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no.	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

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Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	<ul style="list-style-type: none"> • The area is covered with a layer of gritty soil. During quarry development in 1st year gritty soil and intercalated waste will be removed and this soil & waste will be temporarily dumped [Area - 0.013 Ha, (L x W x H = 15m x 9m x 5m), Area - 0.041 Ha, (L x W x H = 42m x 10m x 5m) & Area 0.157 Ha, (L x W x H = 131m x 12m x 5m)] at the north-west part of the area with suitable precaution like constructing parapet wall, garland drain. • In 2nd year gritty soil & intercalated waste will be removed and this soil, waste & existing temporary dumped materials will be temporarily dumped [Area 0.356 Ha, (L x W x H = 85m x 42m x 5m)] within the quarry • In 3rd year gritty soil & intercalated waste will be removed and this soil, waste & existing temporary dumped materials will be temporarily dumped [Area 0.429 Ha, (L x W x H = 85m x 50m x 5m)] within the quarry • In 4th year gritty soil & intercalated waste will be removed and this soil, waste & existing temporary dumped materials will be temporarily dumped [Area 0.527 Ha, (L x W x H = 99m x 53m x 5m)] within the quarry • In 5th year gritty soil & intercalated waste will be removed and this soil, waste & existing temporary dumped materials will be temporarily dumped [Area - 0.593 Ha, (L x W x H = 114m x 52m x 5m)] within the quarry. In conceptual period total removal gritty soil, intercalated waste & plan period existing temporarily dumped materials will be backfill within the exhausted quarry.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set

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	<p>operations.</p> <ul style="list-style-type: none"> • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the

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	<p>drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge.</p> <ul style="list-style-type: none"> ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left

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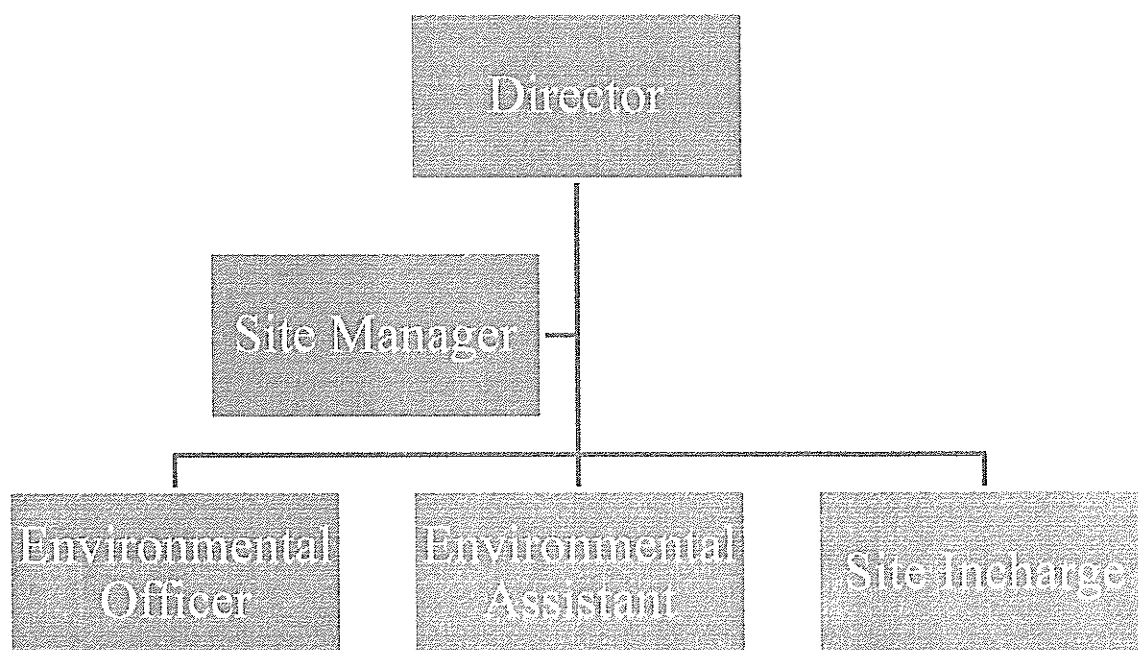
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	unattended till blasting is completed.
Health Hazards	<ul style="list-style-type: none"> ▪ Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. ▪ The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



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EMP Cell Structure

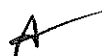
The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

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.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

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 Binderi Bandarkola Stone Deposit of M/s Supreme Stone Works (Partners : Shri Jagbandhu Pandit & Smt. Punam Rashmi), Village : Binderi Bandarkola, Anchal : Borio, Distt. : Sahibganj, Jharkhand (2.83 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

1. This proposal was forwarded through PARIVESH Portal to Jharkhand State Pollution Control Board (JSPCB) for providing comments / Environmental Safeguards on



14.11.2025. The proposal was returned to SEAC via same portal without providing comments / Environmental Safeguards. Hence in compliance of OM File No. Q-15012/2/2022-CPW-Part(1)/e-240741, dated 14.01.2025 and File No. Q-15012/2/2022-CPW9Part-I)/e-231973, dated 08.10.2025, the PAs will mandatorily obtain the Environmental Safeguard to be implemented from Jharkhand State Pollution Control Board.

- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.



3. Sahijana Stone Deposit of Shri Pradeep Kumar Sahu, Village :Sahijana, Anchal :Sisari, Distt. :Gumla, Jharkhand (0.781 Ha). (Proposal no.: SIA/JH/MIN/ 578433 /2026)
4. Sahijana Stone Deposit of Shri Pradeep Kumar Sahu, Village :Sahijana, Anchal :Sisari, Distt. :Gumla, Jharkhand (1.283 Ha). (Proposal no.: SIA/JH/MIN/ 578350 /2026)

The DSR of Gumla District was approved by SEIAA, Jharkhand in its 109th meeting held on 27th& 28th September, 2023 as per recommendation of SEAC based on the proposal of DSR submitted by DC, Gumla duly authenticated by Sub-Divisional Committee.

The above projects is not a part of the approved DSR as mentioned above.

The DC-cum-District Magistrate, Gumla vide letter no. 437/M, dated 02.04.2026 addressed to Member Secretary, SEIAA has confirmed that the above project was not included in the DSR which was submitted to SEIAA for approval.

He has further requested that the above projects may be considered as a part of the present DSR and also stated that these projects will be included in the DSR in future revision.

Hence, SEAC is of the view that SEIAA may request the DC, Gumla to submit his proposal for consideration of revised DSR including all the other left out potential mining areas for approval to SEIAA.

SEIAA may also write to Deputy Commissioners to grant Letter of Intent (LoI) on areas which are included as potential area in the approved DSR.

These projects could not be taken up for consideration for grant of EC as the project is not a part of the present approved DSR.

5. Chhotakhiri Stone Deposit of M/s V.G. Projects (Partners : Shri Varun Ahuja & Shri Gourav Singh), Village :Chhotakhiri, Thana :Govindpur, Circle : Rajnagar, Distt. :Saraikela-Kharsawan, Jharkhand (2.833 Ha).

(Proposal no.: SIA/JH/MIN/ 575763 /2026)

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

This is a new project which has been taken for appraisal on 12.06.2026.

Project Sector: 1(a) Mining of Minerals, Category: B2.



Application for Environmental Clearance (EC).

EC Application for: Proposed Capacity – 90424.80 cum/annum or 244146.96 TPA

Project and Location Details:

Sl	Parameter	Details
1	Project Name	: Chhotakhiri Stone Deposit
2	Lessee	: V.G. Projects Partner- Varun Ahuja S/o Rajkishor Ahuja (2) Shri Gourav Singh S/o Yashwant Singh
3	Lessee Address	: Danda Sai Ward-II, Old Hanuman Mandir Chakradharpur, P.O./P.S. – Chakradharpur, District- West Singhbhum, Jharkhand.
4	Lease Area	: 2.833 Ha. 7.00 Acres
5	Type of Land	: Non-Forest Raiyati Land
6	Project Cost	: Rs. 1,12,07,200
7	EMP Budget	: Capital: Rs. 20,87,200/- Recurring: Rs. 9,75,300/- per year
8	New or Expansion	: New
9	Mineable Reserves	: 1208523.00 tones 447,601.11 Cum
10	Mine Life	: 4.94 or 5 years
11	Man power	: 21
12	Water Requirement	: 13.64~ 14.0 KLD
13	Water Source	: By authorised hired water tankers
14	DG Set / power	: 50 KVA
15	Crusher	: No crusher
16	Nearest Water Body	: Nalla approx 120meter as per Google Earth EMP Submitted
17	Nearest Habitation	: Nearest Habitation 210 meter towards WSW direction as per Google Earth EMP Submitted
18	Nearest Rail Station	: Gamharia Junction, approx. 12.63km towards North direction
19	Nearest Air Port	: Deoghar Airport, approx. 205.19 km towards North direction.
20	Road & Highways	: SH – 6, Approx. 11.36 km towards East direction. NH- 220, Approx 5.97km towards SSW direction.
21	Approach Road	: approx, 456 meters
22	Cluster Certificate	: No other mine exists within 500m radius.
23	Nearest Forest	: The distance of reserved / protected forest is 2 km from proposed project site as per Divisional Forest Officer, Saraikela-Kharsawan, vide letter no.:242/ Saraikela, dated 25.01.2025

24	Distance of nearest ESZ of Wildlife Sanctuary or National Park	:	The project location is at approx. 24.10 KM from the nearest Eco Sensitive Zone of Dalma Wildlife Sanctuary.
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CO-ORDINATES

Pillar ID	Latitude	Longitude
1	22°41'0.853"	86°4'13.621"
2	22°41'0.367"	86°4'17.506"
3	22°41'4.003"	86°4'18.721"
4	22°41'8.152"	86°4'15.729"
5	22°41'9.392"	86°4'15.729"
6	22°41'9.254"	86°4'15.078"
7	22°41'8.444"	86°4'15.130"
8	22°41'7.270"	86°4'16.124"
9	22°41'6.594"	86°4'16.557"
10	22°41'6.277"	86°4'16.226"
11	22°41'6.817"	87°4'14.847"
12	22°41'6.003"	87°4'13.948"

LAND DETAILS

Khata no.	Plot no.
84	628 (P) & 630 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Saraikela - Kharsawan vide letter no. 192/M, dated 13.02.2026.
2	CO	:	The CO, Rajnagar vide letter no. 567, dated 02.08.2024 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in R.S. Khatiyani & Register II and also mentioned that the habitation within 500 meter and Dry pond within 500 meters of proposed project site. During the appraisal it was seen from the KML that barsati nala at a distance of 120 meters from mining lease area. For which detailed Environmental Management Plan

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		has been prepared and submitted. Accordingly PAs has submitted EMP for the same.
3	DMO Cluster	: DMO, Saraikela-Kharsawan vide letter no. 258/M, dated 06.03.2026 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	: Deputy Conservator of Forest & Field Director, Elephant Project, Jamshedpur vide letter no. 561, dated 09.04.2025 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
5	DFO Territorial	: Divisional Forest Officer, Saraikela Forest Division vide letter no. 242, dated 25.01.2025 and letter no. 655, dated 06.05.2026 respectively certified that the distance of notified forest is 02 KM from proposed project site.
6	DSR	: The DMO, Saraikela-Kharsawan has certified vide memo no. 478/M, dated 23.04.2026 that this project is mentioned in approved DSR of Saraikela-Kharsawan District as a potential area (Page no. 11, Sl. No. 678).
7	Gram Sabha	: BDO, Rajnagar vide letter no. 924, dated 22.08.2024 informed that Gram Sabha conducted on 02.09.2025.
8	Mine Plan Approval	: Approved by DMO, Saraikela-Kharsawan vide Letter No. 310/Mining, dated 14.03.2026.
9	Environmental Safeguards	: Environmental Safeguards issued by Environmental Safeguard as provided by Environmental Engineer –cum – Nodal Officer, JSPCB vide memo no. PC/SEIAA/EC-CTE/42/2026 - 1836, dated : 08.06.2026.
10	Qualified Person	: Shri Sahadev Singh was present in the meeting and affirmed that the mine plan has been prepared by him.

Working Details

1	Mining Method	: Opencast mechanized Method
2	Quarry Area	: 2.291 Ha
3	Waste Generation	: 44139.95 cum
4	Stripping Ratio	: 1:0.09
5	Working Days	: 300
6	Benches: size & No	: 6m to 6m
7	Elevation of Mine	: 154 m AMSL to 148 m AMSL
8	Ground Level Elevation	: 148 m AMSL
9	Ultimate Working	: 117 m AMSL (31mbgl)

	Depth		
10	Water Table	:	105-101 m AMSL (43-47mbgl)
11	Topography of Mine	:	Area represents flat elevation
12	Explosive Requirement	:	50 kg/day
13	Diesel/Fuel requirement	:	150 litre/day

Production Details

Year	Production of stone		Generation of l/waste in cum	O/B waste in cum	Total waste in cum
	Cum	MT			
1st Year	88920.00	240084.00	4680.00	5600.00	10280
2nd Year	89604.00	241930.80	4716.00	4000.00	8716
3rd Year	89140.40	240679.08	4691.60	3600.00	8291.6
4th Year	90424.80	244146.96	4759.20	2808.00	7567.2
5th Year	89511.8	241682.01	4711.15	4574.00	9285.15
Total	447601.00	1208522.85	23557.95	20582.00	44139.95

Land Use

Pattern of Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At conceptual period (Ha)
Quarry	Nil	2.291	2.291 (2.291 ha area shall be converted into water reservoir)
Road	Nil	(0.020 removed and backfilled)	comes under mining
Waste Dump	Nil	(0.397 removed and backfilled)	comes under mining
Crusher	Nil	0.080 comes under mining	comes under mining
Safety zone	Nil	0.542 Plantation	0.542 Plantation
Total			2.833

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.542	868	1600 Tree per Hectare	1st Year	Jamun, Neem, Piplal, Gulmohar Jackfruits, Mango, Babul, Arjun, etc
Length of Approach Road Area	456	912	2m X 2 m spacing in two rows		

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(m.)			both side		
Total		1780			

- 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.

BUDGETARY PROVISION (IN Rs.)

PROJECT COST

Particulars			Capital(Rs.)	Recurring(Rs.)
Land			70,00,000.00	7,00,000.00
Infrastructure			15,00,000.00	1,50,000.00
Mining Equipment			0.00	48,00,000.00
<i>Equipment</i>	<i>Quantity</i>	<i>Rent per year</i>		
Wagon drill	1	4,00,000		
Excavator	1	4,00,000		
Compressor	1	10,00,000		
Water Sprinkler	1	6,00,000		
Dumper	3	6,00,000		
Loader	1	3,00,000		
DG Set	1	15,00,000		
@@Per wagon drill- 4,00,000/- @Per Excavator-4,00,000/- @Per Compressor-10,00,000/- @Per Water Sprinkler -6,00,000/- @Per Dumper-2,00,000/- @Per Loader-3,00,000/- @DG set -15,00,000/-				
Water Facility for Domestic Purpose "0.23" KLD (Annual Water Demand "69"KL @4L per Tanker, total number of tanker required ("18") and per tanker cost @Rs. 500)			0.00	9,000.00
Statutory Clearances.			5,00,000.00	0.00
Mine Closure Cost for fencing around mine.			1,20,000.00	0.00
Environment Management Plan (EMP) Cost			20,87,200.00	9,75,300.00
Total			1,12,07,200.00	66,34,300.00

ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital	Recurring
1780 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for	5,34,000	89,000

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maintenance		
Water Tanker @Rs. 500 per Tanker for Dust Suppression (2.73 KLD) & Horticulture (10.68 KLD) 2.73+ 10.68 = 13.41KLD 13.41 KLD X 300 Days = 4023 KLD 4023KLD / 4 KLD = 1006Tankers	0	5,03,000
Environment Monitoring & Compliance	0	50,000.00
To prevent the impact of mining activities on these habitations under compliance of OM Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by MoEF & CC	11,33,200	2,83,300
Garland Drain & Retaining wall	4,20,000	50,000
Total	20,87,200	9,75,300

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no.	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	It has been calculated that total 44139.95 cum waste shall be generated during the plan period. The generated waste shall be temporarily dump in northern part up to 3rd year then onwards 4th year gradually backfill shall be start at exhausted area of quarry, Part of waste shall also be utilized for maintenance the village road and making of approach, haul road etc.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions.

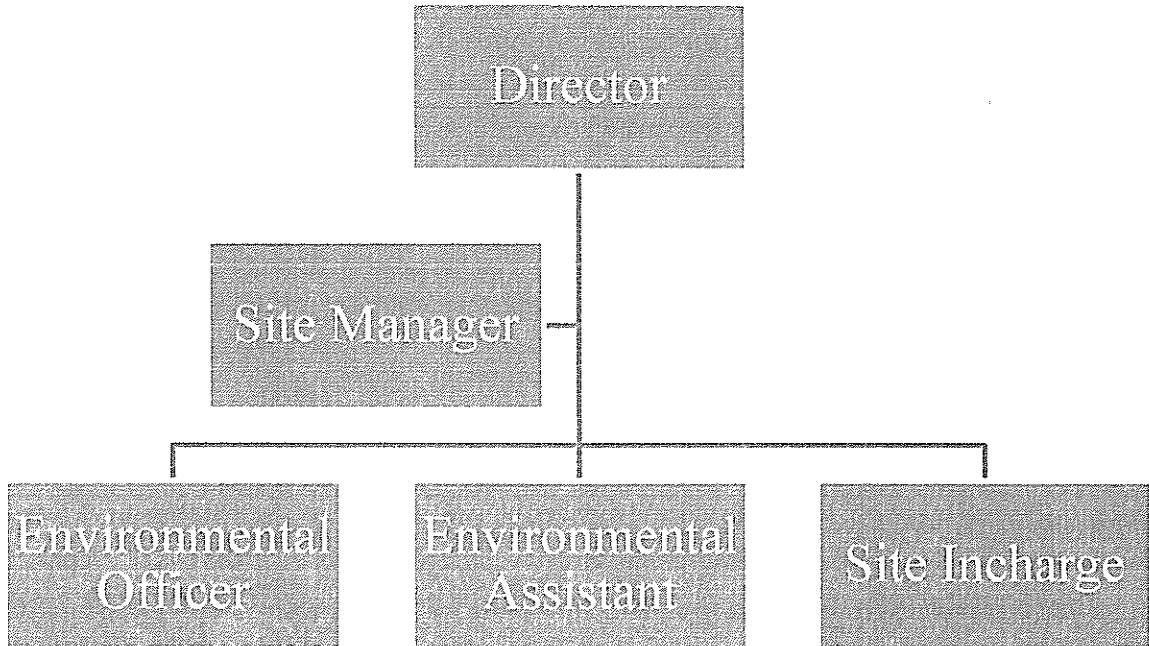
	<ul style="list-style-type: none"> • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality

	<p>as per CPCB and SPCB guidelines.</p> <ul style="list-style-type: none"> • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours.

	<ul style="list-style-type: none"> ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p> <p>The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

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Organizational Structure of Environment Management Cell:



EMP Cell Structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

Undertaking submitted affirming:

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

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- h. All the mining machineries / equipment and transport vehicles should be maintained in good condition and annually tested for fitness and PUC and records to be maintained.
- i. If any tree felling than necessary permission shall be taken from the competent authority.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

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 Chhotakhiri Stone Deposit of M/s V.G. Projects (Partners : Shri Varun Ahuja & Shri Gourav Singh), Village : Chhotakhiri, Thana : Govindpur, Circle : Rajnagar, Distt. : Saraikela-Kharsawan, Jharkhand (2.833 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions and Environmental Safeguard as provided by Environmental Engineer –cum – Nodal Officer, JSPCB vide memo no. PC/SEIAA/EC-CTE/42/2026 - 1836, dated : 08.06.2026 is also included as Annexure – I (A) :

- I. The mine will come in operation only after obtaining permission from DGMS for controlled and delayed blasting.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.



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- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

6. Murumdih Pot Stone Mine of M/s Sri Sai Minerals (Prop. : Smt. Smriti Anand), Village : Murumdih, Thana :Govindpur (Rajnagar), Distt. : Saraikela-Kharsawan, Jharkhand (0.79 Ha).
(Proposal no.: SIA/JH/MIN/ 530679 /2025)

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

Application for Environmental Clearance (EC) (re-appraisal of Environment Clearance issued by DEIAA, Saraikela-Kharsawan).

The project has been granted EC by DEIAA, Saraikela-Kharsawan vide letter no. EC/DEIAA/Saraikela/2016-17/49, dated 21.03.2017 having production capacity of 7400.00 TPA of Stone.

As per O.M. dated 28th April 2023 issued by MOEF & CC projects which have been granted EC by DEIAA are to be reappraised by SEIAA / SEAC.

This is re-appraisal of the EC issued by DEIAA, Saraikela-Kharsawan which has been taken up for consideration on 12.06.2026. As per O.M. dated 12.12.18 issued by MOEF & CC projects fall in category B2.

Dust suppression is being carried out on regular basis.

Greenbelt Developed.

As per compliance report of JSPCB regarding previous EC, plantation has been done in safety zone.

Production detail as per memo no. 634/M, dated 29.05.2026 by DMO, Saraikela-Kharsawan is within the permissible limit of EC.

The compliance report of previous EC has been issued by Regional Office, Jamshedpur, JSPCB vide letter dated 16.05.2026.

The SEAC has found that the certification of the compliance of the conditions of previous EC is not appropriate regarding status of execution of compliance as no details have been provided. Hence, the Committee decided to obtain a self certified compliance report along with the supporting details as evidence of execution.

The self certified compliance report has been submitted and also presented before the Committee.

EC Application for: Proposed Capacity – 2740.50 cum/annum or 7399.350 Tonnes per annum

Project and Location Details:

Sl	Parameter	Details	
1	Project Name	: Murumdih Pot Stone Mine	
2	Lessee	: M/s Sri Sai Minirals Proprietor- Smt Smriti Anand D/o Sohan Singh	
3	Lessee Address	: 109, Punjabi Refugee Colony, P.O- Agrico, Jamshedpur, District- East Singhbhum, Jharkhand	
4	Lease Area	: 0.79 ha	1.96 Acres
5	Type of Land	: Non-Forest Raiyati Land	
6	Project Cost	: Rs. 48,80,000/-	
7	EMP Budget	: Capital: Rs. 9,20,000/-	Recurring: Rs. 3,55,000 per year
8	New or Expansion	: New (Re-appraisal of DEIAA EC)	
9	Mineable Reserves	: 59219.00 tonnes	21932.96 cum
10	Mine Life	: Up to the lease period i.e. 19.09.2017 to 18.09.2027.	
11	Man power	: 24	
12	Water Requirement	: 3.84 ~ 4.00 KLD	
13	Water Source	: By authorised hired water tankers	
14	DG Set / power	: 110 Kva	
15	Crusher	: No crusher	
16	Nearest Water Body	: Nalla, Approx. 62m towards SW direction as per Google earth EMP Submitted.	
17	Nearest Habitation	: Nearest Habitation 279 meter towards North direction as per Google earth EMP submitted.	
18	Nearest Rail Station	: Haludpukur Railway Station, approx. 14.61 km towards East direction.	
19	Nearest Air Port	: Birsa Munda Airport, Ranchi approx. 102.16 km towards NW direction.	
20	Road & Highways	: NH-220, Approx.0.72 km. in North direction.	

21	Approach Road	:	200 m.
22	DMO Cluster	:	No other mining lease exists within 500 m radius.
23	Nearest Forest	:	The distance of notified forest is more than 500m from proposed project site. As per Divisional Forest Officer Saraikela vide letter no. 707, dated 17.05.2016.
24	Distance of nearest ESZ of Wildlife Sanctuary or National Park	:	The project location is at approx. 27.72 KM from the nearest Eco Sensitive Zone of Dalma Wildlife Sanctuary.

CO-ORDINATES

Pillar	Latitude (N)	Longitude (E)
1	22°36'52" N	86°00'05" E
2	22°36'51" N	86°00'08" E
3	22°36'48" N	86°00'08" E
4	22°36'46" N	86°00'08" E
5	22°36'48" N	86°00'05" E

LAND DETAILS

Khata no.	Plot no.
96	926

STATUTORY CLEARANCES

1	LOI / Lease docs	:	Lease deed 19.09.2017 to 18.09.2027.
2	CO	:	The CO, Rajnagar vide letter no. 386, dated 11.05.2016 has mentioned the plot no. of the project is not recorded as "Jungle-Jhari" in Khatiyani. During the appraisal it was seen from the KML that habitation at a distance of 279 meters and Tributary of Sona River at a distance of 62 meters from mining lease area. For which detailed Environmental Management Plan has been prepared and submitted.
3	DMO Cluster	:	DMO, Saraikela-Kharsawan vide letter no. 333/M, dated 12.03.2025 certified that no other mining lease area exists within 500 meters radius from proposed project site.
4	DFO Wild Life	:	Deputy Conservator of Forest & Field Director, Elephant Project, Jamshedpur vide letter no. 447, dated 21.03.2025 certified that

		the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.
5	DFO Territorial	: Divisional Forest Officer, Saraikela Forest Division vide letter no. 707, dated 17.05.2016 certified that the distance of notified forest is more than 500 meters from proposed project site.
6	DSR	: This project is mentioned in approved DSR of Saraikela-Kharsawan District in Page no. 113, Sl. no. 11.
7	Gram Sabha	: Gram Sabha conducted on 08.03.2016.
8	Mine Plan / Scheme Approval	: i. Approved by AMO, Saraikela-Kharsawan vide Letter No. 2287, dated 23.09.2016. ii. Mining scheme approved by Additional Director, Geology, Hazaribag vide memo no. 784/G, dated 03.12.2021.
9	Previous Environmental Clearance (EC)	: Previous EC granted by DEIAA, Saraikela vide letter no. EC/DEIAA/Saraikela/2016-17/49, dated 21.03.2017.
10	Compliance report of EC	: The compliance report of previous EC has been issued by Regional Office, Jamshedpur, JSPCB vide letter dated 16.05.2026.
11	Consent to Establish (CTE)	: CTE issued by JSPCB vide Ref. no. JSPCB/HO/RNC/CTE-1885364/2018 /393, dated 23.04.2018.
12	Consent to Operate (CTO)	: CTO issued by JSPCB vide ref. no. :JSPCB/HO/RNC/CTO-15941275/2023/980, dated 29.05.2023 valid up to 31.03.2025.
13	Production Report	: Production report issued by DMO, Saraikela-Kharsawan vide memo no. 634/M, dated 29.05.2026.
14	Qualified Person	: Shri Surendra Sai was present in the meeting and affirmed that the mining scheme has been prepared by him.

Working Details

1	Mining Method	: Opencast Manual Mining Method
2	Quarry Area	: 0.420 Ha
3	Waste Generation	: 1697.50 Cum
4	Stripping Ratio	: 1:0.05
5	Working Days	: 300
6	Bench: size & No	: 1.5m to 1.5m
7	Elevation of Mine	: 182 AMSL to 186 AMSL
8	Ground Level Elevation	: 182 AMSL

9	Ultimate Working Depth	:	165 AMSL (17m bgl)
10	Water Table	:	160- 157 AMSL (22 – 25 m bgl)
11	Topography of Mine	:	Area represents gently rising topography.
12	Explosive Requirement	:	50 kg/day
13	Diesel/Fuel requirement	:	90 litre/day

Production Details

Year	Proposed Production of Stone in Cum	Proposed Production of Stone in Tons
1 st	2740.50	7399.350
2 nd	2739.73	7397.271
3 rd	2739.25	7395.975
4 th	2739.70	7397.190
5 th	2737.50	7397.190
Total	13696.68	36986.976

Year	Production of EC in Tons
1 st	7400.00
2 nd	7387.00
3 rd	7393.00
4 th	7390.00
5 th	7397.00
Total	36967.00

As per approved mine plan production: - 2740.50 cum/annum or 7399.350 TPA

As per EC letter production: - 2740.74 cum/annum or 7400.00 TPA.

Land Use

Category	Present Land Use (in Ha)	At the end of plan period (in Ha)	At the end of Mine (in Ha)
Quarry Pit	0.192	0.420	0.420 ha (0.327 ha area for reservoir)
Safety Zone	0.370	0.370	0.370

	(Plantation)	(Plantation)	(Plantation)
Total area in use	0.562	0.790	0.790
Balanced Unused Area	0.228	-	-
Total Lease area	0.790		

Green Belt Development

	Area / Length	Number of Trees	Remarks	Timeline	Species
Area in Safety Zone (Ha.)	0.37	592	1600 Tree per Hectare	planted during previous year of mining	Arjun, Jackfruits, Jamun, Babul, Gulmohar, Neem, Pipal, Mango etc.
Length of Approach Road Area (m.)	200	400	2m X 2 m spacing in two rows both side	1st Year	
Total		992			

Note: A total of 992 saplings were proposed to be planted. Out of which 592 plant in Safety Zone area have been planted during previous year of mining.

(400plant along approach road will be done in the first year of operation. (Total 400 Plants).

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

BUDGETARY PROVISION (IN LAKHS)

PROJECT COST

Particulars	Capital(Rs.)	Recurring(Rs.)
Land	19,60,000	1,96,000
infrastructure	12,00,000	1,20,000

Mining Equipment				
Equipment	Quantity	Rent per year		
Dumper	2	4,00,000		
Compressor	1	10,00,000		
Water Sprinkler	1	6,00,000		
Rock Breaker	2	4,00,000		
Excavator	1	4,00,000		
Loader	2	6,00,000	0.00	34,00,000
@Per Excavator-4,00,000/- @Per Compressor-10,00,000/- @Per Water Sprinkler -6,00,000/- @Per Dumper-2,00,000/- @Per Loader-3,00,000/- @ Rock Breaker -2,00,000/-				
Water Facility for Domestic Purpose "0.24" KLD (Annual Water Demand "72KL @4L per Tanker, total number of tanker required ("18") and per tanker cost @Rs. 500)			0.00	9,000
Statutory Clearances			6,00,000	0.00
Mine Closure Cost for fencing around mine			2,00,000	0.00
Environment Management Plan (EMP) Cost			9,20,000	3,55,000
Total			48,80,000	40,80,000

ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital(Rs.)	Recurring(Rs.)
400 Tree Plantation @Rs.300 per Tree for planting & @Rs.50 per tree for maintenance	1,20,000	20,000
Water Tanker @Rs. 500 per Tanker for Dust Suppression (1.20 KLD) & Horticulture (2.40KLD) 1.20 + 2.40= 3.60 KLD 3.60 KLD X 300 Days = 1080 KLD 1080KLD / 4 KLD = 270 Tankers	0	1,35,000
Environment Monitoring & Compliance	0	50,000
To prevent the impact of mining activities on these habitations under compliance of OM Z-11013/57/2014-IA.II (M) dated 29/10/2014 issued by MoEF & CC	3,50,000	1,00,000
Garland Drain & Retaining wall	4,50,000	50,000
Total	9,20,000	3,55,000

Environment Monitoring Plan

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of the mine area. In the surrounding area covering project site only.	3 Stations	Six Monthly
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	No waste will be generated during plan period.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank–soak pit systems. • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG

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	<p>set operations.</p> <ul style="list-style-type: none"> • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> ▪ Overall slope angles of benches will be maintained at 45°. ▪ Unmanageable heights are not created. ▪ Loose sides are properly dressed. ▪ No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). ▪ No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) ▪ It will be ensured that the drilling equipment is suitable for the job. ▪ The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to

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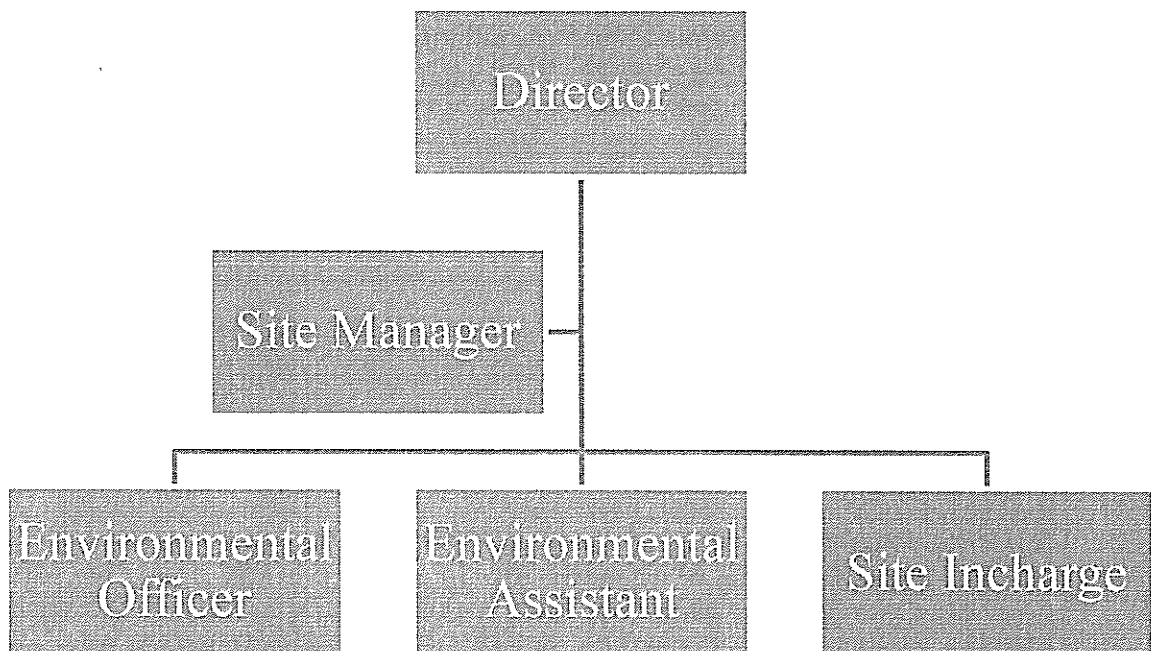
	<p>always face towards the open edge of the bench so that any inadvertent backward step is away from the edge.</p> <ul style="list-style-type: none"> ▪ Provision of portable rail fencing between the drilling operations and the edge of the bench ▪ Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. ▪ Restricted access to the area to all persons except those necessary for the drilling operation. ▪ Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. ▪ In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. ▪ Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
Blasting & Handling of Explosives	<ul style="list-style-type: none"> ▪ Blast hole geometry shall be properly designed. ▪ Blast site shall be wetted before and after blasting operations are completed. ▪ Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. ▪ Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. ▪ While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. ▪ The vibrations should be monitored periodically in consultation with the local Mining authorities. ▪ Use of explosives is specialist work. Planning for a round of shots is necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use. ▪ Proper and safe storage of explosives in approved and Licensed Magazine. ▪ Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. ▪ Explosives shall be conveyed in special containers. ▪ Explosives and detonators shall not be carried in the same container. ▪ The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept.</p>

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	The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level
Accident Prevention	<ul style="list-style-type: none"> ▪ Mine road shall be made smooth regularly with a road roller. ▪ Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. ▪ All transportation within the mine lease area should be carried out directly under the supervision and control of management. ▪ The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. ▪ Navigation signs will be provided at each and every turning point up to the main road (wherever required). ▪ To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

Organizational Structure of Environment Management Cell:



EMP Cell Structure

The EMP Cell is committed to ensuring environmental sustainability and compliance with regulatory requirements for the Stone Mining Project. With a clear structure, roles, and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.

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.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

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 Murumdih Pot Stone Mine of M/s Sri Sai Minirals(Prop. : Smt. Smriti Anand), Village : Murumdih, Thana : Govindpur (Rajnagar), Distt. : Saraikela-Kharsawan, Jharkhand (0.79 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. The production shall be restricted as per approved mining scheme or the approved mine plan at the time of EC, which ever is less.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "*Ek Ped Ma Ke Naam*" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. During appraisal of the project, it is seen that the project authority have not fully complied the condition of green belt development as per the previous EC. Hence, the project authorities are required to plant twice the number of trees as was required in the previous EC. The Deputy Commissioner through District Mining



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Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.

- IV. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.
- V. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- VI. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests . Summary findings of same to submitted along with 6 monthly compliance.
- VII. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VIII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- IX. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

- 7. Tokisud Block – II Coal Mine, South Karanpura Coalfields Limited of M/s Twenty First Century Mining Pvt. Limited, Village : Tokisud (Mahuatoli & Mahuatola) Tehsil : Patratu, Distt. : Ramgarh, Jharkhand (220 Ha).

(Proposal no.: SIA/JH/CMIN/ 565951 /2026)

This is a project of Coal mining for grant of EC in which Terms of Reference has been issued by MoEF&CC, Govt. of India vide letter no. File no. IA-J-11015/53/2023-IA-II(M), dated 27.06.2024 and total project area is 192.26 ha out of which 160.18 ha is forest land and Forest Clearance application bearing proposal no. FP/JH/MIN/QRY/464572/2024, dated 08.03.2024.

The project authority has not yet obtained Stage – I clearance under Forest (Conservation) Act, 1980. Hence, this project could not be taken up for consideration for grant of EC. After grant of Stage -I clearance this project will be listed for consideration.



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8. Manipal Tata Medical College (MTMC) by Manipal Academy of Higher Education (MAHE),
Mouza :Baridih, Thana no. : 1198, Tehsil : Jamshedpur, Distt. : East Singhbhum, Jharkhand.
(Proposal no.: SIA/JH/INFRA2/ 578837 /2026)

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

This is a new project which has been taken for appraisal on 12.06.2026.

Project Sector: 8(a) Building and Construction Projects , Category: B2.

Application for Environment Clearance (EC) as per EIA notification, 2006.

Existing institutional infrastructure was handed over from ADMH to MAHE in 2018.

- Existing institutional infrastructure built-up area: 2,856.00 sq.m.
- Phase-I infrastructure constructed during 2020–2023 comprises Academic Block, Library Building, Anatomy Block, AHS Block, Cafeteria, Classrooms and Autopsy Block with a built-up area of 26,990.72 sq.m.
- Proposed Phase-II infrastructure includes UG Boys Hostel, UG Girls Hostel, PG Hostel, Teaching Block, Non-Teaching Block and Food Court.
- Total Existing Built-up Area [Old Existing (2,856.00 sq.m.) + Phase-I (26,990.72 sq.m.)]: 29,846.72 sq.m.
- Proposed Additional Built-up Area (Phase-II): 47,901.59 sq.m.
- Total Built-up Area (Post Expansion): 77,748.31 sq.m.
- Total Plot Area: 99,006.65 sq.m.
- Total Project Cost: ₹250 Crore.

EC Application for Manipal Tata Medical College (MTMC) at Mauza – Baridih, Khata No. 24, Plot No. 3953 (P), 3826, 3827 & 3828, Thana No. 1198, Ward No. 16, Jamshedpur, District – East Singhbhum, Jharkhand.

Built-up Area: 77,748.31 sq.m

The proposed project is an expansion of the existing Manipal Tata Medical College (MTMC) campus at Baridih, Jamshedpur. The project was earlier exempt from Environmental Clearance requirements applicable to educational institutions. In view of the current regulatory provisions, the proposal is being submitted for Environmental Clearance under Item 8(a) of the EIA Notification, 2006. The expansion includes additional academic, hostel, and support facilities, increasing the total built-up area to 77,748.31 sq.m.

Projectand Location Details:

Parameters	Descriptions
Total Plot Area	99,006.65 Square Meter
Project Cost	INR 250 Crores

Proposed FAR	~0.73 (Against 2.25 Maximum Permissible FAR)
Total Green Area (@ 43% of plot area)	43,060.00 Square Meter
Area under Green Belt(@41.41 %)	41,000 Square Meter
Area under lawn	2060 Square Meter
Population	3,000 Persons
Water Requirement	333 KLD
Fresh Water Requirement	215.72 KLD
Recycled water Requirement	117.31 KLD
DTS (STP + ETP Combined process)	535 KLD (350 + 180 + 5 KLD)
Total Municipal Waste	1104.1Kg/Day
Power Requirement	Maximum power demand for the project during operation phase is estimated to be 5000 kW. Source of power will be JUSCO / Tata Steel Utilities
DG Sets	1 no. of DG set of Total 500 KVA
RWH Pits	Approx. 36 Nos.
Parking Area	337 Car Parking + 30 Visitor Car Parking + 384 Two-Wheeler Parking

Surroundings of the Project Site:

S. No.	Feature	Name / Description	Distance	Direction
1	Nearest River	Subarnarekha River	Approx. 5 km	North
2	Nearest Highway	NH-18 (Jamshedpur)	Approx. 4 km	North-East (NE)
3	Nearest City / Town	Jamshedpur	Approx. Within city	—
4	Nearest Hospital	Mercy Hospital (near site)	Adjacent / <1 km	South - West (SW)
5	Nearest School	AIWC Academy of Excellence	Approx. 2 km	South-West (SW)

6	Nearest Railway Station	Tatanagar Railway Station (~8 km)	Approx. (8 km)	South-West (SW)
7	Nearest Airport	Jamshedpur Airport - Domestic airport (~8 km, W)	Approx. (8 km)	(West W)
6	Ecologically Sensitive Area	Dalma Wildlife Sanctuary	Approx. (11 km)	North-West(NW)

CO-ORDINATES

Point	Latitude	Longitude
1.	22°47'59.13"N	86°14'55.40"E
2.	22°48'2.53"N	86°14'59.76"E
3.	22°48'6.37"N	86°15'4.37"E
4.	22°48'10.18"N	86°14'55.53"E
5.	22°48'7.47"N	86°14'46.32"E
6.	22°48'2.77"N	86°14'51.23"E

LAND DETAILS

Khata no.	Plot no.
24	3953 (P), 3826, 3827 & 3828

AREA STATEMENT

S. No.	Description	Area in Sq.m	Area in Sq.ft
Existing Infrastructure MTMC, Jamshedpur during handover from ADMH to MAHE (2018)			
1.	Total Existing Built-up Area	2,856.00	30,741.73
	Existing FAR	0.02	
Phase 1 – Constructed (2020-2023) Infrastructure Built-Up			
3	Library Building (G+3)	4,491.22	

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4	Library Block G	642.98	
5	Anatomy Block C	725.79	
	AHS block	839.13	
6	Autopsy Block	482.42	
7	Cafeteria (G+1)	616.84	
8	Classroom 01	241.53	
9	Classroom 02	241.53	
10	Academic Block (G+3)	18,709.28	
	Area Phase 1	26990.72	
	Total FAR (Phase 1)	0.27	
Phase 2 – Proposed Infrastructure Built Up			
12	PG Hostel	9,428.32	
13	UG Hostel Girls	9,019.28	
14	UG Hostel Boys	9,026.40	
15	Teaching Block	8,787.81	
16	Non Teaching Block	5,067.36	
.	Food Court	6,572.42	
	Area Phase 2	47,901.59	
s	Total FAR (Final)	0.48	
Far Actual Vs Permitted			
17	Area of Constructed Phase 1 and proposed Phase 2	74,892.31	FAR:~ 0.73(Against 2.25 Maximum Permissible FAR)
18	Total Old Existing + Phase 1 and Phase 2	77,748.31	FAR:~ 0.73(Against 2.25 Maximum Permissible FAR)
Utility Area Details			

19	Total Paved Area	38,975.53	4,19,529.57
20	Total Green / Unpaved Area	43,060.00	4,63,492.72
21	Common Plot Area	11,429.90	1,23,032.94
	Total Utility Area	93,465.43	10,06,055.23
Green Belt Area Development			
22	Area under tree cover	41,000	
23	Area under lawn	2060	
	Total Green Cover	43,060.00	4,63,492.72
23	No. of Trees	1223 Nos.	—
24	Tree Density	46 Trees/Acre	—
25	As per NBC (Minimum 15–20% of total site area)	20,000.00	2,15,278.20
Maximum No. of Floors		LG + G + 9 Floors	

STATUTORY CLEARANCES

1	Land Docs	:	Land handover from Adeshir Dalal Memorial Hospital (ADMH) to Manipal Academy of Higher Education on 11 th June, 2018.
2	DFO Territorial	:	DFO, Jamshedpur Forest Division vide letter no. 2234, dated 18.09.2025 certified that the distance of reserved / protected forest is more than 250 meters from project site.
3	DFO Wildlife	:	Deputy Director of Forest & Field Director, Elephant Project, Jamshedpur vide letter no. 494, dated 04.04.2026 certified that proposed project site is out side Eco Sensitive Zone of Dalma Wildlife Sanctuary.
4	CO certificate	:	The CO, Jamshedpur, East Singhbhum vide letter no. 679, dated 25.05.2026 has mentioned the plot no. of the project is not recorded as "Jungle - Jhari" in Khatiyani.
5	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. JAMS /EAST /B/ 042225/1659581, dated 13.06.2025 valid up to

			12.06.2033.
6	Building Plan approval	:	Building plan approved by Jamshedpur NAC vide memo no. JNAC/BP/0097/W16/2021, dated 29.10.2021 and JNAC/BP/0048/W16/2025 dated 07.08.2025 respectively.
7	Fire Department	:	Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi, vide memo no. 959/Tech./2021, dated 05.03.2021.
8	Environmental Safeguard from Jharkhand State Pollution Control Board (JSPCB)	:	Environmental Safeguard issued by Environmental Engineer – cum – Nodal Officer, Jharkhand State Pollution Control Board (JSPCB) vide its Memo No.: PC/SEIAA/EC-CTE/50/2026 - 1833, dated : 08.06.2026.
9	Water Source	:	Assurance from JUSCO is obtained.
10	Tree cutting permission	:	Tree cutting permission has been obtained from DFO, Jamshedpur Forest Division, Jamshedpur vide letter no. 2801, dated 30.08.2019 & letter no. 3038, dated 21.09.2019.

Population Detail

S. No.	Category	Calculation	Population
1	Residential Students (UG)	Hostel Accommodation Capacity (UG Students)	900
2	Residential Students (PG)		327
3	Residential Teaching Staff		54
4	Residential Non-Teaching Staff		36
5	Relatives of Residential Staff	90 HH × 5 persons	450
	Total Residential Population		1767
6	Day Scholars (Students)		373
7	Day Teaching Staff		196
8	Day Non-Teaching Staff		364
9	Floating Population (Campus Visitors)		300
10	Total Non-Residential Population		1233
Total Estimated Population (MTMC Campus)			3000

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Water Requirement Details

Wastewater Calculations

SI No	Particulars	No of users	Lpcd	Total KLD	Fresh Water Requirement (KLD)	Recycled Water Requirement (KLD)
A	Residential Stream				90	45
1	UG Boys	429	135	57.92	38.61	19.31
2	UG girls	429	135	57.92	38.61	19.31
3	PG Hostel	274	135	36.99	24.66	12.33
4	Teaching Block	286	135	38.61	25.74	12.87
5	Non Teaching Block	180	135	24.30	16.20	8.10
6	Guest houses	169	135	22.82	15.21	7.61
	Total Residents	1767	135	238.55	159.03	79.52
B	Non residential stream	No of users	Lpcd	Total LPD	Fresh Water Requirement (KLD)	Recycled Water Requirement (KLD)
7	Food court	3000	15	45.00	27.00	18.00
8	Day Scholars	468	45	21.06	12.64	8.42
9	Day Staff	198	45	8.91	5.35	3.56
10	Day NTS	267	45	12.02	7.21	4.81
11	Visitors	300	25	7.50	4.50	3.00
	Total Day scholars+staff+visitors	1233		94.49	56.69	37.79
	Grand Total	3000		333.03	215.72	117.31

Special Liquid Discharge

SI No	Special discharge (after pre treatment neutralisation/ disinfection)	Estimated Max effluent LPD	Remarks - Source treatment
1	Anatomy	400	Formalin with fentons reagent, disinfection with 2% hypochlorite
2	Research	1	Disinfection with 2% hypochlorite
3	Physiology	0.01	Disinfection with 2% hypochlorite
4	Biochemistry	0.01	Disinfected with 2% hypochlorite and Diluted with 100x water
5	Microbiology	10	Disinfected with 2% hypochlorite

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6	Pathology	10	Disinfected with 2% hypochlorite
7	Pharmacology	10	Food grade material, no human or biohazard material
8	Community medicine	Nil	
9	Allied Health	Nil	
10	Forensic	10	Disinfected with 2% hypochlorite
11	Research	200	Disinfected with 2% hypochlorite
	Total	641.02	Approx. 1000lit

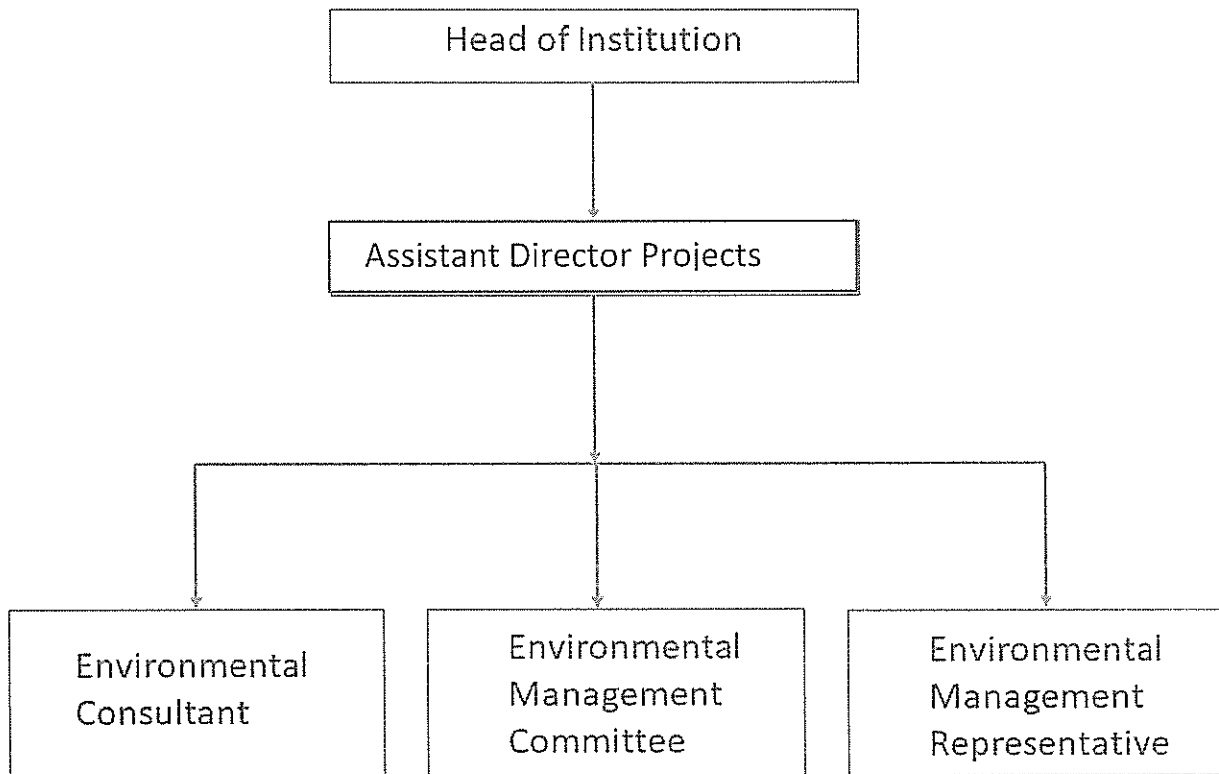
Solid Waste Generation

S. No.	Description	Occupancy/Area	kg/capita/day	Total Solid Waste Generation (kg/day)	Recyclable Waste (40%) (kg/day)	Non-Recyclable / Biodegradable Waste (60%) (kg/day)
1	Total residential person	1767	0.3	530.1	212.04	318.06
2	Total Non-residential person	933	0.1	94	38	56
3	Visitors / Floating Population	300	0.1	30	12	18
4	Pre cooking Food Court / Kitchen Waste	3000	0.15	450	180	270
	Total Municipal Solid Waste			1104.1 kg/day	441.64 kg/day	662.46 kg/day

EMP Cost – Approx. Budget Operational Phase:

S. No.	Activity	Capacity/ Area/Nos./parameters	Capital Cost (Lacs)	Annual Recurring Cost (Lacs)
1.	DTS (STP+ETP Combined process)	535 KLD	120	15
3.	Landscaping & planting trees	43,060.00 sq m	25	3
4.	Solid waste Management	1104.1 Kg/day	20	3
6	RWH Pit Installation	36 pits	12	2

7	Energy Saving	Approx. 30%-40% Renewable Energy Contribution through 275.4kWp Solar PV System, LED Lighting, Occupancy Sensors and Energy Efficient Equipment	15	5
8	Environmental Monitoring*	Air, water, soil and noise	-	5
Total			192	33



Organization Structure

ENVIRONMENT MANAGEMENT

Green Belt Development

- Total green area proposed is 43,060 sq.m (approximately 43% of the total plot area).
- Area under tree cover: 41,000 sq.m.
- Area under lawn and landscaping: 2,060 sq.m.
- Approximately 1223 trees are existing within the campus.
- Native and pollution tolerant species shall be planted.
- Treated wastewater shall be utilized for irrigation of landscaped areas.
- The plant species will be selected on the basis of Guidelines for Developing Green Belts, CPCB March 2000.

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- **Environment Monitoring Programme**

Sl. No	Description	No. Monitoring Stations	Duration	Budget
1	Air	4 Stations	6 Monthly	20000
2	Soil	2 Stations	6 Monthly	8000
3	Surface Water	2 Stations	6 Monthly	7500
4	Ground Water	2 Stations	6 Monthly	7500
5	Noise	4 Stations	6 Monthly	7000

Solid Waste Management

During Construction Phase

- Designated construction material storage areas shall be provided within the project site.
- Excavated topsoil shall be stored separately and reused for landscaping and green belt development.
- Remaining excavated soil shall be utilized for backfilling, site levelling, and internal road development, to the extent feasible.
- Separate waste collection bins/containers shall be provided for collection and segregation of waste generated by construction workers.
- Construction and Demolition (C&D) waste shall be managed in accordance with the Construction and Demolition Waste Management Rules and applicable guidelines.
- Recyclable materials such as steel scrap, cement bags, cardboard, plastic, and packaging materials shall be collected separately and handed over to authorized recyclers.
- Adequate housekeeping practices shall be maintained throughout the construction period.

During Operation Phase

- Waste shall be segregated at source into biodegradable, recyclable, sanitary, biomedical (where applicable), domestic hazardous, and other waste streams as per the applicable Solid Waste Management Rules, 2026.
- Color-coded bins shall be provided at appropriate locations throughout the campus for segregation and collection of different categories of waste.
- Biodegradable waste shall be processed through an Organic Waste Converter (OWC) of 800 kg/day capacity and composting facilities.
- Horticultural waste shall be composted and reused for landscaping and green belt development.
- Recyclable waste such as paper, plastic, glass, metal, and cardboard shall be handed over to authorized recyclers.

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- STP sludge generated from sewage treatment plants shall be utilized as manure for horticulture and landscaping activities, wherever feasible.
- Biomedical waste generated from laboratories shall be managed through an authorized Common Biomedical Waste Treatment Facility (CBWTF) as per Biomedical Waste Management Rules.
- E-waste generated from computers, laboratory equipment, printers, UPS systems, and electronic devices shall be stored in a designated area and handed over to authorized E-waste recyclers.
- Domestic hazardous waste shall be stored separately and disposed of through authorized agencies in accordance with applicable regulations.
- The overall solid waste management system shall ensure environmentally sound collection, segregation, storage, processing, transportation, recycling, and disposal of waste in compliance with statutory requirements.

Water Quality Management

During Construction Phase

- Water requirement will be met through JUSCO water supply and water tankers.
- Mobile toilets shall be provided for construction workers.
- Wastewater from mobile toilets shall be disposed through authorized vendors/tankers.
- Proper site drainage and housekeeping shall be maintained.

During Operation Phase

- STP of total capacity 535 KLD will be provided.
- Approximately 117.31 KLD treated wastewater will be reused for flushing, landscaping, Construction activity, Dust suppression, Solar cleaning and miscellaneous uses.
- Dual plumbing system will be adopted.
- Rainwater harvesting pits will be provided for groundwater recharge.

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

- 275.4kWp Grid Connected Solar PV System.
- 30 Solar Street Lights and 2 Solar High-Mast Lights.
- Occupancy Sensors installed in buildings.
- LED Lighting Fixtures.
- Energy Efficient Motors and Pumps.
- BEE Star Rated Electrical Equipment.
- Copper Bus Bars in Electrical Panels.
- Heat Reflective Roof Coatings.
- Approximately 30-40% of total energy demand met through solar energy.

Undertaking

- An undertaking that no ground water will be used without any prior approval from CGWA
- Biomedical waste shall be disposed through an authorized CBWTF.
- E-waste shall be handed over only to authorized recyclers.
- Solid waste shall be managed as per applicable Solid Waste Management Rules 2026.
- Approximately 5.51 % of total energy consumption shall be met through solar energy.
- The project shall comply with all applicable environmental regulations and statutory requirements.

Based on the presentation made and information provided, the Committee decided that the proposal for Manipal Tata Medical College (MTMC) by Manipal Academy of Higher Education (MAHE), Mouza :Baridih, Thana no. : 1198, Tehsil : Jamshedpur, Distt. : East Singhbhum, Jharkhandis recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II alongwith the following specific conditions and Environmental Safeguard as provided by Environmental Engineer –cum – Nodal Officer, JSPCB vide memo no. PC/SEIAA/EC-CTE/50/2026 - 1833, dated : 08.06.2026 is also included as Annexure – II (A) :

- I. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign “*Ek Ped Ma Ke Naam*” and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- II. Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.

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- III. 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.
- IV. All raw material to be stored only under covered shed.
- V. PAs to offset (upto 20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
- VI. Developers to promote solar energy generation not less than 05 % of connected load.
- VII. Trees should be planted & maintained not less than 15% of project area.
- VIII. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- IX. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- X. 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.
- XI. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- XII. 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.
- XIII. Sufficient number of EV fast charging points to be installed.
- XIV. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XV. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.
- XVI. Excess water from the ETP / STP will be discharged out side the premises after obtaining permission from the competent authority.



9. Expansion of Grain Based Distillery Plant Project of M/s Sheonarain Jaiswal Pvt. Ltd., Village : Balsiring, Tehsil : Namkum, Distt. : Ranchi, Jharkhand.

(Proposal No : SIA/JH/IND2/ 578882/2026)

Name of the consultant :Cognitive Sustainable Solutions Private Ltd., Ghaziabad, U.P.

This is an expansion project which has been taken for appraisal on 12.06.2026.

Project Sector: 5(g) Distilleries, Category: B2.

Application for Environment Clearance (EC) as per EIA notification, 2006.

The Certified Compliance Report (CCR) of existing EC has been issued by Regional Office, Ranchi, MoEF&CC, Govt. of India vide F. No. 111-26/ROR-2025/220, dated 21.04.2026. In response to the same the PAs have submitted Action Taken Report (ATR) to Regional Office, Ranchi, MoEF&CC, Govt. of India on 26.05.2026 with a copy to SEIAA, Jharkhand.

During the appraisal Action Taken Report was reviewed and certain clarification were sought from PAs which has been provided during the meeting and found to be satisfactory.

M/s Sheonarain Jaiswal Private Limited proposes Expansion of Grain Based Distillery Plant from 60 KLPD to 195 KLPD (New 135 KLPD Ethanol Plant) and Co-generation Power Plant from 1.775 MW to 5.775 MW with latest technology of Multi Pressure Distillation and MSDH for dehydration to achieve good quality Fuel Grade Ethanol.

Proposed production after expansion will be 195 KLPD Grain Based Distillery and 5.775 MW Captive Co-generation Power Plant based on grain such as Corn/Maize, Broken Rice, Sorghum and other starch-based grains as basic raw materials. Other inputs will be water, antifoam agents, nutrients, sulphuric acid, sodium hydroxide and enzymes. Rice Husk/Biomass/Coal will be used as fuel in the boilers.

The Distillery proposes to achieve Zero Liquid Discharge (ZLD) by Decantation, Multi Effect Evaporation (MEE) followed by DWGS/DDGS Dryer. Distiller's Dried Grain with Solubles (DDGS) generated will be used as cattle, poultry and fish feed. The entire spent wash generated shall be treated through Decanter, MEE and Dryer system to achieve Zero Liquid Discharge.

Grain Based Distillery of Sheonarain Jaiswal Pvt. Ltd. (SNJPL) is located at Plot No. 726 (P), Balsiring, TurkaToli, Tupudana, Near Ring Road, P.S. Dhurva, P.O. Hatia, Block Namkum, District Ranchi, Jharkhand having Latitude 23°15'25.89"N and Longitude 85°16'24.30"E at an elevation of about 648 m above MSL. The project site is connected through Ring Road and NH-39. Hatia Railway Station is approximately 7 km away and Birsa Munda Airport is about 8 km away. The total cost of the existing and expansion project is estimated to be Rs. 72.70 Crores (Existing: Rs. 22.00 Crores and Expansion: Rs. 50.70 Crores).

4.36 Ha. (10.77 Acres) of land comprising 3.64 Ha. existing area and 0.72 Ha. Additional area Additional area of Khata No. 123, Khesra No. 726 (P) out of total available land of 10.82 Ha at Village Balsiring, Namkum, Ranchi will be utilized for the expansion project.

Land Details :

Khata no.	Plot no.
123	726 (P)

Manufacturing & Production Details :

Manufacturing Facilities	Product (Existing Capacity)	Expansion Capacity	Production Capacity (Total)
Distillery	Ethanol / ENA 60 KLPD	Ethanol only – 135 KLPD	195 KLPD (60 KLPD ENA/Ethanol & 135 KLPD Ethanol Only)
Power Co-generation	1.775 MW	4.0 MW	5.775 MW
No. Of Days Operation / Annum	350 days		
Distilleries Dry Grain with Solubles (DDGS), & CO ₂ will be generated as by-product.			
By-Product	Existing Capacity	Expansion Capacity	Total Generation Capacity
DDGS	30 TPD	68 TPD	98 TPD
CO ₂	20 TPD	45 TPD	65 TPD
Fusel Oil	90 Litres/day	200 Litres/day	290Litres/day

Raw Material Requirement:

Item	Existing Quantity	Expansion Quantity	Total Quantity
Maize	162 TPD	346 TPD	508 TPD
Broken Rice	156 TPD	281 TPD	437 TPD
No. Of Days Operation / Annum	350 Days	350 Days	350 Days

Pollution Control Measures:

The proposed expanded Grain Based Distillery Plant will be based on “Zero Liquid Discharge (ZLD)” technology. Fresh water requirement of the project will be met through ground water

supplemented by rainwater harvesting. Maximum efforts will be made to conserve water through recycling and reuse of treated streams.

During grain-based operation, Grain Slops (Spent Wash) generated from the distillation section will be passed through centrifuge decanters for separation of suspended solids as Distillers Wet Grains (DWG). The thin slops obtained from the decanter will be partly recycled back to the process and the remaining portion will be concentrated in a Multi Effect Evaporation (MEE) System to produce syrup. The syrup will be mixed with wet cake (DWGS) and dried in a DWGS Dryer to produce Distillers Dried Grains with Solubles (DDGS), which will be utilized as cattle, poultry and fish feed.

Process condensate generated from the evaporation section will be treated in a Condensate Treatment/Condensate Polishing Unit (CPU) and recycled back for process use and cooling tower makeup. Domestic wastewater will be treated in a Sewage Treatment Plant (STP). The plant has been designed with an efficient water recycling system to minimize fresh water consumption through recovery, reuse and recirculation of treated wastewater streams, thereby ensuring compliance with Zero Liquid Discharge requirements.

Waste Water Generation & Treatment:

During grain-based operation, spent wash (grain slops) generated from the distillation section will be subjected to decantation through centrifuge decanters for separation of suspended solids in the form of Wet Cake (DWG). The thin slops obtained from the decanter will be partly recycled back to the process and the balance will be fed to the Thin Slop Evaporation Plant (Multi Effect Evaporator) for concentration of dissolved solids to form syrup. The syrup will be mixed with the wet cake (DWGS) and subsequently dried in the DWGS Dryer to produce DDGS containing about 90% solids, which will be utilized as cattle, poultry and fish feed.

The process condensate generated from the evaporation section will be treated in the Condensate Treatment/Condensate Polishing Unit (CPU) and recycled back for process use and cooling tower makeup. Boiler blowdown, cooling tower blowdown, DM plant reject, and other utility wastewater streams will be collected and treated in the CPU for recovery and reuse. Treated water will be utilized for process requirements, cooling tower makeup, ash quenching and other plant utilities. Steam condensate generated from the process and boiler system will be recovered and recycled back to the boiler feed system.

The proposed distillery shall operate on a Zero Liquid Discharge (ZLD) basis through decanter, MEE, CPU and DDGS dryer systems, ensuring complete utilization and recycling of wastewater generated within the plant premises.

Air Pollution:

To minimize air pollution load due to the operation of the proposed boilers, an **Electrostatic Precipitator (ESP)** along with adequate stack height as per CPCB norms will be installed to control particulate matter emissions. Fuel storage and handling areas will be properly managed to minimize fugitive dust emissions. An online stack monitoring system will also be installed for continuous monitoring of emissions.



CO₂ generated during the fermentation process will be collected, scrubbed, compressed and sold to beverage and packaging industries. Existing and proposed DG sets will be provided with acoustic enclosures and stacks of adequate height as per CPCB guidelines. Low sulphur diesel shall be used in DG sets.

All internal roads within the plant premises will be paved to minimize dust generation. A green belt covering 1.44 Ha. (33% of the total project area of 4.36 Ha.) will be developed around the plant boundary and within the premises to attenuate air pollutants, reduce noise levels and improve the overall environmental quality. Regular ambient air quality monitoring will be carried out to ensure compliance with prescribed standards.

Solid Waste Management:

Type of Waste	Existing Quantity	Proposed Quantity	Total Quantity	Storage	Utilization/ Disposal
DDGS – (by product) (Dried distillers' grains with soluble)	30 TPD	68 TPD	98 TPD	Covered shed	Sold as Cattle Feed, Poultry & Fisheries
Ash from boiler	18 TPD	62 TPD	80 TPD	Silo	Sold to authorized Brick Manufacturers
Fusel Oil	90 liters/day	200 Liters/day	290 Liters/day	HDPE drums in covered shed	Given to authorized TSD Fre-cycler
MSW	14 kg/day	5 kg/day	19 kg/day	Wet & Dry dustbins	Will be collected, segregated using twin bin collection system and handed to MSW disposal site.
STP Sludge (5 KLD)	2 kg/day	0kg/day	2kg/day	Stored in closed container in a dedicated Place	Will be used as manure for landscaping within premises
ETP Sludge	30 kg/day	68 kg/day	98 kg/day	Stored in the dedicated Place	Will be used as manure for landscaping within premises and excess quantity of manure will be given to local farmers.

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Raw Material required along with estimated Quantity, likely source, marketing area of final products, mode of Transport of raw material & finished product.

S. No.	Particular	Existing Quantity	Proposed Quantity	Total Quantity	Storage	Mode of Transportation
1	Grain (Broken Rice/Corn / Maize)	Maize: 162 TPD orBroken Rice: 156 TPD	Maize: 346 TPD orBroken Rice: 281 TPD	Maize: 508 TPD orBroken Rice: 437 TPD	Silo & Godown	Through Grain suppliers by road in covered trucks
Process Chemicals						
1.	Sulphuric Acid	39 Kg/Day	71 Kg/Day	110 Kg/Day	Close containers	From local market by roads
2.	Sodium Hydroxide	51 Kg/Day	92 Kg/Day	143 Kg/Day	Close bags	
3.	Alpha Amylase	45 Kg/Day	101 Kg/Day	146 Kg/Day	Covered containers	
4.	Glucosyl Amylase	60 Kg/Day	135 Kg/Day	195 Kg/Day	Cold storage	
5.	Micronutrient	45 Kg/Day	101 Kg/Day	146 Kg/Day	Cold storage	
6.	Defoamer / TRO / Silicone	75 Kg/Day	135 Kg/Day	210 Kg/Day	Covered containers	
7.	Active Dry Yeast	60 Kg/Day	135 Kg/Day	195 Kg/Day	Covered containers	
Fuel						
1.	Coal <u>OR</u> Rice Husk/Biomass/	72 TPD /OR 90 TPD	178 TPD/ OR 210 TPD	250 TPD/ <u>OR</u> 310 TPD	Covered trucks	Covered shed
2.	HSD	~50 Litres/Hour/ DG Set	~50 Litres/Hour/ DG Set	~100Litres/Hour/DG Set	Closed tank	Closed tank in covered shed

Water Requirement

Description	Total	Unit
TOTAL WATER INPUTS - FIRST RUN	2544	KL/Day
TOTAL WATER OUTPUTS - FIRST RUN	724	KL/Day

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Description	Total	Unit
TOTAL WATER RECYCLE & RE-CIRCULATED	1086	KL/Day
FRESH WATER / DAY – DISTILLERY	508	KL/Day
FRESH WATER / DAY – POWER PLANT	226	KL/Day
DOMESTIC& Green Belt USE	42	KL/Day
TOTAL DAILY FRESH WATER	776	KL/Day

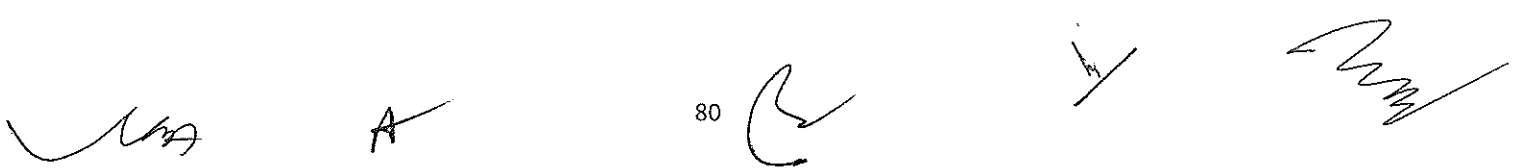
Water Inputs	m3/day	Water recycle	m3/day
Liquefaction	728.0	Flash Condensate	59.0
Fermentation	199.0	Spent lees	133.0
Thin slop for slurry	142.0	Process Condensate	658.0
Cooling Tower	612.0	Thin slop for slurry	142.0
Boiler	799.0	Cooling tower blowdown	40.0
Ash quenching	34.0	Steam Condensate return	573.0
Washings	20.0	Washings	20.0
		Dryer vapour condensate	144.0
		Boiler Blow down	32.00
One time for circulation			
Pump Sealing water	10.0	Pump Sealing water	9.0
Total	2544.0	Total	1810.0
Fresh water required = (2544-1810)			734.0
Domestic			12.0
Harvesting			30.0
Total			776.0

Power Requirement and Source:

Total power requirement will be 4.5 MW which will be met from in house co-generation power plant of 5.775MW using rice husk/biomass/coal as fuel. For emergency, DG set of 500kVA is existing & 1 x 500kVA has been proposed. Additional power will be supplied to state grid.

Steam Requirement:

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Steam requirement for the expanded 195 KLPD Grain Based Distillery and 5.775 MW Co-generation Power Plant will be sourced from the existing 18 TPH boiler and proposed 35 TPH boiler (Total Boiler Capacity: 53TPH {18TPH Existing & 35TPH Proposed}) fired with Rice Husk/Biomass/Coal.

S.No.	Steam requirement	Kg/Lit Of Total Spirit
1.	Liquefaction, Distillation, MSDH (Wash to AA mode), Integrated Evaporation, DWGS Dryer	3.93 Kg/Lit of Total Spirit

Boiler Details:

The total steam requirement of the project will be met through the existing 18 TPH Boiler and proposed 35 TPH Boiler, resulting in a total installed boiler capacity of 53 TPH.

Steam Consumption (Dry Saturated)	Proposed Scheme
1. Cooking and Liquefaction	0.55 Kg/lit of TS
2. Distillation	1.52Kg/lit of TS
3. Ethanol	0.52 Kg/lit of TS
4. DWGS Dryer	1.35 Kg/lit of TS
5. Total Steam Requirement	3.93 Kg/lit of TS (With Multi Effect Evaporator and dryer)

Proposed Boiler Details:

The steam requirement for the expanded 195 KLPD Grain Based Distillery and 5.775 MW Co-generation Power Plant will be met through the existing 18 TPH boiler and proposed 35 TPH boiler, resulting in a total installed boiler capacity of 53 TPH. The boilers will be fired using Rice Husk/Biomass/Coal. Electrostatic Precipitators (ESP) along with adequate stack heights as per CPCB & JSPCB guidelines will be provided to control particulate emissions.

Details regarding proposed boiler are mentioned in the table given below:

Proposed Boiler Details

S. No.		Existing	Proposed	Total
1.	Type of Fuel	Rice Husk/Biomass/Coal	Rice Husk/Biomass/Coal	Rice Husk/Biomass/Coal
2.	Capacity of Boiler	18 TPH	35 TPH	53 TPH
3.	Stack Height	33.7 m	45 m	Existing Stack: 33.7 m and Proposed Stack : 45 m
4.	Pollution	Bag Filters	ESP	Bag Filters for Existing

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	Control Equipment Measures			and ESP for Proposed
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Waste Water Generation & Treatment:

During grain-based operation, Grain Slops (Spent Wash) generated from the distillation section will be passed through centrifuge decanters for separation of suspended solids as Wet Cake (Distillers Wet Grains - DWG). Thin Slops obtained from the decanter will be partly recycled back to the process (20–35%) and the balance will be fed to the Thin Slop Evaporation Plant (Multi Effect Evaporator) for concentration of solids to produce syrup. The syrup will be mixed with Wet Cake (DWGS) and dried in the DWGS Dryer to produce Distillers Dried Grains with Solubles (DDGS), which will be utilized as cattle, poultry and fish feed.

Process condensate generated from the evaporation section will be treated in the Condensate Polishing Unit (CPU) and recycled back for process use and cooling tower makeup. Boiler blowdown, cooling tower blowdown, DM plant reject and other utility wastewater streams will also be collected and treated in the CPU for recovery and reuse. Treated water will be utilized for process requirements, cooling tower makeup, ash quenching and other utility purposes. Steam condensate generated from the process shall be recovered and recycled back to the boiler feed system.

The proposed distillery shall operate on a **Zero Liquid Discharge (ZLD)** basis through Decanter, Multi Effect Evaporator (MEE), Condensate Polishing Unit (CPU) and DDGS Dryer systems, ensuring complete utilization and recycling of wastewater generated within the plant premises.

STATUTORY CLEARANCES :

1	Land docs	:	Land for SNJPL project is registered in the name of SNJPL.
2	CO	:	The CO, Namkum (Ranchi) vide letter no. 320 (ii), dated 10.02.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyana & Register II.
3	DFO Wild Life	:	DFO, Wildlife Division, Ranchi vide letter no. 1081, dated 06.12.2021 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
4	DFO Territorial	:	DFO, Ranchi vide letter no. 5286, dated 27.12.2022 certified that the distance of reserved / protected forest is more than 250 meters from project site.
5	CGWA	:	No Objection Certificate for Ground Water Abstraction issued by CGWA vide NOC no. CGWA/NOC/IND/ORIG/2022/15295, dated 21.04.2022 valid up to 20.04.2025. The renewal application for the said NOC has already been submitted to

			CGWA.
6	Public Hearing	:	Public Hearing conducted by JSPCB on 26.08.2023.
7	Previous Environmental Clearance (EC)	:	Previous EC granted by SEIAA, Jharkhand vide letter no. EC/SEIAA /2022-23/2737/2023/289, dated 06.10.2023 under violation category.
8	Certified Compliance Report (CCR)	:	Compliance Report of previous EC certified by Regional Office, Ranchi, MoEF&CC, Govt. of india vide F.No. 111-26/ROR-2025/220, dated 21.06.2026.
9	Fire Department	:	Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi, vide memo no. 7392/Tech./2023, dated 31.12.2023.
10	Consent to Establish (CTE)	:	CTE issued by JSPCB vide Ref. No. JSPCB/HO/RNC/CTE-17368088/2023/728, dated 30.12.2023.
11	Consent to Operate (CTO)	:	CTO issued by JSPCB vide Ref. No. JSPCB/HO/RNC/CTO-20514533/2025/567, dated 23.03.2025 valid up to 31.12.2026.

Based on the presentation made and information provided, the Committee decided that the proposal for Expansion of Grain Based Distillery Plant Project of M/s Sheonarain Jaiswal Pvt. Ltd., Village : Balsiring, Tehsil : Namkum, Distt. : Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – III alongwith the following specific conditions :

- I. In compliance of S.O. No. 2339(E), dated 16.06.2021 issued by MoEF&CC, Govt. of India the Ethanol produced based on this EC will completely be used only for Ethanol blending petrol.
- II. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- III. In compliance of OM File No. Q-15012/2/2022-CPW-Part(1)/e-240741, dated 14.01.2025 and File No. Q-15012/2/2022-CPW9Part-I)/e-231973, dated 08.10.2025, the PAs will mandatorily obtain the Environmental Safeguard to be implemented or Expansion CTE from Jharkhand State Pollution Control Board, if applicable.
- IV. PAs is directed to comply all the commitment made in Action Taken Report (ATR) and time bound manner and proof of the same shall be submitted with details and evidence in next Half Yearly Compliance Report of issued EC.

10. Expansion of Ingot / Billet Production from 16,800 TPA to 6,99,600 TPA (Installation of 4x35 T IF alongwith 2x30 MT EAF) and Rolling Mill capacity from 6000 TPA to 7,26,000 TPA (MS Rebars, MS Round & M.S Light Structures) with Fly Ash Brick Plant (3.30 Crore Bricks / Annum) and 350 TPD Slag Crushing Unit of M/s Sri Langta Baba Steels Pvt. Ltd., Village : Harsingraidih, Tehsil : Giridih, Distt. : Giridih, Jharkhand.

(Proposal No : SIA/JH/IND2/ 534425/2026)

This proposal is listed in agenda on 12.06.2026.

The project is deferred for consideration for want of Stage – I Clearance under Forest (Conservation) Act, 1980 for which they have submitted Forest Clearance application on 27.03.2026.

11. Kochedega Sand Deposit (River Bed of Sankh River) of M/s Saniya Enterprises (Prop. : Md. Harish), Village :Kochedega, Tehsil :Simdega, Distt. :Simdega, Jharkhand (5.92 Ha).

(Proposal no.: SIA/JH/MIN/ 580328 /2026)

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

This is an amendment project which has been taken for appraisal on 12.06.2026

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for amendment Terms of Reference (ToR).

ToR Application for: Sand Mining proposed capacity (10,656 Cum Per Annum)

Reason for Terms of Reference (Amendment):- M/s Jharkhand State Minerals Development Corporation Limited (JSMDC) was granted a Sand Mining Lease for Kochedega Sand Ghat, located in Block–Simdega, District–Simdega, State–Jharkhand, over an area of 5.92 Ha (14.63 Acres), vide Letter No. 2141/Ranchi dated 15.10.2024.

The Terms of Reference (ToR) for the project were recommended by the State Expert Appraisal Committee (SEAC), Jharkhand, during its 122nd meeting held on 24th, 25th, 26th, 27th, and 28th March 2025. Subsequently, the ToR was approved by the State Environment Impact Assessment Authority (SEIAA), Jharkhand, during its 122nd meeting held on 08th and 09th April 2025. The approved ToR was issued vide File No. EC/SEIAA/2024-25/3645/2024 dated 30.04.2025 in favour of M/s JSMDC.

Upon expiry of the lease period, the sand ghat was re-auctioned by the Government of Jharkhand in accordance with the provisions of the Jharkhand Sand Mining Policy, 2025. M/s

Saniya Enterprises, Proprietor – Md. Harish, having its address at Azad Basti, Naigam Toli, P.O., P.S. & District–Simdega, Jharkhand, emerged as the highest successful bidder.

Thereafter, the District Mining Office, Simdega, issued a Letter of Intent (LoI) vide Letter No. 361/M., Simdega dated 07.04.2026 in favour of M/s Saniya Enterprises for a lease period of five (05) years.

Accordingly, amendment of the existing Terms of Reference (ToR) is being sought to reflect the change in project proponent from M/s Jharkhand State Minerals Development Corporation Limited (JSMDC) to M/s Saniya Enterprises, while the mining lease area and project particulars remain unchanged.

PROJECT and LOCATION Details:

Sl	Parameter	Details	
1	Project Name	: Kochedega Sand Ghat (River Bed of Sankh River) of area 5.92 Ha or 14.63 Acres.	
2	Applicant:	: Saniya Enterprises Prop. - Md. Harish	
3	Lessee Address	: Ajad Basti, Naigam Toli, P.O.+P.S.+Dist.- Simdega, Jharkhand	
4	Lease Area	: 5.92HA.	Acres:14.63Acres
5	Type of Land	: Government Land (River Bed)	
6	Project Cost	: 110 Lakhs	
7	EMP Budget	: Capital: 15.35 Lakhs	Recurring: 8.4 Lakhs
8	New or Expansion	: New Project (ToR Amendment)	
9	Mineable Reserves for 1 st year & subsequent year 60% of Replenished quantity	: Cum.: 10,656 cum (dry basis)	
10	Mine Life	: Co- terminus with lease period.	
11	Man power	: 28	
12	Water Requirement	: 21.28KLD=0.28 KLD (Drinking & Domestic Uses) + 6.00 (Plantation) KLD + 15.00KLD (Dust Suppression).	
13	Water Source	: From Nearby villages by private water tankers.	
14	DG Set / power	: --	
15	Crusher	: --	
16	Nearest Water Body	: Mining lease allocated on the river bed of the Sankh River.	
17	Nearest Habitation	: Garja, approx. 0.85 Km towards ESE.	

18	Nearest Railway Station	:	Kanaroan Railway Station, approx. 45.70 Km in East direction
19	Nearest Airport	:	Birsa Munda Airport approx. 118.50 km towards NE direction.
20	Nearest Forest	:	PF, approx. 2.50 Km in SE. PF, approx. 3.00 Km in South. PF, approx. 3.50 Km in East.
21	Road & Highways	:	NH-143, Approx. 7.30 Km in East direction from mining lease.
22	Nearest Approach Road	:	Kurdeg Road, approx. 1.50 km in SW direction from mining lease.
23	Baseline Monitoring	:	25 th March 2026 to 15 th June 2026

CO-ORDINATES

SL NO.	LATITUDE	LONGITUDE
1	22°37'52.33" N	84°26'07.13" E
2	22°37'53.73" N	84°26'02.99" E
3	22°37'39.65" N	84°25'55.11" E
4	22°37'38.11" N	84°25'57.87" E

LAND DETAILS

Plot no.
7464 (P)

STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Simdega vide letter no. 361/M, dated 07.04.2026.
2	CO	:	The CO, Simdega vide letter no. : 147 (ii)/Ra., dated 23.02.2023 has mentioned the plot no. of the project is not recorded as "Jungle - Jhari" in R.S. Khatiyani & Register II.
3	DMO Cluster	:	DMO, Simdega vide memo no. 510/M, dated 01.06.2026 certified that the no other Balughat exists within 500 m radius from proposed project site.
4	DFO Wild Life	:	DFO, Wildlife Division, Ranchi vide letter no. : 513, dated 26.06.2024 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.

5	DFO Territorial	:	DFO, Simdega Forest Division vide letter no. 588, dated 19.03.2025 certified that the distance of reserved / protected forest is 925 meter from proposed project site.
6	DSR	:	This project is mentioned in approved District Survey Report (DSR) of Simdega (Page no. 78).
7	Gram Sabha	:	BDO, Simdega vide letter no. 1179 (ii), dated 15.07.2024 informed that Gram Sabha conducted on 25.06.2024.
8	Mine Plan Approval	:	Approved by District Mining Officer, Simdega vide memo no. 924/Mining, dated 12.12.2024.
9	Previous Terms of Reference (ToR)	:	Previous ToR granted to M/s JSMDL Ltd. by SEIAA, Jharkhand vide letter no. EC/SEIAA/2024-25/3645/2024/66, dated 16.04.2025.
10	Baseline monitoring period	:	March, 2026 to 15 th June, 2026.
11	Qualified Person	:	Shri P.K. Sen was present in the meeting and affirmed that the mine plan has been prepared by him.
12	Replenishment Study	:	The estimated replenishment quantity of Kochedega Sand Ghat (River Bed of Sankh River) is 88,127 cubic metres (cum), as assessed through the Replenishment Study carried out by Atmos Sustainable Solution Pvt. Ltd. for the year 2025.

Working Details

1	Mining Method	:	Opencast Manual Method
2	Quarry Area	:	3.55 ha.
3	Waste Generation	:	00 cum, as it is sand mining project.
4	Stripping Ratio	:	0:0
5	Working Days	:	200
6	Benches: size & No	:	NA
7	Highest Elevation of Mine	:	323 m Amsl
8	Lowest Elevation of Mine	:	322.7m Amsl
9	Ultimate Working Depth	:	0.30 m
10	Water table	:	NA
11	Topography of Mine	:	Uneven sand bar
12	Explosive Requirement	:	NA
13	Diesel/Fuel requirement	:	NA

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PRODUCTION DETAILS

Year	Total area in (Ha)	Total area 60% in (Ha)	Thickness (m) As per Approved DSR	Production in Cum (Dry Basis)	Volume in Ton (Dry Basis)
1 st Year	5.92	3.55	0.30	10656	13320

LAND USE

GM Land	Area in Hectares
Private Land	0.00
Proposed Mining Area	3.55
No Mining Zone	2.37
Unused area	0.000
Total	5.92

ENVIRONMENT MANAGEMENT

Green Belt Development

Village	No. of plants	Area considers for plantation (Length of approach road KM)	Species of plant	Expected Survival Rate (%)
Kochedega sand ghat Total area of 5.92 ha in River-Sankh.	2000	1.5 KM Approach Road, $1500/3=500$ Plants $500 \times 4=2000$ plants (Two Row Plantation along The both side of the road)	Mango, Jackfruits, Jamun, Babul, Gulmohar, Neem, Pipal, Arjun etc.	100%

In accordance with Office Memorandum No. F.No. IA3-22/3/2024-IA.III (E-241594), dated 24.07.2024, issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), out of the total 2000 trees proposed to be planted in the designated green belt area—both within and outside the lease boundary—10% (approximately 200 saplings) shall be earmarked under the national tree plantation campaign "Ek Ped Ma Ke Naam."

- 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.

ENVIRONMENT MANAGEMENT COST

Sl. No	Description	Capital Cost (lakh)	Recurring Cost (lakh)
1	Pollution Control, Haul Road maintenance & Dust Suppression	3.75	3.00
2	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Quality iv) Noise Pollution	--	2.00
3	Plantation and salary for two gardeners (part time basis).	10.00	2.00
4	Water requirement for Plantation	-	1.20
5	Provision of 5 sets of colour coded dustbin	0.30	--
6	Mobile toilet 2 nos	1.0	0.20
7	Provision of rest shelter	0.30	-
TOTAL		15.35	8.4

Note: * 2000 plants * 500 Rs (for each plant including hedges and fences) = 10 lakhs

- * 2.5 lakh per kilometer (250000 * 1.50 km haul road) = 3.75 lakh/-
- 1 tanker @ 5 KLD @ 500 Rs * 200 days (For Water)

Environment Monitoring Cell

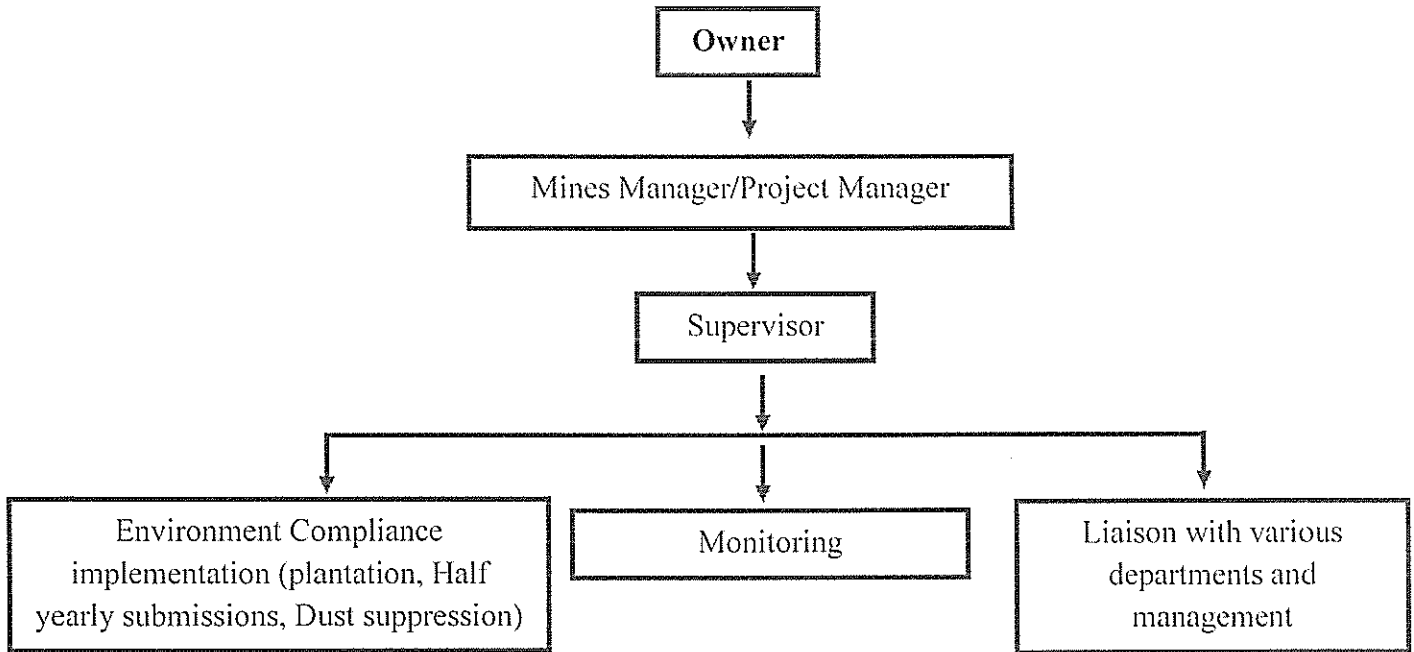


Fig: Organization Chart for Environment Management Cell

FUNCTIONS OF ENVIRONMENT MONITORING CELL

- Supervision: Managed by Mines Manager with a qualified technical team.
- Personnel: Includes skilled, semi-skilled, unskilled, and other third parties.
- Responsibilities:
 - Implement environmental control measures.
 - Oversee reclamation planning and management.
 - Manage air and water pollution control.
 - Liaise with state and central statutory agencies.
 - Develop greenbelt areas.
- Performance Review: Assess corporate environmental performance and report non-compliances.
- Remedial Actions: Suggest and implement actions for exceeding pollution limits.
- Coordination:
 - Collect health statistics for workers and local population.
 - Act as a bridge for project implementation and Project Authorities
 - Facilitate afforestation efforts.

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of	3 Stations	Six Monthly

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	the mine area. In the surrounding area covering project site only.		
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 stations	Six Monthly

Transportation

The usual method of transporting minerals from the working face is by trucks / tippers/dumpers. Large earth moving equipment's are used for loading /transporting large quantity of mineral from a mine. During transportation of minerals in the mining area, utmost care will be taken by the vehicle operator to avoid any accident with any incoming vehicle by keeping sufficient gap between the two vehicles, keep safe distance from the edge of the mine face, avoid any accident to a worker crossing the haul road and shall maintain low speed. The vehicle operator shall not try to overtake another vehicle.

- Mine road shall be made smooth regularly with a roadroller.
- Mine road will be cleaned daily to remove fallen rock/stones for smooth transportation.
- Mine road will be made sufficiently wide to keep two-waytraffic.
- Mine roads will be designed as per the specifications given under MMR1961.
- Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust.
- All transportation within the mine lease area should be carried out directly under the supervision and control of management.
- The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management.
- Navigation signs will be provided at each and every turning point up to the main road (wherever required)
- To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.
- Only trained drivers will be hired.

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	No solid waste is generated during the mining operation.

Air Quality Management	<p>Sand will be mined manually. No mining equipment would be needed. However, diesel operated tippers/tractors would be used for transportation of sand from mine to stockyard.</p> <p><u>Operation of Diesel Equipment's</u> – They generate Noxious gases. It will be ensured that all transport vehicles would be repaired & maintained regularly.</p> <p><u>Loading of Product on tippers</u> – Water will be sprinkled on blasted Sand mass before they are loaded to trucks for transport.</p> <p><u>Movement of tippers on Road</u> – Movement of tippers on road generate dust. For mitigation of this pollution following measures will be taken</p> <ul style="list-style-type: none"> • Regular water sprinkling on Haul Road by using water tankers. • Regular repair of Haul Road • All Trucks carrying Sand outside lease area will have PUC certificate. • Transport tippers/traders moving on public road will be covered with tarpaulin.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined to above Ground Water Table (GWT). No mining will be done below GWT. • Sewage from rest shelter would be treated in Septic Tank soak pit. • There is no other source for generation or discharge of trade effluent.
Noise Quality Management	<p>Source of noise pollution in the project would be movement of tippers / tractors transporting sand from mine to stock yard. In general tippers / tractors produce a noise level of 75 – 90 (A) measured at distance of 3m from the source.</p> <p>Preventive measures</p> <ul style="list-style-type: none"> • Transportation activities would be confined during day time only. • There would be a speed limit of 40 kmph for tippers. Higher is speed higher is noise. • Regular repair and maintenance of tippers/tractors. • Plantation on both sides of haulage road. • Tippers having PUC certified will be allowed to be used for sand transportation.
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Road accidents Transportation of sand along the public road may cause accident which</p>

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	<p>may cause injury.</p> <p>Preventive Measures;</p> <ul style="list-style-type: none"> • Ensure speed limit for the haulage vehicle for 40 KMPH. • Regular maintenance of haulage road • Appropriate navigational signs informing sensitive area like school and habitation • Regular maintenance of the vehicles. <p>Dust generation</p> <p>No drilling involved</p> <ul style="list-style-type: none"> • Dust mass would be supplied to workers. • Regular sprinkling of water on road
Health Hazards	<p>During digging and handling of sand i.e. loading, transportation and unloading of sand, workmen would be exposed to inhalation of fine dust particles. This poses a health hazard.</p> <p>Preventive Measures</p> <p>Following mitigation measures would be taken to minimize this impact on health</p> <ul style="list-style-type: none"> • Regular water sprinkling on haulage roads • Tree plantation on both sides of haulage road • Tippers / Tractors carrying sand would be covered • Mask would be provided to workmen employed for digging, loading, transportation and unloading activities
Accident Prevention	<ul style="list-style-type: none"> • Mine road shall be made smooth regularly with a road roller. • Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. • All transportation within the mine lease area should be carried out directly under the supervision and control of management. • The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. • Navigation signs will be provided at each and every turning point up to the main road (wherever required). • To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

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.

- 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.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 09, 10, 11, 12, 13, 14 & 15.06.2026, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF& CC O.M dated 12.12.18 for issuing of ToR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure IV alongwith following specific condition :-

- i. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>).10% of the total green belt proposed shall be allocated under this clause.

Day 5 : 13th June, 2026 [Saturday]

Consideration of proposals :

1. Amendment in configuration of Induction furnaces from 2x10T + 2x12T to 2x22T including change of layout with total production remaining same and plant area from 4.88 Acres to 5.88 Acres without change in other units as provided in EC dated 30.11.2023 by M/s Jai Prabhuji Iron & Steel Pvt. Ltd. at Village : Kanshitanr, Tehsil : Govindpur, Distt. : Dhanbad, Jharkhand.

(Proposal no.: SIA/JH/IND1/ 580873/2026)

Name of the consultant :Vardan Environet LLP.

This is an amendment proposal which has been taken for appraisal on 13.06.2026.

Project Category: 3 (a) Metallurgical Industries (Ferrous & Non ferrous), Category :B1 as per EIA Notification, 2006 and amendments thereof.

M/s Jai Prabhuji Iron & Steel Pvt. Ltd has made an application online vide proposal no. SIA/JH/IND1/580873/2026 dated 04.06.2026 along with the application in the prescribed format (form-4), copy of Pre- feasibility report and Addendum to the EIA report for the proposed Amendment in configuration of Induction Furnaces from 2x10T + 2x12T to 2x22T including change of layout with total production remaining same and plant area from 4.88 Acres to 5.88 Acres without change in other units as provided in EC dated 30.11.2023 as per the EIA Notification, 2006. The proposed project activity is listed at S. No. 3 (a) under Category "B" of the schedule of the EIA Notification, 2006 and appraised at State Level.

Land Details :

Khata No.	Plot No.
19	81P, 78P, 95P, 101P, 102
18	82, 83, 85, 98P, 99 P, 105, 106
4	84P, 79P, 420P, 107 P, 108P
23	96P, 97 P, 103P, 104P
11	100
Additional Land for greenbelt development- 0.607 Ha. at Mauza – Hirapur, Block – Govindpur, Dhanbad.	
Khata No.	Plot No.
32	150 (P),127

Proposed Changes w.r.t to the Capacity and Configuration granted in EC dated 30.11.2023:

Sl. No.	Units	Existing Units as per EC 30.11.2023		Implementation status as per Valid CTO dated 31.12.2026		Proposed Units	
		Config.	Prod. (TPA)	Config.	Prod. (TPA)	Config.	Prod. (TPA)
Steel Melting Shop							
1.	Induction Furnace	2x10T +2x12T	1,45,200 MS Billets	1x3T +2x6T (old existing)	36000	Replacement of IF (2x10T +2x12T) by 2x22T	1,45,200 MS Billets
2.	LRF	2x12T		1x12T		No change, same as EC dated 30.11.2023	
3.	CCM	1x2 strand, Rad. - 4/7		1x2 strand, Rad. - 4/7			
Reheating Furnace							
4.	Reheating Furnace	(1x30TP H)	99,000 TPA	Not Implemented		No change, same as EC dated 30.11.2023	99,000 TPA
Rolling Mill							
5.	Rolling Mill	(1x25TP H)	1,65,000 TPA	Not Implemented		No change, same as EC dated 30.11.2023	1,65,000 TPA
6.	Slag Crusher Unit	1x10 TPH	33000 TPA (Metal Recovery-3180)	Not Implemented		No change, same as EC dated 30.11.2023	33000 TPA (Metal Recovery-3180)

Environmental Site Settings:

S. No.	Particulars	Details	Remarks
1	Total land	2.38ha [Government land:2.38ha]	Land Use: Industrial
2	Land acquisition details as per MoEF&CC O.M. dated 7/10/2014	Existing Land: 1.975 Ha. (4.88 acres) Additional Land: .404 Ha. (1.0 acre) Total 2.38 Ha. (5.88 acres) has been allotted by JJADA, Bokaro Regional office (erstwhile BIADA). Entire land is under the possession of the company Land documents has been submitted	Additional land of 0.607 Ha. (1.50 acres) has been acquired for greenbelt development outside plant areavide sale deed dated12.10.2023&

S. No.	Particulars	Details			Remarks
					rectification deed dated 01.12.2023.
3	Existence of habitation & involvement of R&R, if any.	R&R is not applicable Existence of Habitation Project Site – Nil Study Area			No Habitation or any other type of settlement on additional land
		Habitation	Distance	Direction	
		Bhitia village	0.240	NE	
4	Land details	Khata No.	Plot No.		--
		19	81P, 78P, 95P, 101P, 102		
		18	82,83,85,98P,99P, 105, 106		
		4	84P, 79P, 420P, 107P, 108P		
		23	96P, 97P, 103P, 104P		
		11	100		
		Additional Land for greenbelt development-0.607 Ha. at Mauza – Hirapur, Block – Govindpur, Dhanbad.			
		32	150 (P), 127		
5	Latitude and Longitude of all corners of the project site.	Points	Latitude	Longitude	--
		A	23°50'59.21"N	86°28'41.53"E	
		B	23°50'57.78"N	86°28'44.25"E	
		C	23°50'56.36"N	86°28'46.50"E	
		D	23°50'53.94"N	86°28'45.32"E	
		E	23°50'52.69"N	86°28'44.04"E	
		F	23°50'51.48"N	86°28'42.85"E	
		G	23°50'52.01"N	86°28'42.57"E	
		H	23°50'52.46"N	86°28'41.90"E	
		I	23°50'52.67"N	86°28'41.31"E	
		J	23°50'52.82"N	86°28'41.37"E	

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S. No.	Particulars	Details			Remarks						
		K	23°50'53.01"N	86°28'40.60"E							
		L	23°50'54.57"N	86°28'40.53"E							
		M	23°50'54.59"N	86°28'40.44"E							
		N	23°50'54.33"N	86°28'40.33"E							
		O	23°50'56.87"N	86°28'40.53"E							
6	Elevation of the project site	222 m above mean sea level			--						
7	Involvement of Forest land, if any	No involvement of Forest Land			--						
8	Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area	Project Site: No water bodies within the project site. Study area <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Water Body</th> <th>Distance</th> <th>Direction</th> </tr> </thead> <tbody> <tr> <td>Khudai River</td> <td>0.90km</td> <td>NW</td> </tr> </tbody> </table>			Water Body	Distance	Direction	Khudai River	0.90km	NW	--
Water Body	Distance	Direction									
Khudai River	0.90km	NW									
9	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	None with 10km radius of the project			-However wildlife conservation plan having budget of Rs. 68.304 Lakhs is prepared for the schedule-1 species present in 10km study area						

Reason for the proposed amendment in EC

Justification of Amendment

During the detailed engineering stage for the integration of Induction Furnace output with Rolling Mill input for direct hot charging, it was found that the output from the 4 small furnaces (2x10T + 2x12 T) will not be cohesive with input requirement of rolling mill due to overlapping of furnace tap timings (simultaneously) requiring additional CCM for billets and resulting in more unrolled billets due to disturbance in direct hot charging.

Two furnaces of bigger capacity (22T each) will have cohesive timing of tapping for hot billets through single CCM and direct rolling of the same.

Also, due to technological requirement there is change in layout and spread for smooth movement of materials/process flow for optimal resource utilization and energy efficiency.

Advantages of Proposed Configuration change

The Proposed amendment of EC for replacement of 2x12 T+2x10 T Induction Furnaces with 2x22 T Induction Furnaces has following advantages

Lower Initial Capital: Purchasing, installing, and maintaining 22-ton furnace is much cheaper than buying the equipment, transformers, and electrical controls required for two separate 12 ton or 10 ton furnaces.

Energy Efficiency: Larger furnaces have a better ratio of volume to surface area, which leads to lower radiation heat loss. A single large unit also requires fewer auxiliary systems (like water cooling lines) than running two separate furnaces for same capacity.

Higher Yields: For bulk production, casting large continuous batches reduces metal loss (burning loss) and dross formation compared to melting two smaller heats.

Less Refractory Wear: Building and maintaining a single large refractory lining is more time- and cost-efficient over time than constantly relining two smaller crucibles.

Space & Footprint: A single furnace requires less floor space and a smaller foundation layout compared to a multi-furnace setup

Reconfiguration of Stacks

S. No	Location	Pollution Control Equipment	Nos.	Connected with no. of Stack	Stack Height	Stack Emissions
As per EC dated 30.11.2023						
1	Induction Fce. 2x 10 Ton	Fume Extraction System + Cyclone cum Spark Arrester with Pulse jet Bag Filter	1	1	30 m	< 50 mg/Nm ³
2	Induction Fce. 2x 12 Ton +2x12T LRF	Fume Extraction System + Cyclone cum Spark Arrester with Pulse jet Bag Filter	1	1	30 m	< 50 mg/Nm ³

S. No	Location	Pollution Control Equipment	Nos.	Connected with no. of Stack	Stack Height	Stack Emissions
3	Reheating Furnace 1x30TPH	Bag Filter	1	1	30 m	< 50 mg/Nm ³
Proposed stack details after amendment						
1	2X22T Induction Furnace	Fume Extraction System + Cyclone cum Spark Arrester with Pulse jet Bag Filter	1	1	30 m	< 50 mg/Nm ³
2	1x30T Reheating Furnace	Cyclone + Bag Filter	1	1	30 m	< 50 mg/Nm ³

AAQ Modeling changes

As per previous EIA: The predicted maximum concentration for PM10, PM2.5, Nox and SOx were found to be 0.01982µg/m³, 0.01015µg/m³, 0.01427µg/m³, and 0.01624µg/m³ at A1 Project site respectively.

Due to Proposed Amendment: The predicted maximum incremental GLC (24- hour average) values of PM10, PM2.5, Nox and SOx were found to be 0.02008µg/m³, 0.01144µg/m³, 0.01502µg/m³, and 0.01685µg/m³ at A1 Project site respectively.

Note: There is very minor change in GLC value due to proposed project. The proposed Bag filters will be sufficient enough for control of pollutants and will keep the emissions within prescribed limits.

Changes in existing and after proposed amendment

S. No.	Particulars	As per EC dated 30.11.2023	As per after proposed Amendment	Remarks
1	Land area	1.975 Ha.	2.38 Ha.	Additional 0.404 Ha. (1.0 acre) land acquired for proposed amendment.
2	Water Requirement	198.8 KLD	198.8 KLD	No Change
3	Power Requirement	25.0 MVA	25.0 MVA	No Change
4	Man Power Requirement	150 no.	150 no.	No Change
5	Project Cost	57.10 Crs	62.66 Crs	As EC not implemented yet the total project cost after proposed amendment will be 62.66 crores.

6	Greenbelt Area	0.827 Ha.	1.014 Ha.	As EC not implemented yet. The total area of the plant after proposed amendment will be 2.38 hectare (5.88 acres). Greenbelt will be developed over an total area of 1.014 hectare – i.e. 0.407 ha within the plant premises and remaining 0.607 ha. in the land area acquired outside the plant premises.
7	AQ Modelling	PM 10 – 0.01982µg/m ³ , PM 2.5 - 0.01015µg/m ³ , Nox -0.01427 µg/m ³ and SO ₂ - 0.01624 µg/m ³	PM 10 – 0.02008µg/m ³ PM 2.5 - , 0.01144µg/m ³ , Nox - 0.01502µg/m ³ and SO ₂ -0.01685 µg/m ³	No major change in GLC value. There is very minor change in GLC value due to proposed amendment at (A1 Project site). The GLC values at Location A1 are increased by 0.00026µg/m ³ for PM10, 0.0013 µg/m ³ for PM2.5,0.0008 µg/m ³ for NOx,0.0006 µg/m ³ for SO ₂
8	Stack details	One stack with Induction Furnaces 2x 10 Ton, One stack with Induction Furnaces 2x 12 Ton and One stack with Reheating Furnace	One stack with Induction Furnaces. 2x22 Ton, and One stack with Reheating Furnace	Existing two stacks - One stack with Induction Furnaces 2x10 Ton, One stack with Induction Furnaces 2x12 Ton will be replaced by One stack with Induction Furnaces. 2x 22 Ton with higher volumetric flow rate. Rest will remain same
9	Raw Material	Requirement for Steel Melting Shop -181,790 TPA, Rolling Mill - 168,300 TPA, Coal/ Furnace Oil for re-heating furnace - 11088TPA/ 3300KL	Requirement for Steel Melting Shop -181,790 TPA, Rolling Mill - 168,300 TPA, Coal/ Furnace Oil for re-heating furnace - 11088TPA/ 3300KL	No Change
10	Solid waste	Total: 39298 TPA (Comprising of Slag , Waste Lining , Scale& End Cuttings, Mill Scale & cuttings, Ash & Bag filter	Total: 39298 TPA (Comprising of Slag , Waste Lining , Scale& End Cuttings, Mill Scale & cuttings,	No Change

	Dust, Dust from process)	Ash & Bag filter Dust, Dust from process)	
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Raw Material requirement- No change

Sl. No.	Item	Total Requirement in TPA (Existing)	Source	Distance & Mode of Transport
STEEL MELTING SHOP –(MS Billets 145,200 TPA)				
1.	Sponge Iron	116,160	Local Market in Dhanbad	40 to 120 km By Road
2.	Pig Iron	43560		
3.	Scrap	21780		
4.	Ferro-alloys	290		
Total		181,790		
ROLLING MILL – (Long Rolled Product 165,000TPA)				
1.	MS Billets	145,200	Hot Billets direct charging	Conveyor
		23,100	Purchased from nearby Plants	40 km By Road
Total		168,300		
2.	Coal/ Furnace Oil for re-heating furnace	11088TPA/ 3300KL	Purchase from open market	40to120km ByRoad

Land Use breakup of the plant:

The total plant area as per EC dated 30.11.2023 was proposed as 1.975 Ha. (4.88 acres). Additional area required for proposed amendment will be 0.404 Ha. (1.0 acre). The total plant area after proposed amendment will be revised from 1.975 hectare (4.88 Acres) to 2.38 hectare (5.88 Acres). The entire land has been allotted by JIADA, Bokaro Regional office (erstwhile BIADA).

The unit has also acquired and is in possession of 0.607 ha (1.5 acres) of land outside the plant premises for plantation.

Land details of the plant as per EC and proposed amendment

S. No.	Land Use	Existing Area in Ha. as per EC dated 30.11.2023	Total area after proposed amendment in Ha.
1	Total plant area	1.975	2.38
2	Additional Land for Plantation Outside plant area		0.607

Land Use breakup of the plant after amendment

S. No.	Land Use	Area in Ha. (after amendment)	Area in Percentage
1	Plant area (processing & material handling)	1.170	49.16
2	Water complex	0.033	1.39
3	Storage yard	0.170	7.14
4	Roads	0.280	11.76
5	Greenbelt & plantation	0.407	17.10
6	Infrastructure	0.250	10.51
7	Vacant	0.070	2.94
Total Plant Area		2.380	100
Additional Plantation – outside plant premises		0.607	100

Water Requirement as per the EC of the plant- No change

S. No.	Particulars/Uses	Requirement (KLD)
1	Industrial Use	186.0
2	Domestic and other uses	12.8
	Total	198.8
<ul style="list-style-type: none"> • Reuse of treated wastewater - for plantation and dust suppression • Source- Ground water (CGWA NOC for present unit valid till 19.01.2027) 		

Solid Waste Generation & Utilization for the Plant- No change

Units	Solid Wastes	Qty. In TPA	Disposal Practice
	Slag	31944	Will be sent to metal recovery plant. After metal extraction

Induction Furnace	Waste Lining	660	(approx. 10% metal recovered) remaining crushed material will be supplied to road and building construction companies for filling.
	Scale & End cuttings	2614	Recycled in-house along with scrap in the induction furnace.
Rolling Mill	Mill Scale & cuttings	3300	
Re-heating Furnace (when coal used as fuel)	Ash & Bag filter dust	490	Supplied to fly-ash block Manufacturers
Bag Filter Dust from Induction Furnaces	Dust from process	290	Will be supplied to road and building construction companies for filling

TATUTORY CLEARANCES

1	Land docs	: Deed No. 8675 - 2.00 Acre - Dated: 10.12.2003. Deed No. 6808 - 1.38 Acre – Dated: 26.08.2004. Deed No. 1184/1108 – 1.50 Acre – Dated: 21.03.2018. Deed No. 3988/3713 - 1.00 Acre - Dated: 03.06.2025.
2	CO	: The CO, Govindpur (Dhanbad) vide letter no. 1424, dated 20.11.2021 has mentioned the plot no. of the project is not recorded as “Jungle Jhari” in R.S. Khatiyar & Register II.
3	DFO Wild Life	: DFO Wildlife, Hazaribagh vide letter no. 1347, dated 11.07.2019 certified that the proposed project site is outside Eco Sensitive Zone of Topchanchi Wildlife Sanctuary.
4	DFO Territorial	: DFO, Dhanbad vide letter no. 1678, dated 06.11.2018 certified that the distance of notified forest is 2037 meters from project site.
5	CGWA	: No Objection Certificate (NOC) for Ground Water Abstraction vide NOC no. CGWA/NOC/IND/REN/2024/9268, dated 18.03.2024 valid up to 19.01.2027.
6	Previous Environmental Clearance (EC)	: i. 1 st EC granted by MoEF&CC, Govt. of India vide F. No. J-11011/180/2010-IA.II (I), dated 13.07.2011. ii. 2 nd EC granted by SEIAA, Jharkhand vide letter no. EC/SEIAA/2022-23/2710/2023/377, dated 02.11.2023 vide EC identification No. EC23B008JH137579, dated 30.11.2023.
7	No Increase in Pollution Load	: No Increase in Pollution Load (NIPL) issued by JSPCB vide Ref. no. B-1156, dated 17.06.2022.

	(NIPL)		
8	Consent to Establish (CTE)	:	<p>CTE issued by JSPCB vide</p> <p>i. Ref. No. JSPCB/HO/RNC/CTE-1655200/2017/461, dated 07.09.2017.</p> <p>ii. Ref. No. JSPCB/HO/RNC/CTE-19594803/2024/549, dated 11.11.2024.</p>
9	No Objection Certificate (NOC) / Consent to Operate (CTO)	:	<p>i. NOC issued by JSPCB vide Ref. No. N-113, dated 19.02.2005.</p> <p>ii. NOC issued by JSPCB vide Ref. No. N-559, dated 14.12.2005</p> <p>iii. NOC issued by JSPCB vide Ref. No. PC/NOC/DHN/01/2010/B-2474, dated 12.09.2011</p> <p>iv. CTO issued by JSPCB vide Ref. No. JSPCB/HO/RNC/CTO-24503168/2026/85, dated 11.01.2026 valid up to 31.12.2026.</p>

There is no Court case/show cause/direction or violation under EIA, 2006 related to the project under consideration.

Name of the EIA consultant: M/s Vardan EnviroNet LLP [S. No. 193 in List of ACOs with the Certificate Letter no. NABET/EIA/26-29/RA 0493; Valid up to 04.05.2029].

Based on the presentation made and information provided, the Committee decided that the proposal for Amendment in configuration of Induction furnaces from 2x10T + 2x12T to 2x22T including change of layout with total production remaining same and plant area from 4.88 Acres to 5.88 Acres without change in other units as provided in EC identification No. EC23B008JH137579, dated 30.11.2023 by M/s Jai Prabhuji Iron & Steel Pvt. Ltd. at Village : Kanshitanr, Tehsil : Govindpur, Distt. : Dhanbad, Jharkhandis recommended for grant of amended EC. All other terms and conditions of the earlier EC letter no. EC/SEIAA/2022-23/2710/2023/377, dated 02.11.2023 shall remain the same along with following specific conditions :

- i. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

2. Saunda D Coal Mine (Rated and Peak capacity 6.21 MTPA) of M/s Central Coalfields Ltd. Located at South Karanpura Coalfield (Barka Sayal Area, Central Coalfields Limited), Saunda D Coal Block, Village : Saunda, Post : Patratu, Distt. : Ramgarh, Jharkhand (447.94 Ha).

(Proposal no.: SIA/JH/CMIN/ 579786/2026)

Name of the consultant: Vardan Environet LLP.

This is a new project which has been taken for appraisal on 13.06.2026.

Project Sector: 1(a) Mining of Minerals (Coal), Category: B1.

Application for Terms of Reference (ToR) for Saunda D coal mine (Opencast, Underground, Highwall mining), Capacity 6.21 MTPA within total project activity area of 447.94 Ha.

The project is for reopening of the Saunda-D Coal Mine, located in the South Karanpura Coalfield, Jharkhand of Central Coalfields Limited (CCL), a subsidiary of Coal India Limited. The mine was operational prior to nationalization and was subsequently vested with CCL under the Coal Mines (Nationalisation) Act, 1973. The Mine has also obtained Environmental Clearance from MoEFCC vide dated 23.12.1993 through both Opencast and Underground mining methods.

Mining operations were discontinued in 2017, due to techno-commercial constraints. The project is now proposed for reopening through a combination of Opencast, Underground and Highwall Mining methods for extraction of 147.96 Million Tonnes of coal over a mine life of 25 years at a rated production capacity of 6.21 MTPA.

The Total Project Activity Area is 447.94 Ha, comprising 332 Ha of mining area, 74.54 Ha of adjoining decoaled area proposed for external dumping-1 and 41.40 Ha area for external dumping-2.

The proposed mining project is an interlinked project, wherein External Dump-2 (41.40 ha) falls under Bhurkunda Coal Mine and this dump area will be utilized after exhaustion of OC Mining of Bhurkunda Coal Mines.

STATUTORY CLEARANCES

Particulars	Permission details	Remarks
EC	J-11015/17/92-IA.II(M) dated 23.12.1993	EC does not fall under EIA notification 1994 and 2006
FC stage-I	F.No.8-126/1990-FC dated 08.04.1993 for 99.69 Ha.	Valid for 10 years
FC stage-II	F.No.8-126/1990-FC dated 27.03.1997 for 99.69 Ha.	Valid for 10 years
FC stage-I renewal	F.No.8-126/1990-FC(pt) dated 08.07.2010 for 99.69 Ha.	Valid for 20 years

FC stage-II renewal	Applied for 99.69 Ha forest area.	Under process (NPV submitted)
EC Bhurkunda Colliery	F.No. 23-266/2018-IA.III (V) dated 13.07.2022	Interlinked Project
LOA	Ref No. CCL/GM(CMC)/MDO RS/Saunda-D/B-S area/NIT37/LOA /2023 dated 14.09.2023	LOA for the work of reopening, Salvaging, rehabilitation, development and operation of Saunda D coal mine issued by CCL

1	Land Docs	:	Project area acquired under CBA Act, 1957, Land Acquisition Act, 1894 and Coal Mines Nationalisation Act, 1973.
2	CO	:	The CO, Patratu (Ramgarh) vide letter no. 97, dated 02.02.2026 has mentioned the plot no. of the project is recorded as "Jungle Jhari" in R.S. Khatiyar & Register II.
3	DFO Wild Life	:	DFO Wildlife, Hazaribagh vide letter no. 305, dated 13.02.2026 & letter no. 758, dated 07.04.2026 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
4	DFO Territorial	:	DFO, Ramgarh vide letter no. 228, dated 12.02.2026 & letter no. 608, dated 08.04.2026 certified that the proposed plot is within the notified forest boundary.
5	Mine Plan Approval	:	Mine plan approved by Company Secretary, Central Coalfields Limited, Darbhanga House, Ranchi vide Ref. No. C.S./B.M./552/2025/358, dated 06.11.2025
6	Baseline study period	:	December, 2023 to February, 2024.

Land Details

S.No	Particulars	Forest Land (Ha)	Non-Forest Land (Ha)	Total Area (Ha)
1	Excavation Area, Embankment, Road diversion and Safety Zone (within lease area of Saunda D project)	203.48	128.52	332
2	External OB Dump 1 (falling within the project boundary of Central Saunda Colliery)	57.98	16.56	74.54

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3	External OB Dump 2 (falling within the project boundary of Bhurkunda Colliery)	27	14.40	41.40
Total Area in Ha		288.46	159.48	447.94

Further, the detailed status of the forest land falling within Saunda-D project area is reproduced below

S.No	Total Area of Forest Land (Ha)	Status	Undertaking
1	99.69	<ul style="list-style-type: none"> Renewal of Stage-I FC granted by MoEF& CC vide letter no. 8-126/1990-FC(Pt) Dated: 08.07.2010. Stage-II FC renewal is under process. 	Stage – I / Stage-II FC renewal of 99.69 Ha. will be submitted along with final EC application for the project.
2	161.77	<ul style="list-style-type: none"> A letter has been obtained from DFO, Ramgarh vide letter no: 38 Dated: 06.01.2026 certifying that the said Forest Land involved with in the project boundary is broken prior to 1980. 	<p>An application has been submitted to DFO, Ramgarh for permission of non-forestry use of the broken-up forest land (broken before 1980) involved within the project vide Ref. no. PO/SND-D/2024/426 dated: 18.10.2024 and is currently under process.</p> <p>Stage-I FC of forest land involved within the project that has already been broken before 1980 (if applicable) or NOC from DFO, Ramgarh confirming the non-applicability of FC Act, 1980 including any further subsequent amendments in this regard issued by MoEF&CC, shall be submitted at the time of submission of final EC application.</p>
3	27	A letter has been obtained from PCCF-cum-ED Nodal, Jharkhand vide no: 412 Dated: 18.05.2022 certifying that the entire forest land falling within the project	Stage-I FC of forest land involved within the project that has already been broken before 1980 (if applicable) or NOC from DFO, Ramgarh confirming the non-applicability of FC Act, 1980 including

		boundary of Bhurkunda Colliery is broken prior to 1980.	any further subsequent amendments in this regard issued by MoEF&CC, shall be submitted at the time of submission of final EC application.
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Plot and Khata No.

The plot and Khata number details of entire project area of 447.94 Ha. Is provided below.
Mine Area 332 Ha.

Sl. No.	Khata No.	Plot No.	Sl. No.	Khata No.	Plot No.	Sl. No.	Khata No.	Plot No.
1	139	4 P	130	72	133	259	1	262
2	83	5 P	131	83	134	260	9	263
3	138	6	132	8	135	261	126	264
			133	8	136	262	138	265
4	1	7	134	138	137	263	85	266
5	139	8	135	60	138	264	85	267
6	139	9	136	46	139	265	138	268
7	138	10	137	42	140	266	85	269
			138	46	141	267	140	270
8	138	11	139	81	142	268	51	271
			140	78	143	269	140	272
9	1	12	141	46	144	270	7	273
10	83	13	142	42	145	271	12	274
			143	42	146	272	32	275
11	113	14	144	42	147	273	32	276
12	113	15	145	42	148	274	17	277
13	109	16	146	42	149	275	17	278
14	111	17	147	42	150	276	140	279
15	105	18	148	42	151	277	1	280
16	105	19	149	42	152	278	32	281
17	140	20	150	42	153	279	32	282
18	40	21	151	42	154	280	15	283

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19	109	22	152	2	155	281	28	284
20	109	23	153	83	156	282	28	285
21	28	24	154	2	157	283	1	286
22	28	25	155	78	158	284	15	287
23	66	26	156	138	159	285	15	288
24	10	27	157	83	160	286	32	289
25	10	28	158	138	161	287	1	290
26	111	29	159	36	162	288	83	291
27	139	30	160		163	289	17	292
28	2	31	161		164	290	1	293
29	18	32	162	116	165	291	1	294
30	139	33	163	109	166	292	138	295
31	140	34	164	138	167	293	83	296
32	57	35	165	129	168	294	1	297
33	5	36	166	129	169	295	1	298
34	139	37	167		170	296	83	299
35	107	38	168		171	297	1	300
36	36	39	169	91	172	298	83	301
37	1	40	170	111	173	299	14	302
38	139	41	171	11	174	300	68	303
39	1	42	172	11	175	301	63	304
40	3	43	173	4	176	302	63	305
41	138	44	174		177	303	140	306
			175	138	178	304	139	307
42	36	45	176	91	179	305	138	308
43	36	46	177	91	180	306	116	309
44	51	47	178	91	181	307	116	310
45	51	48	179	70	182	308	94	311
46	61	49	180	1	183	309	116	312
47	61	50	181	140	184	310		313

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48	61	51	182	1	185	311	116	314
49	138	52	183	83	186	312	116	315
50	1	53	184	91	187	313	138	316 P
51	1	54	185	83	188			
52	91	55	186	2	189	314	15	317
53	91	56	187	11	190	315	42	318
54	90	57	188	95	191	316	32	319
55	90	58	189	95	192	317	83	320
56	91	59	190	95	193	318	32	321
57	1	60	191	18	194	319	15	322
58	1	61	192	95	195	320	15	323
59	1	62	193	95	196	321	83	324 P
60	11	63	194	1	197	322	32	325
61	83	64	195	90	198	323	32	326
62	138	65	196	1	199	324	14	327
			197	87	200	325	32	328
63	8	66	198	89	201	326	51	329
64	11	67	199	89	202	327	26	330
65	5	68	200	91	203	328	4	331
66	107	69	201	91	204	329	14	332
67	139	70	202	136	205	330	4	333
68	36	71	203	113	206	331	4	334
69	36	72	204	130	207	332	11	335
70	138	73	205	136	208	333	50	336
71	138	74	206	138	209	334	50	337
72	1	75	207	24	210	335	11	338
73	1	76	208	113	211	336	50	339
74	138	77	209	134	212	337	14	340
75	46	78	210	138	213	338	17	341
76	110	79	211	89	214	339	83	342

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77	83	80	212	87	215	340	139	343
78	11	81	213	87	216	341	139	344
79	11	82	214	87	217	342	6	345
80	11	83	215	89	218	343	139	346
81	2	84	216	88	219	344	139	347
82	2	85	217	85	220	345	10	348
83	138	86	218	138	221	346	16	349
84	91	87	219	138	222	347	16	350
85	140	88	220	126	223	348	6	351
86	95	89	221	85	224	349	26	352
87	93	90	222	137	225	350	42	353
88	95	91	223	79	226	351	42	354
89	83	92	224	98	227	352	42	355
90	93	93	225	115	228	353	42	356
91	11	94	226	98	229	354	42	357
92	4	95	227	138	230	355	42	358
93	83	96	228	95	231	356	42	359
94	83	97	229	95	232	357	1	360
95	83	98	230	12	233	358	1	361
96	83	99	231	12	234	359	123	362
97	1	100	232		235	360	2	363
98	1	101	233	79	236	361	2	364
99	5	102	234	83	237	362	15	365
100	118	103	235	83	238	363	61	366
101	5	104	236	138	239	364	14	367
102	91	105	237	138	240	365	32	368
103	43	106	238	139	241	366	56	369
104	126	107	239	136	242	367	61	370
105	1	108	240	1	243	368	61	371
106	72	109	241	1	244	369	140	372

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107	103	110	242	1	245	370	14	373
108	91	111	243	138	246	371	4	374
109	91	112	244	53	247	372	20	375
110	11	113	245	61	248	373	18	376
111	4	114	246	28	249	374	15	377
112	138	115	247	83	250	375	20	378
113	43	116	248	83	251	376	83	379
114	96	117	249	56	252	377	11	380
115	99	118	250	42	253	378	32	381
116	138	119	251	42	254	379	31	382
117	99	120	252	42	255	380	64	383
118	99	121	253	42	256	381	83	384
119	1	122	254	46	257	382	9	385
120	98	123	255	42	258	383	11	386
121	107	124	256	91	259	384	61	387
122	69	125	257	140	260	385	1	388P
123	1	126	258	139	261	386	9	424 P
124	99	127				387	2	427
125	138	128	-	-	-	-	-	-
126	1	129	-	-	-	-	-	-
127	1	130	-	-	-	-	-	-
128	43	131	-	-	-	-	-	-
129	43	132	-	-	-	-	-	-

Sl. No.	Khata No.	Plot No.	Sl. No.	Khata No.	Plot No.
388	83	428	517	30	557
389	14	429	518	52	558
390	14	430	519	34	559

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391	14	431	520	54	560
392	9	432 P	521	66	561
393	83	433	522	30	562
394	9	434	523	59	563
395	9	435	524	20	564
396	2	436	525	58	565
397	83	437	526	58	566
398	2	438	527	59	567
399	14	439	528	59	568
400	18	440	529	58	569
401	20	441	530	30	570
402	38	442	531	101	571
403	18	443	532	101	572
404	20	444	533	37	573
405	140	445	534	58	574
406	61	446	535	73	575
407	83	447	536	75	576
408	61	448	537	75	577
409	28	449	538	37	578
410	83	450	539	1	579
411	61	451	540	38	580
412	1	452	541	100	581
413	13	453	542	100	582
414	55	454	543	100	583
415	19	455	544	100	584
416	61	456	545	138	585
417	47	457	546		586
418	56	458	547	66	587
419	137	459	548		588
420	51	460	549	18	589

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421	123	461	550	18	590
422	91	462	551		591
423	9	463	552	18	592
424	51	464	553	140	593
425	61	465	554	106	594
426	83	466	555	59	595
427	20	467	556	58	596
428	1	468	557	48	597
429	83	469	558	100	598
430	109	470	559	33	599
431	1	471	560	66	600
432	67	472	561	38	601
433	20	473	562	102	602
434	1	474	563	56	603
435	44	475	564	6	604
436	1	476	565	101	605
437	140	477	566	12	606
438	49	478	567	62	607
439	57	479	568	109	608
440	26	480	569	65	609
441	1	481	570	20	610
442	26	482	571	39	611
443	57	483	572	24	612
444	140	484	573	10	613
445	80	485	574	33	614
446	80	486	575	79	615
447	127	487	576	33	616
448	127	488	577	50	617
449	61	489	578	39	618
450	124	490	579	39	619

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451	135	491	580	21	620
452	135	492	581	21	621
453	14	493	582	33	622
454	14	494	583	106	623
455	3	495	584	54	624
456	3	496	585	54	625
457	10	497	586	106	626
458	16	498	587	82	627
459	10	499	588	82	628
460	16	500	589	82	629
461	132	501	590	94	630
462	138	502	591	64	631
463	83	503	592	9	632
464	77	504	593	24	633
465	125	505	594	9	634
466	45	506	595	35	635
467	125	507	596	9	636
468	77	508	597	5	637
469	10	509	598	131	638
470	126	510	599	131	639
471	126	511	600	131	640
472	138	512	601	114	641
473	140	513	602	9	642
474	1	514	603	9	643
475	123	515	604	35	644
476	123	516	605	29	645
477	138	517	606	32	646
478	133	518	607	42	647
479	133	519	608	12	648
480	5	520	609	115	649

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481	10	521	610	71	650
482	133	522	611	71	651
483	123	523	612	83	652
484	100	524	613	137	653
485	5	525	614	42	654
486	74	526	615	103	655
487	74	527	616	86	656
488	23	528	617	138	657
489	76	529	618	87	658
490	76	530	619	42	659
491	140	531	620	46	660
492	57	532	621	69	661
493	14	533	622	1	662
494	41	534	623	36	663
495	1	535	624	116	664
496	5	536	625	86	665
497	14	537	626	140	666
498	25	538	627	140	667
499	10	539	628	95	668
500	41	540	629	87	669
501	75	541	630	1	670
502	127	542	631	42	671
503	127	543	632	1	672
504	122	544	633	1	673
505	27	545	634	83	674
506	122	546	635	9	675
507	122	547	636	61	676
508	73	548	637	61	677
509	22	549	638	83	678
510	140	550	639	138	679



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511	57	551	640	72	133/ 684
512	6	552	641	81	148/ 683
513	22	553	642	83	424/ 682 P
514	37	554	643	138	426/ 686 P
515	20	555	644	26	480/ 680
516	20	556	645	57	452/ 681

74.54 Ha of Area (Ext. Dump-1)

Khata No.	Plot No.	Khata No.	Plot No.
83	5	83	406
138	316	83	407
83	324	15	408
140	372	96	409
1	388	1	415
9	389	9	416
83	390	83	417
12	391	9	420
12	392	83	421
1	393	9	422
83	394	83	423
17	398	9	424
12	399	9	425
83	400	1	426
12	401	9	432
83	402	83	433
9	403	83	424/682
12	404	138	426/686
9	405		

41.40 Ha of Area (Ext Dump-2)

Sl. No.	Plot No.
1	1277(P)
2	1283(P),
3	1284(P),
4	1285(P),
5	1288,
6	1289(P),
7	1290,

8	1291
9	1292
10	1297 (P)
11	1298(P)
12	1299(P),
13	1293
14	1294
15	1295
16	1296
17	1303(P),
18	1304(P),
19	1305
20	1306
21	1307(P)
22	1308
23	1309
24	1310(P)
25	1311
26	1312
27	1313
28	1314(P)
29	1315(P)
30	1316(P)

Project and Location details

Sl. No.	Particulars	Details
1	Project Name	Saunda D Coal Mine (6.21 MTPA)
2	Project Proponent	Central Coalfields Limited (CCL)
3	Project Activity Area	447.94 Ha
4	Forest Land	288.46 Ha (Forest clearance under process for 99.69 Ha. & remaining 188.77 Ha. is broken up forest land before 1980, FC is not applicable)
5	Non-Forest Land	159.48 Ha
6	Project Cost	Rs. 834.82 Crores
7	Mine Life	25 Years
8	Extractable Coal Reserve	147.96Million Tonnes
9	Geological Reserve	294.42Million Tonnes

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10	Total Overburden	346.76 Million m ³
11	Top Soil	7.0 Million m ³
12	Average Stripping Ratio	3.37 m ³ /t
13	Employment Potential	1459 Persons
14	Water Requirement	1173 KLD
15	Water Source	Ground water through Borewell and Mine seepage
16	Power Requirement	5 MVA Emergency Purpose – 500 KVA DG set
17	Average Coal Grade	G-6

Land Use Planning

During Mining Landuse

S.No.	Name of the Area	Area (Ha.)
1	Excavation Area	302.54
2	External Dump	115.94
3	Safety Zone	14.92
4	Road	9.067
5	Embankment	5.47
Total		447.94

Post Mining Landuse

Details	Land Use (Proposed)	Land Use (end of life)	Land Use (PostClosure)						Total
			Agriculture	Plantation	Water Body	Public/ Company Use	Undisturbed	Forest Land (Returned)	
Quarry	302.54								0
Backfilled		262.59	72.77	189.82					262.59
Excavated Void		39.95			39.95				39.95
External Dump	115.94	115.94		115.94					115.94

Safety Zone	14.92	14.92					14.92		14.92
Road	9.067	9.067				9.067			9.067
Embankment	5.47	5.47		5.47					5.47
Total	447.94	447.94	72.77	311.23	39.95	9.067	14.92	288.46	447.94

Production Details

Year of Operation	Coal Production Schedule (Lte)				OB Removal (L m ³)
	OC	UG	High Wall	Total	
Y-1	17.60	-	-	17.60	96.9
Y-2	35.50	-	-	35.50	146.9
Y-3	62.00	-	-	62.00	221.0
Y-4	62.00	-	-	62.00	217.9
Y-5	62.00	-	-	62.00	221.1
Y-6	62.00	-	-	62.00	209.0
Y-7	62.00	-	-	62.00	206.8
Y-8	62.00	-	-	62.00	206.8
Y-9	62.00	-	-	62.00	206.8
Y-10	62.00	-	-	62.00	192.0
Y-11	62.00	-	-	62.00	192.0
Y-12	62.00	-	-	62.00	192.0
Y-13	62.00	-	-	62.00	198.0
Y-14	60.00	1.10	1.00	62.10	198.0
Y-15	52.10	5.00	5.00	62.10	168.6
Y-16	47.10	10.00	5.00	62.10	155.4
Y-17	32.10	25.00	5.00	62.10	105.9
Y-18	32.10	25.00	5.00	62.10	105.9
Y-19	32.00	25.00	5.00	62.00	105.6
Y-20	32.00	25.00	5.00	62.00	105.6
Y-21	20.00	25.00	17.00	62.00	60.0

Y-22	7.80	25.00	29.20	62.00	19.5
Y-23	0	30.00	32.00	62.00	-
Y-24	0	30.00	32.00	62.00	-
Y-25	0	30.00	32.00	62.00	-
Total	1050.30	256.10	173.20	1479.60	3537.6

Equipment Details

Equipment Name	Capacity	Numbers
Overburden		
Diesel Hyd Shovel	8/10 cum	6
Diesel Hyd Shovel	3.8 cum	6
Rear Dumper	35 T	50
Rear Dumper	50 T	25
Diesel RBH Drill	160 mm	16
Dozer	410 HP	16
Coal		
FE Loader	5 cum	6
Rear Dumper	35 T	31
Dozer	410 HP	6
Diesel RBH Drill	160 mm	4
Common		
Diesel Hyd Backhoe	2-3 Cum	1
Grader	250-280 HP	1
Wheel Dozer	460 HP	1
R T Crane	20 T	1
Mobile Crane	8-14 T	1
Dozer with Ripper	750-850 HP	1
Tyre Handler	35 kN	1
Reclamation		
Water Sprinkler	28 KL	1
Water Sprinkler	28 kL	2
FE Loader	5-6 cum	3
Dumper	40 T	6
Dozer	410 HP	3
Compactor	100 HP	4

Coordinates

Mine Area Lat.: 23°39'12" N to 23°40'23" N and Long.: 85°19'24" E to 85°20'54" E

Dump I: Lat. 23°39'56" N to 23°40'39" N and Long.: 85°19'58" E to 85°20'43" E

Dump II: Lat. 23°38'52" N to 23°39'14" N and Long.: 85°20'0" E to 85°20'32" E

Salient Features of Project

- Legacy coal mining project operating since pre-independence era and vested with CCL after nationalization.
- Project area acquired under CBA Act, 1957, Land Acquisition Act, 1894 and Coal Mines

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Nationalisation Act, 1973

- No fresh land acquisition involved.
- Resettlement and rehabilitation are involved in the project for which activities and study will be carried out as per existing policies of CCL and relevant govt policies.
- Road diversion & Transmission line diversion is also involved in the project for which permissions will be obtained from the concerned department.
- Due to previous mine operations the water is accumulated in the excavated pits which will be removed/utilized before start of mining.

Mining Details

Mining Method: Opencast, Underground, Highwall mining

Number of Coal seams : 22 Coal Seams

19 upper seams will be extracted through opencast mining, 3 deeper seams will be mined using underground methods and Coal trapped under quarry batters will be recovered through high-wall mining

Working Depth: Minimum - 27.15 m and Maximum - 350 m

Ground water level – Maximum GWL is 3.8 m and minimum GWL is 1.5 m. The dewatering will be taken up at the end of 1st year as the mine intersects the ground water table in the end of 1st year itself.

Coal Transportation

The mine is strategically located near key transportation infrastructure. Coal will be transported from mine to the stock yard and then to Nearest railway siding (Saunda B siding) at 0.95 km. Pay-loaders shall be used for wagon loading at the siding.

The mine area is situated approximately 1.60 Km from Patratu town and is well connected through the Bhurkunda–Patratu–Ranchi road. Patratu Railway Station is located at a distance of 1.90Km while Bhurkunda Railway Station lies at 3.36 Km.

Greenbelt

The total Safety Zone area of the mine is 14.92 ha, wherein greenbelt development is proposed at a plantation density of 2,500 saplings per hectare. Accordingly, approximately 37,300 saplings will be planted within the Safety Zone area. Further, upon completion of mining operations, the excavated pit will be backfilled in a phased manner, and plantation over the reclaimed backfilled area will be undertaken as per environmental norms

Environmental Setting

Sl. No.	Particulars	Details
1	Nearest Highway	SH-2 – 2.4 km in South Direction
2	Nearest Railway Station	Bhurkunda Railway station - 3.36 km in SE direction.



		Patratu railway station - 1.90Km in WNW direction		
3	Nearest Airport	Birsa Munda Airport, Ranchi located at approximately 36.6 km		
4	Nearest Town/City	Ramgarh		
5	Interstate Boundary	None within 10 km radius		
6	Nearest Water Body	Water-body	Distance (Km)	Direction
		Nakari Nadi	adjacent to the mine boundary	South
		Damodar river	1.41 Km	NE
7	Reserve / Protected Forests	<p>List of Protected Forest</p> <p><u>Protected Forest</u></p> <p>Few Protected Forest within the 10 km study area</p> <ul style="list-style-type: none"> • PF near Kurse, Bhurkunda is at 0.30km in SSE direction • Ghagra PF is at a distance of 2.33km in North direction • Sankul PF is at a distance of 2.36km in NW direction • Koto PF is at a distance of 6.58km in SW direction. 		

Baseline data collection period: 1st December 2023 to 28th February 2024. The summary of baseline data is provided below.

Parameters	Baseline Status	Permissible Level
Ambient Air Quality	PM10 –59.2 to 78.8µg/m ³ PM2.5 – 26.6 to 43.8µg/m ³ SO ₂ –2.5 to 17.2 µg/m ³ NO _X – 10.6 to 30.0 µg/m ³ CO – 0.42 to 0.91 mg/m ³	100 µg/ m ³ 60 µg/ m ³ 80 µg/ m ³ 80 µg/ m ³ 02 mg/m ³
Noise Level	The Leq values at this location for day and night time was observed to be 70.44 dB(A) to 47.3 dB(A) and 49.48 dB(A) to 38.71 dB(A) respectively.	75 Leq dB (A) D 70 Leq dB (A) N
Water Quality	Ground Water: All the Parameters Like pH: Min 7.56, Max 7.99, TotalHardness varies from Min 237 mg/L, Max 296 mg/L, TotalDissolvedSolids varies from Min 421 mg/L, Max 489 mg/L, Chlorides – Min 69.77 mg/L, Max 79.84 mg/L etc. are found within the permissible limits.	IS:10500:2012

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	<p>Surface Water: All the Parameters like pH varies from Min 7.21, Max 7.74, TotalHardness varies from Min 368 mg/L, Max 468 mg/L, Nitrate varies from Min 37.48 mg/L, Max 51.64 mg/L, Chloride varies from Min 93.28 mg/L, Max 126.27 mg/L, DissolvedOxygen – Min 6.0 mg/L, Max 6.5 mg/L etc. are found within the permissible limits.</p>	IS:2296 Class C Norms
Soil Quality	<p>pH: Min 7.33, Max 7.69, Conductivity: Min 0.395 mS/cm, Max 0.506 mS/cm, Sodium: Min 176.55 mg/kg, Max 189.57 mg/kg, Potassium: Min 50.24 mg/kg, Max 151.47 mg/kg, AvailableNitrogen: Min 162.41 kg/ha, Max 178.82 kg/ha</p>	--

Environmental Management and Mine Closure

- Progressive backfilling has been incorporated into the mine plan from the 5th year onwards.
- Initial overburden will be accommodated in designated external dumps and decoaled areas.
- Temporary and external dumps shall be progressively rehandled and utilized for backfilling of mined-out areas.
- The entire excavation area is proposed to be reclaimed through systematic backfilling and rehandling of overburden.
- Biological reclamation, plantation and ecological restoration have been integrated into the mine closure plan

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 09, 10, 11, 12, 13, 14 & 15.06.2026, the Committee recommends for issuing of ToR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure - V alongwith following specific condition :-

- I. PAs shall obtain Stage-I Clearance under Forest (Conservation) Act, 1980 or certificate from DFO, Ramgarh Forest Division stating that Forest (Conservation) Act, 1980 is not applicable on the forest land area within the project before submission of the application for final EC.
- II. In compliance of OM no. F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.




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3. Khas Karanpura Coal Mines (Rated 2.25 MTPA and Peak capacity 3.375 MTPA) of M/s Central Coalfields Ltd. Located at South Karanpura Coalfield, Thana :Patratu, Distt. : Ramgarh, Jharkhand (232.13 Ha).

(Proposal no.: SIA/JH/CMIN/ 581347/2026)

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

This is a new project which has been taken for appraisal on 13.06.2026.

Project Sector: 1(a) Mining of Minerals (Coal), Category: B1.

Application for Terms of Reference (ToR).

In the Form-I application it is stated that the total forest land 212.41 Ha (Notified forest 169.61 Ha and GMJJ 42.80 Ha) was broken for the mining use before the enactment of Forest (Conservation) Act, 1980. Prior to the submission of EIA / EMP report a certificate / NoC from the concerned forest division confirming that the provision of Forest (Conservation) Act, 1980 are not applicable to the forest land. If required Forest Clearance will be obtained prior to the final EIA appraisal.

The PAs have submitted a letter to DFO, Ramgarh Forest Division vide letter no. GM(BS)/SO(P&P)/2025/229, dated 12.09.2025 seeking clarification on the applicability of the Forest (Conservation) Act, 1980 as it is broken prior to 1980.

Application for: Terms of Reference (ToR) for Khas Karanpura Coal Mine (Opencast & Highwall Mining), Rated Capacity: 2.25 MTPA/Peak Capacity – 3.375 MTPA within project activity area of 232.13 Ha.

The proposal pertains to reopening of the legacy Khas Karanpura Coal Mine of Central Coalfields Limited (CCL), a subsidiary of Coal India Limited. The mine was operational prior to nationalization and was subsequently vested with CCL under the Coal Mines (Nationalisation) Act, 1973. The project comprises the abandoned workings of Khas Karanpura UG Mine, AK Colliery and Sayal-A Colliery.

Mining operations were discontinued during 1999-2000 due to techno-commercial constraints. The project is now proposed for reopening through a combination of Opencast and Highwall Mining methods for extraction of 30.00 Million Tonnes of coal over a mine life of 15 years at a rated production capacity of 2.25 MTPA.

The total project area is 232.13 Ha, comprising 175.43 Ha of mining area, 48.21 Ha of adjoining Sayal-A decoaled area proposed for external dumping and 8.49 Ha of adjoining AK Colliery area proposed for infrastructure development.

Land Details

Category	Area (Ha)
Notified Forest Land	169.61

GM Jungle Jhari (GMJJ)	42.80
Government Land	6.08
Tenancy Land	13.64
Total	232.13

Plot and Khata No.

KHATA NO.	PLOT NO.
1	153
45	154
67	84,88,89,98,117,120,123,127,10,11,144,145
68	92,93,96,122,132,133,135,139,147
69	83,86,95,124,125,126,134,136,13,109,110,148
70	78,94,8,103,104,105
80	80,90,91,97
81	119
82	156
86	4,5,12,81,82,87,99,100,101,149,150,151,152,155,160,261,6,7,85,108,14
	6
87	121
	128,129

Project and Location Details

Sl. No.	Particulars	Details
1	Project Name	Khas Karanpura Coal Mine (2.25 MTPA)
2	Project Proponent	Central Coalfields Limited (CCL)
3	Project Area	232.13 Ha
4	Forest Land	212.41 Ha
5	Non-Forest Land	19.72 Ha
6	Project Cost	Rs.597.81 Crore
7	Mine Life	15 Years
8	Extractable Coal Reserve	30.00 Million Tonnes
9	Geological Reserve	76.66 Million Tonnes
10	Total Overburden	94.11 Million m ³
11	Average Stripping Ratio	3.14 m ³ /t
12	Employment Potential	588 Persons
13	Water Requirement	255 KLD
14	Water Source	Mine Seepage Water

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15	Power Requirement	2 MW through proposed 11 kV line from Urimari Area
16	Average Coal Grade	G-7

Land Use Planning and Conceptual Plan

Type	Land use (Proposed)	Land Use (End of Life)	Land Use (Post Closure)						Total
			Agricultural land	Plantation	Water Body	Public/ Company Use	Forest Land (Returned after plantation)	Undisturbed	
Excavation Area	140.00								
Backfilled Area		140.00		2.86			137.14		140.00
Excavated Void									0.00
Without Plantation									0.00
Top Soil Dump									0.00
External Dump	62.63	62.63*		5.76*			56.87*		62.63
Safety Zone	2.00	2.00		0.50			1.50		2.00
Haul Road between quarries									0.00
Road diversion									0.00
Diversion/ Below River / Nala / Canal									0.00
Settling Pond	0.08	0.08					0.08		0.08
Road And Infrastructure Area	7.07	7.07		1.97			5.10		7.07
Fly ash dumping, if any									0.00
Rationalization Area									0.00
Garland	0.73	0.73					0.73		0.73

Drains										
Embankment	10.07	10.07				5.03	5.04			10.07
Green Belt	1.00	1.00		0.73			0.27			1.00
Water Reservoir Near Pit										0.00
UG Entry										0.00
Undisturbed / Mining Right for UG	8.55	8.55					5.68	2.87		8.55
Resettlement										
Pit Head Power Plant										
Water Harvesting										
Agricultural Land										
Total	232.130	232.130		11.820	0.000	5.030	212.41	2.87		232.130

Therefore total plantation for Khas Karampura Coal Mines is =212.41 ha+ 11.820 Ha=224.23 Ha, The balance 5.030 Ha Embankment and 2.87 Ha is undisturbed land

Production Details

Year	Coal by OC Method (Mte)	Coal by Highwall Method Q1 (Mte)	Coal by Highwall Method Q2 (Mte)	Total Coal (Mte)	Cumulative Coal (Mte)	OB Q1 (MCum)	OB Q2 (MCum)	Total OB (MCum)	Cumulative OB (MCum)	ROM SR (Cum/t)	Cumulative SR (Cum/t)
2025-26	0.00	0.00	0.00	0.00	0.00	1.10	0.00	1.10	1.10	-	-
2026-27	0.75	0.00	0.00	0.75	0.75	2.06	0.00	2.06	3.16	2.75	4.21
2027-28	2.25	0.00	0.00	2.25	3.00	7.00	0.00	7.00	10.16	3.11	3.39
2028-29	2.25	0.00	0.00	2.25	5.25	7.50	0.00	7.50	17.66	3.33	3.36
2029	2.25	0.00	0.00	2.25	7.50	7.50	0.50	8.00	25.16	3.33	3.35

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2030 -31	2.00	0.25	0.00	2.25	9.75	3.00	5.00	8.00	33.16	3.56	3.40
2031 -32	1.80	0.45	0.00	2.25	12.00	3.00	5.00	8.00	41.16	3.56	3.43
2032 -33	1.00	0.85	0.40	2.25	14.25	2.75	5.25	8.00	49.16	3.56	3.45
2033 -34	0.00	2.05	0.20	2.25	16.50	0.00	8.00	8.00	57.16	3.56	3.46
2034 -35	0.00	1.65	0.60	2.25	18.75	0.00	8.00	8.00	65.16	3.56	3.48
2035 -36	0.00	1.65	0.60	2.25	21.00	0.00	8.00	8.00	73.16	3.56	3.48
2036 -37	0.00	1.65	0.60	2.25	23.25	0.00	8.00	8.00	81.16	3.56	3.49
2037 -38	0.00	1.05	1.20	2.25	25.50	0.00	7.00	7.00	88.16	3.11	3.46
2038 -39	0.00	1.05	1.20	2.25	27.75	0.00	3.00	3.00	91.16	1.33	3.29
2039 -40	0.00	1.05	1.20	2.25	30.00	0.00	2.95	2.95	94.11	1.31	3.14
Total	12.30	11.70	0.40	24.40	30.00	33.91	60.20	94.11	94.11	3.14	3.14

OB Details

Year / Stage	Total OB	Dump A	Dump B	Dump C	Dump D	Dump E	Dump F	Rehandled OB (Dump E → Dump C)	Rehandled OB (Dump A → Dump D)
1	1.10	1.10	-	-	-	-	-	-	-
2	2.06	2.06	-	-	-	-	-	-	-
3	7.00	7.00	-	-	-	-	-	-	-
4	7.50	6.50	1.00	-	-	-	-	-	-
5	7.50	2.50	1.00	4.00	-	-	-	-	-
6	8.00	-	-	3.00	-	5.00	-	-	-
7	8.00	-	-	3.00	-	5.00	-	-	-



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8	8.00	-	-	8.00	-	-	5.00	-	-
9	8.00	-	-	8.00	-	-	5.00	-	-
10	8.00	-	-	8.00	-	-	-	-	-
11	8.00	-	-	2.25	5.75	-	-	-	-
12	8.00	-	-	-	8.00	-	-	-	-
13	7.00	-	-	-	7.00	-	-	-	-
14	3.00	-	-	-	3.00	-	-	-	-
15	2.95	-	-	1.09	-	1.86	-	-	-
Post Closure – Year 1	0.00	-	-	-	-	-	-	6.50	-
Post Closure – Year 2	0.00	-	-	-	-	-	-	6.50	-
Post Closure – Year 3	0.00	-	-	-	-	-	-	6.16	-
Total Generated / Rehandled	94.11	19.16	2.00	36.25	24.84	10.00	1.86	19.16	10.00
End of Closure Position	94.11	0.00	2.00	46.25	44.00	0.00	1.86	-	-

Proposed Equipment Details

Sl. No.	Equipment	Capacity	Maximum Population	Application
1	Diesel Hydraulic Shovel (Backhoe)	3.2 Cum	14	Overburden Removal
2	Rear Dumper	35 T	88	Overburden Removal
3	Diesel Drill	160 mm	2	Overburden Removal
4	Dozer	200 HP &	4	Overburden Removal

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		354 HP		
5	Diesel Hydraulic Shovel (Backhoe)	4.2–4.5 Cum	3	Coal Extraction
6	Front End Loader	5 Cum	3	Coal Extraction
7	Rear Dumper / Trucks	35 T	20	Coal Transportation
8	Drill	160 mm	1	Coal Extraction
9	Dozer	200 HP & 354 HP	2	Coal Extraction
10	Mobile Crusher	300 TPH	2	Coal Crushing
11	Surface Miner	450 TPH	1	Coal Winning
12	Highwall Miner (HW-300)	300 m Reach	2	Highwall Mining
13	Grader	120–150 HP	1	Road Maintenance
14	Crane	20–40 T	2	Material Handling
15	Diesel Hydraulic Shovel (Backhoe)	2.7 Cum	1	General Utility
16	Front End Loader	5 Cum	1	General Utility
17	Dozer	200 HP	1	General Utility
18	JCB	-	1	Miscellaneous Works
19	Diesel Bowser	-	2	Fuel Supply
20	Fire Tender	-	1	Fire Protection
21	Boom Truck	-	2	Lifting & Maintenance
22	Heavy Duty Tow Truck	-	1	Equipment Recovery

23	Forklift Truck	5 T	1	Material Handling
24	Vibratory Compactor	-	1	Road & Ground Compaction
25	Tyre Handler	-	2	Tyre Maintenance
26	Water Sprinkler	12 KL	4	Dust Suppression
27	Fog Cannon	-	4	Dust Suppression
28	Maintenance Van	-	2	Maintenance Support
29	Farm Tractor	-	2	Miscellaneous Utility
30	Dewatering Pump	4000 GPM	2	Mine Dewatering
31	Dewatering Pump	2000 GPM	13	Mine Dewatering

COORDINATES

Latitude: 23°41' N to 23°42' N and Longitude: 85°20' E to 85°21' E

SALIENT FEATURES OF THE PROJECT

- Legacy coal mining project operating since pre-independence era and vested with CCL after nationalization.
- Brownfield reopening of an abandoned mine utilizing existing mining infrastructure and previously disturbed mining land.
- No fresh land acquisition involved.
- No displacement of habitation and no Rehabilitation & Resettlement (R&R) issues.
- Project area acquired under CBA Act, 1957, Land Acquisition Act, 1894 and Coal Mines Nationalisation Act, 1973.
- Mine Plan and Mine Closure Plan approved by CCL Board vide Letter No. CS/BM/542/2024/304 dated 05.10.2024.

MINING DETAILS

- Mining Method: Opencast and Highwall Mining.
- Number of Coal Seams Considered: 14.
- Maximum Working Depth: 170 m.
- Opencast mining will be undertaken through shovel-dumper combination using drilling & blasting and surface miner technology depending upon geological conditions.
- Highwall Mining has been proposed for extraction of locked coal reserves and maximization of resource recovery.
- Total Coal Production during Mine Life: 30.00 Million Tonnes.

- Total Overburden Generation: 94.11 Million m³.

INFRASTRUCTURE AND UTILITIES

- Existing mine infrastructure, roads, workshops and residential facilities available.
- Approximately 314 existing CCL quarters are available within the project area.
- Proposed 2.5 MVA substation within the project area.
- Water requirement shall be met from mine seepage and recycled mine water.

COAL TRANSPORTATION

Coal will be transported by covered trucks to Saunda-B Railway Siding and thereafter by rail. Depending upon market demand and consumer requirements, direct transportation from pithead by road may also be undertaken.

ENVIRONMENTAL SETTING

Sl. No.	Particulars	Details
1	Nearest Highway	NH-20 at 17 km in the East direction; SH-2 at 4.20 km in the South direction
2	Nearest Railway Station	Patratu Railway Station located at approximately 2.90 km
3	Nearest Airport	Birsa Munda Airport located at approximately 52 km
4	Nearest Town/City	Ramgarh
5	Interstate Boundary	None within 10 km radius
6	Nearest Water Body	Damodar River flows along the northern boundary of the block from west to east direction
7	Reserve / Protected Forests	1. Maramgarha Protected Forest – 6.7 km (NE) 2. Ghaghra Protected Forest – 8.0 km (SE) 3. Hariharpur Protected Forest – 9.6 km (SE) 4. Sankul Protected Forest – 2.9 km (W) 5. Tokisud Protected Forest – 5.0 km (W) 6. Koto Protected Forest – 8.0 km (SW) 7. Jarad Protected Forest – 9.2 km (S) 8. Lem Protected Forest – 10.1 km (S) 9. Aswa Protected Forest – 3.9 km (NNW)

ENVIRONMENTAL MANAGEMENT AND MINE CLOSURE

- Progressive backfilling has been incorporated into the mine plan from the 5th year onwards.
- Initial overburden will be accommodated in designated external dumps and decoaled areas.

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- Temporary and external dumps shall be progressively rehandled and utilized for backfilling of mined-out areas.
- The entire excavation area is proposed to be reclaimed through systematic backfilling and rehandling of overburden.
- No final quarry void is envisaged at the conceptual stage.
- Biological reclamation, plantation and ecological restoration have been integrated into the mine closure plan.

SOCIO-ECONOMIC BENEFITS

- Direct employment to 588 persons.
- Significant indirect employment through transportation, maintenance and allied activities.
- Revitalization of economic activity in the Patratu-Sayal region.
- Contribution towards domestic coal production, regional development and national energy security.

Baseline Monitoring:

- Baseline environmental monitoring was conducted during the pre-monsoon season from March 2026 to May 2026 to establish the existing environmental status of the study area surrounding the project.
- The monitoring and analysis work was carried out by ECO Care Laboratory, Asansol, a recognized environmental laboratory equipped with the necessary facilities and expertise for environmental quality assessment.
- The study area covered the core zone (project site) and the surrounding buffer zones up to 10 km radius from the project boundary.
- Monitoring locations were selected to represent environmental conditions within the project site, 500 m buffer zone, 5 km buffer zone, and 10 km buffer zone, considering factors such as habitation, sensitive receptors, drainage pattern, land use, and prevailing wind direction.
- Ambient Air Quality Monitoring was carried out at 8 locations distributed across the core and buffer zones to assess the existing concentration levels of PM₁₀, PM_{2.5}, SO₂, NO_x, and other relevant parameters.
- Ambient Noise Level Monitoring was conducted at 8 locations covering residential, commercial, rural, and project-influenced areas to determine the prevailing day-time and night-time noise levels.
- Ground Water Quality Monitoring was undertaken at 8 locations comprising wells, hand pumps, and bore wells within the study area to evaluate the existing groundwater quality status.
- Surface Water Quality Monitoring was carried out at 3 locations representing major water bodies and drainage channels within the study area to assess the physico-chemical and biological characteristics of surface water.
- Soil Quality Monitoring was conducted at 8 locations covering agricultural land and other representative land-use areas to determine the physical and chemical characteristics of soil.

- The monitoring was carried out in accordance with the guidelines prescribed by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Central Pollution Control Board (CPCB), and relevant Bureau of Indian Standards (BIS) methods.
- The collected environmental data forms the basis for assessing the likely impacts of the proposed project and for developing suitable environmental management and mitigation measures.

Ambient Air Quality Monitoring locations

Sl. No.	Monitoring Location	Direction	Distance	Latitude	Longitude
AAQ1	Project Site	-	-	23°41'24.25"N	85°20'6.58"E
AAQ2	Tipla	South	300 m	23°40'36.46"N	85°20'9.44"E
AAQ3	Giddi Basti	East	3.29 km	23°40'52.43"N	85°22'21.31"E
AAQ4	Urimari Officer Colony	North-West	2.27 km	23°41'18.77"N	85°18'14.58"E
AAQ5	Kinni	South	7.31 km	23°36'50.49"N	85°19'33.22"E
AAQ6	Chikor	South-East	7.37 km	23°37'21.71"N	85°22'30.02"E
AAQ7	Terpa	West	7.03 km	23°40'31.50"N	85°15'29.41"E
AAQ8	Chano	North	6.17 km	23°44'57.80"N	85°20'26.12"E

Ambient Noise Monitoring Locations

Sl. No.	Monitoring Location	Direction	Distance	Latitude	Longitude
AN1	Project Site	-	-	23°41'24.25"N	85°20'6.58"E
AN2	Tipla	South	300 m	23°40'36.46"N	85°20'9.44"E
AN3	Giddi Basti	East	3.29 km	23°40'52.43"N	85°22'21.31"E
AN4	Urimari Officer Colony	North-West	2.27 km	23°41'18.77"N	85°18'14.58"E
AN5	Kinni	South	7.31 km	23°36'50.49"N	85°19'33.22"E
AN6	Chikor	South-East	7.37 km	23°37'21.71"N	85°22'30.02"E
AN7	Terpa	West	7.03 km	23°40'31.50"N	85°15'29.41"E
AN8	Chano	North	6.17 km	23°44'57.80"N	85°20'26.12"E

Ground Water Monitoring Locations

Sl. No.	Monitoring Location	Direction	Distance	Latitude	Longitude
GW1	Project Site	-	-	23°41'24.25"N	85°20'6.58"E
GW2	Tipla	South	300 m	23°40'36.46"N	85°20'9.44"E
GW3	Giddi Basti	East	3.29 km	23°40'52.43"N	85°22'21.31"E
GW4	Urimari Officer Colony	North-West	2.27 km	23°41'18.77"N	85°18'14.58"E
GW5	Kinni	South	7.31 km	23°36'50.49"N	85°19'33.22"E
GW6	Chikor	South-East	7.37 km	23°37'21.71"N	85°22'30.02"E
GW7	Terpa	West	7.03 km	23°40'31.50"N	85°15'29.41"E
GW8	Chano	North	6.17 km	23°44'57.80"N	85°20'26.12"E

Surface Water Monitoring Locations

Sl. No.	Monitoring Location	Direction	Distance	Latitude	Longitude
SW1	Damodar River (Upstream Side)	West	1.38 km	23°41'16.11"N	85°18'44.06"E
SW2	Damodar River (Downstream Side)	South-East	2.12 km	23°40'28.46"N	85°21'28.85"E
SW3	Patratu Lake	South	8.91 km	23°36'46.20"N	85°17'11.85"E

Soil Quality Monitoring Locations

Sl. No.	Monitoring Location	Direction	Distance	Latitude	Longitude
SQ1	Project Site	-	-	23°41'24.25"N	85°20'6.58"E
SQ2	Tipla	South	300 m	23°40'36.46"N	85°20'9.44"E
SQ3	Giddi Basti	East	3.29 km	23°40'52.43"N	85°22'21.31"E
SQ4	Urimari Officer Colony	North-West	2.27 km	23°41'18.77"N	85°18'14.58"E

SQ5	Kinni	South	7.31 km	23°36'50.49"N	85°19'33.22"E
SQ6	Chikor	South-East	7.37 km	23°37'21.71"N	85°22'30.02"E
SQ7	Terpa	West	7.03 km	23°40'31.50"N	85°15'29.41"E
SQ8	Chano	North	6.17 km	23°44'57.80"N	85°20'26.12"E

Khas Karanpura Coal Mine is a strategically important brownfield coal mining project involving reopening of a legacy nationalized mine. The project will facilitate extraction of 30.00 Million Tonnes of coal through environmentally sustainable Opencast and Highwall Mining methods while ensuring complete reclamation of mined-out areas, restorat of forest land, generation of employment and contribution towards the energy security objectives of the country.

STATUTORY CLEARANCES

1	Land Docs	:	Project area acquired under CBA Act, 1957, Land Acquisition Act, 1894 and Coal Mines Nationalisation Act, 1973.
2	CO	:	The CO, Patratu (Ramgarh) vide letter no. 68, dated 18.01.2025 has mentioned that total proposed land is 212.41 Ha out of which 42.80 Ha is recorded as "Jungle Jhari" in R.S. Khatiyani & Register II.
3	DFO Wild Life	:	DFO Wildlife, Hazaribagh vide letter no. 106, dated 15.01.2025 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
4	DFO Territorial	:	DFO, Ramgarh vide letter no. 2290, dated 06.12.2024 certified that the total proposed land is 212.41 Ha out of which Notified forest is 169.61 Ha.
5	Mine Plan Approval	:	Mine plan approved by Staff Officer (P & P) (BS), Barka-Sayal Area, Central Coalfields Limited vide Ref. No. GM(BS)/P&P/KK/MDO RS / Mining Plan /24-25/396, dated 24.10.2024.
6	LOA	:	LOA for the work of reopening, Salvaging, rehabilitation, development and operation of Khas Karanpura Mines issued by CCL vide Ref No. – CCL/GM(CMC)/MDO RS/ Khas Karanpura/B-S Area/NIT47/LOA/2023/439 dated 21/07/2023.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 09, 10, 11, 12, 13, 14 & 15.06.2026, the Committee recommends for issuing of ToR to

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SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure - V alongwith following specific condition :-

- I. PAs shall obtain Stage-I Clearance under Forest (Conservation) Act, 1980 or certificate from DFO, Ramgarh Forest Division stating that Forest (Conservation) Act, 1980 is not applicable on the forest land area within the project before submission of the application for final EC.
- II. In compliance of OM no. F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

4. Expansion for Commercial cum Residential Building Project "Essence Mall" (Previously Eminence Mall) of M/s Morias Infrastructure Private Limited, Village : Chadri, Tehsil : Ranchi, Distt.: Ranchi, Jharkhand.

(Proposal no.: SIA/JH/INFRA2/576415 /2026)

Name of the consultant: Paramarsh Servicing Environment And Development, Lucknow, U.P

This is an expansion project which has been taken for appraisal on 13.06.2026.

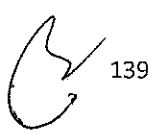
Project Sector: 8(a) Building and Construction Projects , Category: B2.

Application for Environment Clearance (EC) as per EIA notification, 2006.

Earlier the project involves the construction of Proposed Commercial Cum Residential "Eminence Mall" & Hospital Project with 82 dwelling units, Hospital and other facilities: Shops, Retail Shops, Assembly Community Hall and Health Club etc.

For the above project EC has been obtained from SEIAA Jharkhand vide File No. EC/SEIAA/2023-24/2873/2023 Dt: 21.08.2023 which proposed for 2 Building Blocks, Block A for Comm. Cum Residential Building project and Block B for Hospital Project.

Later on, PP decided to proceed further with one building block only for Comm. Cum Residential Building project in the name of "Essence Mall". Due to change in engineering design of project total built-up area has been increased in comparison



to previous project. Thus, application for EC of expansion proposal is being submitted herewith.

The Project built up area is greater than 20,000 Sqm. and less than 1,50,000 Sqm. therefore, designated under Category "B" and falls under Item 8(a) (Building & Construction Project) of the Environmental Impact Assessment (EIA) Notification of September 14, 2006 and its subsequent amendments.

M/s Morias Infrastructures Private Limited has Proposed development of Commercial cum Residential building "Essence Mall" at Mouza Chadri, Plot No.1824, Khata No.57, Thana-Lower Bazar, Thana No.199, Old Ward No.-20, New Ward No.-18, Dist. Ranchi, State Jharkhand on the total land area measuring 6610.03Sqm. The proposed total built up area is 23263.48Sqm.

Salient Features of the Project

Components	Existing Details as per EC vide Letter No. EC/SEIAA/2023-24/2873/2023	Proposed Details
1. Project Address	Mouza Chadri, Plot No.1824, Khata No.57, Thana-Lower Bazar, Thana No.199, Old Ward No.-20, New Ward No.-18, Dist. Ranchi, State Jharkhand	
2. Type of Project	Commercial cum Residential Building Project	
3. Screening Category	Cat. B2, Item 8(a), Building and Construction	
4. Total Plot Area	6611.49 Sqm.	6610.03 sqm
5. Surrender Area	196.54 Sqm.	196.54 sqm
6. Net Plot Area	6414.94 Sqm.	6413.49 sqm
7. Total Built-up Area	28467.87 Sqm.	40477.36 sqm (Existing 10715.34 sqm + Proposed 29762.02)
8. Green Area	700.24 (10.91%)	699.71 sqm (10.91%)
9. Ground Coverage Permissible	35 % (2245.23 Sqm.)	2244.72 sqm (35%)
10. Ground Coverage Achieved	32.73 % (2099.60 Sqm.)	1877.49 sqm (29.27%)
11. F.A.R. Permissible	3.30 % (21817.91 Sqm.)	22804.60 sqm (3.45)
12. F.A.R. Proposed	3.29 % (21763.78 Sqm.)	21655.58 sqm (3.28)
13. Block A	B+G+11 (Comm. Cum Residential)	LB+UB+G+16 (Comm. Cum Residential)
14. Block A Built-up Area	18145.26 Sqm.	N/A
15. Block B	LB+UB+G+7 (Hospital) @ 200 beds & 20 KL Oxygen Plant)	N/A

Components	Existing Details as per EC vide Letter No. EC/SEIAA/2023-24/2873/2023	Proposed Details
16. Block B Built-up Area	10322.60 Sqm.	N/A
17. Parking Area	7085.11 Sqm. (24.9%)	11043.77 (27.28%)
18. Parking Facility	184 ECU & 430 2 Wheelers	252 ECU & 388 2-wheeler
19. Landscape Area	15 % (962.24 Sqm.)	962.02 Sqm. (15 %)
20. Paved area including Parking	52.27% (3353.10 Sqm.)	52.27% (3352.33 Sqm.)
21. No. of Dwelling Units		
a. 5 BHK	0	2 Nos.
b. 4 BHK	0	74 Nos.
c. 3 BHK	40 Nos.	0
d. 1 BHK	19 Nos.	48 Nos.
e. LIG	21 Nos.	0
f. CFSI 1293	02 Nos.	0
TOTAL	82 Nos.	124 Nos.
22. Commercial facilities		
a) Shops	0	56
b) Restaurants	0	2
c) Food Court	0	1
d) Community Hall	0	1 (Occupancy 250 nos.)
23. Power Requirement	1060 KW	1800 KW
24. Power Backup	1 No. 400 KVA & 1 No. 300 KVA	2 Nos. 500 KVA
25. Solar Power	60 kW	35 kW (2.5%)
26. Maxm. Height of Building	Block 'A' 46.95 m. Block 'B' 33.85 m.	69.52 m., permission (70 m)
27. Water Requirement and Source	545 KLD	182 KLD 79 KLD Fresh Water + 103 KLD Treated Water Recycling
	Proposed Borewells	Proposed Borewells
28. Waste Water generation	540 KLD	120 KLD
29. Waste Water Treatment	STP : 567 KLD ETP: 10 KLD (for hospital only) MBBR Technology	STP : 125 KLD MBBR Technology

Components	Existing Details as per EC vide Letter No. EC/SEIAA/2023-24/2873/2023	Proposed Details
30. Solid Waste Generation	772 KG / Day (MSW 697 Kg/Day & BMW 75 Kg/Day)	1000 Kg/Day Biodegradable Waste 729 Kg/Day & 270 Kg/Day Non Biodegradable Waste
31. Solid Waste Management	Organic Waste Converter and Municipal Waste Collection System	Organic Waste Converter and Municipal Waste Collection System
32. Project Cost	Rs. 45.82 Crores	Rs. 60 Crores
33. EMP Budget	Rs. 426 Lakhs (399+27)	Rs. 104 Lakhs (77+27)

LAND DETAILS :

Khata No.	57
Plot No.	1824

Geo Coordinates of Project Area

Corners	Latitude	Longitude
1	23°22'19.10"N	85°19'39.21"E
2	23°22'19.51"N	85°19'37.94"E
3	23°22'18.94"N	85°19'36.39"E
4	23°22'19.17"N	85°19'35.86"E
5	23°22'19.25"N	85°19'35.20"E
6	23°22'17.92"N	85°19'34.62"E
7	23°22'17.05"N	85°19'37.71"E
8	23°22'17.12"N	85°19'37.73"E
9	23°22'16.95"N	85°19'38.17"E
10	23°22'17.00"N	85°19'38.53"E

Floor wise Built-up Area

Floor	Built-up Area in Sqm.
Lower Basement	5357.67
Upper Basement	5357.67
Ground Floor	2477.48
1 st Floor	2406.35
2 nd Floor	2406.28
3rd. Floor	1893.79
4th Floor	1594.51
5th Floor	1594.88
6 th Floor	1594.51
7 th Floor	1594.88
8 th Floor	1594.51
9 th Floor	1594.88
10 th Floor	1594.51
11 th Floor	1594.88
12 th Floor	1594.51
13 th Floor	1594.88
14 th Floor	1594.51
15 th Floor	1583.30
16 th Floor	1453.36
Total	40477.36

Parking Details

Requirement	Car		Visitors Cars		2 Wheelers	
	Required	Proposed	Required	Proposed	Required	Proposed
No. of Parking	198	252	6	7	353	388
Parking Area (Sqm.)	2475	3150	75	87.50	706	776

Water Requirement ;

Total Water Requirement ; 182 KLD

Fresh Water Requirement ; 79 KLD

Treated Water Utilization ; 103 KLD

The total fresh water requirement during 01st run for the proposed Residential & Commercial Building Project will be 182 KLD. Thereafter 79 KLD fresh water

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requirement and 103 KLD STP Treated Water. Toilet flushing, Car/Street Washing, Green belt & landscape irrigation and Fire fighting water requirement will be met by Treated Water from STP. The fresh water will be sourced through Borewells. Water Budget & Water Balance for the Building Project are shown here as under;

Components	Occupancy / Area	Requirements as per MoEF / NBC Guidelines			Actual Requirement in KLD
		Domestic (Fresh Water) Requirement	Flushing (Treated Water) Requirement	Total Requirement	
Residential Flats	724 Nos.	90 Ltr./day/head	45 Ltr./day/head	135 Ltr./day/head	97 (Domestic 65 & Flushing 32)
Comm. Area	1870 Nos.	5 Ltr./day/head	10 Ltr./day/head	15 Ltr./day/head	28 (Domestic 9 & Flushing 19)
Visitors	386 Nos.	10 Ltr./day/head	5 Ltr./day/head	15 Ltr./day/head	6 (Domestic 4 & Flushing 2)
Security & Maintenance Staff	25 Nos.	45 Ltr./day/head	30 Ltr./day/head	15 Ltr./day/head	1 (Domestic 0.6 & Flushing 0.4)
Total				132 KLD	
a. Total Water Requirement for Drinking and Domestic Use (Fresh Water)				78.6 ~ 79KLD	
b. Toilet Flushing Water Requirement (STP Treated Water)				53KLD	
c. Horticulture, Landscaping & Miscellaneous (STP Treated Water)				10KLD	
d. Street /Car Washing (STP Treated Water)				5KLD	
e. Fire Fighting Tanks (STP Treated Water)				35KLD	
TOTAL WATER REQUIREMENT (a+b+c+d+e) ,max^{m-}				182 KLD max^{m-}	
Waste Water Generation				120 KLD	
Treated Water Available				108 KLD	
+Treated Water Utilization max^{m-}				103 KLD	
++Treated Water Discharge max^{m-}				40 KLD	
N.B.	+	35 KLD will be stored in Fire Water Tanks in 2 Days			
	++	After filling of fire water tanks 40 KLD (including surplus water of fire water tanks) of treated water will be discharged per day			

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STATUTORY CLEARANCES


1	Land Docs	:	Development Agreement
2	DFO Territorial	:	DFO, Ranchi Forest Division vide letter no. 466, dated 07.02.2023 certified that the distance of reserved/protected forest is more than 250 m from project site.
3	DFO Wildlife	:	DFO, Wildlife Division, Ranchi vide letter no. 64, dated 20.01.2023 certified that proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
4	CO certificate	:	The CO, Shahar, Ranchi vide memo no. 459(ii), dated 29.05.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyar.
5	AAI NOC	:	Airport authority of India issued NOC vide NOC ID RANC/EAST/B/102725/2136367, dated 05.01.2026 valid up to 04.01.2034.
6	Fire Department	:	A fire advisory has been issued by Fire Department, Jharkhad, Ranchi vide vide memo no. 522/Tech./2022, dated 30.01.2022.
7	Building Plan	:	Building plan approved by Ranchi Municipal Corporation vide memo no. RMC/GH/1834/W18/2021, dated 22.10.2022.
8	Previous Environmental Clearance (EC)	:	Previous EC granted by SEIAA, Jharkhand vide letter no. EC/SEIAA/2023-24/2873/2023/216, dated 14.08.2023.
9	Consent to Establish (CTE) application	:	CTE application has been submitted bearing application no. 26234267, dated 06.06.2026.

Based on the presentation made and information provided, the Committee decided that the proposal for Expansion for Commercial cum Residential Building Project "Essence Mall" (Previously Eminence Mall) of M/s Morias Infrastructure Private Limited, Village : Chadri, Tehsil : Ranchi, Distt.: Ranchi, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II alongwith the following specific conditions :

- I. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the

details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>).
10% of the total green belt proposed shall be allocated under this clause.

- II. Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.
- III. 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.
- IV. All raw material to be stored only under covered shed.
- V. 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.
- VI. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load.
- VII. Trees should be planted & maintained not less than 15% of project area.
- VIII. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- IX. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- X. 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.
- XI. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- XII. 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.
- XIII. Sufficient number of EV fast charging points to be installed.
- XIV. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XV. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.



5. Bindri Bandarkola Stone Deposit of Shri Ranjeet Kumar Singh, Village :BindriBandarkola, Tehsil : Borio, Distt. :Sahibganj, Jharkhand (2.833 Ha).

(Proposal no.: SIA/JH/MIN/ 572815 /2026)

Name of the consultant : New Vision Earth Consultancy (OPC) Pvt. Ltd., Ranchi, Jharkhand

This is a new project which has been taken for appraisal on 13.06.2026.

Project Sector: 1(a) Mining of Minerals, Category: B1.

Application for Environmental Clearance (EC) after Terms of Reference (ToR).

The State Expert Appraisal Committee, Jharkhand deliberated the project during its 125th meeting held on 23.07.2025 - 28.07.2025 and SEIAA, Jharkhand has approved the ToRs in 125th meeting held on 19th&20thAugust, 2025. TOR for the project was issued by SEIAA, Jharkhand vide letter no. EC/SEIAA/2025-26/3868/2025/391, dated 21.08.2025. The final EIA / EMP submitted by PP to SEAC on 17.04.2026.

EC Application for: Proposed Capacity: 70623 Cum per Year/190682 tonnes per Year.

Project and Location Details:

S. No	Parameter	Details	
1	Project Name	: BINDERI BANDERKOLA STONE DEPOSIT	
2	Lessee:	: Sri Ranjeet Kumar Singh	
3	Lessee Address	: Nischintpur, Dumka Road, P.O. + P.S. Nischintpur, Rampur Hat, District: Birbhum, West Bengal.	
4	Lease Area	: 2.833 Ha	7.00 Acres
5	Cluster Details	: Total area: 7.00+7.32+7.04+7.00 = 28.36 Acre	Total no of mine in cluster: 4
6	Type of Land	: Raiyati Land	
7	Project Cost	: 99.63 Lakhs	
8	EMP Budget	: Capital: 51.756 Lakhs	Recurring: 23.49 Lakhs/Year
9	New or Expansion	: New	
10	Mineable Reserves	: 682223.33 Cum	1842003 Tonnes
11	Mine Life	: 9.7 Years	
12	Man power	: 20 persons	
13	Water Requirement	: 16.729 KLD	
14	Water Source	: by hired water tankers	
15	DG Set / power	: 50 KVA (Temporary setup for Backup)	

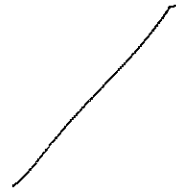
16	Crusher	:	No crusher		
17	Nearest Water Body	:	Morang River (2.5 Km) & Ganga River (14.95 Km)		
18	Nearest Habitation	:	Harinchora Basti Village (2.3 Km)		
19	Nearest Rail Station	:	Pathara Railway Station (10 Km).		
20	Nearest Airport	:	Deoghar Airport, (189 Km)		
21	Nearest Forest	:	Radhakishanpur PF	7.54 km	E
			MasberaBanspur PF	7.32 km	NE
			Godaidhab PF	9.68 km	NE
			Lakhipur PF	11.60 km	NE
22	Nearest ESZ	:	Udhwa Bird Sanctuary 17.3 Km from the project Site		
23	Road & Highways	:	The distance of Approach Road is 1.02 km, after that, this road connects to village road towards SH..		
24	Nearest Approach Road	:	At a distance of 1.02 kilometers.		

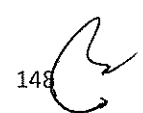
CO-ORDINATES

PILLAR NO	LATITUDE	LONGITUDE
BM01	25° 2' 42.833" N	87° 37' 52.552" E
P1	25° 2' 47.993" N	87° 37' 54.367" E
P2	25° 2' 47.818" N	87° 37' 56.415" E
P3	25° 2' 45.785" N	87° 37' 56.271" E
P4	25° 2' 43.465" N	87° 37' 56.106" E
P5	25° 2' 41.651" N	87° 37' 58.657" E
P6	25° 2' 39.553" N	87° 37' 57.689" E
P7	25° 2' 40.341" N	87° 37' 56.147" E
P8	25° 2' 39.820" N	87° 37' 54.515" E
P9	25° 2' 39.454" N	87° 37' 54.714" E
P10	25° 2' 40.293" N	87° 37' 51.484" E
P11	25° 2' 42.151" N	87° 37' 52.177" E
P12	25° 2' 43.962" N	87° 37' 52.872" E
P13	25° 2' 44.917" N	87° 37' 52.952" E
P14	25° 2' 46.616" N	87° 37' 53.839" E
P15	25° 2' 47.122" N	87° 37' 54.229" E

LAND DETAILS

Khata no.	Plot no.
11	602 (P)
34	647 (P)





STATUTORY CLEARANCES

1	LOI / Lease docs	:	The Letter of Intent (LoI) has been issued by District Mining Officer, Sahibganj vide letter no. 1375/M, dated 13.12.2024.
2	CO	:	The CO, Borio, Sahibganj vide letter no. 742/Ra., dated 05.10.2024 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyon & Register II.
3	DMO Cluster	:	DMO, Sahibganj vide memo no. 1416/M, dated 22.07.2025 certified that 03 LoI (7.00 Acre, 7.32 Acre & 7.04 Acre) exists within 500 meters radius from proposed project site and total area is 28.36 Acre.
4	DFO Wild Life	:	DFO – cum- Incharge Wildlife Sanctuary, Udhwa (Sahibganj) vide letter no. 2620, dated 09.10.2024 certified that the proposed project site is outside Eco Sensitive Zone of Udhwa Bird Sanctuary.
5	DFO Territorial	:	Divisional Forest Officer, Sahibganj Forest Division vide letter no. 2566, dated 05.10.2024 certified that the distance of reserved / protected forest is 480 meters from proposed project site.
6	DSR	:	The DMO, Sahibganj has certified vide memo no. 528/M, dated 20.03.2025 that this project is mentioned in approved DSR of Sahibganj District as a potential area (Page no. 200).
7	Gram Sabha	:	Gram Sabha conducted on 26.09.2024.
8	Mine Plan Approval	:	Approved by District Mining Officer, Sahibganj vide Letter No. 1438/M, dated 21.12.2024.
9	Grid Certificate	:	DMO, Sahibganj vide memo no. 1128/M, dated 20.06.2025 certified that said project falls under grid no. 55 and Hon'ble NGT has not decided the production capacity of that Grid. The DMO also stated that this certificate is issued in the light of order passed by Hon'ble NGT on 22.12.2021 in OA No. 23/2017/EZ, O.A. no. 776/2018 and O.A. no. 373/2019. It also states this certificate is issued in compliance of report of Expert Committee.
10	Public Hearing	:	Member Secretary, JSPCB vide Ref. No. PC/PH/DMK/01/2025/545, dated 02.03.2026 informed that Public Hearing conducted on 08.01.2026.
11	Baseline monitoring period	:	March to May, 2025.

12	Qualified Person	:	Shri Vidya Bhushan Mishra was present in the meeting and affirmed that the mine plan has been prepared by him.
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Working Details

1	Mining Method	:	Semi-mechanized "OTFM" Method
2	Quarry Area	:	2.290 Ha.
3	Waste Generation	:	54,423 cum
4	Stripping Ratio	:	1:0.06
5	Working Days	:	300
6	Benches: size & No	:	6m to 6m and 8 in numbers
7	Elevation of Mine	:	240 m AMSL to 200 m AMSL
8	Ground Level Elevation	:	198 m AMSL
9	Ultimate Working Depth	:	185 m AML
10	Water Table	:	160 m AMSL
11	Topography of Mine	:	Undulating Topography with hill ranges.
12	Explosive Requirement	:	80 kg Nitro mix explosives/day to be licensed by external agency.
13	Diesel/Fuel requirement	:	Approximately 382 litre/day.

Year Wise Production Details

Year	Production of stone in Cum	Production of Stone in Tonnes	Overburden in cum	Intercalated waste in Cum	Total Waste in Cum
1st Year	64906	175246	16874	3416	20290
2nd Year	65242	176154	4248	3434	7686
3rd Year	65130	175851	7906	3428	11334
4th Year	66700	180089	3658	3511	7169
5th Year	70623	190682	4248	3701	7949
Total	332601	898022	36934	17489	54423

Land Use

Land Utilization	Existing Land use (Ha)	At the end of plan period (Ha)	At Conceptual period (Ha)
Quarry	NIL	1.236	2.290 (0.0488ha area shall be backfilled, 0.446 ha area shall be left as water reservoir and 1.356ha shall be left as dead benches)
Waste Dump	NIL	0.348	Nil (waste dump to be removed and backfilled)

Road	NIL	0.012	0.00
Safety Zone Plantation	NIL	0.543	0.543
Total	0.000	2.139	2.833
Unused Area	2.833	0.694	0.0
Total Lease Area	2.833		

ENVIRONMENT MANAGEMENT

Green Belt Development

Year	Place of Plantation	Spacing b/w plants	Total No. of Plants	Area Cover in Square Meters	Total Area in Ha.	Species
1st	Safety Zone	2.5 x 2.5	869	5430	0.543	Neem, Ber, Mango, Sisam, Amaltas, Anjana, Arjuna, Ashoka, Gulmohar, Peepal, Bamboo, Babool, Kahtal (Jackfruit). Jamun, Sagwan (Teak), Mahua
	Haul Road	2 x 2	2048	1024M Approach Road 1024/2 = 512Plants 512 x 2= 2048Plant		
	Dead Bench and Backfilled area	2.5 x 2.5	2934	1844 (1356 Dead Bench + 488 Backfilled area)	1.844 (1.356 + 0.488)	
2nd	Care & Protection	---	---	---	---	
3rd	Care & Protection	---	---	---	---	
4th	Care & Protection	---	---	---	---	
5th	Care & Protection	---	---	---	---	
Total			5877	---	---	

In accordance with Office Memorandum No. F.No. IA3-22/3/2024-IA.III (E-241594), dated 24.07.2024, issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), out of the total 1760 trees proposed to be planted in the designated green belt area—both within and outside the lease boundary—10% (approximately 587 saplings) shall be earmarked under the national tree plantation campaign "Ek Ped Ma Ke Naam."

- 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.

Environment Management Budget

BUDGETARY PROVISION FOR ENVIRONMENT MANAGEMENT PLAN (EMP)		
Mitigative measures to protect Environment	Capital	Recurring

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Water Tanker for Dust Suppression, watering plants (Rs 3000/day & 300 working day)	0	9,00,000
Tree Plantation (5877 plants for greenbelt development cost of per plant would be @350 Rs, hence total cost of plant would be 2056950 Rs) Fertilizer, labour & maintenance cost @800 rs per plant per day & 300 working days= 800*300=240000)	2056950	240000
Construction & Maintenance of haul road, Garland Drain & Parapet wall (Salary of Labour for haul road maintenance, garland drain per day = 300 Rs, Total working days=300 days & 2 labour required, hence 2 *300*300=1,80,000/-)	5,00,000	1,80,000
Environment Monitoring & Compliance (Six Monthly)	0	1,50,000/-
Total	22,06,000	14,70,000
Plantation in consultation with DFO & Gram Panchayat and conversion to Grazing land as far as possible.		
Green belt development safety zone 7.5mtr, along the road & reclaimed area (for each plant including hedges and fences and tree guard at approach roads) 5877 No. of plants x 300 Rs.	17,63,100	3,00,000
Solid Waste Management		
Bins 2 Nos.	1500	4000
Transport of Dry Waste	5000	
Vehicle Maintenance +PUC Certification	Nil	25000
Action Plan for Addressing Public Hearing Concerns with Implementation Schedule and Budgetary Allocation	7,50,000	4,50,000
Budget allocation based on Socio-Economic findings	4,50,000	1,00,000
Total EMP Budget	5175600	2349000

Additional Blasting EMP Budget

Blasting			
1	Training and Awareness of personnel during Blasting operations	50,000	0
2	Provision of safe distance from the Project site for the settlements		
	• Blasting shelters and Sirens	50,000	5,000
	• Portable Drop Arm Barrier	2,00,000	10,000
Total cost		3,00,000	15,000

Endangered species of flora, fauna & Schedule-I

Based on the preliminary study conducted during the baseline data generation phase, along with consultations with local residents and relevant authorities, no endangered species of flora or fauna, including those listed under Schedule-I of the Wildlife (Protection) Act, 1972, were observed within the designated 10 km study area.

Action plan with time bound plan

S. No.	Issues / Suggestions	Action / Commitment by Project Proponent	Time-Bound Action Plan	Capital Cost (₹ Lakhs)	Recurring Cost (₹ Lakhs)
1	Drinking water, road repair, health facilities	Deep boring for drinking water; rural road repair; periodic medical camps & first aid	Within 6 months	2.5	1.0
2	Unemployment, education, Anganwadi, Education, housing, pension, employment, Water problem, road, health, Power problem	Priority employment to locals; proposal to concerned dept. for Anganwadi, Drinking water arrangement, proposal under Abua Housing Scheme, Request to electricity dept., road repair; primary health care support	Employment: ongoing; 1-2 years	5.0	3.5
Total				7.5	4.5

Budget allocation based on Socio-Economic needs

S. No	Activities	Estimated Cost in Rs. (in Lakhs)	2nd Year	3rd Year	4th Year	5th Year
1	Provision of financial assistance for girl child education (scholarships/school kits)	2.00	0.4	0.4	0.4	0.4
2	Distribution of sports equipment to youth clubs and village schools	0.50	0.2	0.1	-	-
3	Beautification of village playground with fencing, seating, and tree plantation	0.50	-	-	-	-
4	Repair and maintenance of community drinking water hand pumps	1.50	-	-	-	-
Total		4.50	0.6	0.5	0.4	0.4

Organization Chart for Environment Management Cell

Environment Monitoring Cell

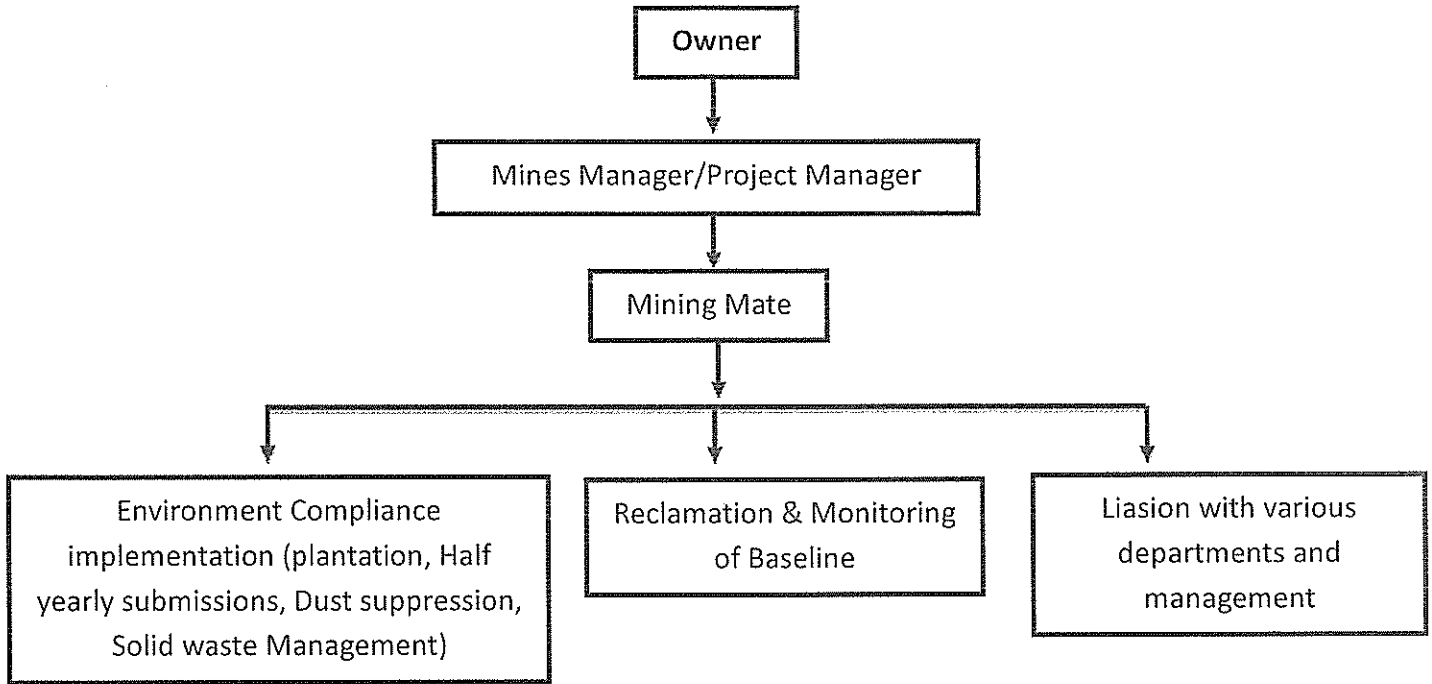


Fig: Organization Chart for Environment Management Cell

FUNCTIONS OF ENVIRONMENT MONITORING CELL

- Supervision: Managed by Mines Manager with a qualified technical team.
- Personnel: Includes skilled, semi-skilled, unskilled, and other third parties.
- Responsibilities:
 - ✓ Implement environmental control measures.
 - ✓ Oversee reclamation planning and management.
 - ✓ Manage air and water pollution control.
 - ✓ Liaise with state and central statutory agencies.
 - ✓ Develop greenbelt areas.
- Performance Review: Assess corporate environmental performance and report non-compliances.
- Remedial Actions: Suggest and implement actions for exceeding pollution limits.
- Coordination:

Collect health statistics for workers and local population.

Act as a bridge for project implementation and Project Authorities

Facilitate afforestation efforts.

Environment Monitoring Plan (post operation)

Monitoring Parameters and Frequency of Monitoring

S. no	Monitoring Parameters	No. of Locations	Frequency of Monitoring
1	Ambient Air: Ambient Air Quality at appropriate location for PM10, PM2.5, SO2, NOx in the vicinity of	3 Stations	Six Monthly

	the mine area. In the surrounding area covering project site only.		
2	Water: Surface water sample in the vicinity of the Project area.	2 Surface water 2 Ground water	Six Monthly
3	Noise: Day & Night level Noise Monitoring.	4 stations	Six Monthly
4	Soil: Soil Monitoring, Qualitative and quantitative testing/analysis to check the soil fertility, porosity, texture, water holding capacity, etc.	2 station	Six Monthly

BASELINE Findings:

Study period: March 2025-May 2025

Parameter	No. of locations	Baseline Findings
AAQM	8	PM ₁₀ ranged from 49.9 µg/m ³ to 53.0 µg/m ³ , while PM _{2.5} concentrations varied between 17.3 µg/m ³ and 20.3 µg/m ³ . The levels of SO ₂ were found to be in the range of 4.5 µg/m ³ to 6.6 µg/m ³ , whereas NO ₂ concentrations ranged from 15.8 µg/m ³ to 18.4 µg/m ³ .
ANQM	5	Noise Level during Day Time – 50.0 dB (A) to 65.2 dB (A) Noise Level during Night Time – 34.5 dB(A) to 35.1 dB (A)
SQM	5	In the study area, variations in the pH of the soil were found to be neutral (6.2 to 6.9). Electrical conductivity (EC) is a measure of the soluble salts and ionic activity in the soil. In the collected soil samples, the conductivity ranged from 243-252 µmhos/cm.
WQM	GWQM (3) SWQM (2)	Groundwater and surface water quality in the study area was assessed against IS:10500 standards. The pH of groundwater (7.012-7.036) and surface water (7.342–7.342) remained within acceptable limits. TDS levels in groundwater (304.1-321.6 mg/l) and surface water (72.24-73.6 mg/l) were within desirable limits. Chlorides, hardness, and fluoride in both water sources were found within prescribed standards. Heavy metals were below detectable limits. Overall, groundwater is fit for consumption, while surface water complies with CPCB Category-C standards and is suitable for drinking after conventional treatment and disinfection.

Ecological biodiversity

The ecological study was conducted within a 10 km radius of the proposed stone mining project in Sahibganj District, Jharkhand.

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No Wildlife Sanctuary, National Park, Eco-Sensitive Zone, Ramsar site, Tiger or Elephant Reserve, or wildlife corridor exists within the study area.

The surrounding land use comprises forest patches, agricultural land, seasonal water bodies, rivers, and scattered settlements.

Four Protected Forests are located within the buffer zone, the nearest being Masbera Banspur PF at about 7.32 km from the project site.

The core zone is barren stony land with sparse natural vegetation and no ecologically sensitive plant species.

A total of 112 floral species were recorded in the buffer zone, dominated by tree species typical of the Sal-dominated forest ecosystem.

Agricultural crops and common forest produce such as Kathal, Jamun and Kendu leaf are prevalent in the surrounding area.

Faunal diversity in the buffer zone is limited and mainly includes common mammals, reptiles, amphibians, and avifauna of Least Concern status.

No Schedule-I species or significant wildlife movement was observed during the survey period.

Overall, the study area exhibits low to moderate ecological sensitivity, with no critical biodiversity or habitat constraints for the proposed project.

Environment Management Practices to be followed:

Aspect	Mitigation Measures / Control Measures
Solid Waste Management	The waste encountered during the mining operation is mainly 54423 cum. During Plan period gritty soil removed will be dumped at south-west side with suitable precaution. Some quantity of the removed gritty soil would also be used for road dressing and plantation. After conceptual period mined out area of quarry will be reclaimed to the extent possible.
Air Quality Management	<ul style="list-style-type: none"> • Wet drilling and use of sharp drill bits to minimize dust generation. • Controlled blasting using optimum explosive charge during favorable weather conditions. • Regular maintenance of diesel equipment and vehicles to reduce emissions. • Water sprinkling on haul roads, loading/unloading points, and working areas. • All transport vehicles will have valid PUC certificates. • Greenbelt and roadside plantation to act as dust and noise barriers.
Water Quality Management	<ul style="list-style-type: none"> • Mining will be confined only above the Ground Water Table (GWT). • Rainwater accumulated in the pit will be collected and pumped out regularly during monsoon. • Settling sump will be provided to desilt pumped out of mine-pit and collected through garland drain before discharge into natural drainage. • Garland and foot drains will be constructed around the quarry to control surface runoff. • Sewage from rest shelters will be treated through septic tank-soak

	<p>pit systems.</p> <ul style="list-style-type: none"> • Foot drain would be provided around the external dump, if any.
Noise Quality Management	<ul style="list-style-type: none"> • Mining activities will be restricted to daytime and carried out with controlled blasting techniques. • Acoustic enclosures and mufflers will be provided for drilling and DG set operations. • Regular maintenance of mining machinery to minimize vibration and noise. • Greenbelt development around the lease boundary to attenuate noise propagation. • Use of delayed blasting technique to minimize the adverse impact of vibration.
Soil Quality Management	<ul style="list-style-type: none"> • Topsoil will be carefully removed and stored separately for future use in plantation and reclamation. • Garland drains and retaining walls will prevent soil erosion and siltation. • Spillage of oil or fuel will be avoided; impervious flooring and oil traps provided near storage areas • Post-mining, the area will be rehabilitated using stored topsoil and native vegetation
Flora & Fauna management	<ul style="list-style-type: none"> • No tree felling will be undertaken without obtaining permission from the competent authority. • Greenbelt and plantation will be developed using native species along approach roads and lease periphery (7.5m Safety Zone). • Dust suppression measures will minimize impact on surrounding vegetation
Socio Economy:	<ul style="list-style-type: none"> • Priority employment to local people in mining and ancillary activities. • Community development initiatives such as tree plantation drives, road maintenance, and local infrastructure support. • Awareness programs on safety, hygiene, and environmental protection
Monitoring & Reporting:	<ul style="list-style-type: none"> • Periodic monitoring of air, water (ground & surface), noise, and soil quality as per CPCB and SPCB guidelines. • All monitoring reports will be submitted to statutory authorities as per the compliance schedule. • Corrective measures will be taken immediately if any deviation from standards is observed.
Risk & Hazard	<p>Activities which are likely to create risk are: Temporary Storage of Explosives, Charging of Explosives, Blasting, Drilling, Bench Formation, Loading / Unloading, Transportation</p> <p>Proposed Preventive measures:</p> <ul style="list-style-type: none"> • Overall slope angles of benches will be maintained at 45°.

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	<ul style="list-style-type: none"> • Unmanageable heights are not created. • Loose sides are properly dressed. • No loose stone or debris will be permitted to remain on the top of the bench or side of any excavation (Regulation 106(4) of MMR 1961). • No undercutting of any face or sides will be permitted so as to cause any overhanging (Regulation 106(5) of MMR 1961) • It will be ensured that the drilling equipment is suitable for the job. • The person in charge of the drilling machine is competent to carry out the drilling operation; part of the training includes instructions to always face towards the open edge of the bench so that any inadvertent backward step is away from the edge. • Provision of portable rail fencing between the drilling operations and the edge of the bench • Provision to attach a safety line to the drilling rig and provide a harness for the driller to wear. • Restricted access to the area to all persons except those necessary for the drilling operation. • Wet drilling will be carried out by constantly injecting a jet of water at the drill bit inside the hole, which prevents dust generation. • In case due to any reason, wet drilling is not possible (due to non-availability of water), exhaust/ vacuum system will be provided which removes the dust from the drill hole continuously and discharges the same in a dust collector specially provided for the purpose. • Drilling machine shall be fitted with dust suppression, collection and disposal arrangement.
<p>Blasting & Handling of Explosives</p>	<ul style="list-style-type: none"> • Blast hole geometry shall be properly designed. • Blast site shall be wetted before and after blasting operations are completed. • Only optimum quantity of permissible explosives shall be used so that the vibrations do not damage the structures/houses if the quarrying operations are close to human habitation. • Blasting shall be conducted only during favourable weather conditions and only during the day time and permissible hours. • While carrying out blasting operations near habitations, wide publicity will be given in the local area through announcement and other available media so that local people become aware of the blasting activities being undertaken in the area and take appropriate precautions. • The vibrations should be monitored periodically in consultation with the local Mining authorities. • Use of explosives is specialist work. Planning for a round of shots is

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	<p>necessary to ensure that the face is properly surveyed, holes correctly drilled, direction logged, the weight of explosive suitable for good fragmentation and the continuity of the initiator are but a few of the steps necessary to ensure its safe use.</p> <ul style="list-style-type: none"> • Proper and safe storage of explosives in approved and Licensed Magazine. • Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc. will be put in place. • Explosives shall be conveyed in special containers. • Explosives and detonators shall not be carried in the same container. • The holes which have been charged with explosives will not be left unattended till blasting is completed.
Health Hazards	<p>Health hazards should be interpreted as being harmful dust and noise which is emitted during surface mining operations. All suitable steps and precautions will be undertaken to ensure minimum health hazard. Provision of use of Personal Protective Equipment (PPE) will be kept. The PPE shall be of good make and quality, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particulate hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection it will only be used as a last resort and as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level</p>
Accident Prevention	<ul style="list-style-type: none"> • Mine road shall be made smooth regularly with a road roller. • Mine road will be made sufficiently wide to keep two-way traffic. Regular water sprinkling will be done on mine road and haul road to avoid suspension of dust. • All transportation within the mine lease area should be carried out directly under the supervision and control of management. • The vehicles will be maintained in good working condition and checked thoroughly at least once a month by the competent person authorized for the purpose by the management. • Navigation signs will be provided at each and every turning point up to the main road (wherever required). • To avoid danger while reversing the vehicles especially at working place/loading points, stopper should be posted to properly guide reversing/spotting operating.

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.

- 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.
- j. Slope of the Water bodies to be stabilized using gabion plantation created at the end of life of the mine.
- k. Suitable safety protection measures shall be taken around the water bodies to prevent any human or animals falling in to the water bodies created at the end of life of the mine.
- l. Personal protective equipments such as clothing, helmet, goggles or other garments or equipments designed to protect from injury or infection will be provided to working personnel.

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 Bindri Bandarkola Stone Deposit of Shri Ranjeet Kumar Singh, Village :Bindri Bandarkola, Tehsil : Borio, Distt. : Sahibganj, Jharkhand (2.833 Ha) is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – I along with following specific conditions :

- I. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLIFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- II. The Deputy Commissioner through District Mining Officer will ensure that the mines owner of the respective leases to complete the plantation and maintenance in a time bound manner.
- III. Suitable plant species of not less than 2 M height to be planted equal to twice the area of saplings proposed in Safety zone. This is to be planted in land available near mines and outside safety zone. This will be in addition to plantation in safety zone. Newly planted saplings to be maintained for minimum 3 years with Geo-Tagged photographs.

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- IV. Dedicated water tanker to be provided for mine. The tanker to be used for spraying water on haul road and for irrigating newly planted saplings only. Sprinkling to be done such that the haul road is kept moistened all the time with Geo-Tagged photographs.
- V. Pre employment Occupational health check up for employees to be done and thereafter at annual interval for PLFT, Audiometry and other required tests .Summary findings of same to submitted along with 6 monthly compliance.
- VI. Ensure use of Quality PPEs equivalent not less than 3M make. Records of same to be maintained and submitted with 6 monthly compliance report with Geo-Tagged photographs.
- VII. Keep vulnerable areas unmanned. Ensure rotation of duties. Records to be maintained and submitted with 6 monthly compliance report.
- VIII. Failing of any of terms & conditions mentioned in EC can lead to revocation / cancellation of EC.

6. Borna Stone Mine of Shri Krishna Kumar Saha, Mauza : Borna, Thana : Ranga, Distt. : Sahibganj, Jharkhand (3.490 Ha).

(Proposal no.: SIA/JH/MIN/ 572255 /2026)

The above-mentioned project was considered in the light of section 11 of EIA Notification, 2006 and OM no. IA3-22/19/2023-IA.III [E-226246], dated 19.02.2025 of MoEF&CC, Govt. of India for transferability of Environmental Clearance. The Environmental Clearance granted by then DEIAA, Sahibganj vide its letter no. EC/DEIAA/2016-17/86, dated 13.12.2016 in the favour of "Borna stone Mine" M/s A.R.K Nirman (P) Ltd. (Director Sri Krishna Kumar Saha) on plot no. 214 (p), 215, 219(p), 396, 397,398, 399, 400 and 402 (p), Khata no. 58, 5, 36&11, Village: Borna, P.S Ranga Dist. Sahibganj, State-Jharkhand (3.49 Ha).

The PAs vide online application no. SIA/JH/MIN/572255/2026 has requested to transfer of Environmental Clearance Borna Stone Mine of M/s Krishna Kumar Saha (Prop : Shri Krishna Kumar Saha) for which he has submitted " No Objection Certificate" affirming that the Environmental Clearance will be transfer in favour of "Borna Stone Mine of M/s Krishna Kumar Saha (Prop : Shri Krishna Kumar Saha)" and they do not have any objection regarding the transfer of Environmental Clearance all the terms & conditions of Environmental Clearance dated 13.12.2016 shall be complied by Borna Stone Mine of M/s Krishna Kumar Saha (Prop : Shri Krishna Kumar Saha). Deputy Commissioner, Sahibganj vide GRN no.



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312487, dated 13.10.2017 for the period of 07.09.2017 to 06.09.2027 for an area 8.62 Acre or 3.49 Ha.

The PAs submit affidavit that the said project falls under grid no. 117 and production is within the overall permissible production limit and certified DMO Grid letter will be submit during Reappraisal of EC.

It is observed that Deputy Commissioner, Sahibganj transferred the lease deed in the name of "Borna Stone Mine of M/s Krishna Kumar Saha (Prop : Shri Krishna Kumar Saha)" and as per direction of OM no. IA3-22/19/2023-IA.III [E-226246], dated 19.02.2025 of MoEF&CC, Govt. of India application for transfer of EC after of period of 24 months from the date of transfer / acquisition/ demerger / change in name etc. of the company, the PAs shall apply on PARIVESH Portal with detailed justification for delay in applying for transfer of EC with the Certified Compliance Report (CCR) for the project from the concerned Regional Office of the Ministry (MoEF&CC, Govt. of India).

In the light of above direction of MoEF&CC, Govt. of India PAs have obtained the CCR from MoEF&CC, Regional Office, Ranchi issued vide F. no. 111-23/ROR-2025/697, dated 19.12.2025. The PAs have also submitted the action taken report to MoEF&CC, Regional Office, Ranchi vide letter dated 12.03.2026 and obtained review report MoEF&CC, Regional Office, Ranchi issued vide F. no. 111-23/ROR-2025/181, dated 01.04.2026. As per the report of the Regional Office, Ranchi, MoEF&CC, Govt. of India there no mention of violation of any EC conditions.

The PAs have also provided detailed justification to SEAC stating that the PAs have continued mining operation based on the valid lease document and the CTO issued by the competent authority i.e. JSPCB. It is further submitted that the key person in the operation of the mine was Shri Krishna Kumar Saha before the transfer of the lease. Even after transfer of the lease there has been no change in the person carrying out the mining operations as the lease has been transferred in the name of Shri Krishna Kumar Saha. Shri Krishna Kumar Sahas always been associated with and responsible for the mining activities. The change was only in the business entity, from M/s A.R.K. Nirman Company to the present proprietorship of Shri Krishna Kumar Saha.

Accordingly, SEAC accepted the justification as lessee were operating the mine with valid CTO and also there is no change in the person who operating the mine and the EC holder and recommends for condonation of the reason of delay in the process of transfer of Environmental Clearance issued vide letter no. EC/DEIAA/2016-17/86, dated 13.12.2016 in favour of "Borna Stone Mine of M/s Krishna Kumar Saha (Prop: Shri Krishna Kumar Saha)" with the same terms & condition under which prior Environmental Clearance was granted by then DEIAA, Sahibganj for the same validity period.

7. Proposed Integrated Municipal Solid Waste Management Facility of M/s Shree Shyam SWM Simdega Private Limited, Village :TapudegaPandripani, Distt.: Simdega, Jharkhand (2.32 Ha).

(Proposal no.: SIA/JH/INFRA2/471667 /2024)

Name of the consultant :NatureanalyticaEnvirocare Solutions Pvt. Ltd., Udaipur, Rajasthan.

This is a new project which has been taken for appraisal on 13.06.2026.

Project Sector: 7(i) Common Municipal Solid Waste Management Facility (CMSWMF), Category: B1.

Application for Terms of Reference (ToR) as per EIA Notification, 2006.

The particulars of the project, in brief, as submitted by the PP are as follows-

1.	Category / Item no.(in Schedule):	7 (i) Common Municipal Solid Waste Management Facility (CMSWMF)																										
2.	Location of Project	Khata No.-43, Plot No. 635part & 640, Thana No.-113, Mauza-TapudegaPandripani, Block-Thethayitangar, District- Simdega, Jharkhand-835223																										
3.	Project Details	"It is green field project of Proposed Integrated MunicipalSolidWaste Management Facility for Simdega, Jharkhand. with proposed processing facility 30 TPD(Windrow composting+ RDF) and Sanitary Landfill area 6264sqmt.& Plot area is 5.75 sqmt (2.32 ha)																										
4.	National High way	143- 0.79Km in WSW																										
5.	Railway & Airlink	Biramitrapur Railway Station -28.1 Km SE Birsa Munda Airport Ranchi- 117.96 Km NE																										
6.	Land Break up	<table border="1"> <thead> <tr> <th>S. N</th> <th>Area</th> <th>In Acre</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Area under Processing Plant</td> <td>0.47</td> <td>8.17</td> </tr> <tr> <td>2</td> <td>Road and paving area</td> <td>0.303</td> <td>5.26</td> </tr> <tr> <td>3</td> <td>Parking area</td> <td>0.0657</td> <td>1.14</td> </tr> <tr> <td>4</td> <td>Green Belt Area</td> <td>1.8975</td> <td>33.00</td> </tr> <tr> <td>5</td> <td>MSW Sanitary Landfill area</td> <td>1.547</td> <td>26.90</td> </tr> </tbody> </table>			S. N	Area	In Acre	%	1	Area under Processing Plant	0.47	8.17	2	Road and paving area	0.303	5.26	3	Parking area	0.0657	1.14	4	Green Belt Area	1.8975	33.00	5	MSW Sanitary Landfill area	1.547	26.90
S. N	Area	In Acre	%																									
1	Area under Processing Plant	0.47	8.17																									
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4	Green Belt Area	1.8975	33.00																									
5	MSW Sanitary Landfill area	1.547	26.90																									

		6	Area of leachate tank (LTP)	0.045	0.78	
		7	Open area/Landscape area	1.4221	24.73	
			Total Area	5.75	100.00	
7.	Cost of the Project	1034.28 Lakh				
8.	Water Requirement & Source	In Construction -5.0KLD In Operation- Total water Requirement-18.5 KLD Fresh Water requirement -12.5 KLD Recycle Water- 6.0 KLD Source: Through Tanker Supply				
9.	Waste water generation & LTP capacity	Waste Water Generation: 6.5 KLD Treatment: LTP				
10.	Power Requirement	63 KVA from state electricity board				
11.	Manpower Requirement	construction phase -30 Operational Phase- 56				
12.	Ecological Sensitive area	No any ecological sensitive National Park , wild life sanctuary comes under 10 km radius				
13.	Environment Management Plan Proposed Capital Cost- 60.38 Lakhs Recurring Cost – 17.15 Lakhs/yr.					
	S. No.	Particulars	Capital Cost (Lakhs)	Recurring Cost (Lakhs)	Remarks	
	1	Air & Noise Pollution Control System	5	1	Measures to reduce harmful emissions into the atmosphere.	
	2	Water and Waste Water Treatment Management	10	3		
	3	Rain Water Collection tank	5	2	Systems to capture and store water rainwater for reuse	
	4	Green Belt Development	9.18	7.65	Creation of green spaces to	

					improve environmental quality.
5	Occupational Health and Safety	3	1		Measures to protect the health of employees.
6	Solid and hazardous waste management (also includes Odour management)	5	1.5		Systems for handling, coprocessing under rule 9 and recycling.
7	Environment Monitoring of Air, Water, Noise and Soil	1.5	0.5		Env. Audit, EC Compliance, GHG reporting, etc. through Third Party
8	Environmental Awareness & Training	1	0.5	-	
		39.68	17.15		
Corporate Environment Responsibility (CER)					
9	CER	20.7	-	-	
	Total	60.38	17.15	-	
14.	LTP	10 KLD capacity of LTP will be proposed			
15.	Waste Collection and transportation	<p>Collection transportation system proposed for is basically on the concept that <i>there will be nodual handling of waste and with due course of time it would become bin-less town.</i> However, it is also kept in mind that 100% people's participation for door-to-door collection cannot be ensured right</p>			
16.	RDF end use	<p>Refuse Derived Fuel (RDF) or solid recovered fuel generic term used to describe fuel produced from waste that has undergone some sort of process, from minimal sorting and bailing to more complex mechanical treatments.</p> <p>Materials for recycling and non-combustible materials such as glass and metals are generally removed with mechanical separation processing. The residual material can be sold in its processed form or it may be compressed into pellets, bricks or logs. Advanced RDF</p>			

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processing methods can remove or significantly reduce harmful pollutants heavymetals.

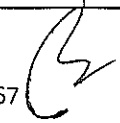
17. Mitigation Measures

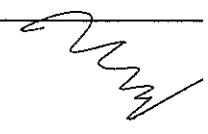
S. N	Component	Activity	Potential	Suggested Mitigation Measures impact
1	Air environment	Fugitive emissions from construction activities, operation of diesel-driven equipment and machinery, loading and unloading of materials.	<ul style="list-style-type: none"> • Vehicular emissions • Dust and particulate emissions 	<ul style="list-style-type: none"> ➤ Wet suppression of unpaved roads. ➤ Limited and regulated vehicular movement within the project site. ➤ Vehicle speed on unpaved roads restricted to 20 kmph. ➤ Pollution Under Control (PUC) certificates maintained for all transport vehicles. ➤ Haul trucks covered with tarpaulin sheets during transportation of construction materials. ➤ Preference for low-sulphur fuel in construction vehicles and equipment. ➤ Restrict the number of vehicles entering the site as per the approved traffic management plan ➤ Fuel storage tanks to be located in shaded and cool areas to minimize evaporation losses.
2	Noise environment	Construction activities such as Piling Foundation works Fabrication of Structures, Operation of construction equipment etc.	Potential increase in noise levels in adjoining areas.	<ul style="list-style-type: none"> ➤ The construction site will be cordoned with acoustic barriers or temporary walls. ➤ Rubber padding for vibration control. ➤ Regular maintenance of vehicles and equipment/ machinery will be done.
3	Surface and	Construction of site	Surface water	<ul style="list-style-type: none"> ➤ Domestic waste

	Ground water quality .	formation levelling the ground surface removal of vegetation, material storage areas, vehicle maintenance areas, spoil disposal areas, washing of various, construction equipment's	contamination by construction activity & oil/grease, Surface water contamination as there is Nalla in project site.	water will be treated in by soak pit/septic tank. <ul style="list-style-type: none"> ➤ An impervious cover will be provided over the adjacent storm water drain to prevent the surface runoff carrying the construction waste materials/ other pollutants to enter the drain. ➤ Garland drain will be construct all around the project site to collect surface runoff.
4	Soil Quality	Site Preparation, Installation of heavy construction machinery causing soil compaction,	Contamination of soil Activity may damage soil fertility/quality.	<ul style="list-style-type: none"> ➤ No disposal of construction waste outside the project area will be allowed. ➤ Construction wastes from site such as metal cuttings debris, plastic packing material, wooden logs etc.will be segregated and kept in specially identified waste bins.
5	Solid Waste	Construction activity generate Cement concrete, Bricks, tiles, Cement plaster, Steel Rubble, sand, Stone(Marble, granite, sandstone), Timber/wood Paints/varnishes.	Soil erosion. Contamination of soil & soil fertility.	<ul style="list-style-type: none"> ➤ Reuse of bricks, tiles, stone slabs, timber, piping railings etc to the extent possible and depending upon their conditions. ➤ Sale/ auction of materials which Cannot be used at the site due to design constraint. ➤ Plastics, broken glass, scrap metal etc will be stored and processed within the site premises.

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6	Socio economic environment	Operation of equipment's. Transportation Loading/unload dingand fugitive generation	The construction activities may lead to increase in noise levels dust	<ul style="list-style-type: none"> ➤ Noise levels will be maintained within permissible limits. ➤ sprinkling near approach
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CER

Sr No.	Key Area identification under CER	Time bound (Year wise) expenditure					Total Proposed Expenditure (Rs. Lakhs)
		1st	2nd	3rd	4th	5th	
A.	Community Health Initiatives						
	Company will organize medical health checkup camps per year in the nearby villages	2.00	2.00	1.0	-	-	5.00
B.	Education Initiatives						
	* RO based drinking water facility for students * Donation of School uniform including winter wears	2.0	2.0	2.0	2.0	-	8.00
C.	Community development Initiatives						
	Company will organize skill development camps for women in nearby villages	1.50	1.50	1.0	1.0	-	5.0
	Green belt development/ Plantation in school premises nearby areas and near villages	1.00	0.50	0.50	0.70		2.70
Total							20.7

15.	Present Scenario	Total waste generated in the city is approximately 19.34 MT with per capita waste generation of approximately 353.11 grams. No waste processing facility available in city. Waste is being dumped at dump site. No measures are adopted for protection of underground water contamination, surface water contamination, soil pollution and protection from fugitive dust or air borne litters.
16.	Landfill Site Criteria	No Any river within 100mt, No any pond with in 200mt, distance of

		highway is more than 200 mt, no habitation settled with in 200 mt, no airport falls with 20 km from project boundary & Area comes in Seismic zone -II		
17	Details Required	Waste processing details must be elaborated in final EIA, More green belt trees having aromatic flowers to be inducted, MoU for RDF disposal with external agencies will be provided during final EIA.		
18	Environment Management Cell	The EMP Cell is committed to ensuring environmental sustainability and compliance with requirements for the project with clear structure, roles and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.		
19	Latitude/Longitude	Pillar No.	N	E
		1	22° 33'9.51"	84°31'9.74"
		2	22 °33'9.23"	84°31'10.61"
		3	22 °33'9.01"	84°31'11.07"
		4	22 °33'8'64"	84°31'12.51"
		5	22° 33'7.69"	84°31'12.41"
		6	22° 33'6.33"	84°31'15.54"
		7	22° 33'5.79"	84°31'16.47"
		8	22° 33'5.66"	84°31'7.01"
		9	22° 33'5.33"	84°31'7.64"
		10	22 °33'5.05"	84°31'18.28"
		11	22 °33'4.04"	84°31'17.86"
		12	22° 33'4.16"	84°31'17.59"
		13	22° 33'3.86"	84°31'17.43"
		14	22° 33'4.09"	84°31'16.95"
		15	22 °33'4.26"	84°31'16.97"
		16	22° 33'4.91"	84°31'15.77"
		17	22° 33'4.77"	84°31'15.67"
		18	22° 33'3.92"	84°31'15.38"
		19	22 33'3.85"	84°31'15.32"
		20	22 °33'3.89"	84°31'15.10"
		21	22° 33'3.79"	84°31'14.96"
		22	22 °33'3.66"	84°31'14.88"
		23	22 °33'4.04"	84°31'13.81"

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		24	22° 33'4.35"	84°31'13.04"	
		25	22° 33'4.71"	84°31'12.38"	
		26	22° 33'5.54"	84°31'10.72"	
		27	22 °33'6.87"	84°31'8.27"	
20	Base Line Monitoring Period	Baseline monitoring was conducted during the March to May 2026.			

LAND DETAILS

Khata no.	Plot no.
43	635 (P) & 640

Land Fill Sitting Criteria

<u>Criteria for landfill site</u>	<u>Required as per SWM Rules, 2016 & 2026</u>	<u>Actual Position</u>
<u>Design Life Period</u>	<u>20-25 years</u>	<u>Up to 20 years</u>
<u>Distance from River</u>	<u>>100 Mtrs</u>	<u>No river within 100 m from the site.</u> <u>Nearest river is Thethaitangarnadi</u> <u>which is 1.60 km from site.</u>
<u>Distance from Pond</u>	<u>>200 Mtrs</u>	<u>No any pond within 200 m from the</u> <u>site.</u>
<u>Distance from Highway</u>	<u>>200 Mtrs</u>	<u>Distance of highway is more than 200 m</u> <u>from the Landfill site.</u> <u>Nearest Highway is NH-143 which is</u> <u>0.79 km from site.</u>
<u>Distance from Habitation</u>	<u>>200 Mtrs</u>	<u>No habitation is settled within 200m</u> <u>from the site.</u> <u>Nearest village is TapudegaPandripani</u> <u>which is 0.80 km from site.</u>
<u>Distance from Public Parks</u>	<u>>200 Mtrs</u>	<u>No public park exist in 200m from the</u> <u>site.</u>

<u>Distance from Water supply wells</u>	<u>>200 Mtrs</u>	<u>No any water supply well was observed within 200m from the project boundary</u>
<u>Water table*</u>	<u>2 m from bottom liner of landfill</u>	<u>Criteria Complied.</u>
<u>Earthquake zone*</u>	<u>500 m from fault line fracture</u>	<u>The project district comes under seismic zone II</u>
<u>Airport/Airbase</u>	<u>>20 Kms</u> <u>10-20 Kms.</u>	<u>No airport/airbase falls within 20 Km from project boundary.</u>
<u>Floodplains (100 Yrs.)</u>	<u>Not Allowed</u>	<u>Not Applicable</u>
<u>Zone of Coastal Regulations</u>	<u>Not Allowed</u>	
<u>Wetland</u>	<u>Not Allowed</u>	
<u>Critical Habitat Area</u>	<u>Not Allowed</u>	
<u>Sensitive Eco Fragile Area</u>	<u>Not Allowed</u>	
<u>General Conditions:</u> <u>EIA Notification</u> <u>2006; Project is category A if</u>	<u>EIA Notification 2006; Requirement</u>	<u>Not Applicable</u>
<u>Protected Area under Wildlife</u>	<u>>10 Kms</u>	<u>Not Applicable</u>
<u>Critically Polluted Area under CPCB</u>	<u>>10 Kms</u>	<u>Not Applicable</u>

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<u>Notified Eco Sensitive Area</u>	<u>>10 Kms</u>	<u>Not Applicable</u>
<u>Interstate Boundaries</u> or <u>International Boundaries</u>	<u>>10 Kms</u>	<u>Not Applicable</u>

TECHNOLOGY AND PROCESS DESCRIPTION

Accelerated Aerobic Bio conversion under controlled conditions in windrows. (Also called Windrow Technology.)

Refuse Derived Fuel (RDF) or solid recovered fuel is a generic term used to describe fuel produced from waste that has undergone some sort of process, from minimal sorting and bailing to more complex mechanical treatments. Materials for recycling and non-combustible materials such as glass and metals are generally removed with mechanical separation processing. The residual material can be sold in its processed form or it may be compressed into pellets, bricks or logs. Advanced RDF processing methods can remove or significantly reduce harmful pollutants heavy metals.

RDF is made from domestic waste which includes biodegradable material as well as plastics and has a lower calorific value than solid recovered fuel. It is basically a processing method for mixed MSW, which can be very effective in preparing an enriched fuel feed for thermal processes.

DESIGN OF SANITARY LANDFILL LANDFILL SITE COMPLIANCE WITH SWM RULES, 2016

The sanitary landfill shall be provided with fence, security gate, approach and internal roads, waste inspection facility, weigh bridge, equipment and machinery, infrastructure like water supply, lighting, etc. and health inspection facilities.

Waste shall be compacted adequately and provided with daily cover of minimum 10cm of soil inert debris.

Prior to commencement of monsoon intermediate cover of thickness 45cm has to be provided with proper compaction and grading to prevent infiltration during monsoon. Proper drainage berms shall be provided to divert runoff from the active cell of the landfill.

The minimum bottom layer specifications shall be a composite barrier having 1.5mm High Density Polyethylene (HDPE) geomembrane overlying 90 cm of soil (clay/amended soil) having permeability coefficient not greater than 1×10^{-7} cm/sec. The highest level of water table shall be 2m below the clay/amended soil layer.

The final cover shall have a barrier layer comprising of 60 cm of clay/amended soil with permeability coefficient not greater than 1×10^{-7} cm/sec. on the top of the barrier soil layer there shall be a drainage layer of 15cm and on the top of drainage layer there shall be a vegetative layer of 45cm thick.

In order to prevent the pollution problems storm water diversion drains, leachate collection and treatment system and preventive measures for run – off from landfill area entering any stream, lake, river or pond shall be provided.

Buffer zone around the landfill site and a vegetative cover over the completed site shall be provided.

The post closure care of landfill site shall be conducted for at least fifteen years and long-term monitoring plan shall be prepared.

Life of Project

22 years i.e. 2026-2048

GAS AND LEACHATE MANAGEMENT SYSTEM

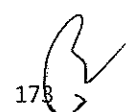
- Periodic inspection of the gas and leachate collection system shall be undertaken to identify broken pipes, leaking gas (if any) and damaged or clogged wells / sumps.
- Repair work for gas and leachate management system requires skilled man power and shall be carried out by the agencies operating the gas treatment and leachate treatment facilities. One may often have to install new gas extraction and leachate collection wells if the damaged /clogged facilities are inaccessible and irreparable.

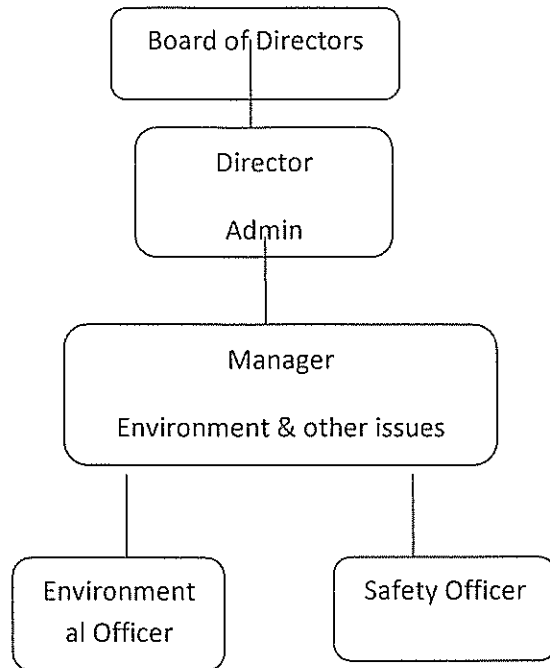
Surface water Drainage System The surface water drainage system shall also be inspected 2 to 4 times a year.

- (a) To identify cracks in drains due to settlements
- (b) To delineate clogged drain requiring immediate clean up and
- (c) To study the level of deposited soil in the storm water basin and initiate excavation measures.

EMP CELL

The EMP Cell is committed to ensuring environmental sustainability and compliance with requirements for the project with clear structure, roles and responsibilities, the EMP Cell is equipped to manage environmental impacts and promote sustainable practices.










STATUTORY CLEARANCES

1	Land docs	:	Agreement between Nagar Parishad and Project Proponent (Shree Shyam SWM Simdega Private Limited)
2	CO	:	The CO, Thethaitangar vide letter no. 564 (ii)/Ra., dated 22.06.2024 has mentioned the plot no. of the project is not recorded as "Jungle- Jhari" in R.S. Khatiyan & Register II.
3	DFO Wild Life	:	DFO, Wildlife Division, Ranchi vide letter no. 318, dated 28.05.2025 certified that the proposed project site is outside Eco Sensitive Zone of Palkot Wildlife Sanctuary.
4	DFO Territorial	:	Divisional Forest Officer, Simdega Forest Division vide letter no. 1355, dated 23.08.2024 certified that the distance of reserved / protected forest is 250 meter from proposed project boundary.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 09, 10, 11, 12, 13, 14 & 15.06.2026, the Committee recommends for issuing of ToR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure - VI alongwith following specific condition :-

- i. In compliance of OM no. F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

8. Proposed Group Housing Project "President Tower" of M/s Galatrix Developers Pvt. Ltd.,
Village :Hurlung, Tehsil : Jamshedpur, Distt.: East Singhbhum, Jharkhand.

(Proposal no.: SIA/JH/INFRA2/580741 /2026)

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

This is a new project which has been taken for appraisal on 13.06.2026.

Project Sector: 8(a) Building and Construction Projects , Category: B2.

Application for Environment Clearance (EC) as per EIA notification, 2006.

Item	Details		
Project Name	PRESIDENT TOWER		
Location	Village : Hurlung Tehsil : Jamshedpur District: East Singhbhum State : Jharkhand		
Plot Area & its break – up (sq.m.)	Particulars	Area (Sq.m.)	Percentage of Plot Area (%)
	Plot Area	7,763.37	100.00%
	Ground Coverage	1,337.49	17.23%
	Road	1,960.00	25.25%
	Open Parking	1,031.50	13.29%
	Paved Path	500.00	6.44%
	Garden	1,110.00	14.30%
	Tree Cover	1,302.00	16.77%
	Other includes; STP : 149.59 Sq.m. Generator Room : 37.16 Sq.m. Waste Bin : 4.64 Sq.m. OWC : 4.64 Sq.m	522.38	6.72%
	Total	7,763.37	100.00%
Ground Coverage Permissible	35%		
Ground Coverage Consume	17.23% (1337.49 Sq.m.)		
FAR Permissible	3.00		
FAR Consume	2.96		

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Total Built-Up Area & its break – up (sq.m.)	Floor Name	Proposed Built-up Area (Sq.mt.)
	Basement Floor	3498.45
	Ground Floor	1382.74
	First Floor	1302.44
	Second Floor	1135.95
	Third Floor	1135.95
	Fourth Floor	1135.95
	Fifth Floor	1135.95
	Sixth Floor	1135.95
	Seventh Floor	1135.95
	Eighth Floor	1135.95
	Ninth Floor	1135.95
	Tenth Floor	1135.95
	Eleventh Floor	1135.95
	Twelfth Floor	1135.95
	Thirteenth Floor	1135.95
	Fourteenth Floor	1135.95
	Fifteenth Floor	1135.95
	Sixteenth Floor	1135.95
	Seventeenth Floor	1135.95
	Eighteenth Floor	1135.95
Nineteenth Floor	1135.95	
Twentieth Floor	1135.95	
Terrace Floor	0	
Total	27766.68	
Number of Block	1	
No. of Floor	B+G+20	
Height (m)	61.72m	
Building Configuration	158 dwelling units of 3 BHK and a shop having an area of 1051.86 Sq.m.	
Population	1393	
Municipal Solid Waste	Total estimated MSW is 660.8 Kg/day including 264.32 Kg/day bio-degradable waste (i.e. 40% of MSW) and 396.48 Kg/day non-bio-degradable waste (i.e. 60% of MSW)	
Parking	188 Car Parking & 159 Two Wheeler Parking	
Power Requirement	Power Requirement	0.22 MVA (conventional)
	Energy Saving	18.20%
	Power Back-up	1000 KVA
	Renewal Energy	95.28 kWh per day 2% of conventional energy demand
RWH Pits	2 Nos of Recharge pit	
Total no. of Dwelling Units	158 dwelling units of 3 BHK 1 retail Shop 1 Community Hall	
Total Project Cost	Rs. 83.25 Crores.	

EMP Cost (Construction Phase)	Capital Cost: Rs. 42.00 Lakh Recurring Cost: Rs. 19.75 Lakh
EMP Cost (Operational Phase)	Capital Cost: Rs. 129.00 Lakh Recurring Cost: Rs. 17.00 Lakh
Disaster Management	Separate Assembly Points will be marked for each section. Residents will be made aware of the safety protocols and escape routes.
Coordinate	22°47'50.3"N 86°16'00.6"E

LAND DETAILS

Khata no.	Plot no.
221	142 (P)
167	149 (P)

POPULATION

Building Type	Configuration	DW Units / Area	NBC Norms	Population
Residential units	3BHK	158	6	948
<i>Floating Population 10%</i>				<i>95</i>
	Retail Shop	1051.86	1 person per 3 Sq.m. of street floor	350 <i>35 fixed & 315 floating</i>
Total				1393

WATER & WASTEWATER

Water Demand

Residential Blocks	Domestic @70L Per head		Flushing @35L per head	
1043	73		36.5	
Commercial Units	Fix		Floating	
	Domestic @25L per head	Flushing @20L per head	Domestic @5L per head	Flushing @10L per head
350 <i>35 fixed & 315 floating</i>	0.875	0.7	1.575	3.150
Water Demand Total (UNIT : KLD)				
<i>Domestic</i>			75.45	
<i>Swimming Pool</i>			6.90	
<i>Flushing</i>			40.35	
<i>Dust Suppression</i>			5.00	
<i>Landscaping</i>			5.00	
<i>Car Washing</i>			10.00	
Total Water Demand			142.70	
Total Fresh Water Demand			82.35	

Total Treated Water Demand	60.35
Discharge to Municipal Drain	20.22

Source: Fresh Water from Municipal Water Supply System / Ground Water & Treated Water from Sewage Treatment Plant (STP)

Swimming Pool - Water Requirement and Wastewater Generation

	Water Demand	Loss 10%	Waste Water
Swimming Pool	69.00 KL	6.90 KL	62.10 KL
Water Treatment Plant (WTP) : 75 KL			
Treated Water	55.89 KL	10% Loss during Processing	6.20 KL

Chemical requirement for swimming pool

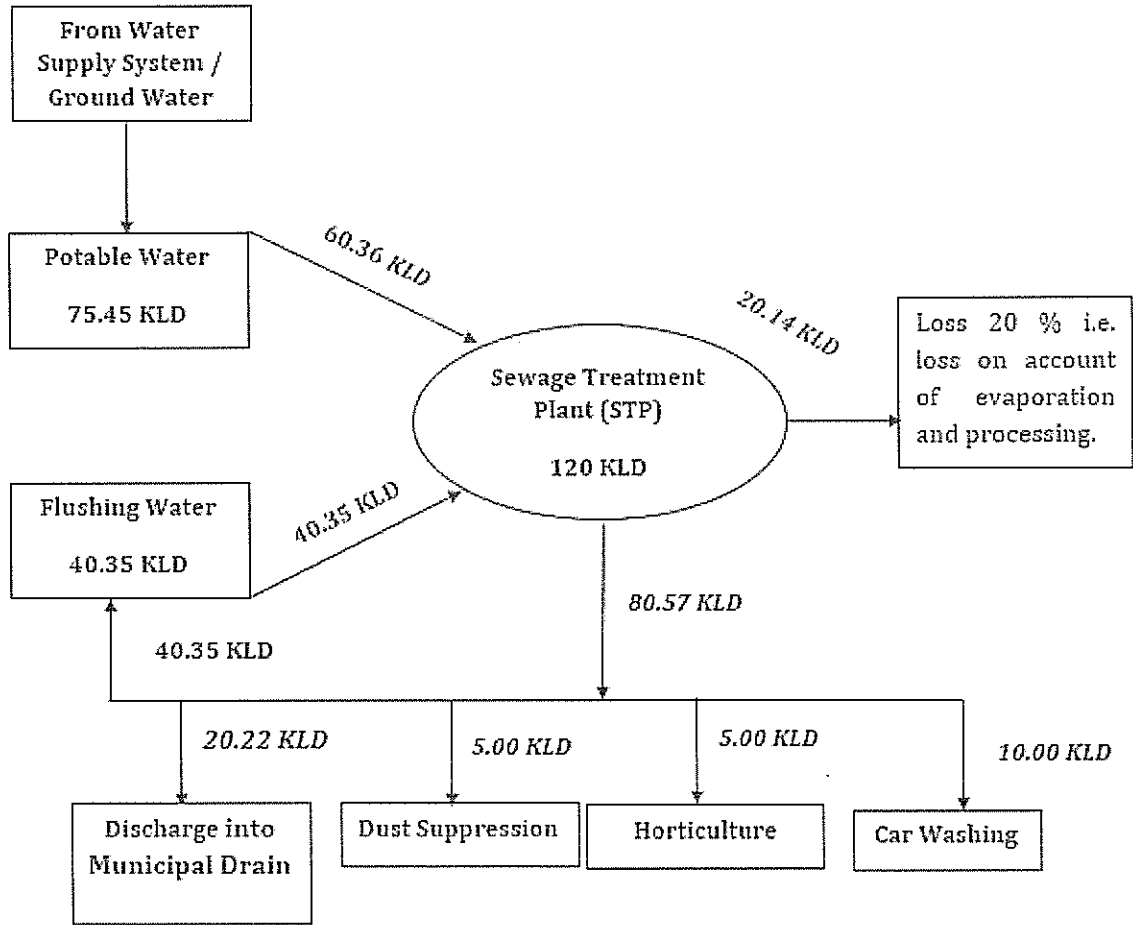
Chemical	Purpose	Dosage for 69 KL Pool
Liquid Chlorine (12%)	Increase chlorine by 1 ppm	3.45 L
Calcium Hypochlorite	Increase chlorine by 1 ppm	104 g
Trichlor Tablets	Continuous chlorination	3-4 tablets (200 g each)
Sodium Carbonate (Soda Ash)	Raise pH by 0.1 unit	345 g
Hydrochloric Acid (HCl)	Lower pH by 0.1 unit	431 mL
Sodium Bicarbonate	Increase alkalinity by 10 ppm	259 g
Muriatic Acid	Reduce alkalinity by 10 ppm	518 mL
Calcium Chloride	Increase hardness by 10 ppm	259 g
Cyanuric Acid	Increase stabilizer by 10 ppm	173 g
Algaecide (Initial)	Algae prevention	690 mL
Algaecide (Maintenance)	Weekly maintenance	173 mL/week
Calcium Hypochlorite	Shock treatment	863 g
Liquid Chlorine (12%)	Shock treatment	8.63 L

Waste Water Management

STP Calculation (KLD)			
Total Domestic Water	75.45	60.36	80% of Domestic Water is Waste Water
Total Flushing Water	40.35	40.35	100% of Flushing Water is Waste Water
Total Volume of Waste Water		100.71	
STP Capacity		120.00	
Waste Water Management (KLD)			
Volume of Treated Water from STP <i>i.e., 80% of Waste Water</i>			80.57
Loss 20 % loss on account of evaporation, loss in conveyance and processing.			20.14
Break-Up			

Flushing	40.35
Dust Suppression	5.00
Horticulture	5.00
Car Washing	10.00
Discharge to Municipal Drain	20.22

WATER BALANCE



CONNECTIVITY

Feature	Location	Approx. Aerial Distance (km)	Direction
Railway Station	Tatanagar Junction Railway Station	7.66	SW
Airport (Nearest Airstrip)	Sonari Airport	10.20	W
Operational Commercial Airport	Birsa Munda Airport	115.00	NW
Bus Stand	Mango Bus Stand	6.00	NW
National Highway	NH-33	3.00	N

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ENVIRONMENTAL SENSITIVITY AREA

Environmental Feature	Name of Feature	Direction from Site	Aerial Distance (km)
Wildlife Sanctuary	Dalma Wildlife Sanctuary	North	8.64
Forest	Dalma PF	North	3.57
Water Body	Dimna Lake	South	6.94
	Subarnarekha River	South-West	0.53
	Kharkai River	West	11.58
Educational Institute	National Institute of Technology Jamshedpur	West	12.77
	XLRI Xavier School of Management	West	7.97
	Arka Jain University	West	8.86
	Netaji Subhas University	North	1.41
	Baridih High School	West	2.74
	NSE School	West	4.77
Healthcare Hospital /	Brahmananda Narayana Multispeciality Hospital	North-West	8.9
	MGM Medical College and Hospital	South-West	10.3
	Tata Main Hospital	South-West	14.1
	Mercy Hospital	South-West	3.50
	TMH Tinplate	South	3.70
	Apex Hospital	West	5.93
	Sadar Hospital	South – West	7.85

SOLID WASTE MANAGEMENT

Construction Phase

Building Type	Municipal Solid Waste @0.2 Kg per Person per Day	Bio-degradable (40% of MSW)	Non-Biodegradable (60% of MSW)
Labours @0.1 Kg/Day/Person	15 Kg / Day	6 Kg / Day	9 Kg / Day

Solid Waste generated during construction phase would include top soil, brick bats, pieces of reinforcing roads, pieces of wood boards & waste of other construction material, cans of paints electrical wire, etc.

Top-Soil would be separately stored at pre-defined location within the site & preserved for landscaping. Sub – Soil would be stored for reuse in road making, plinth filling, etc. E-Waste & Hazardous waste (cans of paints_ would be collected in separates containers. Recyclable wastes including bags, packing, pcs of steel rods sold to rag pickers.

C & D Waste

C&D Waste Constituents	Percentage Composition (%)	Quantity (Ton)	Disposal / Utilization Method
Soil, Sand and Gravel	34.99%	479.95	Reused on-site for backfilling, leveling & landscaping
Brick and Masonry	29.95%	410.84	Used for sub-base, filling & road works
Concrete	24.98%	342.70	Crushed and reused as aggregate (where feasible)
Metal	4.97%	68.18	Sold to authorized scrap recyclers
Bitumen	2.04%	27.98	Reused in road works / disposed through authorized agency
Wood	2.04%	27.98	Reused / handed over to authorized recyclers
Other	1.02%	13.99	Disposed as per standard practice
	100.00%	1371.72 Ton	Handed over to Municipal Solid Waste Management Facility / authorized C&D waste processing facility

Operational Phase

Building Type	Municipal Solid Waste	Bio-degradable (40% of MSW)	Non-Biodegradable (60% of MSW)
Residential Building @0.6 Kg per Person per Day	625.8 Kg/Day	250.32 Kg/Day	375.48 Kg/Day
Commercial Building @0.1 Kg per Person per Day	35 Kg/Day	14 Kg/Day	21 Kg/Day
TOTAL	660.8 Kg/Day	264.32 Kg/Day	396.48 Kg/Day

Estimated quantity of municipal solid waste Community building & residential building. During operational phase of buildings municipal solid waste would be generated. They would be stored in different colour bins.

Colour Bin	Waste Type	% of Waste	Quantity (Kg/Day)	Treatment / Disposal Method
Green	Biodegradable	40% of MSW	264.32	Treated on-site through Organic Waste Converter (OWC) to produce compost for landscaping and horticulture use.
Blue	Recyclable (plastic, paper, metal, glass)	75% of dry	297.36	Handed over to authorized recyclers for material recovery and recycling.
Black	Reject / non-recyclable inert	15% of dry	59.472	Handed over to the Municipal Authority for scientific landfill disposal.

Red	Hazardous / sanitary waste	5% of dry	19.824	Collected separately and disposed of through authorized agencies as per applicable rules.
Yellow	E-waste (electrical, batteries etc.)	5% of dry	19.824	Handed over to authorized e-waste recyclers in accordance with the E-Waste Management Rules, 2016.

Organic Waste Converter – Process & Capacity Details

Particulars	Unit	Quantity / Description
Total Organic Waste Generated	kg/day	264.32
Inert / Reject Material (~5%)	kg/day	13.22
Net Waste Fed to OWC	kg/day	251.10
Bulking Agent (10–15%)	kg/day	25 – 38
Bio-culture / Enzyme Addition	kg/day	0.9 – 1.3
Total Input to OWC	kg/day	~289
OWC Processing Capacity	kg/day	300
Retention Time in OWC	Hours	24
Temperature Maintained	°C	55–65
Moisture Content Maintained	%	55–60
Volume Reduction	%	60–65
Semi-processed Output	kg/day	~100
Curing Period	days	7–14
Final Compost Yield	kg/day	78 – 91
Compost Utilization	—	On-site landscaping
Rejects Disposal	—	Authorized municipal facility

An Organic Waste Converter of 300 kg/day capacity is proposed to handle 251.10 kg/day of biodegradable waste. The system ensures effective volume reduction, odor-free operation, and generation of nutrient-rich compost for in-house greenbelt development.

ENERGY DEMAND

The total conventional energy demand of the proposed project is estimated at 17,38,893 kWh/year (i.e. 4764.01 kWh / day). Through the adoption of energy-efficient lighting systems, regenerative lifts, IE3/IE4 motors, VFD-controlled pumps, efficient STP and OWC systems, and other energy conservation measures, an overall energy saving of approximately 18.20% is achieved, resulting in a net energy requirement of 14,05,485.52 kWh/year (i.e. 3850.65 kWh/day).

In compliance with the provisions of Clause 4(a) of Category 2 Table under Notification No. S.O. 3999(E) dated 09/12/2016 published by MOEF & CC and sustainable building practices, rooftop solar photovoltaic (PV) panels equivalent to 2% of the total annual energy demand are proposed, generating approximately 95.28 kWh/day. A total of 24 solar PV panels requiring approximately 480 sq.ft. of rooftop area will be installed.

20% of total parking spaces to be equipped with EV charging points / infrastructure (conduits & wiring).

Unit : kWh

Category	Conventional Demand (A)	Energy Saving (B)	% of Energy Saving	Net Demand (C = A - B)
DU	12,61,440	1,89,216	15.00%	10,72,224
Pumps (60 kW)	65,700	9,855	15.00%	55,845
STP (120 KLD)	70,080	10,512	15.00%	59,568
OWC (300 Kg/Day)	1,42,350	21,352.50	15.00%	120,997.50
External/Common Area Lighting	1,01,868	61,120.80	60.00%	40,747.20
Swimming Pool Filtration	4,015	602.25	25.00%	3,412.75
3 Number of Lifts	93,440	23,360	25.00%	70,080
TOTAL	17,38,893	18.20%	3,16,018.55	14,22,874.45

Energy Conservation Measures

The project incorporates various energy conservation measures to minimize overall power consumption and enhance operational efficiency. The following measures have been proposed for different utilities and services within the project:

- ✓ **Domestic Units (DU):** Energy-efficient LED lighting fixtures and star-rated appliances such as fans, air-conditioners, refrigerators, and other electrical equipment shall be provided in the residential units. These measures are expected to achieve an average overall energy saving of approximately 21.75% compared to conventional systems.
- ✓ **Pumps (60 kW):** Water supply and utility pumps shall be equipped with IE3/IE4 energy-efficient motors and Variable Frequency Drive (VFD) systems to optimize pump performance and reduce electricity consumption. Expected energy saving is approximately 15–20%.
- ✓ **STP (120 KLD):** The Sewage Treatment Plant shall utilize IE3/IE4 energy-efficient motors, optimized aeration systems, and efficient blowers. The average power consumption for wastewater treatment is considered as approximately 1.5–2.0 kWh per m³ of wastewater treated, and for design calculations, 1.6 kWh/m³ has been considered. Expected energy saving is approximately 15%.
- ✓ **OWC (300 Kg/day):** The Organic Waste Converter shall be provided with energy-optimized motors and efficient drying/mixing systems. Standard energy consumption for OWC operation is approximately 1.2–1.5 kWh per kg/day of waste processed, and an average value of 1.3 kWh/kg has been considered for design purposes. Expected energy saving is approximately 15%.
- ✓ **External/Common Area Lighting:** Conventional lighting systems shall be replaced with energy-efficient LED fixtures along with occupancy sensors and timer-based controls wherever feasible. These measures are expected to achieve approximately 60–80% energy savings compared to conventional lighting systems.

- ✓ **Swimming Pool Filtration System:** Energy-efficient filtration pumps with timer-based control systems shall be installed to optimize operating hours and reduce energy consumption.
- ✓ **Passenger Lifts (3 Nos.):** Conventional passenger lifts generally consume approximately 5.5–6.5 kW (≈7.5–8.7 HP) per lift, whereas regenerative lifts require only about 4.0 kW average demand. Therefore, regenerative lift systems with braking energy recovery mechanisms have been proposed, resulting in approximately 30–40% lower energy consumption compared to conventional lift systems.
- ✓ **Service / Fire Lift:** Conventional service/fire lifts consume approximately 7.5–9.0 kW (≈10–12 HP), whereas regenerative lift systems operate with an average demand of approximately 5.5 kW. Regenerative technology shall be adopted to improve energy efficiency and reduce operational electricity demand.
- ✓ The adoption of the above energy conservation measures shall substantially reduce the overall connected load and operational energy requirement of the project, thereby promoting sustainable and energy-efficient development.

Energy Performance Index (EPI)

It is a measure used to evaluate the energy efficiency of a building by comparing the total annual energy consumption with the built-up area of the building.

EPI (Initial)

$$EPI = \frac{1,734,878}{27,434.42}$$

$$EPI = 63.24 \text{ kWh/m}^2/\text{year}$$

EPI (After Energy Conservation & Renewable Energy Measures)

$$EPI = \frac{1,402,112.92}{27,434.42}$$

$$EPI = 51.10 \text{ kWh/m}^2/\text{year}$$

The Energy Performance Index (EPI) of the proposed Group Housing Project has been assessed as 63.24 kWh/m²/year under conventional operating conditions. Through the adoption of energy-efficient measures such as LED lighting, energy-efficient pumps and motors (IE3/IE4), Variable Frequency Drives (VFDs), regenerative lifts, efficient STP and OWC systems, and rooftop solar photovoltaic panels, the EPI is reduced to 51.10 kWh/m²/year.

The reduction of approximately 12.14 kWh/m²/year, corresponding to an overall improvement of about 19.2%, demonstrates the effectiveness of the proposed energy conservation and renewable energy measures. The achieved EPI value indicates that the project is designed to operate with lower energy intensity and reduced dependence on conventional grid electricity, thereby contributing to resource conservation, reduction in greenhouse gas emissions, and sustainable development.

Therefore, the proposed project incorporates adequate energy-efficiency measures and renewable energy generation systems, resulting in a satisfactory EPI and improved environmental performance throughout its operational phase.

Renewable Energy Generation (Solar)

The project proposes the use of Solar Photovoltaic (SPV) cells as a renewable energy source to reduce dependence on conventional grid electricity and promote sustainable

development. Solar PV technology converts solar radiation directly into electrical energy through photovoltaic cells installed over rooftop areas and other suitable locations within the project premises.

The proposed solar power system shall generate approximately 95.28 kWh/day of electricity, which contributes around 2% of the total connected energy demand after implementation of energy conservation measures. Approximately 24 solar panels are proposed considering an average generation of 4 kWh per panel per day. The total area required for installation of the solar panels is estimated to be about 480 sq.ft.

Solar Energy Generation (2% of conventional demand) = 34,777.86 / 365 = 95.28 kWh / day

**Assuming 4 kWh generation per solar panel per day = 95.28 / 4 = 23.82
= 24 Solar Panels**

Area Required (@20 sq.ft./panel) = 480 sq.ft.

RAIN WATER RECHARGE PITS

2 Rainwater Recharge pits are proposed. Rain water from roof tops will be drained through rain water vertical down take pipes. These vertical down take pipes shall be located at suitable locations inside the shafts or periphery of the building. The terrace will be sloped. The down take pipes will be connected to the storm water network and then to Rainwater Harvesting Pits.

Catchment Area(m2)	Runoff Coefficient	Intensity of Rainfall in 24 hr. (mm)	Maximum Intensity of Rainfall hourly (mm/hr)	Retention Time - Runoff (m3/15 mins)	Runoff 60 minutes
1120.66	0.85	180	9	2.14	8.57
Volume of desilting Tank (m3)	Volume of Recharge Pit (m3 Per pit)	Total Volume (M3)	Runoff 60 minutes	No. of pits required	No. of pits proposed
2.5	2.5	5	8.57	1.72	2

Rainwater from other surface type

Surface Type	Area (sq.m)	Runoff Co-efficient	Effective Area (sq.m)
Paved / Road Area/Open Parking	3491.50	0.65	2269.48
Lawn / Garden / Tree Cover	2665.00	0.15	399.75
Total Effective Catchment Area			2669.23

Hourly Rainfall = 9mm/hr

Hourly Run-off = 2669.23 * (9/1000) = 24.02 m3 per hour

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This run-off will be drained through a network of open drain & connected to Storm Water Municipal Drain.

BUDGETARY PROVISION

Project Cost

Particulars	Amount (INR)
Land	4,54,78,627.00
Construction Cost	75,00,00,000.00
EMP	1,71,00,000.00
Statutory Clearance & Other	2,00,00,000.00
Total Project Cost	83,25,78,627.00 (Rs. 83.25 Cr.)

Environmental Management Plan (EMP) Cost

A. EMP Cost for Construction Phase

S. No.	Description	Capital Cost (Rs. Lakhs)	Recurring Cost (Rs. Lakhs/Annum)
1	Construction site enclosure with 3 m high corrugated GI sheets	10.00	-
2	Acoustic enclosure for DG Set	4.00	-
3	Air Fogging Gun and Water Tankers for dust suppression	3.00	15.00
4	Covered shed for storage of construction materials and tarpaulin arrangements	5.00	-
5	Temporary septic tank and sanitation facilities	3.00	0.50
6	Drinking water and worker welfare facilities	1.50	0.50
7	Temporary storm water drainage and sediment traps	5.00	0.50
8	HDPE bins and waste storage area	1.00	0.25
9	PPE, occupational health and safety measures	2.00	1.00
10	Environmental monitoring, awareness programs and miscellaneous measures	7.50	2.00
Sub-Total (A)	Construction Phase	42.00	19.75

B. EMP Cost for Operational Phase

S. No.	Description	Capital Cost (Rs. Lakhs)	Recurring Cost (Rs. Lakhs/Annum)
1	Plantation of 500 saplings including 3-year maintenance	4.00	0.75

2	Development of landscaped lawns, parks and green areas	8.00	1.50
3	120 KLD Sewage Treatment Plant (MBBR/SBR Technology)	35.00	3.00
4	300 kg/day Organic Waste Converter with shredder and curing system	15.00	1.50
5	Two Rainwater Harvesting and Recharge Pits with filtration arrangements	12.00	1.00
6	Rooftop Solar Power System (40–50 kWp including inverter and net metering)	30.00	2.00
7	Acoustic enclosure and stack for DG Set	5.00	0.75
8	Solid Waste Management infrastructure and collection system	5.00	1.00
9	Swimming Pool Filtration and Water Recirculation System (15 m ³ /hr)	5.00	1.50
10	Environmental monitoring, STP sludge management, training and miscellaneous provisions	10.00	4.00
Sub-Total (B)	Operational Phase	129.00	17.00

ENVIRONMENT MANAGEMENT PLAN

During Construction Phase

Likely to impact	Mitigation Measure
Site Clearance <ul style="list-style-type: none"> ➤ Tree Felling ➤ Dismantling of existing structure & disposal of C & D Waste ➤ Grading & Leveling of Site ➤ Removal of Top Soil 	<ul style="list-style-type: none"> ✓ There are NO Trees at all at the site. ✓ Water sprinkling on identified site. ✓ Store top soil at pre-determined identified site & preserved
Construction of Labour Camp	Local Labors will be hire
Installation, commissioning, and operation of construction	✓ Regular maintenance of machineries to minimize generatio of noxious gases and dust. To ensure that constructio

equipment & machineries	<p>equipments are compliant to BIS Specification wherever applicable.</p> <ul style="list-style-type: none"> ✓ Also that they comply to applicable standard for emission prescribed by regulators
Earthwork Soil excavation for foundation work construction activities	<ul style="list-style-type: none"> ✓ Use excavated soil for plinth filling or Road construction. ✓ Surplus soil to be used in own mines for plantation purpose.
Generation of Solid Waste	<ul style="list-style-type: none"> ✓ Recyclable waste to be handed over to Rag Pickers.
Transport & Storage of construction materials	<ul style="list-style-type: none"> ✓ Trucks carrying fine materials to be covered with tarpaulins ✓ Trucks with Pollution under Control Certificate. ✓ Toe wall along the edge of soil / sand storage to be provided to arrest flow of material during monsoon. ✓ Temporary storage yard to be constructed for proper storage of construction materials.
Water Pollution	<ul style="list-style-type: none"> ✓ Sewage & Cess Pool is proposed to be constructed for labor. ✓ Drinking water facility to be provided. ✓ Collection of surface run-off from active construction area and channelize them to desiltation pond. Desilted water to be let off to natural drainage.
Hazardous Waste	<ul style="list-style-type: none"> ✓ Used oil from construction equipments will be collected in HDPE containers and handed over to authorized recyclers. ✓ Used cans of paints, varnished to be handed over to authorized recycler.
Noise Pollution (Noise generated by construction equipments)	<ul style="list-style-type: none"> ✓ Regular repair & maintenance of equipments. ✓ Providing acoustic barrier around periphery of construction site (3.5 m high GI Sheet). Boundary wall has already been constructed around the project area. ✓ DG set will be provided as per the norms of CPCB.
Environment Monitoring	Regular environment monitoring will be done covering noise, air & water quality, during half yearly EC Compliance.
Arrangement of Water for Construction	<ul style="list-style-type: none"> ✓ Create water storage tank to store water procured through water tankers / ground water abstraction.

During Operational Phase

Attributes	Environmental Issues	Impact	Mitigation Measure
Air Environment	Movement of Vehicles along internal Road	Generation of dust & noxious gases	<ul style="list-style-type: none"> ✓ Water sprinkling on internal Roads. ✓ Create grass cover on open spaces. ✓ Internal Roads to be paved. ✓ Avenue Plantation

			<ul style="list-style-type: none"> ✓ Plantation along periphery of project premises. ✓ Enforce speed limit for vehicle within project area.
Noise Environment	Movement of Vehicles along internal Road	Noise	<p>Ensure</p> <ul style="list-style-type: none"> ✓ Restrict speed limit to 20 KMPH. ✓ Enforce no Horn Zone.
Solid Waste Management	Generation of Municipal Solid Waste	Unhygienic Condition	<p>Collection of</p> <ul style="list-style-type: none"> ✓ Bio-Degradable Waste ✓ Recyclable Solid Waste ✓ Non-Recyclable Solid Waste ✓ Hazardous Waste <p style="text-align: right;">Into a colored bin.</p> <p>Disposal</p> <ul style="list-style-type: none"> ✓ Recyclable waste to be handed over to rag pickers. ✓ Bio-Degradable & Non-Recyclable solid waste to be converted into fertilizer through OWC. <p>Hazardous waste to be handed to authorized hazardous Waste Management Facility.</p>
	Generation of Sludge from STP	Unhygienic Condition	A sludge treatment & recovery plant will be installed along with the STP. The product may be utilized as fertilizer.
Water Environment	Generation of Sewage	Waste Water	<ul style="list-style-type: none"> ✓ Provision of STP for treatment of waste water & recycling
	Storm Water	Surface run-off may carry suspended solid during monsoon	<ul style="list-style-type: none"> ✓ Provide a network of storm water drains terminating into desiltation tank. This tank would be connected to storm water drainage system.
	Roof top rainwater harvesting system	Loss of rainwater	<ul style="list-style-type: none"> ✓ Provide rainwater harvesting system with drawdown pipes & harvesting pits.

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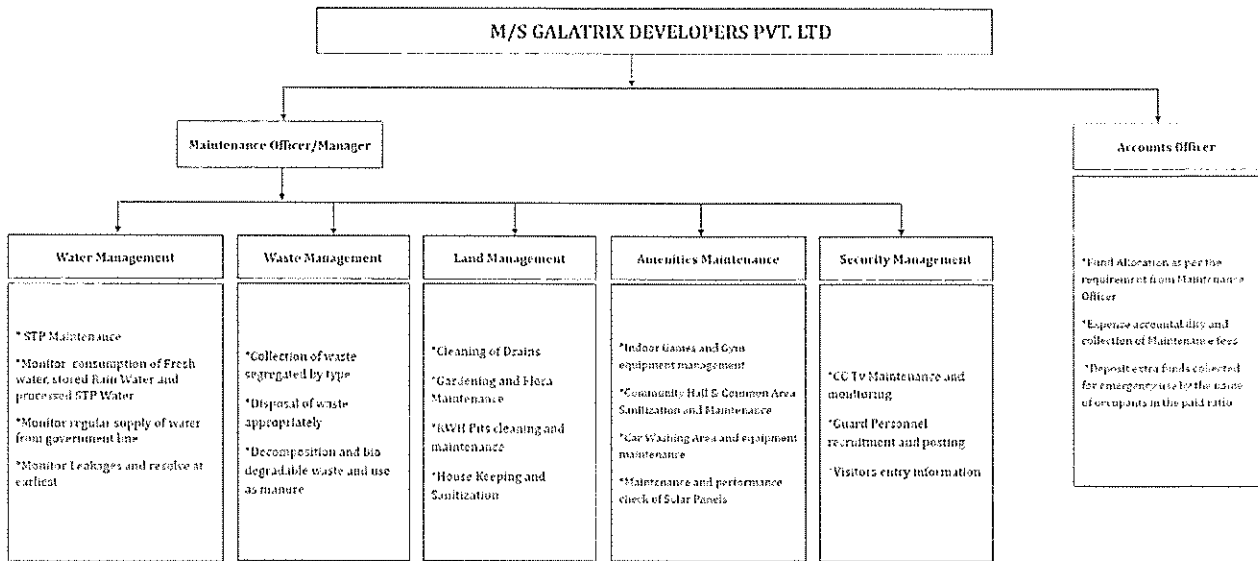
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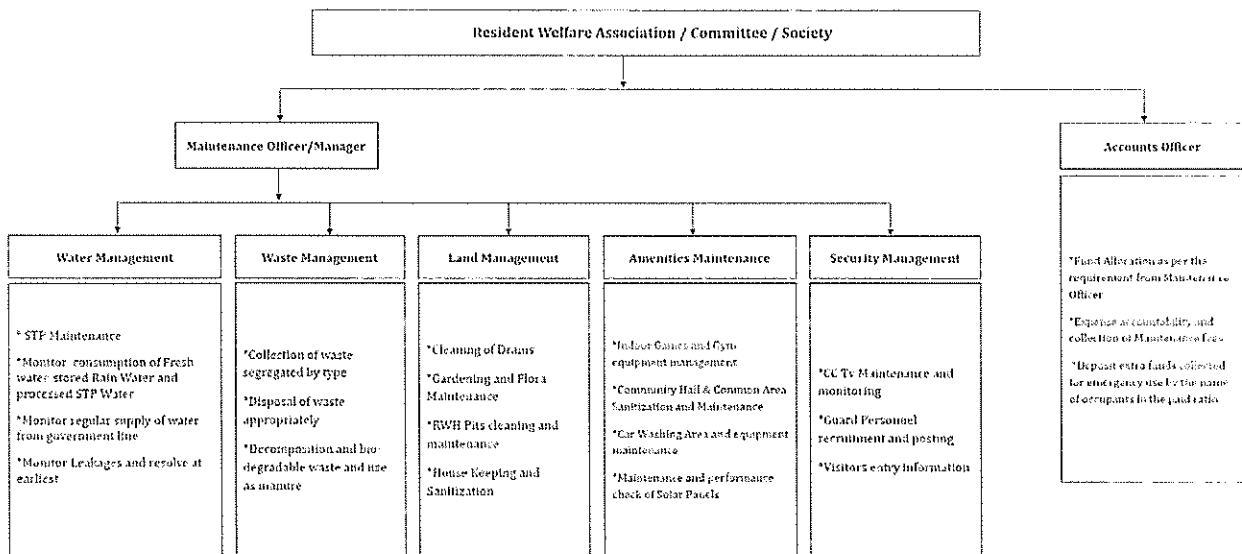
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ORGANIZATIONAL STRUCTURE

During Construction Phase



During Operational Phase



STATUTORY CLEARANCES

1	Land Docs	:	Own Land for Development
2	DFO Territorial	:	DFO, Jamshedpur Forest Division vide letter no. 818, dated 28.04.2026 certified that the distance of reserved / protected forest is more than 250 meters from project site.
3	DFO Wildlife	:	Deputy Conservator of Forest & Field Director, Elephant Project, Jamshedpur vide letter no. 762, dated 13.05.2026 certified that the proposed project site is outside Eco Sensitive Zone of Dalma Wildlife Sanctuary.

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4	CO certificate	:	The CO, Jamshedpur, East Singhbhum vide letter no. 112, dated 03.02.2026 has mentioned the plot no. of the project is not recorded as "Jungle - Jhari" in R.S. Khatiyan & Register II.
5	AAI NOC	:	Airport authority of India issued NOC vide NOC ID no. JAMS /EAST /B/ 010826/2333808, dated 12.01.2026.
6	Building Plan approval	:	Building plan approved by East Singhbhum Zila Parishad vide memo no. ESZP/GH/0219/2025, dated 21.01.2026.
7	Fire Department	:	Fire Advisory has been issued by Fire Department, Jharkhand, Ranchi, vide memo no. 6909/Tech./2024, dated 14.10.2024.
8	Environmental Safeguard from Jharkhand State Pollution Control Board (JSPCB)	:	Environmental Safeguard issued by Environmental Engineer – cum – Nodal Officer, Jharkhand State Pollution Control Board (JSPCB) vide its Memo No.: PC/SEIAA/EC-CTE/53/2026 - 1822, dated : 08.06.2026.

Based on the presentation made and information provided, the Committee decided that the proposal for Proposed Group Housing Project "President Tower" of M/s Galatrix Developers Pvt. Ltd., Village : Hurlung, Tehsil : Jamshedpur, Distt.: East Singhbhum, Jharkhand is recommended for grant of EC. The various conditions for grant of EC is enclosed as Annexure – II alongwith the following specific conditions and Environmental Safeguard as provided by Environmental Engineer – cum – Nodal Officer, JSPCB vide memo no. PC/SEIAA/EC-CTE/53/2026 - 1822, dated : 08.06.2026 is also included as Annexure – II (B) :

- I. In compliance of OM no.F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "EkPed Ma KeNaam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.
- II. Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.
- III. 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.
- IV. All raw material to be stored only under covered shed.
- V. 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.

- VI. Developers to promote energy conservation measures such that it offsets not less than 02 % of connected load.
- VII. Trees should be planted & maintained not less than 15% of project area.
- VIII. Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio degradable) generated is composted at source only.
- IX. Developers/Company to install STP of sufficient capacity such that all the sewer produced is treated and reused.
- X. 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.
- XI. Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
- XII. 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.
- XIII. Sufficient number of EV fast charging points to be installed.
- XIV. MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
- XV. ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr management.

9. Burakhap Small Patch Coal Mine of M/s Shreesatya Mines Private Limited, Village :Burakhap, Tehsil : Mandu, Distt. : Ramgarh, Jharkhand (57.05 Ha).

(Proposal no.: SIA/JH/CMIN/ 490746 /2026)

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

This is a new project which has been taken for appraisal on 13.06.2026.

Project Sector: 1(a) Mining of Minerals (Coal), Category: B1.

Application for Terms of Reference (ToR).



PROJECT DETAILS:

Sl	Parameter		Details
1	Project Name	:	BURAKHAP SMALL PATCH COAL MINE
2	Project Proponent	:	M/s Shreesatya Mines Private Limited
3	Address	:	DN-36, Primarc Tower, Sector V 4th Floor, Salt Lake Kolkata, West Bengal 700091 Corporate Office : Infinity Tower, 2 nd Floor, Bistupur, Jamshedpur – 831001, Jharkhand
4	Area	:	57.05 Ha. 140.97 Acres
5	Capacity	:	Peak : 0.60 MTPA Rated : 0.40 MTPA
6	Type of Land	:	Forest Land: 51.00 Ha. & Non-Forest Land: 6.05 Ha.
9	Project Cost	:	Rs. 77.30 Crores
10	New or Expansion	:	New
11	Gross Geological Reserve	:	11.03 Mte
12	Extractable Reserve	:	2.2000 Mte
13	No. of Fault	:	2
14	No. of Seam	:	11
15	Boreholes drilled	:	12
16	Mine Life	:	8 Years
17	Man power	:	27
18	Water Requirement	:	266.715 KLD including 165.50 KLD for Plantation, 100 KLD for Dust Suppression & 1.215 KLD for workers.
19	Water Source	:	Ground Water
20	Power	:	The proposed Burakhap Opencast Project has been planned for a rated production capacity of 0.40 MT coal per annum and is located in Ramgarh Area of CCL. Presently, this area is virgin and a 11KV lines has passed beside the mining area. One number 11 kV OHTL feeders from nearby sub-station of DVC/Jharkhand Power Development Corporation will be required to feed power to the OCP. The source of power

			isJPDC, which may supply power at 11 kV. The Main Substation will be located near the external dumping area of proposed Mines where 11 kV will be stepped down to 3.3 kV by 2 nos. 0.63 MVA, 33/3.3 kV transformer in this Option. Electrical connection will be taken from Jharkhand Power Development corporation.
21	Crusher	:	Yes
22	Nearest Water Body	:	Damodar River passes through lease
23	Nearest Habitation	:	220m
24	Nearest Rail Station	:	Ranchi Road Railway Station (6.2 Km)
25	Nearest Air Port	:	Birsa Munda Airport (52 Km)
26	Nearest Forest	:	Notified Forest within the lease
27	Road & Highways	:	NH – 20 ~ passes through the lease
28	Eco-Sensitive Zone	:	Not within 15 Km
29	National Park / Wildlife Sanctuary / Corridor	:	Not within 15 Km
30	Project Affected Family (PAF)	:	0

LAND & LAND SCHEDULE:

Khata No.	Plot No.	Area (Ha.)	Type of Land
54	371	0.22	Gairmajuara Nala
54	348	6.04	Gairmajuara Nadi
54	369	0.69	Gairmajuara Nala
53	368	0.05	Raiyati
1	345 (P)	20.80	Gairmajuara Jungle Jhari
1	345 (P)	11.20	Notified Forest
1	349 (P)	3.62	Gairmajuara Jungle Jhari
1	349 (P)	15.38	Notified Forest
Total		58.00	

GM (JJ)~ Deemed Forest : 24.42 Hectares

Notified Forest : 26.58 Hectares

For which Forest Diversion Proposal has been filed vide Proposal No. FP/JH/MIN/QRY/577378/2026 on PARIVESH Portal.

Block Area : 58.00 Hectares
Proposed Project Area : 57.05 Hectares
*Differential Area : 0.95 Hectares

TOPOSHEET & BOUNDING CO-ORDINATES:

Topo-Sheet No. : 73E/10 / F45B10
Latitude range : 23°38'48"N to 23°39'18"N
Longitude range : 85°32'56"E to 85°33'40"E

SITE DESCRIPTION:

National Highway 20 divides the Burakhap project area in two parts, East Quarry & West Quarry.

On the South side of the property lies the river flowing almost East - West. Thus, the periphery of the East quarry is:

East : local Nalla
West : NH20
South : River
North : Geological boundary

Periphery of West Quarry is:

East : NH20
West : Local Nalla
South : River
North : Geological boundary

As both the quarries have water bodies on its two sides and NH20 on one side, the barrier of suitable width has been left as per requirement of Coal Mines Regulations 2017.

Thickness of barriers left is as follows:

1. Barrier between the quarry edge and the Nalla: 15m (i.e. 15m is the minimum width of the barrier between the Quarry edge and the Nalla at any point)
2. Barrier between the Quarry edge and the Highway (public property): 45m.
3. Barrier between the quarry edge and the river: 45m (minimum): a barrier of 45m against the river has been clearly demarcated in the Geological report which has been maintained in the mining plan and will remain untouched throughout the life of the mine.
4. Further, two major faults have dissected the block in the east- west direction. Both the faults namely F1- F1 and F2-F2 are having throw of 200m and 30m respectively towards the south. Throw of fault F2- F2 increases to 35m towards west. It's not possible for the quarry to progress beyond the fault F1-F1 on South side. As a result, the barrier between the river and the quarry edge is more than 45m at places.

Embankment along Damodar River and Nala:

An embankment has been proposed to be constructed at a distance of 15meter from the bank of Damodar River, lying on the south of the Mine, and Nalas lying along the eastern and western boundary of the Mine. The embankment will be constructed strictly as per the provisions of the regulation 149 and other relevant regulations of CMR 2017.

The embankment along the Damodar river at southern side of project and along Nalas on eastern and western boundary will protect the Mine from the flood. The Top RL of embankment will be plus 319.0 m, 3.0 m above the HFL of RL 316 m as per CMR 2017.

WORKING DETAILS:

Quarry-1 (East) will be exhausted in the 3rd year of quarry operation and then Quarry-2 (West) will be started. During Quarry-1 operation OB from Quarry-1 will be dumped over the property of Quarry-2. It will again be re-handled during operation of Quarry-2.

1	Mining Method	Opencast Shovel Dumper with blasting in both coal and OB
2	Project Area and capacity	Block Area : 58.00 Ha. Proposed Project Area : 57.05 Ha. Proposed Rated Capacity : 0.40 MTPA Proposed Peak Capacity : 0.600 MTPA
3	No of Seams considered	Seam-XI, Seam-X, Seam-IXA, Seam-IX, Seam-VII, Seam-VI, Seam-V, Seam-IV, Seam-III, Seam-II, Seam-I
4	Name of Coalfield	Ramgarh Coal Field
5	Average Grade	G7
6	Exploration Details	Detailed exploration of the Coal Block was carried out to establish succession, disposition, quality and reserve of the coal seams. Due to structural complexity of the area, 12 drilling points with a borehole density of 20.68 holes per sq. km were proposed at suitable interval on a grid pattern. Grids measuring 100m x 100m and at place 50m x 50 m were prepared and 12 boreholes were drilled. Altogether eleven major Barakar coal seams were observed in the area out of which only three coal seams I, II and III were found to be workable. GR prepared by Directorate of Geology, Dept. of Mines and Geology, Govt. of Jharkhand and the net geological reserve was found to be 9.68 Mte which is the sum of the reserves of the three seams only viz. Seam-I, Seam-II and Seam-III only.

7	Life of the project	8 Years
8	Gross Geological Reserve	11.03 Mte
9	Net Geological Reserve	9.6800 Mte
10	Blocked Reserve	7.2400 Mte
11	Mineable Reserves	2.4400 Mte
12	Extractable Reserve	2.2000 Mte
13	Depth of Working	119m (maximum)
14	Mode of Transport	Road and Road cum Rail
15	Overburden	6.1900 Mte
16	Striping Ration	3.60 m ³ /t

DESCRIPTION OF FAULT:

Two major fault has dissected the block in the east- west direction. Both the faults are having throws towards the south. As a sum totaleffect the block has been divided into three sub-blocks i.e Sector-I, Sector-II and Sector-III. The details of the faults have been tabulated in table below and the structure of individual seams have been depicted in Floor contour plans of the seams.

Fault No.	General Trend	Throw amount Dip & Direction	Linear Extension	a) Nature of Fault b) Evidence
F1-F1	E-W	i. 200m. ii. 80° southerly	630m	Curvilinear Oblique fault Intersected in JRB-01& JRB-06 and Difference of floor level.
F2-F2	E - W swinging to NWSE in the eastern part	i. 30m in the eastern part increasing to 35m towards west near JRB10 ii. 80° southerly	1065m	Curvilinear Oblique fault Intersected in JRB-07 & JRB-08 and Difference of floor level.

SEQUENCE OF COAL SEAMS:

The number of intersections of the individual seams (full thickness) is very few and depending on that a brief description of the lower seams has been attempted. For seams

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younger than Seam-III the intersections has further reduced to 1 or 2 boreholes hence for younger seams no detail description has been attempted.

Altogether 11 regional coal seams belonging to Barakar formation have been identified in Burakhap coal block. Among the 11 coal horizons except the last three horizons, Seam-I, Seam-II and Seam-III, rest younger horizons have very limited intersections to assess their thickness and quality parameters.

Hence in the present report no attempt has been made to calculate the reserve of those younger seams. Reserves have been estimated only for Seam- I, II and III.

In the northern and the central sector of the block as a result of the faults the lower thick seams, Seam-I to Seam V has come to the near surface position and out cropped within the block and the Barakar Gneiss contact runs east west along the northern fringe of the block. Due to the thickness of the seams and their near surface position these two sectors have become potential as opencast sector with respect to Seam-I, Seam-II and Seam-III. In the southern-most sector at the down thrown side of fault F1-F1 the seams have gone below and coal horizons from Seam-XI is present here. Since the thicker lower horizons has gone below this sector does not have any opencast potentiality.

Coal Seam	Variation In Seam Thickness (m) – Minimum	Variation In Seam Thickness (m) - Maximum	Variation In Parting (m) - Minimum	Variation In Parting (m) - Maximum	No. of sections considered
Seam-XI	3.02 (JRB-02)				1
Parting			56.23 (JRB-02)		1
Seam-X	1.75 (JRB-06)	3.94 (JRB-02)			3
Parting			21.82 (JRB01)	24.72 (JRB 02)	3
Seam-IXA	Thin bands (0.66 in JRB-06)	1.88(JRB-01)			3
Parting			15.09 (JRB01)	29.37 (JRB 06)	3
Seam-IX	Thin bands (0.10 in JRB01)	3.53 (JRB-02)			3
Parting			22.21 (JRB01)	64.67 (JRB 02)	3
Seam-VIII	Not Developed				
Parting					

Seam-VII	3.80 (JRB-02)				1
Parting			18.90 (JRB-02)		1
Seam-VI	1.59(JRB-02)				1
Parting			23.32 (JRB-02)		1
Seam-V	3.29 (JRB-02)	5.43 (JRB-12)			3
Parting			2.12 (JRB12)	8.74 (JRB-02)	2
Seam-IV	3.00 (JRB-12)	6.70 (JRB-02)			2
Parting			26.70 (JRB02)	36.63 (JRB 12)	2
Seam-III	10.47 (JRB11)	31.16 (JRB-04)			8 (6 full & 2 part)
Parting			4.84 (JRB04)	24.14 (JRB 02)	4
Seam-II	4.97 (JRB-02)	15.34 (JRB-04)			4
Parting			5.66 (JRB04)	12.55 (JRB 03)	4
Seam-I	2.84 (JRB-02)	5.40 (JRB-04)			4
Parting with Gneiss			41.82 (JRB04)	119.05 (JRB-11)	3

DIP AND STRIKE:

The coal seams in Burakhap coal block, situated in the northern fringe of the central part of the basin, are having E-W trending strike dipping towards south. The strata showing steep dip of around 25°-30° in the northern part and gradually flatten to 10°-15° in the south and south-eastern part of the block.

PROPOSED CALENDAR PROGRAM:

Year of Operation	Calendar Year	UG	OC	Total	OB MM3	SR
1	2027-28	0	0	0.0000	0	0
2	2028-29	0	0.10	0.1000	0.18	1.8000
3	2029-30	0	0.20	0.2000	0.37	1.8500

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4	2030-31	0	0.40	0.4000	0.56	1.4000
5	2031-32	0	0.40	0.4000	1.19	2.9750
6	2032-33	0	0.40	0.4000	1.44	3.6000
7	2033-34	0	0.40	0.4000	1.44	3.6000
8	2034-35	0	0.30	0.3000	1.01	3.3667

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

LAND USE:

Type	Land use (Proposed)	Land Use (End of Life)	Plantation	Water Body	Public/Co mpany Use	Undisturbed	Total
Excavation Area	18.83	0	0	0	0	0	0
Backfilled Area	0	5.93	5.93	0	0	0	5.93
Excavated Void	0	12.90	0	12.90	0	0	12.90
Without Plantation	1.00	1.00	0	0	0	1.00	1.00
Top Soil Dump	1.10	1.10	1.10	0	0	0	1.10
External Dump	5.28	5.28	5.28	0	0	0	5.28
Safety Zone	11.35	11.35	11.35	0	0	0	11.35
Haul Road between quarries	0.17	0.17	0.17	0	0	0	0.17
Road diversion	1.63	1.63	0	0	1.63	0	1.63
Diversion Or Below River Or Nala Or Canal	0	0	0	0	0	0	0
Settling Pond	0.10	0.10	0.10	0	0	0	0.10

Road And Infrastructure Area	2.41	2.41	2.41	0	0	0	2.41
Rationalization Area	3.50	3.60	3.60	0	0	0	3.60
Garland Drains	0.10	0	0	0	0	0	0
Embankment	5.69	5.69	5.69	0	0	0	5.69
Green Belt	5.89	5.89	5.89	0	0	0	5.89
Water Reservoir Near Pit	0	0	0	0	0	0	0
UG Entry	0	0	0	0	0	0	0
Undisturbed OR Mining Right For UG	0	0	0	0	0	0	0
Resettlement	0	0	0	0	0	0	0
Pit Head Power Plant	0	0	0	0	0	0	0
Water Harvesting	0	0	0	0	0	0	0
Total	57.05	57.05	41.52	12.90	1.63	1.00	57.05

MACHINERIES / HEMM

S.No.	Type of Equipment	Capacity	Unit	Quantity
1	Diesel Hydraulic Shovel	1.5	Tonnes	1
2	Dumper	25	Tonnes	14
3	Drill	110	mm	3
4	Dozer	165	Horsepower (HP)	3
5	Diesel Hydraulic Backhoe	0.9	Cubic Meter	1
6	Crane	8	Tonnes	1

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7	FE Loader	0.7	Cubic Meter	1
8	Tipping truck	10	Tonnes	1
9	Water sprinkler	10	KL	1

PLANTATION

A plantation program over life of the mine has been planned in a phase wise manner. Due precaution has been emphasized in green belt development as per the importance of the place. 7.5 m to 45 m wide green belt has been proposed all around the ML (i.e. 17.24 Ha. Safety Zone + Greenbelt).

The native species used for plantation in the region are sal, mahua, gulmohar, neem, siris, acacia, casuarina, mango, kaner, etc.

ESTIMATED BUDGET FOR ENVIRONMENT MANAGEMENT PLAN (EMP)

Particulars	Capital (Rs.)	Recurring (Rs.)
Plantation of 37008 tree over an area of 23.13 Ha. i.e. 1600 Tree / Hectare	1,85,04,000.00	37,00,800.00
Water Sprinkling	5,00,000.00	50,000.00
Annual Environment Monitoring & Compliance	0.00	10,00,000.00
PPE Kits for Workers	10,00,000.00	1,00,000.00
Total	2,00,04,000.00	48,50,800.00

STATUTORY CLEARANCES

1	Land Docs	:	Vesting order issued by Office of the Nominated Authority, Ministry of Coal, Govt. of India vide order no. NA-104/7/2023-NA, dated 08.06.2023 for life of mine i.e. 8 years.
2	CO	:	The CO, Mandu (Ramgarh) vide letter no. 1169, dated 11.07.2023 has mentioned the 24.42 ha under khata no. 01, plot no. 345 & 349 of the project is recorded as "Jungle Jhari" in Khatiyani and khata no. 54, plot no. 371, 348 & 369 khata no. 53, plot no. 368 of the project is not recorded as "Jungle Jhari" in R.S. Khatiyani & Register II. For which diversion application of deemed Forest land under Forest (Conservation) Act, 1980 has been submitted vide

		proposal no. FP/JH/MIN/QRY/577378/2026.
3	DFO Wild Life	: DFO Wildlife, Hazaribagh vide letter no. 2030, dated 18.09.2024 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribag Wildlife Sanctuary.
4	DFO Territorial	: DFO, Ramgarh vide letter no. 1737, dated 05.09.2024 certified that the proposed plot is within the notified forest boundary. For which diversion application of Forest land under Forest (Conservation) Act, 1980 has been submitted vide proposal no. FP/JH/MIN/QRY/577378/2026.
5	Mine Plan Approval	: Mine plan approved by Deputy Director, Coal Controller Organisation (A subordinate organisation of Ministry of Coal), Ministry of Coal, Govt. of India vide Application No. JHJH023/APP00277/2023, dated 28.08.2024.
6	Baseline Environmental Data Generation	: The baseline environmental data is proposed to be generated during the post-monsoon season of 2026 (October to December 2026).

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 09, 10, 11, 12, 13, 14 & 15.06.2026, the Committee recommends for issuing of ToR to SEIAA for undertaking detailed EIA / EMP study as mentioned in Annexure - V alongwith following specific condition :-

- I. PAs shall obtain Stage-I Clearance under Forest (Conservation) Act, 1980 before submission of the application for final EC.
- II. In compliance of OM no. F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (<https://merilife.nic.in>). 10% of the total green belt proposed shall be allocated under this clause.

Day 6 : 14th June, 2026 [Sunday]

A. Any other matter, if any, with the permission of Chair.

1. The following mines were asked by Member Secretary, SEAC to provide clarification and details with evidence of the compliance of conditions of EC.

- i. Kutmu Stone Mine of Sri Basant Kumar Keshri at Village – Kutmu, Tehsil – Bishrampur, Dist – Palamu, Jharkhand (1.82 Ha)
- ii. Gurgai Stone Deposit of M/s Lalkeshwar Stone Chips(P) Ltd. Sri Lalkeshwar Mahto & Sri Rammandan Mahto & Sri Tulsi Kharwar at Village :Gurgai, Oramnjhi, Ranchi (1.33 Ha)
- iii. Chapabar Stone Mine of M/s M/s Hardrock Infra, Village :Chapabar, Tehsil :Ormanjhi, Dist. : Ranchi, Jharkhand (0.66 Ha)
- iv. Dugdugia Stone Mine of Shri Nitesh Sarada, Village :Dugdugia, Tehsil :Khunti, Dist. :Khunti, Jharkhand (1.948 Ha)

The replies have been received from the above mines. In the replies received, all the conditions are addressed suitably.

However, status of actual compliance can only be ascertained by physical verification of project site.

2. The following mines were asked by Member Secretary, SEAC to provide clarification and details with evidence of the compliance of conditions of EC.

- i. Bara Bana Para & Matiyani Stone Mine of M/s Bihar Bentonite Supply Company at Vill- Bara Bana Para & Matiyani, thana- Talhjari, Dist- Sahibganj, Jhk (9.086 Ha)
- ii. Kordar Stone Mine of M/s A.R.S. Enterprises at Village :Kordar, Thana : Ranga, Distt. :Sahibganj, Jharkhand. (2.797 Ha).


- iii. Borna Stone Mine of Shri Jagnath Bhagat at Vill- Borna, P.O.- Bishanpur, Dist- Sahebganj, Jhk (2.90 Ha)
- iv. Rajbandh Stone Deposit of M/s Mandhan Minerals Corporation of Sri Shiladitya Mukherjee at Village – Rajbandh, P.O.- Pakur, P.S.- Malpahari, Dist – Pakur, Jharkhand (3.64 Ha)
- v. Sundre Stone Deposit of M/s O.P. Stone at Vill – Sundre, Banglow, Sakrogarh, Dist – Sahebganj, Jharkhand (2.83 Ha)
- vi. Srirampur Stone Deposit of M/s Mandhan Minerals Corporation Sri Anil Tanwari at Vill – Srirampur, P.S. – Malpahari, Dist – Pakur, Jharkhand (1.48 Ha)
- vii. Anguthia Stone Mine of M/s Sukhi Stone Works, Mouza :Anguthia, Block &P.S. :Hiranpur, Dist. :Pakur, Jharkhand (2.81 Ha)
- viii. Gurgain Stone Mine of M/s Shri Jai Balaji Construction, Village :Gurgain, Thana :Ormanjhi, Thana no. : 69, Distt. : Ranchi, Jharkhand (1.74 Ha)
- ix. Chagjo Stone Deposit of Shri Noor Islam, Village :Chagjo, Thana : Ranga, Thana No. : 8, Dist :Sahebganj, Jharkhand (1.619 Ha)
- x. Bishanpur Stone Deposit of Sri BhaweshTanwani at Vill – Bishanpur, Thana – Pakur, Dist – Pakur, Jharkhand (2.17 Ha)
- xi. Chuwa Stone Deposit of M/s Sankat Mochan Stone Mines (Partner : Shri Pankaj Kumar Yadav), Village :Chuwa, Tehsil :Mandro, Distt. :Sahibganj, Jharkhand (3.640 Ha) (Proposal no.: SIA/JH/MIN/ 530227 /2025)


No replies have been received from these mines.

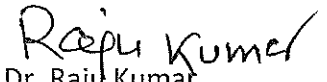
The Member Secretary, SEAC may issue a final show cause as to why the projects may be recommended to SEIAA for keeping the EC of the above projects in abeyance and take necessary action as deemed fit.

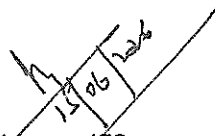
The meeting concluded with thanks to all present.


Ashok Kumar Dubey, IFS (Retd.)
Member


Dr. Ajay Govind Bhatt
Member


Niranjana Lal Agarwalla
Member


Dr. Raju Kumar
Member


Srikant Verma, IFS
Member Secretary


Ashok Kumar Singh, IFS (Retd.)
Chairman

I. Statutory compliance

- i. This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- ii. In the writ petition (Civil) no. 202/1995, T.N. GodavermanThirumulpadvs 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 proscribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- iii. The Project proponent complies with all the statutory requirements and judgement of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors before commencing the mining operations.
- iv. The Hon'ble Supreme Court vide order dated 08.01.2020 in W.P. (Civil) No.114/2014 in the matter of Common Cause vs. Union of India has directed that the area which has been mined should be restored so that grass and other vegetation including trees can grow in the mining area for the benefit of animals.

"The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- v. The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgement of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
- vi. This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- vii. This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- viii. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.

- ix. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- x. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- xi. The Project Proponent shall follow the mitigation measures provided in MoEF&CC's Office Memorandum No. Z-11013/57/2014-IAJI (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- xii. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- xiii. A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- xiv. State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- xv. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change ([www. Environment clearance.nic.in](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.

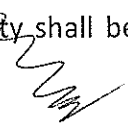
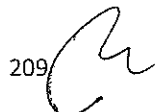
- ii. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading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

III. Water quality monitoring and preservation

- i. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF&CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- ii. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- iii. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be



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submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

- iv. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
- v. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IAJI (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- vi. Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually.
- vii. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.

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

IV. Noise and vibration monitoring and prevention

- i. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- ii. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
- iii. The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining Plan

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



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- iii. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.

VI. Land reclamation

- i. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- ii. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- iii. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- iv. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
- v. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.
- vi. Catch drains, settling tanks and ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

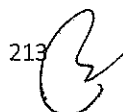
- vii. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
- viii. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

- i. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- ii. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.



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VIII. Green Belt

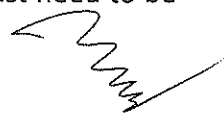
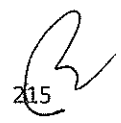
- i. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward 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, if any found or reported by the competent authority. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- v. If any Wild Life Conservation Plan is prepared as per above clause no. iv, it shall be implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

IX. Public hearing and human health issues

- i. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which

are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEF&CC Regional Office and DGMS on half-yearly basis.

- ii. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- iii. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
- iv. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be



presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.

- v. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- vi. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
- vii. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

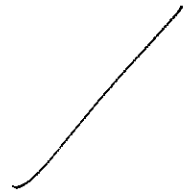
X. Corporate Environment Responsibility (CER)

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

XI. Miscellaneous

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

- ii. The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- iii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF& CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- iv. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.
- v. The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.
- vi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- vii. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- viii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- ix. The Environmental Clearance accorded shall be valid for the period of lease of the mine. The PP shall not increase production rate and alter lease area during the validity of Environmental Clearance
- x. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.



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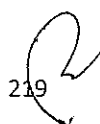


Environmental Safeguard provided by JSPCB

Environmental Safeguards: -

- 1) That, the occupier must provide a display board of adequate size (preferably not less than 1 m × 1 m) near the entrance of mines, mentioning the following details: -
 - a. Name of the Mines with Capacity.
 - b. Address and exact location of area with latitude and longitude of all corner points.
 - c. Name of the Proprietor with contact no.
 - d. Status of regulatory compliance status with Validity (CTE, CTO, HWA etc.).
 - e. Status of Electricity Power Supply.
- 2) That, the occupier shall construct proper Haul roads and make arrangements to maintain the same. Moreover, sufficient numbers of sprinklers should be provided along the haul road to suppress the dust emission. The concerned unit shall be responsible for installation and O & M.
- 3) That, the occupier shall do plantation in both side of the haul / approach road.
- 4) That, the occupier shall do mining activities only if, the mining lease is valid.
- 5) That, the occupier Shall Submit Production figure of the Boulder duly certified by D.M.O, within consent period.
- 6) That, the occupier shall supply Stone Boulder only to those stone crusher units which have valid Consent to Operate from the Board and shall maintain record of it and show the record to the Inspecting Officer at the time of inspection.
- 7) That, the occupier shall make necessary arrangements to preserve live soil of the mine(s) and shall reclaim mined out areas by filling it (them) with over burden and live soil and shall do tree plantation over it (them). In no case soil shall be stored out of mine lease area and report to JSPCB.
- 8) That, the occupier shall do plantation in 3 rows in the safety barrier & enhance the density of the plantation by practicing the continued plantation.
- 9) That, the occupier shall install fixed type water sprinklers to cover all dusty places in the premises to impart water spraying intermittently and during loading, unloading of raw materials / products and wastes.
- 10) That, the occupier shall keep their annual production within the capacity mentioned in the Environmental Clearance accorded to the Unit.

- 11) That, the occupier shall not use any sort of explosives for mining activities without obtaining explosive license / proper permission from the Competent Authority.
- 12) That, the occupier shall make a provision for Water Wetting / Surface active agents / Covering at the product storage area and OB / Waste Storage area.
- 13) That, the occupier shall carry out mining activity at a minimum distance of 100 meter from any river / nallah etc.
- 14) That, the occupier shall install USEPA approved technology PM₁₀ analyser as per CPCB guideline with onsite display and shall provide connectivity to JSPCB server.
- 15) That, the occupier shall submit Ambient Air Quality Report & Noise Level Monitoring Report prior to start of operation of the mines from the Laboratory portal of the Board.
- 16) That, the occupier shall provide information to JSPCB regarding temporary discontinuation / under suspension / closure / any incident of accident or other unforeseen act or event of the unit.
- 17) That, the occupier shall install mist fog cannon dust suppression system at dust prone areas to arrest dust particles.
- 18) That, the occupier shall ensure that haul roads / roads within the mines / industry premises used for the transportation of the products from the stone crushers or mines shall be paved and sufficient number of sprinklers be in operation. The concerned mines shall be responsible for installation and O&M.
- 19) That, the occupier shall ensure that the stone dusts from the stone crushing / mines are not dumped in the nearby areas and may be utilized for construction activities of the highway and Bridges in the area and filling up the ponds / mine voids which were created during the stone mining or reclamation of the stone mines.
- 20) That, the occupier shall abide by the conditions & shall confine to the production as per the year wise production capacity mentioned in the Environmental Clearance accorded to the Unit.



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I. Statutory Compliance

- i. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
- ii. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of fire fighting equipment etc as per National Building Code including protection measures from lightening etc.
- iii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- iv. In the writ petition (Civil) no. 202/1995, T.N. GodavermanThirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to ".
- v. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- vi. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- vii. The project proponent shall obtain the necessary permission for drawl of ground water / surface water required for the project from the competent authority.
- viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
- x. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
- xi. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
- xii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking,

safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.

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

II. Air quality monitoring and preservation

- i. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
- ii. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants

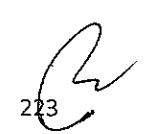

released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.

- iv. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- v. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
- vi. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
- vii. Wet jet shall be provided for grinding and stone cutting.
- viii. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
- ix. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
- x. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
- xi. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
- xii. For indoor air quality the ventilation provisions as per National Building Code of India.

III. Water quality monitoring and preservation

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

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



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

IV. Noise monitoring and prevention

- i. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
- ii. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

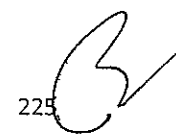
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures

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

VI. Waste Management

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



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- v. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
- vi. Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
- vii. Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
- viii. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016., Ready mixed concrete must be used in building construction.
- ix. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- x. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover

- i. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
- ii. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
- iii. Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
- iv. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.

VIII. Transport

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

IX. Human Health Issues

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

X. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

XI. Miscellaneous

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as

prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry / SEIAA / SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry / SEIAA / SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF& CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi / CPCB / SEIAA.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.
- xvi. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.

Environmental Safeguard provided by JSPCB

A. Safeguards for control of Water Pollution:

1. That, the occupier shall provide provisions for treatment of Effluent through a Effluent Treatment Plant (ETP) of adequate capacity as required, to meet the discharge norms prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder.
2. That, the occupier shall provide provisions for treatment of Sewage through a Sewage Treatment Plant (STP) of adequate capacity as required, to meet the discharge norms prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder.
3. That, the occupier shall ensure that no untreated wastewater or effluent is discharged outside the premises under any circumstances, and all wastewater shall be treated to meet prescribed standards before reuse or disposal.
4. That, the occupier shall provide proper drainage channels across the premises to prevent waterlogging and avoid contamination of surrounding areas.
5. That, the occupier shall install silt traps and sedimentation tanks to control construction run-off and prevent the discharge of silt-laden water outside the premises.
6. That, the occupier shall ensure that, water during construction phase should be preferred from Treated Waste Water of the existing Hospital premises.
7. That, the occupier shall ensure that, the natural drain system should be maintained for ensuring unrestricted flow of water.
8. That, the occupier shall ensure that, total fresh water use shall not exceed the proposed requirement as provided in the project details.
9. That, the occupier shall ensure that, 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.
10. That, the occupier shall ensure that, 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
11. That, the occupier shall ensure that, water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices referred.
12. That, the occupier shall ensure that, rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
13. That the occupier shall ensure that, the ground water shall not be withdrawn without approval from the Competent Authority.
14. That, the occupier shall ensure that, no ground water shall be used during construction phase of the project for the construction purposes.



B. Safeguards for control of Air Pollution:

1. That, the occupier shall ensure that, acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution and conform to rules made under the Environment (Protection) Act, 1986. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. 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.
2. That, the occupier shall install acoustic enclosures for all DG sets and maintain the stack height as per CPCB norms.
3. That, the occupier shall install Retrofit Emission Control Devices (RECDs) to the DG sets as per CPCB norms from the manufacturers certified by CPCB for same.
4. That, the occupier shall use only low-sulphur fuel for DG sets and shall ensure periodic monitoring of emissions to meet prescribed standards.
5. That, the occupier shall install such automatic inbuilt system(s) that process flue gas(es) / process gas(es) and undergo cleaning so that clean air is discharged through chimneys of height as per CPCB norms.
6. That, the occupier shall use only PUC-certified vehicles and DG sets complying with established emission norms of CPCB.
7. That, the occupier shall ensure regular maintenance of all construction machinery and equipment to minimize emissions and ensure efficient operation.
8. 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 6 meter height).
9. That, the occupier shall ensure that, 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.
10. That, the occupier shall store fine construction materials such as sand, cement and aggregates in enclosed spaces to prevent their dispersion due to wind or site activity.
11. That, the occupier shall construct pucca internal road or pave the approach road so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.
12. That the occupier shall ensure that, 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. Moreover, all construction and demolition waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016.
13. That the occupier shall ensure that, unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
14. That, the occupier shall ensure that for indoor air quality the ventilation provisions as per National Building Code of India.

C. Safeguards for Bio-Medical Waste Management:

1. That, the occupier shall make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in coloured bags or containers in the manner as specified in Schedule I, to ensure that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed in these rules to the common bio-medical waste treatment facility or for the appropriate treatment and disposal, as the case maybe, in the manner as prescribed in Schedule I;
2. That, the occupier shall make arrangements for pre-treating the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilisation on-site in the manner as prescribed by the World Health Organisation (WHO) or National AIDS Control Organisation (NACO) guidelines and then sent to the common bio-medical waste treatment facility for final disposal;
3. That, the occupier shall make provisions for disposing of solid waste other than biomedical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time;
4. That, the occupier shall make provisions for ensuring segregation of liquid chemical waste at source and ensure pre-treatment or neutralisation prior to mixing with other effluent generated from health care facilities;
5. That, the occupier shall make provisions for ensuring treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);

D. General Safeguards:

1. That the occupier shall construct pucca (i) minimum ten feet high boundary wall and (ii) approach road and internal roads and shall keep the premises neat, clean and tidy.
2. That, the occupier shall submit the ambient air quality, noise level and the effluent analysis reports to the Board before and after commissioning of the project.
3. That, the occupier shall ensure that, use of environment friendly materials such as Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks shall be used for at least 50% of the construction material quantity.
4. That , the occupier shall comply with the provisions of the Construction and Demolition Waste Management Rules, 2016.
5. That, the occupier shall ensure that, adequate provisions 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 complied with.
6. That, the occupier shall ensure that separate bins for dry and wet solid waste must be provided in each unit for facilitating segregation of waste.
7. That, the occupier shall install organic waste compost/Vermiculture pit / Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/person/day

8. That, the occupier shall ensure that, all non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recycler.
9. That, the occupier shall ensure that 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.
10. That, the occupier shall ensure that, used CFLs and TFLs should be properly collected and disposed off / sent for recycling to authorized TSDFs to avoid mercury contamination.
11. That, the occupier shall ensure that the provisions of the Solid Waste Management Rules, 2016. The e-Waste (Management) Rules, 2022, the Plastic Waste Management Rules, 2016, the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and The Noise Pollution (Regulation and Control) Rules, 2000 shall be followed and complied with.
12. That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and rules thereunder.
13. That, this Comments & Environmental Safeguards is issued from the environmental angle only and does not absolve the occupier from other statutory obligation prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions rests with the occupier.
14. That, this Comments & Environmental Safeguards shall not in any way adversely affect or jeopardize legal proceedings, if any, instituted in the past or that may be instituted against the occupier by the State Board for violation of the Act or Rules made thereunder.



Environmental Safeguard provided by JSPCB

A. Safeguards for control of Water Pollution:

1. That, the occupier shall provide provisions for treatment of Sewage through a Sewage Treatment Plant (STP) of adequate capacity as required, to meet the discharge norms prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder.
2. That, the occupier shall ensure that no untreated wastewater or effluent is discharged outside the premises under any circumstances, and all wastewater shall be treated to meet prescribed standards before reuse or disposal.
3. That, the occupier shall provide proper drainage channels across the premises to prevent waterlogging and avoid contamination of surrounding areas.
4. That, the occupier shall install silt traps and sedimentation tanks to control construction run-off and prevent the discharge of silt-laden water outside the premises.
5. That, the occupier shall ensure that, water during construction phase should be preferred from Treated Waste Water of the existing Hospital premises.
6. That, the occupier shall ensure that, total fresh water use shall not exceed the proposed requirement as provided in the project details.
7. That, the occupier shall ensure that, 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.
8. That, the occupier shall ensure that, 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.
9. That, the occupier shall ensure that, water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices referred.
10. That, the occupier shall ensure that, rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
11. That, the occupier shall ensure that, the ground water shall not be withdrawn without approval from the Competent Authority.
12. That, the occupier shall ensure that, no ground water shall be used during construction phase of the project for the construction purposes.

B. Safeguards for control of Air Pollution:

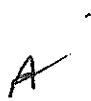
1. That, the occupier shall ensure that, acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution and conform to rules made under the Environment (Protection) Act, 1986. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Low sulphur diesel

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- 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.
2. That, the occupier shall install Retrofit Emission Control Devices (RECDs) to the DG sets as per CPCB norms from the manufacturers certified by CPCB for same.
 3. That, the occupier shall use only low-sulphur fuel for DG sets and shall ensure periodic monitoring of emissions to meet prescribed standards.
 4. That, the occupier shall use only PUC-certified vehicles and DG sets complying with established emission norms of CPCB.
 5. That, the occupier shall ensure regular maintenance of all construction machinery and equipment to minimize emissions and ensure efficient operation.
 6. 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 6 meter height).
 7. That, the occupier shall ensure that, 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.
 8. That, the occupier shall store fine construction materials such as sand, cement and aggregates in enclosed spaces to prevent their dispersion due to wind or site activity.
 9. That, the occupier shall construct pucca internal road or pave the approach road so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.
 10. That, the occupier shall ensure that, 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. Moreover, all construction and demolition waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016.
 11. That, the occupier shall ensure that, unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
 12. That, the occupier shall ensure that for indoor air quality the ventilation provisions as per National Building Code of India.

C. General Safeguards:

1. That, the occupier shall construct pucca (i) minimum ten feet high boundary wall and (ii) approach road and internal roads and shall keep the premises neat, clean and tidy.
2. That, the occupier shall submit ambient air quality, noise level and effluent analysis reports to the Board before and after commissioning of the project.
3. That, the occupier shall ensure that, use of environment friendly materials such as Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks shall be used for at least 50% of the construction material quantity.
4. That, the occupier shall ensure that, adequate provisions 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 complied with.

5. That, the occupier shall ensure that separate bins for dry and wet solid waste must be provided in each unit for facilitating segregation of waste.
6. That, the occupier shall install organic waste compost / Vermiculture pit / Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day.
7. That, the occupier shall ensure that, all non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recycler.
8. That, the occupier shall ensure that any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals from the Jharkhand State Pollution Control Board.
9. That, the occupier shall ensure that the provisions of the Solid Waste Management Rules, 2016, The e-Waste (Management) Rules, 2022, the Plastic Waste Management Rules, 2016, the Hazardous and Other Wastes (Management and Transboundary Movement) Rules,2016 and The Noise Pollution (Regulation and Control) Rules,2000 shall be followed and complied with.
10. That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and rules thereunder.
11. That, this Comments & Environmental Safeguards is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions rests with the occupier.
12. That, the occupier shall conserve the energy via solar power or LED.
13. The approval of the Competent Authority shall be obtained for structural safety of building due to earthquakes, adequacy of fire fighting equipment etc. as per National Building Code including protection measures from lightening etc.
14. That, this Comments & Environmental Safeguards shall not in any way adversely affect or jeopardize legal proceedings, if any, instituted in the past or that may be instituted against the occupier by the State Board for violation of the Act or Rules made thereunder.

I. Statutory compliance

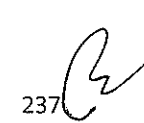
- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area).
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vi. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

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 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common / criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous).
- iii. 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.



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- iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- v. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
- vi. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- viii. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

III. Water quality monitoring and preservation

- i. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD) and connected to SPCB and CPCB online servers.
- ii. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- iv. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- v. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- vi. Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system.
- vii. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.

- iii. 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 energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

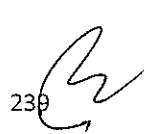
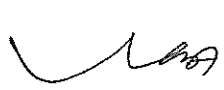
- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.

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.

VIII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- 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, creche 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 and records maintained as per the Factories Act.



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- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May, 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation/violation of the environmental / forest/wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, 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.
- xvii. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.



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

- i. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- ii. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- iii. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- iv. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- v. Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- vi. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- vii. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
- viii. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- ix. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

- x. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- xi. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- xii. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- xiii. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- xiv. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- xv. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- xvi. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- xvii. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- xviii. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and

buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

- xix. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
- xx. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- xxi. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- xxii. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- xxiii. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be

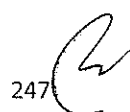
shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

- xxiv. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- xxv. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- xxvi. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- xxvii. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- xxviii. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- xxix. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- xxx. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- xxxi. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
- xxxii. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving

the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

- xxxiii. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- xxxiv. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- xxxv. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- xxxvi. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- xxxvii. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- xxxviii. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- xxxix. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
 - xl. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
 - xli. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
 - xl.ii. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
 - xl.iii. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
 - xl.iii. Besides the above, the below mentioned general points are also to be followed :-
 - a) Executive Summary of the EIA/EMP Report

- b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF & CC / NABL accredited laboratories. All the original analysis / testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF& CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF & CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
 - i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
 - j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
- xlv. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
- xlvi. The Prescribed ToRs is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022 of MoEF&CC, Govt. of India.



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

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



9. In case of any proposed diversion of nallah/canal/river, the proposed route of diversion /modification of drainage and their realignment, construction of embankment etc. should also be shown on the map as per the approval of Irrigation and Flood Control Department of the concerned state.
10. Similarly if the project involves diversion of any road/railway line passing through the ML/project area, the proposed route of diversion and its realignment should be shown in the map.
11. Break up of lease/project area as per different land uses and their stage of acquisition should be provided.

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

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

12. Break-up of lease/project area as per mining operations should be provided.
13. Impact of changes in the land use due to the project, if much of the land being acquired is predominantly agricultural land/forestland/grazing land.
14. One-season (non-monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
15. Map of the study area (1: 50, 000 scale) (core and buffer zone clearly delineating the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources should be provided. The number and location of the stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Values should be provided based on desirable limits.
16. Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora fauna and, or if the area is occasionally visited or used as a habitat by Schedule-I fauna, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan should be prepared and submitted with EIA-EMP Report; and comments from the CWLW of the State Govt. should also be obtained and furnished.

17. Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included.
18. Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
19. Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing through the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
20. Detailed water balance along with flow chart should be provided. The break-up of water requirement for the various mine operations should be given separately.
21. Source of water for use in mine, sanction of the competent authority in the State Govt. and impacts vis-à-vis the competing users should be given.
22. Impact of mining and water abstraction use in mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
23. Impact of blasting, noise and vibrations should be given.
24. Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
25. Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop, management plan for maintenance of HEMM, machinery, equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.
26. Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP / Silo entirely wagons and into trucks / tippers.
27. Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on slope stability studies with a max of 28° angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.
28. Efforts be made for maximizing progressive internal dumping of O.B., sequential mining, external dump on coal bearing area and later rehandling into the mine void.-- to reduce land degradation.



29. Impact of change in land use from mining operations and whether the land can be restored to agriculture use post mining.
30. Progressive Green belt and Ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEF&CC given below) and selection of species (native) based on original survey/land use should be given.
31. Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the status of pre- mining should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of rehandling (wherever applicable) and backfilling and progressive mine closure and reclamation should be detailed.

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

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

32. Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be accorded ?.
33. Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.
34. Risk Assessment and Disaster Preparedness and Management Plan should be provided.
35. Integration of the Environmental Management Plan with measures for minimizing use of natural resources - water, land, energy, etc. should be carried out.
36. Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.
37. Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.

38. CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.
39. Corporate Environment Responsibility:
- The Company must have a well laid down Environment Policy approved by the Board of Directors.
 - The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
 - The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
 - To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.
40. Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.
41. In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.
42. Status of any litigations/ court cases filed/pending on the project should be provided.
43. Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.
44. Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

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

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

45. Besides the above, the below mentioned general points should also be followed:-
- a) A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.
 - b) All documents may be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
 - d) Where the documents provided are in a language other than English, an English translation should be provided.
 - e) The Questionnaire for environmental appraisal of mining projects as prescribed by the Ministry shall also be filled and submitted.
 - f) Approved mine plan along with copy of the approval letter for the proposed capacity should also be submitted.
 - g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013 /41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
 - h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH process again with the revised documentation.

The EIA report should also include

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

After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

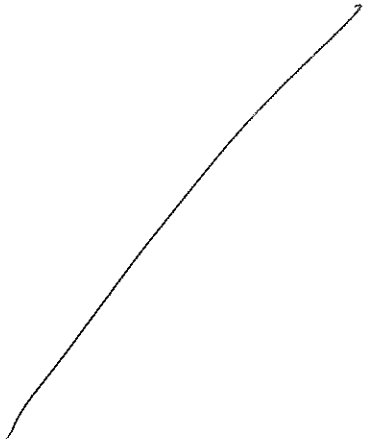
46. The Prescribed ToRs is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022 of MoEF&CC, Govt. of India.



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

1. The project should be designed based on the population projections as by Master Plan.
2. Submit a 10 km. radius map (on survey of India toposheet) showing co-ordinates of project site, national highway, state highway, district road/approach road, river, canal, natural drainage; protected areas, under Wild Life (Protection) Act, archaeological site, natural lake, flood area, human settlements (with population), industries, high tension electric line, prominent wind direction (summer and winter), effluent drain, if any and ponds etc. should be presented and impacts assessed on the same.
3. Examine and submit details of alternative technologies viz. RDF shall also be evolved.
4. Examine and submit details of storm water/ leachate collection from the composted area.
5. Examine and submit details of monitoring of water quality around the landfill site. Water analysis shall also include for nitrate and phosphate.
6. Examine and submit details of the odour control measures.
7. Examine and submit details of impact on water bodies/rivers/ ponds and mitigative measures during rainy season.
8. Submit the criteria for assessing waste generation. Any segregation of hazardous and bio-medical wastes.
9. Submit a copy of the layout plan of project site showing solid waste storage, green belt (width & length, 33% of the project area), all roads, prominent wind direction, processing plant & buildings etc. should be provided.
10. Submit a copy of the land use certificate from the competent authority.
11. NOC from local or nearest airport within 20 km and any flight funnel restrictions.
12. Submit a copy of the status of ambient air quality and surface and ground water quality, soil type, cropping pattern, land use pattern, population, socio-economic status, anticipated air and water pollution.
13. Submit a copy of the topography of the area indicating whether the site requires any filling, if so, the details of filling, quantity of fill material required, its source and transportation, etc.
14. Examine and submit the details of impact on the drainage and nearby habitats/settlements (surroundings).
15. Examine and submit the details of surface hydrology and water regime and impact on the same.
16. Examine and submit the details of one complete season AAQ data (except monsoon) with the dates of monitoring, impact of the project on the AAQ of the area (including H₂S, CH₄).
17. Submit a copy of detailed plan of waste management.

18. Submit the details of sanitary land fill site impermeability and whether it would be lined, if so details thereof.
19. Examine and submit the details of impact on environmental sensitive areas.
20. Examine and submit the details of rehabilitation/compensation package for the project effected people, if any.
21. Submit Environmental Management Plan and Environmental Monitoring Plan with costs and parameters.
22. Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
23. A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
24. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
25. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
26. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Common Municipal Solid Wastes>".
27. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered.
28. The Prescribed ToRs is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022 of MoEF&CC, Govt. of India.



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