

# State Level Environment Impact Assessment Authority, Jharkhand

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website: www.jseiaa.org

Letter No : EC/SEIAA/2022-23/2618/2022/

Ranchi, Date:

To: M/s Asit Kumar Mandal Stone Mine, Proprietor- Shri Asit Kumar Mandal, Village — Asanbani, P.O. — Vitiya, P.S. — Govindpur, District — Dhanbad, Jharkhand - 828109.

Sub: Prescribing of ToR to "M/s Asit Kumar Mandal Stone Mine of Sri Asit Kumar Mandal, Mouza: Marro, Thana: Govindpur, Distt.: Dhanbad, Jharkhand (1.295 Ha)" (Proposal No.: SIA/JH/MIN/80727/2022) - regarding.

**Ref:** Your application no.- Nil, dated – 14.07.2022.

Sir.

It is in reference to the project to "M/s Asit Kumar Mandal Stone Mine of Sri Asit Kumar Mandal, Mouza: Marro, Thana: Govindpur, Distt.: Dhanbad, Jharkhand (1.295 Ha)" along with the application in the prescribed format (Form-1) and a copy of the prefeasibility report and approved mine plan to prescribe the ToRs for undertaking detailed EIA study for the purpose of obtaining environmental clearance under the provisions of the EIA Notification. 2006 in respect of the above mentioned project.

This is a new project which has been taken for appraisal on 21.07.2022.

Project Category : B1 – Application for Terms of Reference

EC Application for : Boulder Stone : Increase in production from 44,604 Tons

(Max) /year to 1,74,000 Tons ( Max) /Year upto 19.05.2026

DG Set: 25 KVA

#### **Project & Location Details:**

SI	Parameter		Details		
1	Project Name	:	M/S Asit Kumar Mandal Stone Mine, Project type – Stone Mine		
2	Lessee:	:	M/S Asit Kumar Mandal Stone Mine. Proprietor – Sri Asit Kumar Mandal.		
3	Lease Address	:	Mouza – Marro, Thana & Block- Govindpur, Dist - Dhanbad, State- Jharkhand.		
4	Lease Area	:	Ha: 1.295 ha	Acres: 3.20 Acres	

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			N. F. A. Deveti Land			
	Type of Land		Non Forest – Rayati Land			
6	Project Cost	:	Capital Cost – 73.20 Lakhs			
7	EMP Budget	:	Capital: 14.5735 Lakhs	Recurring: 02.09 Lakhs		
8	CSR / CER Budget	:	2.20 Lakhs			
9	New or Expansion	:	New Project			
10	Mineable Reserves	:	Cu.M.: 3,62,468.617 Cum	Tonnes: 10,87,405.85 Tons		
11	Mine Life	:	3.92 years say 4.00 years			
12	Man power	:	21			
	NV . D	:	15.76 KLD (Drinking:0.32 KLD	, Dust Suppression: 5.60 KLD,		
13	Water Requirement		Plantation:9.84 KLD			
		:	Water will be sourced from aban	doned Mine through Water		
			Tanker for Dust Suppression and	l Plantation.		
14	Water Source		Water will be sourced from Bore Well within the lease area for			
			Drinking and Domestic Consumption.			
15	DG Set / power	:	25 KVA DG Set proposed			
16	Crusher	:	NA			
17	Nearest Water Body	:	Khudia River- 0.70 km – South			
18	Nearest Habitation	:	Marro – 0.73 km. Dhanbad – 10.20 KM			
19	Nearest Rail Station	:	Dhanbad Railway station – 10.50 km – SW			
20	Nearest Air Port	1:	Ranchi Airport, Ranchi – 134 Km- SW			
21	Nearest Forest	1:	Protected Forest - 5 Km- South			
22	Road & Highways	:	Pakka Road – 0.70 Km in No	ka Road – 0.70 Km in North direction,		
1	Koad & Highways		S.H13 – 3.50 Km in East di	rection from project site		

# CO-ORDINATES

Sl.No.	Latitude	Longitude
P1	23° 52' 01.68 N	86° 29 31.89 E
P2	23° 51' 59.91 N	86° 29 26.98 E
P3	23 <sup>o</sup> 52' 02.42 N	86° 29° 24.88" E
P4	23° 52' 01.51 N	86° 29° 23.12° E
P5	23° 51' 58.10 N	86° 29 26.24" E
P6	23° 52' 00.81 N	86 <sup>0</sup> 29 32.38 E

## LAND DETAILS

Khata No.	Plot No.
20	386(P)

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## STATUTORY CLEARANCES

1	LOI/Lease docs	:	Lease from 20.05.2016 to 19.05.2026	
2	СО	:	The CO, Govindpur, Dhanbad, vide letter no. 1447, dated 07.11.2015 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in Khatiyan.	
3	DMO	:	DMO. Dhanbad vide memo no. 1832 /M. dated 03.10.2015 certified that nine another lease area exists within 500 m radius from proposed project site & Total lease area is 34.18 acre (more than 5 Ha).	
4	DFO Wild Life	:	DFO. Wildlife Hazaribagh vide letter no. 960, dated 01.06.2022 certified that the National Park & Sanctuary is not within 10 km from project site and proposed project is not situated in any ESZ.	
5	DFO Forest Distance	:	DFO, Dhanbad vide letter no. 1303, dated 10.08.2015 certified that the distance of notified forest is more than 500 metre.	
6	DSR	:	This project is mentioned in page no18 (point no 28) District Survey Report (DSR) at Dhanbad district.	
7	Gram Sabha	:	On 28.08.2015	
8	Mine Plan Approval	:	Mining Scheme approved by Additional Director, Geology, Hazaribag vide letter no. 627/G dated 26.07.2021	
9	Earlier EC	:	SEIAA letter no. EC/SEIAA/2015-16/1689/2015/2345, dated 30.12.2015	
10	CTE & CTO from JSPCB	:	CTE: Ref. no.: JSPCB/HO/RNC/CTE-908266/2016/452. dated 21.10.2016  CTO: Ref. no.: JSPCB/RO/DHN/CTO-10850072/2021/70. dated 30.07.2021	

## **Working Details**

1	Mining Method	1:	Semi Mechanised. Wagon Drilling & Blasting to be used		
2	Quarry Area	:	5 years – 1.53 Ha End of Mine – 1.53 Ha		
3	Waste Generation	:	5 years— Very minimal O.B. (Dead Rock Mixed with soil) will be generated.	Life of Mine (Waste Gen.) – Very minimal O.B. (Dead Rock Mixed with soil) will be generated.	
4	Stripping Ratio	:	1:0	-	

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5	Working Days		300
6	Benches: size & No	:	6 m x 6/7 m, Bench No 1 to 6 (Conceptual period depth)
	Elevation of Mine	:	Maximum Elevation – 340 AMSL
7			Minimum Elevation – 315 AMSL
0	Ground Level		315 AMSL
8	Elevation		
9	Ultimate Working	:	294 AMSL
9	Depth		
10	Water Table	:	280 AMSL (35 m bgl)
11	Topography of Mine	:	Undulating Terrain
12	Explosive	:	57.60 Tons/year
12	Requirement		
13	Diesel/Fuel	:	246 KL/year (820 Litres/day)
13	requirement		

## **Production Details**

		Cross	Average	Annual	Annual	Total
Year	Slice/Bench	Sectional	Length	Productio	Production in	Average
		Area	of	n	(Tonne)	Production
		Excavated	Excavati	( m3 )		Per Day
		(in m2)	on			(Tonne)
			(m)			Stone
						Boulder
İst	First(1) Bench	800	72.50	58000	174000.00	580.00
	(273 m to 267m)					
	Each Bench Height					
	3.00m					
2nd	Second (2)Bench	800	72.50	58000	174000.00	580.00
	(267 m to 261m)					
	Each Bench Height					
	3.00m					
3 <sup>rd</sup>	Third (3)Bench	800	72.50	58000	174000.00	580.00
	(261 m to 255m)					
	Each Bench Height					
	6.00m					,
4th	Third (3)Bench	800	72.50	58000	174000.00	580.00
	(255 m to 249m)					
	Each Bench Height					
	6.00m					
5th	Fourth (4)Bench	800	72.50	58000	174000.00	580.00
	(264-255ach Bench					
	Height (3+6) 9.00m					
	1161ght (3+0) 7.00m					







#### Land Use

# **Existing Land Use pattern**

Category	Area in Acre
Infrastructure	0.00
Garland Drain	0.00
Green belt	0.00
Settling Tank	0.00
Unutilized	3.20
Total Leasehold area	3.20

## **Proposed Land Use for Current Plan Period**

Type of land use	Area (Acre)
Mining area	1.53
Infrastructure	0.01
Approach roads	0.01
Garland drain	0.28
Green Belt	1.17
Total	3.00
Balance Area	0.20
Lease hold Area	3.20

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

Type of land use	Area (Acre)
Mining area	1.53
	(To be converted into Water Body)
Infrastructure. Approach	0.30 (Plantation)
Roads, Garland Drain	
Green Belt	1.17 (Plantation)
Total	3.00
Balance Area	0.20
Lease hold Area	3.20

# ENVIRONMENT MANAGEMENT

## **Green Belt Development**

SL	LOCATION		Area/Length	No of Trees
1	Safety Zone/Green Belt and other reclaimed area (Infrastructure, Approach Roads, Garland Drain area)	:	0.60 ha	1.500 trees @ 2500 trees per ha.
2	Haul /Approach Road	:	0.70 KM	468 trees on both sides – 3 m distance

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#### **Water Generation**

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

#### Water Quality Management

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

#### Air Quality Management

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

#### Undertaking submitted affirming:

- a. Ground water will be used only for domestic purpose and not be used for any 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.

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

SEAC. Jharkhand has suggested the ToRs in its 95<sup>th</sup> meeting held on 15<sup>th</sup>, 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, 21<sup>st</sup> and 22<sup>nd</sup> July, 2022 in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC OM dated 12.12.18 for undertaking detailed EIA / EMP study and SEIAA, Jharkhand has approved the ToRs in its 96<sup>th</sup> meeting held on 26<sup>th</sup>, 27<sup>th</sup> & 28<sup>th</sup> July, 2022.

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

#### **Specific Condition:**

- 1. 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.
- 2. EC compliance report of the previous EC duly certified by Regional Office, MoEF & CC. Govt. of India to be provided.
- 3. This TOR letter is subject to Hon'ble NGT order dated 13.09.2018, order dated : 11.12.2018 and MoEF & CC OM dated : 12.12.2018.
- 4. 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.
- 5. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.

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- 6. 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.
- 7. 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).
- 8. 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.
- 9. 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.
  - 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. 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.
- 15. 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.

- 16. 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.
- 17. 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.
- 18. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 19. 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.
- 20. 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.
- 21. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 22. 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.
- 23. 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).

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- 41. 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.
- 42. 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.
- 43. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 44. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 45. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 46. 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.
- 47. 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 (1) 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-l 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

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- 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.
- 48. 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.
- 49. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA II (M), dated 12.01.2017.

Sd/-

Member Secretary State Level Environment Impact Assessment Authority, Jharkhand.

Memo No: EC/SEIAA/2022-23/2618/2022/2/9

Dated: 06/3/2022

Copy to:

1. Member Secretary, Jharkhand State Pollution Control Board, Ranchi for information and necessary action.

2. Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

State Level Environment Impact Assessment Authority, Jharkhand

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