

**STATE EXPERT APPRAISAL COMMITTEE MINUTES 22 December 2017  
OF 302<sup>st</sup> MEETING**

The 302<sup>st</sup> meeting of the State Expert Appraisal Committee (SEAC) was held on 22<sup>nd</sup> December, 2017 under the Chairmanship of Mohd. Kasam Khan for the projects / issues received from SEIAA. The following members attended the meeting-

1. Dr. Mohd. Akram Khan, Member.
2. Dr. A. K. Sharma, Member.
3. Dr. Sonal Mehta, Member.
4. Shri Prasant Srivastava, Member.
5. Dr. R. Maheshwari, Member.

The Chairman welcomed all the members of the Committee and thereafter agenda items were taken up for deliberations.

1. **Case No.-5313/2016 M/s Khatri Minerals & Mining Co., 365, South Motinala, Hanumantal, Jabalpur – 482002. Prior Environment Clearance for Blue Dust/Iron Ore, Manganese, Laterite, Ocher & Clay Mine in an area of 4.49 ha. (40,809 TPA) at Khasra no.-441, 445/2, 446/1, 381/2, 388, Village-Jhansi Siluwa, Tehsil - Sihora, Dist. Jabalpur (MP). EIA Consultant; M/s CES, Bhopal.**

This is case of Blue Dust/Iron Ore, Manganese, Laterite, Ocher & Clay Mine. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at Khasra No. 441, 445/2, 446/1, 381/2, 388 at Village-Jhansi Siluwa, Tehsil - Sihora, Dist. Jabalpur (MP) 4.49 ha. The project requires Prior EC before commencement of any activity at site.

PP has submitted a copy of approved Mining Plan, letter from Mining Officer certifying the leases within 500 meters radius around the site and requisite information in the prescribed format duly verified by the Tehsildar and DFO. Concerned Mining Officer vide letter no. 2503 dated: 31/12/15 has reported that there is no more mines operating or proposed within 500 meters around the said mine.

**Environment setting**

Particulars	Details
Locations	
Village	Jhansi & Siluwa
Tehsil	Sihora
District	Jabalpur
State	MP
Nearest National/state Highway	NH-7 - 3.80km – WN W

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Nearest Railway Station	Gosalpur Railway station - 2.75 km - WNW
Nearest Airport	Jabalpur - 20.0km
Nearest Tourist Place	None
Archaeological Important Place	None in 10 km radius
Ecological Sensitive Areas (Wild Life Sanctuaries)	None in 10 km radius
Reserved / Protected Forest within 10km radius (Boundary to boundary distance)	Borha RF - 3.10 km - SES
Nearest major city with 100000 population	None in 10 km radius
Nearest village	Siluwa Village - 0.10km - N Jhansi - 0.25 km - S
Nearest Town	Jabalpur - 20.0km
Physiography	Hilly
Slope	Radial
Nearest River	Barne River - 4.0 km - SE
Nearest nalla/ pond/canal	Canal - .90 km - SE Water pond - 0.130km - S Water pond - 0.53km - NE Barne Reservoir - 4.0km - SE Maral Reservoir - 4.90km - SE Budhasagar Reservoir - 6.30km - W
Nearest hill/valley	None in 10 km radius

It was reported by the PP that

- The lease was granted for period of 30years from 18.05.2007 to 17.05.2037.
- The lease area comes under Pvt land.
- No other lease area is located within 500m radius
- mine is being operated with valid consent of MPPCB which is valid till 30.06.2019
- The scheme of mining with progressive mine closure plan has been approved by IBM, Nagpur.

**Salient feature of the lease area**

Particulars	Details
Type of Mine	Open Cast
Mining Lease Area	4.49 ha

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Existing Pits & Quarries	1.8001 ha
Existing Dumps	0.6475 ha
Infrastructure and road	0.014 ha
Plantation	0.1ha
Total geological Reserve	770787 t
Total Movable Reserve	433820 t
Method of mining	Fully mechanized
Ultimate Depth of Mining	17m bgl (upto 360m MSL)
Expected Life of Mines	12 years from 2012
Stripping Ratio	1:0.50
Existing mode to transportation	Road
Area to be covered under dumps in conceptual period	1.4475 ha
Area covered under pit in conceptual period	2.0924 ha
Area to be reclaimed in conceptual period	0.3765ha
Area to be rehabilitated by afforestation in conceptual period	2.5339ha
Area to be covered under water reservoir	1.2650 ha
Ground water table	
Monsoon period	20m bgl (357m AMSL)
Dry month	25m bgl (352m AMSL)
Production per day (m <sup>3</sup> )	136
Truck per day (20t)	7.0
End user of mineral	Cement grade, Cement Industries and beneficiation plant
Supply location	Near by area

**Post land use plan**

Items	Existing	At the end of conceptual period
<b>Total lease area</b>	<b>4.49ha</b>	
Mineable area	2.0924ha	
Ultimate depth of mining	9m bgl (366m MSL)	17m bgl (360m MSL)
Ultimate pit slope	45 <sup>o</sup>	45 <sup>o</sup>
Area under dumps	0.6475 ha	1.4475 ha
Area under pits	1.8001 ha	2.0924 ha
Area to be reclaimed	0.0675 ha	0.3765ha
Infrastructure & Road	0.014 ha	Nil
Plantation	0.1ha	2.5339ha
Water body	0.5ha	1.2650ha

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In the SEAC 58<sup>th</sup> meeting dated 10.11.2016, the case was presented by the PP and their consultant. Being it's a case of major mineral, it was decided to consider this case as B-1 category and committee recommended to issue standard TOR prescribed by the MoEF&CC for conducting the EIA along with following additional TOR's:-

1. Detailed evacuation plan with transport route, required infrastructure and man-power is to be discussed in the EIA report.
2. If on the evacuation route there are human settlements justify how they will be protected or suggest alternate evacuation route.
3. Transportation plan & traffic management plan should be discussed in the EIA report.
4. Inventory of all sensitive receptors in 2 Km & 5 Km around the mine.
5. Mine water discharge plan with details of garland drains and settling tanks should be detailed out on a map in the EIA report.
6. Compliance of consent conditions of M. P. Pollution Control Board from concerned Regional Office.
7. Year wise details of minerals already excavated till date should be submitted with EIA report.
8. PP should submit inventory of all the existing trees and if tree falling is proposed same should be discussed in EIA report.
9. There are 02 villages within 100-150 meters of ML area, thus one-one air monitoring station should be established in these villages and thus monitoring should be carryout at atleast at 08 locations. Suitable protective measures should be proposed for these villages in the EIA report.

PP has submitted the EIA report vide letter dated 29/11/17, which was forwarded by the SEIAA vide letter no. 1265 dated 05/12/2017.

The case was presented by the PP and their consultant wherein following details were submitted:

- The fresh lease was granted for period of 30years from 18-05-07 to 18-05-2037.
- The lease area comes under Pvt. waste land
- One other lease area are located within 500m radius
- The scheme of mining with progressive mine closure plan has been approved by IBM, Nagpur.
- The Iron ore and Ochre of the lease area is very friable in nature and directly amenable to excavation. Hence no blasting is required

**Salient feature of the lease area**

<b>Particulars</b>	<b>Details</b>
Type of Mine	Open Cast
Mining Lease Area	4.49 ha
Existing Pits & Quarries	1.8001 ha
Existing Dumps	0.6475 ha
Infrastructure and road	0.014 ha
Plantation	0.1ha
Total geological Reserve	770787 t
Total Movable Reserve	433820 t
Method of mining	Fully mechanized
Ultimate Depth of Mining	17m bgl (upto 360m MSL)
Expected Life of Mines	12 years from 2012
Stripping Ratio	1:0.50
Existing mode to transportation	Road
Area to be covered under dumps in conceptual period	1.4475 ha
Area covered under pit in conceptual period	2.0924 ha
Area to be reclaimed in conceptual period	0.3765ha
Area to be rehabilitated by afforestation in conceptual period	2.5339ha
Area to be covered under water reservoir	1.2650 ha
Ground water table	
Monsoon period	20m bgl (357m AMSL)
Dry month	25m bgl (352m AMSL)
Production per day (m <sup>3</sup> )	136
Truck per day (20t )	7.0
End user of mineral	Cement grade, Cement Industries and beneficiation plant
Supply location	Nearby area

**GEOLOGY OF THE MINE**

- Area is consisting of Blue dust, Red and Yellow Ochre with siliceous shale.

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- At places boulders of manganese & laterite are seen which are negligible in quantity and not taken for estimation of mineral reserves.
- Existence of phyllite, ochre and blue dust occur in pockets and band at places exist as alternate bands of blue dust and ochre, western and north western part of the area is having concentration of blue dust.
- Area is divided in to three zones, zone-I (12484m<sup>2</sup>) is north western part of lease area, it is consisting of blue dust/iron ore with ochre, zone-2 is ochre bearing area (16691m<sup>2</sup>) is located in eastern part of the area and about 15725 m<sup>2</sup> southern part of the area is considered unexplored /non mineralized area. Existence of mineral is not seen in the non mineralized area.
- Zone-I: North western part of the lease area consisting of blue dust with red and yellow ochre. Alternate bands of blue dust with ochre are seen with thin pockets of white clay. Traces of manganese and Laterite are seen in north eastern part of the area, which is negligible in quantity and not taken in account. General trend of rock is east-west having 45<sup>0</sup>-60<sup>0</sup> dip towards south. Blue dust is in the form of powder with pearly lusture, exist as alternate bands with red and yellow ochre. Bulk density of blue dust is 3 tonnes per cubic meter.
- Zone-II: Ochre exists as alternate bands reddish and yellowish in color, both are low grade (light color), after getting dry color becomes dull. It is soft, sticky to friable in nature having bulk density 2.1 tonnes per cubic meter.

**Details of existing pit**

Pit no.	Broken area ha	Pit bottom area ha	Surface MSL-m	Pit bottom MSL	Overall slope
<b>PIT-1</b>	1.8001	0.90	387-377	366m	45 <sup>0</sup> -55 <sup>0</sup>
<b>Trial Pit-2</b>	0.0180	0.0180			60 <sup>0</sup> -80 <sup>0</sup>
<b>Trial PIT-3</b>	0.0221	0.015	377	374	
Total	1.8001	0.90			

**Details of conceptual pit**

Pit no.	Broken area ha	Pit bottom area ha	Surface MSL-m	Pit bottom MSL	Benches				Overall slope
					Type	Bench no	Avg. Ht m	Avg. Width m	

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<b>Pit-1</b>	2.0924	0.75	387-377	360m	Mineralized part	B1	2.5	2.5	<45 <sup>0</sup>
			B2	5		5			
			B3	3.5		3.5			
			B4	5		5			
			B5	5		5			

**Mining Method**

- Blue dust/iron ore and ochre mining has been done by opencast mechanized method with help of Excavator cum loader & JCB and same operation will be continue in future also.
- Mineral exposed from the surface hence proposal of development benches is not required.
- Mineral is soft in nature hence blasting is not required. It is easily negotiable by using excavator.
- During the past mining, about 1.8001ha area has been excavated upto 366m MSL (9mbgl) and at the end of conceptual period about 2.0924ha area will be excavated upto 360m MSL (17mbgl) with 5 production benches. Height of production benches will be varies from 2.5 to 5m in the end of conceptual period.
- There are 03 existing pits and development will be done in pit –I advancing depth MSL from 383 to 360m. It will be lateral and depth wise. All three pits will merge together at the end of the conceptual period.

**Existing and proposed land use plan**

<b>Items</b>	<b>Existing</b>	<b>At the end of conceptual period</b>
Total lease area	4.49ha	
Mineable area	2.0924ha	
Area under dumps	0.6475 ha	1.4475 ha
Area under pits	1.8001 ha	2.0924 ha
Infrastructure & Road	0.014 ha	Nil
Plantation	0.1ha	0.33ha
Unworked area	1.9284ha	0.4501ha
Total	4.49ha	4.49ha
Area to be reclaimed	0.0675 ha	0.3765ha
Water body	0.5ha	1.2650ha

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Plantation	-	2.5339ha
Unworked area plantation	-	0.33ha
Dump area plantation		1.00ha
Backfilled area plantation	-	0.3765ha
Bench area plantation		0.8274ha

**ENVIRONMENT IMPACT & MANAGEMENT Ecology: Stage Wise Cumulative Plantation**

**REQUIREMENTS OF PLANTS FOR AFFORESTATION/RECLAMATION**

Year	Unworked area green belt		Bench of pit		Backfilled area		Inside dump area		Total	
	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	No. of Trees
Presently	0.1	100	-	-	-	-	-	-	0.1	100
1 <sup>st</sup> to CP	0.23	480	0.8274	1750	0.3765	800	1.0	2100	2.4339	5130
<b>Total</b>	<b>0.33</b>	<b>580</b>	<b>0.8274</b>	<b>1750</b>	<b>0.3765</b>	<b>800</b>	<b>1.0</b>	<b>2100</b>	<b>2.5339</b>	<b>5230</b>

**Time Bound Plantation Programme**

Year	Area	Number of Plants
1 <sup>st</sup>	0.23ha + 300m (Road side)	480 + 240 = 720
2 <sup>nd</sup>	0.50 ha	1050
3 <sup>rd</sup>	0.3765ha	800
4 <sup>th</sup> to CP	1.3274 ha	2800
<b>Total</b>	<b>1.90+300</b>	<b>5130+240</b>

S. No.	Head	Qty	Rate (Rs.)	Amount (Rs.)
	<b>Within lease area</b>			



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1 <sup>st</sup>	Saplings, with earth work and pesticides	720	250/-	1,80,000/-
2 <sup>nd</sup>	Saplings, with earth work and pesticides	1050	250/-	2,62,500/-
3 <sup>rd</sup>	Saplings, with earth work and pesticides	800	250/-	2,00,000/-
4 <sup>th</sup> to CP	Saplings, with earth work and pesticides	2800	250/-	7,00,000/-
	<b>Total</b>	<b>5130</b>		<b>13,42,500/-</b>
<b>Along the transport road</b>				
1 <sup>st</sup> year	Saplings, with earth work and pesticides and tree guard	240	355/-	85,200/-
	<b>Total</b>	<b>240</b>		<b>85,200/-</b>
	<b>Grand total</b>	<b>5370</b>		<b>14,27,700/-</b>

**SOCIO-ECONOMIC ENVIRONMENT**

Proposed CSR activities					
SN	Plan	Activity	Place of activity	Budgetary provisions (Rs in lakh)	
				Capital	Recurring
1.	Promotion of quality education	(A) Computer education: providing at least 02 computers in nearby school at Siluwa, Jhansi and providing facilities of teacher for	Nearby Village School (04no.) Computer @ Rs. 25,000 Teacher @ Rs. 8000/month. Need based support for building repairing, toilets, fresh water	1.0	0.96
				1.0	

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		computer education and basic education. (B) Providing one room for computer lab	supply through Gram Panchayat / Gram Sabha etc		
2	Solar light	5 no. of Solar street light provide to nearby villages Siluwa, Jhansi, Bela, Tikriya, Pondi Kalan	12 months	2.0	0.10
3	Free medical camp	Medical Checkup facility, first aid and other welfare activities for nearby villagers	Quarterly	-	2.0
4	Drip Irrigation facility at nearby villages	Motivation and financial assistance to the framers of nearby villages for drip irrigation	Yearly	-	1.0
5	Sanitation facilities	Provision of public Toilet facility provide with water tank and its maintenance at to nearby villages Siluwa, Jhansi, Bela, Tikriya, Pondi Kalan, Badam Khurd (two each for man and women)	Yearly	7.0 (1.00 for each village)	1.40
			<b>Total</b>	<b>11.00</b>	<b>5.46</b>

**ENVIRONMENTAL MONITORING & MANAGEMENT PLAN**

S. No.	Head	Approximate Capital cost (Rs. In lacs)	Basis	Approximate recurring cost per annum (Rs. in lacs)	Basis
1	Air pollution monitoring	3.0	Cost includes water spraying	2.20 (Rs 4500/- per sample)	Expected cost includes regular monitoring by

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S. No.	Head	Approximate Capital cost (Rs. In lacs)	Basis	Approximate recurring cost per annum (Rs. in lacs)	Basis
			arrangement		approved third party
2	Water pollution monitoring	3.0	Include cost of septic tank, garland drain, Settling tanks	1.50 Rs 5000/- per sample for G/w, S/w, M/D etc- 15 no))	Expected cost includes regular monitoring by approved third party
3	Noise pollution monitoring	Nil	-	0.10	Expected cost includes regular monitoring by approved third party
4	Solid and hazardous waste management	1.5	For storage provision of tailings, oil & grease drums	0.50	Expected cost of cleaning and maintenance
5	Environmental Monitoring and management	-	-	1.50	Recurring cost would incur on hiring of consultants for environmental management
6	Water Table monitoring	1.00	Installation of pizometers	0.50	Maintenance of plantation
7	De-siltation of pit and ST	-	-	1.0 (0.25 per quarter)	Quarterly basis
	<b>Total</b>	<b>8.50</b>		<b>7.30</b>	

**Budget for Occupational Health and Safety of the workers (in Lakhs)**

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Items	Capital Cost in lacs	Recurring cost in lacs
Personal Protective Equipments (Mask, Gloves, Goggles)	0.50	0.10
Medical Checkup facility, first aid and other welfare activities	0.50	0.20
<b>Total</b>	<b>1.0</b>	<b>0.30</b>

<b>Total Cost (EMP + CSR+ plantation + Monitoring ) (Lakh)</b>		
Particular	Capital	Recurring per annum
Dust Suppression through tanker over 0.30 km road * 6.0m (15 Rs/km inclusive diesel exp, driver exp and maintenance) Approx running per day 1.80km @300 day (over road) = 540 km	-	0.081 Says 0.10
Dust Suppression through tanker over 0.500 km road * 5.0m (20Rs/km) Approx running per day 8.0km@300 day	-	0.48 says 0.50
<b>Sub total</b>	-	<b>0.60</b>
Roads repair and maintenance (0.30km@2.0lakh per Km)	-	0.60
<b>Sub total</b>	-	<b>0.60</b>
Occupational health and safety exp.	1.00	0.30
<b>Sub-total</b>	<b>1.00</b>	<b>0.30</b>
Environmental Monitoring cost	8.50	7.30
<b>Sub-total</b>	<b>8.50</b>	<b>7.30</b>
Plantation (Capital cost) Along the village Road	0.85 says 1.0	
Maintenance of Plantation (Along the village Road & lease area)		1.00
Plantation (Capital cost) within lease area	13.42 says 13.50	-
<b>Sub-total</b>	<b>14.50</b>	<b>1.00</b>
Fencing around the lease periphery (1000m @300 running meter)	3.00	
Maintenance of fencing		0.50
<b>Sub-total</b>	<b>3.00</b>	<b>0.50</b>
<b>Total</b>	<b>27.00</b>	<b>10.30</b>
CSR cost	11.00	5.46
<b>Sub total</b>	<b>11.00</b>	<b>5.46</b>
<b>PH issue</b>		
Deeping of village pond	3.00	0.50
Construction of Jhansi – Siluwa Road (700m @5.0 lakh/km)	3.50	-
<b>Sub total</b>	<b>6.50</b>	<b>0.50</b>
<b>Total</b>	<b>44.50</b>	<b>16.26</b>

It was also observed during presentation that the mine is on small hillock having 10 mt elevation difference and mine is surrounded by the agricultural land, habitation (100m & 250 mtr) and one other lease of same lessee of 4.56ha (which is proposed). It was reported by PP that no blasting shall be carried out and committee also recommended as one of the condition of environment clearance. As reported by PP that water table is about 20-25 mt BGl and ultimate depth is proposed 17 mtrs and thus water table will not be intersected. Committee suggested that if any time there is possibility of ground water table intersection, geohydrological studies shall be carried out by the PP. It was also observed from the Google image that a tar road is passing from the northern side of the lease for which PP submitted that the road is > 100 meters away from their mining lease. During presentation and discussion, PP has proposed to provide two community toilets for nearby villages.

After presentation, PP was asked to submit response on following:

1. Revised EMP & CSR cost with bifurcation in Capital & Recurring Cost.
2. Structure of EMP and CSR cell.

PP has submitted the response of above quarries vide letter dated 22/12/2017 which was placed before the committee and the same found satisfactory. The EIA/EMP and other submissions made by the PP earlier were found to be satisfactory and acceptable, hence committee decided to recommend the case for grant of prior EC for Blue Dust/Iron Ore, Manganese, Laterite, Ocher & Clay Mine in an area of 4.49 ha. (40,809 TPA) at Khasra no.-441, 445/2, 446/1, 381/2, 388, Village-Jhansi Siluwa, Tehsil - Sihora, Dist. Jabalpur (MP). subject to the following special conditions:

**(A) PRE-MINING PHASE**

1. The lease boundary should be clearly demarcated at site with the given co-ordinates by pillars.
2. Necessary consents for proposed expansion shall be obtained from MPPCB and the air / water pollution control measures have to be installed as per the recommendation of MPPCB.
3. Authorization (if required) under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.
4. PP will also carry out fencing all around the lease area.
5. If any tree uprooting is proposed necessary permission from the competent authority should be obtained for the same.
6. For dust suppression, regular sprinkling of water should be undertaken.
7. PP will obtain other necessary clearances/NOC from respective authorities.

**(B) MINING OPERATIONAL PHASE**

8. No blasting is permitted as per the approved mine plan and submissions made by the PP during presentation.
9. Curtaining of site shall be done through thick plantation all around the boundaries of all part of lease. The proposed plantation scheme should be carried out along with the mining and PP would maintain the plants for five years including casualty replacement. Initially, dense plantation shall be developed along the site boundary (in three rows) including the village side to provide additional protection in one year only.
10. Peripheral plantation all around the project boundary shall be carried out using tall saplings of minimum 2 meters height of species which are fast growing with thick canopy cover preferably of perennial green nature. As proposed in the landscape plan & EMP a minimum of 5370 no's of trees will be planted. PP will also make necessary arrangements for the causality replacement and maintenance of the plants.
11. Transportation of material shall be done in covered vehicles.
12. Transportation of minerals shall not be carried out through forest area.
13. The OB till its utilization for backfilling shall be properly stacked as per approved mining plan and disposed off as per the submitted proposal. PP shall bound to compliance the final closure plan as approved by the IBM.
14. As per proposal alternate route with length of 300 meters and width 06 meters shall be used for transportation of mineral. The same shall be developed and maintained by the PP.
15. Garland drains 321m x 0.25m x 0.25m (existing) and 800m x 0.50m x 1.00m (proposed) connected with 09 settling pits should be provided to avoid silt discharge. Two settling tanks (790 sqm x 5.0D & 300 sqm x 5.0D) shall be connected with garland drains and settling pits shall be provided for proper sedimentation.
16. Water sprinkling through tankers should be provided on 250 meter long and 06 meter wide haul road. However, regular water spraying should also be practiced on 250 meters long and width 06 meters wide transport road for dust suppression.

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17. All garland drains shall be connected to settling tanks through settling pits and settled water shall be used for dust suppression, green belt development and beneficiation plant. Regular de-silting of drains and pits should be carried out.
18. The existing and proposed land use plan of the mine is as follows:

Items	Existing	At the end of conceptual period
Total lease area	4.49ha	
Mineable area	2.0924ha	
Area under dumps	0.6475 ha	1.4475 ha
Area under pits	1.8001 ha	2.0924 ha
Infrastructure & Road	0.014 ha	Nil
Plantation	0.1ha	0.33ha
Unworked area	1.9284ha	0.4501ha
Total	4.49ha	4.49ha
Area to be reclaimed	0.0675 ha	0.3765ha
Water body	0.5ha	1.2650ha
Plantation	-	2.5339ha
Unworked area plantation	-	0.33ha
Dump area plantation		1.00ha
Backfilled area plantation	-	0.3765ha
Bench area plantation		0.8274ha

19. Appropriate and submitted activities shall be taken up for social up-liftment of the Region. Funds reserved towards the same shall be utilized through Gram Panchayat. Further any need base and appropriate activity may be taken up in coordination with local panchayat.
20. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.

21. The commitments made in the public hearing are to be fulfilled by the PP.
22. Fund should be exclusively earmarked for the implementation of EMP through a separate bank account.
23. PPE's such as helmet, ear muffs etc should be provide to the workers during mining operations.

**(C) ENTIRE LIFE OF THE PROJECT**

24. The proposed EMP cost is Rs. 33.50 lacks and Rs. 10.80 lacks /year are proposed as recurring expenses out of which Rs. 14.50 lacks is proposed for green belt development and Rs. 1.00 lacks /year for recurring expenses for plantation in the proposed EMP of this project.
25. Under CSR activity, Rs. 11.00 lacks and Rs. 05.46 lacks /year are proposed as recurring expenses in different activities and should be implemented through respective committees.
26. The environment policy of the company should be framed as per MoEF&CC guidelines and same should be implemented through monitoring cell. In case the allocated EMP budget for mitigative measures to control the pollution is not utilized fully, the reason of under utilization of budgetary provisions for EMP should be addressed in annual return.
27. A separate bank account should be maintained for all the expenses made in the EMP activities by PP for financial accountability and these details should be provided in Annual Environmental Statement.
28. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
29. PP will comply with all the commitments made vide letter dated 22/12/2017.
30. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity/ built-up area/ project area, addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.

**2. Case No. 5525/17 M/s Khatri Minerals & Mining Co., 365, South Motinala, Hanumantal, Jabalpur, M.P – 482002 (SIA/MP/MIN/18320/2017). Prior Environment Clearance for Iron Ore / Blue dust mine with physical beneficiation in an area of 4.56**



**ha. (20114 MT ha.) (Khasra no. 367, 368, 369P, 370, 371, 372, 380, 381/1, 38/1, 38/2, 38/3, 39, 40, 41, 42, 440) at Village- Jhansi Siluwa, Tehsil - Sihora, Dist. Jabalpur .**

This is case of Iron Ore / Blue dust mine. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at (Khasra no. 367, 368, 369P, 370, 371, 372, 380, 381/1, 38/1, 38/2, 38/3, 39, 40, 41, 42, 440) at Village- Jhansi Siluwa, Tehsil - Sihora, Dist. Jabalpur 4.56 ha. The project requires Prior EC before commencement of any activity at site.

PP has submitted a copy of approved Mining Plan, letter from Mining Officer certifying the leases within 500 meters radius around the site and requisite information in the prescribed format duly verified by the Tehsildar and DFO. Concerned Mining Officer vide letter no. --- dated: 25-01-2017 has reported that there is 01 more mine operating or proposed within 500 meters around the said mine with total area of 09.05 ha including this mine.

The case was presented by the PP and their consultant wherein it was observed that being it's a case of major mineral committee recommended to issue standard TOR prescribed by the MoEF&CC for conducting the EIA along with following additional TOR's:-

1. Approved mining plan to be submitted at the time of EIA Presentation.
2. Detailed evacuation plan with transport route, required infrastructure and man-power is to be discussed in the EIA report.
3. If on the evacuation route there are human settlements justify how they will be protected or suggest alternate evacuation route.
4. Transportation plan & traffic management plan should be discussed in the EIA report.
5. Inventory of all sensitive receptors in 2 Km & 5 Km around the mine.
6. Mine water discharge plan with details of garland drains and settling tanks should be detailed out on a map in the EIA report.
7. Compliance of consent conditions duly authenticated by concerned Regional Officer, MP Pollution Control Board.
8. Year wise details of minerals already excavated till date should be submitted with EIA report.
9. Atleast 08 stations should be selected for monitoring and results should be discussed in the EIA report.
10. Hydro geological study should be carried out if ground water intersection is proposed.
11. Free silica study should also incorporate in EIA report.
12. Top soil management plan should be addressed in EIA report.

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13. Input data of modeling should be addressed in EIA along with this all back up calculation.
14. Onsite pictures of monitoring and survey along with date and time on photographs should be attached with the EIA report.
15. Inventory of all existing trees and if any tree is to be uprooted, then it should be clearly addressed in EIA.
16. Ground water table data should be compared with data of Central Ground Water Board authorities nearest sampling point.
17. Water quality of all the villages within 10 k.m radius should be studied and result should be incorporated in final EIA report.

PP has submitted the EIA report vide letter dated 29/11/17 which was forwarded by the SEIAA vide letter no. 1263 dated 05/12/2017.

Project proponent and his consultant presented the salient features of the project, EIA, baseline data and the proposed EMP before the committee which reveals the following:

**Environment setting**

<b>Particulars</b>	<b>Details</b>
Locations	
Village	Jhansi & Siluwa
Tehsil	Sihora
District	Jabalpur
State	MP
Nearest National/state Highway	NH-7 - 3.75km - WN W
Nearest Railway Station	Gosalpur Railway station - 2.75 km - WNW
Nearest Airport	Jabalpur - 20.0km
Nearest Tourist Place	None
Archaeological Important Place	None in 10 km radius
Ecological Sensitive Areas (Wild Life Sanctuaries)	None in 10 km radius
Reserved / Protected Forest within 10km radius (Boundary to boundary distance)	Borha RF - 3.10 km - SES
Nearest major city with 100000 population	None in 10 km radius
Nearest village	Siluwa Village - 0.040km - N Jhansi - 0.20 km - S
Nearest Town	Jabalpur - 20.0km
Physiography	Hilly
Slope	Radial
Nearest River	Barne River - 4.0 km - SE

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	Heran River 6.0km - NW
Nearest nalla/ pond/canal	Canal - 0.90 km - SE
	Water pond - 0.20km - SE
	Water pond - 0.60km - NE
	Barne Reservoir - 4.0km - SE
	Maral Reservoir - 4.90km - SE
	Budhasagar Reservoir - 6.30km - W
Nearest hill/valley	None in 10 km radius

It was reported by the PP that:

- The fresh lease was granted for period of 50years from 09-01-2017 to 08-01-2067.
- The lease area comes under Pvt. waste land
- One other lease area are located within 500m radius
- The scheme of mining with progressive mine closure plan has been approved by IBM, Nagpur
- The Iron ore of the lease area (fines) is very friable in nature and directly amenable to excavation. Hence no blasting is required.

**Salient feature of the lease area**

Particulars	Details
Type of Mine	Open Cast OTFM
Mining Lease Area	4.56 ha
Existing Pits & Quarries	0.0244 ha
Existing Dumps	0.2406ha
Infrastructure and road	0.034ha
Plantation	0.1ha
Total geological Reserve	206048.00t
Total Movable Reserve	73694.00t
Ultimate Depth of Mining	18m bgl (upto 362m MSL)
Expected Life of Mines	5 years from 2017
Stripping Ratio	1:1.55 to 1:4.54
Existing mode to transportation	Road
Area to be covered under dumps in conceptual period	Nil
Area covered under pit in conceptual period	1.3827ha
Area to be reclaimed in conceptual period	0.8200ha
Area to be rehabilitated by afforestation in conceptual period	2.0ha

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Area to be covered under water reservoir	0.5627 ha
Ground water table	23m bgl (357m AMSL) - 28m bgl (352m AMSL)
Production per day (T)	67.0
Truck per day (24t )	3.0
End user of mineral	Cement grade, Cement Industries and beneficiation plant
Supply location	Near by area

**GEOLOGY OF THE MINE**

Topography of the area is rolling topography. North eastern part of the area is elevated part, whereas south eastern and western part of the area is gentle rolling ground. Highest elevation of the area is 382m in north eastern part of the area whereas lowest elevation of the area is 380m in eastern and western part of the area

Surface of the area is covered by the thin layer of soil followed by the weathered phyllite and iron ore which is in the form of blue dust and in the form of powder with pearly lusture, exist as alternate bands with brown/yellow phyllite. Bulk density of iron ore/ blue dust is 2.6 tonne per cubic meter. Based on the various lithounits seen in the trial pits area is divided in to two zones.

Zone-I: It is located in northern, southern and eastern part of the area, covering 35370m<sup>2</sup> area. Exploration shows that this area is consisting of pyhyllite, brownish and grayish in color. Phyllite seen in the northern area is light yellow to brown in color.

Zone2: Area of zone-2 is 9750m<sup>2</sup> and it is located in central part of the area taken in G-1 followed by G-2 and about 580m<sup>2</sup> eastern area is under G-2 from the surface. Area is consisting of iron ore/blue dust, exist in the form of alternate bands of iron ore and weathered phyllite. About 9750m<sup>2</sup> area is taken as mineralized area, existence of mineral is proved in this area based on the lateral influence of working pit seen in the adjoining area, continuity of strike direction seen in the working pit is asses in the area.

**Details of conceptual pit**

Pit no.	Broken area ha	Pit bottom area ha	Surface MSL-m	Pit botto m MSL	Benches				Overall slope
					Type	Bench no	Avg. Ht m	Avg. Width m	
Pit-1	1.3827	3848	382-380	367-	Mineralized	B1 OB	3	6	<38 <sup>0</sup>

				362	part	B2 - mineral	5	5	
							5	5	
						B3- mineral	5	5	
						B4 - mineral	5	5	
						B5 - mineral			

### **Mining Method**

- Iron ore mining will be done by opencast mechanized method with help of Excavator cum loader & JCB.
- Mineral is soft in nature hence blasting is not required. It is easily negotiable by using excavator.
- During the PL mining, about 0.02441ha area has been excavated and at the end of conceptual period about 1.3827ha area will be excavated upto 362m MSL (14mbgl) with 4 development benches and 5 production benches. Height of production benches will be varies from 3 to 5m in the end of conceptual period.
- There are 14 existing pits and development will be done in pit –A advancing depth MSL from 380 to 367. It will be lateral and depth wise. All pits will merge together at the end of the conceptual period
- During the SOM period lessee will also be established beneficiation plant in southern part of lease area.

### **Existing and proposed land use plan**

<b>Items</b>	<b>Existing</b>	<b>At the end of conceptual period</b>
<b>Total lease area</b>	<b>4.56ha</b>	
Mineable area	1.3827ha	
Area under dumps	0.2406ha	Nil
Area under pits	0.0244ha	1.3872ha
Infrastructure & Road	0.034ha	Nil
Plantation	0.1ha	0.93ha

Beneficiation plant	Nil	0.36ha
Unworked area	4.161ha	1.8828ha
Total	4.56ha	4.56ha
Area to be reclaimed	Nil	0.82ha
Water body	Nil	0.5627ha
<b>Plantation</b>		<b>2.00ha</b>
Unworked area plantation	-	0.93ha
Dump area plantation		Nil
Backfilled area plantation	-	0.82ha
Bench area plantation		0.25ha

## **BENEFICIATION PROCESS**

1. Raw Material received from mines are feed to ground hopper under this hopper vibrating feeder is installed which controls the flow of material to BC-1.
2. BC-1 transports the material to Vibrating screen 1. This is 800mm width belt conveyor.
3. Vibrating screen 1 is a double deck screen with water spray to separate out material properly. This separates the material as 18mm to 40mm material at upper part, 6mm to 18mm material from middle and -6mm material in lower part as slurry. Top part 18mm to 400mm material is taken to BC-2 as product -1. Middle part 6mm to 18mm material is taken to BC-3, as product -2 and bottom part or lower side flows to tank-1 as slurry.
4. Slurry tank -1 is fitted with a slurry pump. This is vertical slurry pump with 25meters head and 500 cubic meters per hour's capacity pump. It pumps the slurry from slurry tank 1 to Hydro-cyclone-1. Slurry tank 1 receives slurry from dewatering screen – under flow.
5. Hydro – cyclone separates material on the basis of size and weight. Bigger size and heavy material goes out as under flow through cyclone apex and fed to dewatering screen 1. Over flow with fine size material and lower weight material send to slurry tank 2 for further beneficiation.
6. Dewatering screen 1 dewateres the slurry and produces the dry material of size 0.5mm to 6mm which fed to BC4 as product-3. Under flow of dewatering 1 flow back to slurry tank 2.
7. Slurry tank 2 is fitted with a slurry pump. This is vertical slurry pump with 25meters head and 400 cubic meters per hour capacity pump. It pumps the slurry from slurry tank 2 to hydro-cyclone 2. Slurry tank 2 receives slurry from Hydro-cyclone 1 overflow, under flow of magnetic separator and under flow of dewatering 1
8. Hydro-cyclone separates material on the basis of size and weight. Bigger size and heavy material goes out as under flow through cyclone apex and fed to dewatering

screen 2. Over flow with fine size and lower weight material sends to tailing thickener for thickening.

9. Slurry tank 3 is fitted with a slurry pump. This is vertical slurry pump with 25 meters head and 200 cubic meters per hour capacity pump. It pumps the slurry from Slurry tank 3 to Magnetic Separator (HGMS). Slurry tank 3 receives slurry from under flow of dewatering 2.
10. Under flow of Magnetic Separator is fed to slurry tank 2. Over flow of magnetic separator will be fed to tailing thickener.
11. Thickener is used to thicken the tailing slurry. It is also prime equipment for process water collection. After slurry thickening water is separated out and fed back to water tank as thickener overflow. Some time it proper thickening is not happening then chemical name flocculent is used for better thickening and clean water recover. Flocculent is a degradable chemical and not harmful in any manner. Thickened slurry from thickener is taken out as under flow and send to tanks called tailing ponds.
12. Tailing ponds: In tailing ponds natural settling is taking and dry material is collected for disposal (product 5) from ponds 1 to 4. Water collected from natural settling in pond 5 is pumped to plant water tank for recirculation in process.
13. 3 water pumps are used to fulfill the water requirement of plant. These pumps are pumping water to various process requirements in the plant. One pump is fitted at tailing pond to collect the water from ponds.

Waste generation after beneficiation will be in the form of tailings which is estimated as 12000 TPA on dry basis and 15000 TPA with 20% moisture. The tailings will be collected in tailing tanks.

Total make-up from the beneficiation plant shall be about 20 KLD. The underflow from solid waste thickener conveyed to filter press. The filtrate and overflow from thickeners drain directly into recycling water system, and then are conveyed to beneficiation plant.

### **Disposal of Tailing Waste**

Tailing will be collected through tailing ponds. 5 no. tailing ponds will be made to collect the tailing from slurry. This is natural thickening process of slurry. Tailing slurry is feed to one of the pond and in natural way it flows from one pond to second to third to fourth to fifth. In this process solid waste get settled in earlier ponds and clean water flows to last pond. From last pond water is pumped back to plant for re-use in process. Solid waste settled in ponds are taken out with the help of poclain and transported to storage place. This thickened slurry is having around 22 to 25% moisture which dried in natural way then tailing is ready for disposal. Tailing collected from ponds will be stored in nearby area for

natural drying. This area will be specially marked for tailing storage and boundary wall will be made if felt necessary.

Tailing from the beneficiation process is ideally suitable for bricks, tiles & blocks making and would be marketed to local brick maker. It is proposed to dispose of tailing to Gosalpur, Dhamki and Dhamdha and therefore no accumulation of waste shall be there.

### **AIR POLLUTION CONTROL MEASURES**

- Spraying of water is proposed on the haulage roads, services road & dump area during proposed mining.
- Dumping will be done in south east and north east direction, and away from the habitation. Regular water spraying over the dumps (once in a day) is suggested at this stage.
- As proposed backfilling of 0.82 ha shall be taken up at early stage and no dump shall remain in lease area.
- Dust mask will be provided to all workers, but use shall be made compulsory.
- Regular maintenance of vehicles and machines will be carried out in order to control emissions. During the proposed mining, frequency of maintenance need to be scheduled, hence log book is required for smooth functioning.
- One dumper of ROM (OB & Mineral) will move on haul road in every hour during proposed operation. hence one trip of water tanker in every hour (08 trip per day) is proposed
- It is assumed that 67T of ore will be transported on per day basis through transport road (230mt length- From lease area to pacca road) by dumper having capacity of 24MT capacity. It means that, there will be movement of 3 dumpers on road per day basis, therefore and water spraying is proposed before moving of dumper (one trip per three hrs.)
- Approx 55 no of workers is proposed in lease area. Dust mask will be provided to all workers, but wearing of the same should be made compulsory
- Haulage of overburden/mine waste to the siding will be done by dumper. The approach road from lease area to PWD road is about 0.230 km, which is kuchha road. Dust generation due to transportation will be for limited period and extent to small area. However water spraying over the road is suggested prior to movement of dumper for at least 0.230km from the mining gate with scheduled frequency of one trip in three hrs. The timing of movement of dumpers must be scheduled in considering with local village activities
- Water shall be sprayed over the muck pile and dumps to reduce the dust generation;



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- Plantation has already been carried out in north barrier zone to arrest fugitive emission. Further plantation shall be taken up on priority basis with provision of sampling of at least 3 ft height.
- About 240 plants will be planted on both side of the existing unpaved road (230m) in single rows at plant spacing of 2.5m. Plants of large sized tree species will be planted at a spacing of 10m and between any two plants of large sized tree species, three (03) plants of small sized tree/shrub species, shrubs will be planted. The selection of species will depend on the availability of quality planting material.
- Beneficiation plant will be installed in southern part of lease area
- Crusher will be installed with water spraying system and vibrating screen will be covered.

**WATER POLLUTION CONTROL MEASURES**

The total fresh water requirement is about 16.00KL per day for consumption of domestic, dust suppression and afforestation purpose and about 100KLP water required for 1<sup>st</sup> day of beneficiation plant. After 1<sup>st</sup> day 20 KLD water will be required as make-up water and rest of water will be met through recycling:

Incoming Water				Use of Water			
Sr. No	Supply of water	Unit	Quantity	Sr. No	Supply of water	Unit	Quantity
1	Fresh Water	LPD	100000	A	Screen 1	LPD	40000
<b>Recycle Water</b>				B	Log Washer	LPD	10000
2	From Thickener	LPD	50,000	C	Screen 2	LPD	25000
3	From Filter Press	LPD	20,000	D	Classifier	LPD	25000
4	From CDF	LPD	10,000				
	Total	LPD	80000				
							100000
LPD	LITRE PER DAY						

There is no surface water course in the lease area. The main drainage of the area is through Barne River, which is located in SE direction of the mine. The water table in the area varies from 23m (357m MSL) to 28m (352m MSL), whereas mining is proposed up to avg. 18m depth (362mRL) thus ground water table will not be intersect during conceptual period. The accumulated water of working pit in rainy season will be pumped out to the proposed settling tanks. The accumulated water will be used for green belt, dust suppression and excess water may be given to nearby formers for agricultural purpose. Following measures shall be taken by the lessee to minimize the impact of mining on water environment:

- Regular removal of settled silt from the settling tank, which need to be scheduled and to be documented.
- The mining site is to be provided with basic sanitary facilities and septic tanks to avoid open defecation.
- Provision of network of settling pits and settling tanks associated with drains, for water management and it's optimum utilization
- All garland drain shall be connected to settling tank through settling pits and water of settling tank will be used for dust suppression, green belt development
- It is proposed to make 10 number of settling pits within the garland drain and proposed to connect drains to large settling tanks through these pits to avoid silt discharge from open ended drains
- During the proposed mining, 3 settling tanks will be proposed. The de-silted water will be provided for agricultural purposes after ensuring it's quality
- The area of 0.56270 ha shall be developed as water body, which will help to recharge the water table and shall also be used for agricultural purposes
- Quality of water accumulated in the working pit and settling tanks shall be checked in pre and post monsoon.
- It shall be ensured that quality of drinking water for the worker is hygienic and good sanitation system is available.
- Pump of adequate capacity is installed to lift accumulated rain water from working pit
- From beneficiation plant, tailing shall be generated 12000 TPA on dry basis and 15000TPA with 20% moisture. Total make-up from the beneficiation plant shall be about 20 KLD. The underflow from solid waste thickener conveyed to filter press. The filtrate and overflow from thickeners drain directly into recycling water system, and then are conveyed to beneficiation plant. Solid waste from the beneficiation process is ideally suitable for bricks, tiles & blocks making and would be marketed to

local brick maker. Following measures are proposed for considering the proposed beneficiation plant:

- In tailing pond the solids will get settled and then top layer of water will be taken into first RCC bedded settling tank. From the first settling tank the water will be taken to the second tank where some biodegradable flocculent will be added depending upon the turbidity of the water.
- The clear water from the second settling tank will be taken for re-use and the settled solids will be scrapped out at regular intervals which will be sold to brick manufacturers.
- There will be five RCC bedded settling tanks and will be used alternately to ensure maximum recovery of water and to scrap out the settled solids from the tanks.
- As such no slurry will be allowed to drain out and the scrapped material will be utilized for value addition, in-addition to brick manufacturing.
- Garland drainage also is conveyed to tailing pond to control the pollution by runoff.
- Grounded high grade iron ore in form of slurry will be dewatered in thickener and pressure filter. The filtrate water from pressure filter will be recycled to the process. Hence zero discharge plant is designed for 100% utilization of recycled water.
- The run-off generated from the temporary dumps of discards and related haulage will be collected through garland drains and further de-siltation will be carried through the run-off management, which comprises of de-silting pits. Filter Press technology will be used to recover water from solid waste & concentrate respectively, which will be re-circulated in the system.

## **SOLID WASTE MANAGEMENT**

- During the first two year working about 32484 m<sup>3</sup> mine waste will be generated in the form of intercalated phyllite and OB and same will be dumped in south eastern and north eastern part of lease area as temporary dump.
- At the end of SOM period as well as Conceptual period about 96277m<sup>3</sup> mine waste will be generated and same will be used for backfilling of excavated area. Hence at the end of SOM period, no waste dump will be remaining in lease area.
- During the SOM period as well as conceptual period about 1.3827 ha area will be developed up to 18m bgl (362m MSL).
- From third year onward simultaneous mining and backfilling will be carried out. The mined out area of 0.8200ha will be backfilled during proposal period by SOM period overburden.

**Details of Existing plantation**

S. No.	Name of plants	No. of Plants
1.	Mango	50
2	Neem	20
3	Karanj	30
	Total	100

**Afforestation plan**

ENVIRONMENT IMPACT & MANAGEMENT Ecology: Stage Wise Cumulative Plantation										
REQUIREMENTS OF PLANTS FOR AFFORESTATION/RECLAMATION										
Year	Unworked area green belt		Bench of pit		Backfilled area		Inside dump area		Total	
	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	No. of Trees
Presently	0.1	100	-	-	-	-	-	-	0.1	100
1 <sup>st</sup> to CP	0.83	1750	0.25	525	0.82	1720	-	-	1.90	3995
Total	0.93	1850	0.25	525	0.82	1720	-	-	2.0	4095

**Time Bound Plantation Programme**

Year	Area	Number of Plants
1 <sup>st</sup>	0.50ha + 300m (Road side)	1050 + 240 = 1290
2 <sup>nd</sup>	0.33 ha	700
3 <sup>rd</sup>	0.25ha	525

4 <sup>th</sup> to CP	0.82ha	1720
<b>Total</b>	<b>1.90+300</b>	<b>3995+240</b>

**Plant Species for Mine Area, Transportation road and its Boundary**

<b>Proposed Plantation Detail</b>			
	<b>Description</b>	<b>Qty</b>	<b>Location</b>
	<b>Forest Trees</b>		
	Neem	500	Along the lease Boundary in mine premises and transportation route
	Bans	500	
	Kachnar	500	
	<b>Ornamental Trees</b>		
	Amaltash	500	Along the transportation road/ in premises
	Gulmohar	500	Along the transportation road/ Along the transportation road/ in premises
	Satparni	500	Along the lease Boundary in mine premises
	Karanj	500	Along the lease Boundary in mine premises and transportation road
	<b>Fruit Trees &amp; Ornamental</b>		
	Awala	200	In mine premises
	Mango	235	Along the lease Boundary in mine premises and transportation road
	Jamun	200	Along the lease Boundary in mine premises and transportation road
	Imly	100	Along the lease Boundary in mine premises and transportation road
	<b>TOTAL</b>	<b>4235</b>	

**Budget Allocation for Plantation**

A separate budget shall be made for plantation/ Green belt development Plan as follows:

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S. No.	Head	Qty	Rate (Rs.)	Amount (Rs.)
	<b>Within lease area</b>			
1 <sup>st</sup>	Saplings, with earth work and pesticides	1050	250/-	2,62,500/-
2 <sup>nd</sup>	Saplings, with earth work and pesticides	700	250/-	1,75,000/-
3 <sup>rd</sup>	Saplings, with earth work and pesticides	525	250/-	1,31,250/-
4 <sup>th</sup> to CP	Saplings, with earth work and pesticides	1720	250/-	4,30,000/-
	<b>Total</b>	<b>3995</b>		<b>9,98,750/-</b>
	<b>Along the transport road</b>			
1 <sup>st</sup> year	Saplings, with earth work and pesticides and tree guard	240	355/-	85,200/-
	<b>Total</b>	<b>240</b>		<b>85,200/-</b>
	<b>Grand total</b>	<b>4235</b>		<b>10,83,950/-</b>

**SOCIO-ECONOMIC ENVIRONMENT**

Proposed CSR activities				
SN	Plan	Activity	Place of activity	Budgetary provisions (Rs in lakh)
1.	Promotion of quality education	(A) Computer education: providing at least 02 computers in nearby school at Siluwa, Jhansi and	Nearby Village School (04no.) Computer @ Rs. 25,000 Teacher @ Rs.	1.0 0.96 1.0

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		providing facilities of teacher for computer education and basic education. (B) Providing one room for computer lab	8000/month. Need based support for building repairing, toilets, fresh water supply etc through Gram Panchayat / Gram Sabha	
2	Solar light	5 no. of Solar street light provide to nearby villages Siluwa, Jhansi, Bela, Tikriya, Pondi Kalan	12 months	2.0
3	Free medical camp	Medical Checkup facility, first aid and other welfare activities for nearby villagers	Quarterly	2.0
4	Drip Irrigation facility at nearby villages	Motivation and financial assistance to the framers of nearby villages for drip irrigation	Yearly	1.0
5	Sanitation facilities	Toilet facility provide with water tank and its maintenance at Aganwadi center to nearby villages Siluwa, Jhansi, Bela, Tikriya, Pondi Kalan, Badam Khurd	Yearly	3.00
			Total	10.96

**ENVIRONMENTAL MONITORING & MANAGEMENT**

S. No.	Environmental Attributes	Locations	Parameters	Period and Frequency
1	Ambient Air quality	<ul style="list-style-type: none"> <li>• Mine Office</li> <li>• Jhansi</li> <li>• Siluwa</li> </ul>	PM <sub>10</sub> , PM <sub>2.5</sub> SO <sub>2</sub> , NO <sub>x</sub> , CO and as directed by	24 hr. average samples monthly during mining phase

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S. No.	Environmental Attributes	Locations	Parameters	Period and Frequency
		<ul style="list-style-type: none"> <li>• Haul road</li> <li>• Tikriya</li> <li>• Dump site</li> </ul>	MPPCB	
2	Ground water	Lease area Jhansi Siluwa Tikriya	Drinking Water parameters as per IS 10500	Pre Monsoon and Post Monsoon
3	Surface water	Mine pit, Local Pond (NE & S)	pH, conductivity, Alkalinity, TS, TDS, TSS, Total hardness, Cl, SO <sub>4</sub> , Ca, Mg, K, Na, F, PO <sub>4</sub> , Fe, Pb, Mn, Zn, Ni	Pre Monsoon and Post Monsoon
4	Ambient Noise	Mine site (near the working pit during excavation, and around the lease periphery) total 04 point, Siluwa, Jhansi	dB (A) levels	Hourly day and night time Leq levels every quarter
5	Mines discharge	Settling tank, settling pits, tailing storage tanks & garland drain of lease area	pH, conductivity, Alkalinity, TS, TDS, TSS, Total hardness, Cl, SO <sub>4</sub> , Ca, Mg, K, Na, F, PO <sub>4</sub> , Fe, Pb, Mn, Zn, Ni	Pre and Post Monsoon
6	Soil Quality	In and around the site	Organic matter, C, H, N, alkalinity, Acidity, heavy metal	Annual
7	Ground water table monitoring	Core and buffer zone <ul style="list-style-type: none"> <li>• At Mine site</li> <li>• Siluwa</li> <li>• Jhansi</li> </ul>	-	Annual

**Expenditure on Environmental monitoring**

S. No.	Head	Approximate Capital cost (Rs. In lacs)	Basis	Approximate recurring cost per annum (Rs. in lacs)	Basis



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<b>S. No.</b>	<b>Head</b>	<b>Approximate Capital cost (Rs. In lacs)</b>	<b>Basis</b>	<b>Approximate recurring cost per annum (Rs. in lacs)</b>	<b>Basis</b>
1	Air pollution monitoring	3.0	Cost includes water spraying arrangement	2.20 (Rs 4500/- per sample)	Expected cost includes regular monitoring by approved third party
2	Water pollution monitoring	3.0	Include cost of septic tank, garland drain, Settling tanks	1.50 Rs 5000/- per sample for G/w, S/w, M/D etc- 15 no))	Expected cost includes regular monitoring by approved third party
3	Noise pollution monitoring	Nil	-	0.10	Expected cost includes regular monitoring by approved third party
4	Solid and hazardous waste management	1.5	For storage provision of tailings, oil & grease drums	0.50	Expected cost of cleaning and maintenance
5	Environmental Monitoring and management	-	-	1.50	Recurring cost would incur on hiring of consultants for environmental management
6	Water Table monitoring	1.00	Installation of pizometers	0.50	Maintenance of plantation

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S. No.	Head	Approximate Capital cost (Rs. In lacs)	Basis	Approximate recurring cost per annum (Rs. in lacs)	Basis
7	De-siltation of pit and ST	-	-	1.0 (0.25 per quarter)	Quarterly basis
	<b>Total</b>	<b>8.50</b>		<b>7.30</b>	

**Expenditure on Environmental Management Plan**

<b>Budget for Occupational Health and Safety of the workers (in Lakhs)</b>		
Items	Capital Cost in lacs	Recurring cost in lacs
Personal Protective Equipments (Mask, Gloves, Goggles)	0.50	0.10
Medical Checkup facility, first aid and other welfare activities	0.50	0.20
<b>Total</b>	<b>1.0</b>	<b>0.30</b>

<b>Total Cost (EMP + CSR+ plantation + Monitoring ) (Lakh)</b>		
Particular	Capital	Recurring cost
Dust Suppression through tanker over 0.30 km road * 6.0m (15 Rs/km inclusive diesel exp, driver exp and maintenance) Approx running per day 1.80km @300 day (over road) = 540 km	-	0.081 Says 0.10
Dust Suppression through tanker over 0.500 km road * 5.0m (20Rs/km) Approx running per day 8.0km@300 day	-	0.48 says 0.50
<b>Sub Total</b>		<b>0.60</b>
Plantation (Capital cost) Along the village Road	0.85 says 1.0	-
Maintenance of Plantation (Along the village Road & lease area) @ Rs 45/- per plant	-	1.00
Plantation (Capital cost) within lease area	9.98 says 10.00	
<b>Sub Total</b>	<b>11.00</b>	<b>1.00</b>

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Roads repair and maintenance (0.30km@2.0 lakh per Km)	-	0.60
Construction of evacuation road (0.30km@5.0 lakh per Km)	1.50	-
<b>Sub Total</b>	<b>1.50</b>	<b>0.60</b>
Occupational health and safety exp.	1.00	0.30
<b>Sub Total</b>	<b>1.00</b>	<b>0.30</b>
Environmental Monitoring cost	8.50	7.30
<b>Sub Total</b>	<b>8.50</b>	<b>7.30</b>
Fencing around the lease periphery (1000m@300 running meter)	3.00	0.50
<b>Sub Total</b>	<b>3.00</b>	<b>0.50</b>
CSR cost	-	10.96
<b>Sub Total</b>	<b>-</b>	<b>10.96</b>
<b>PH issue</b>		
Provision of Hand pump	2.50	-
Contribution for Construction of Over head tank	5.00	-
Provision for Water supply	1.50	-
<b>Sub Total</b>	<b>9.00</b>	<b>-</b>
<b>Total</b>	<b>34.00</b>	<b>21.26</b>

During presentation following issues were also discussed:

1. During the PPT, it was reported that the mine is on small hillock having 6 mt elevation difference. The mining is proposed over lower central part of the area. Southern area is earmarked for the beneficiation plant.
2. Mine is surrounded by the agricultural land, habitation and one other lease of same lessee of 4.49ha.
3. Reserve details has been discussed which are as per the approved mining plan. Geo technical details were also discussed considering proposed bottom area of the ultimate pit.
4. IT was reported by PP that no blasting shall be carried out and committee also recommended as one of the condition of environment clearance.
5. The process of beneficiation plant has been dealt in detail and PP was asked not to use chemical process. The process shall be through hydroclone, screens etc through use of water only.
6. PP was asked to provide tailing pond in series for proper settlement of tailing. Further PP was asked to provide filter press for better recovery of water from tailing.
7. It is also suggested that tailing may be stored over the lined surface.
8. As reported that water table is around 23-28 mt BGI and ultimate depth is proposed 18 mtrs and thus ground water table intersection was not envisaged.

9. During presentation and discussion, PP has proposed to provide two community toilets for nearby villages i.e. Siluwa and Jhansi.
10. The gram sabha of village Jhansi has passed a proposal on 07.12.2013 that khasara number 41 may not be given to the mine owner as it is owned by Shri Ganesh So/Parsadi unless it has been consented by owner. PP has shown the P-2 form and informed that the same piece of land was purchased by him and hence now it is part of granted leases. The lease was granted on 29.12.2016 only after having ownership of khasara no 41 with the PP.
11. It is also noticed that a kacchi pagdandi was used by the villagers of jahnsi and silua passing through the sanctioned lease. Considering the demand of the people, PP has provided alternate route from Jahnsi to Silau on his own land for movement of people as entire land of lease as well nearby is owned by the PP. It is also informed that PP shall construct an alternate route of 170 mtrs for evacuation of mineral which will connect to state highway directly.

After presentation, PP was asked to submit response on following:

1. Revised EMP & CSR budget with bifurcation in Capital & Recurring Cost.
2. Revised land use plan showing the area for beneficiation plant.
3. Composition of CSR and Environmental Cell.

PP has submitted the response of above quarries vide letter dated 22/12/2017 which was placed before the committee and the same found satisfactory. The EIA/EMP and other submissions made by the PP earlier were found to be satisfactory and acceptable, hence committee decided to recommend the case for grant of prior EC for Iron Ore / Blue dust mine with physical beneficiation in an area of 4.56 ha. (20114 MT ha.) (Khasra no. 367, 368, 369P, 370, 371, 372, 380, 381/1, 38/1, 38/2, 38/3, 39, 40, 41, 42, 440) at Village- Jhansi Siluwa, Tehsil - Sihora, Dist. Jabalpur subject to the following special conditions:

**(A) PRE-MINING PHASE**

1. The lease boundary should be clearly demarcated at site with the given co-ordinates by pillars.
2. Necessary consents for proposed expansion shall be obtained from MPPCB and the air / water pollution control measures have to be installed as per the recommendation of MPPCB.
3. Authorization (if required) under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.
4. PP will also carry out fencing all around the lease area.

5. If any tree uprooting is proposed necessary permission from the competent authority should be obtained for the same.
6. For evacuation of minerals, 300 meters evacuation road should be prepared and maintained by the PP.
7. For dust suppression, regular sprinkling of water should be undertaken.
8. PP will obtain other necessary clearances/NOC from respective authorities.

**(B) MINING AND BENEFICATION OPERATIONAL PHASE**

9. No blasting is permitted as per the approved mine plan and submissions made by the PP during presentation.
10. Curtaining of site shall be done through thick plantation all around the boundaries of all part of lease. The proposed plantation scheme should be carried out along with the mining and PP would maintain the plants for five years including casualty replacement. Initially, dense plantation shall be developed along the site boundary (in three rows) including the village side to provide additional protection in one year only.
11. Peripheral plantation all around the project boundary shall be carried out using tall saplings of minimum 2 meters height of species which are fast growing with thick canopy cover preferably of perennial green nature. As proposed in the landscape plan & EMP a minimum of 4235 no's of trees will be planted. PP will also make necessary arrangements for the causality replacement and maintenance of the plants.
12. Transportation of material shall be done in covered vehicles.
13. Transportation of minerals shall not be carried out through forest area.
14. The OB till its utilization for backfilling shall be properly stacked as per approved mining plan and disposed off as per the submitted proposal. PP shall bound to compliance the final closure plan as approved by the IBM.
15. As per proposal alternate route with length of 300 meters and width 06 meters shall be used for transportation of mineral. The same shall be developed and maintained by the PP.
16. Garland drains of 2030m x 0.50m x 1.0 m (existing) connected with 11 settling pits should be provided to avoid silt discharge. Three settling tanks ( two of size 2090 sqm x 5.0D & one of 540 sqm x 5.0D) shall be connected with garland drains and settling pits shall be provided for proper sedimentation.

17. Water sprinkling through tankers should be provided on 250 meter long and 04 meter wide haul road. However, regular water spraying should also be practiced on 300 meters long and width 06 meters wide transport road for dust suppression.
18. All garland drains shall be connected to settling tanks through settling pits and settled water shall be used for dust suppression, green belt development and beneficiation plant. Regular de-silting of drains and pits should be carried out.
19. The existing and proposed land use plan of the mine is as follows:

<b>Items</b>	<b>Existing</b>	<b>At the end of conceptual period</b>
<b>Total lease area</b>	<b>4.56ha</b>	
Mineable area	1.3827ha	
Area under dumps	0.2406ha	Nil
Area under pits	0.0244ha	1.3872ha
Infrastructure & Road	0.034ha	Nil
Plantation	0.1ha	0.93ha
Beneficiation plant	Nil	0.36ha
Unworked area	4.161ha	1.8828ha
Total	4.56ha	4.56ha
Area to be reclaimed	Nil	0.82ha
Water body	Nil	0.5627ha
<b>Plantation</b>		<b>2.00ha</b>
Unworked area plantation	-	0.93ha
Dump area plantation		Nil
Backfilled area plantation	-	0.82ha
Bench area plantation		0.25ha

20. Appropriate and submitted activities shall be taken up for social up-liftment of the Region. Funds reserved towards the same shall be utilized through Gram Panchayat. Further any need base and appropriate activity may be taken up in coordination with local panchayat.
21. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
22. The commitments made in the public hearing are to be fulfilled by the PP.

23. Fund should be exclusively earmarked for the implementation of EMP through a separate bank account.
24. PPE's such as helmet, ear muffs etc should be provide to the workers during mining operations.
25. The process of beneficiation plant shall be through hydroclone, screens etc through use of water only without any chemical process.
26. Tailing pond shall be in series for proper settlement of tailings with HDPE linings of suitable thickness and minimum 08 Peizometric sampling points all around them. Filter press shall also be provided for better recovery of water from tailings and same shall be reused in the process. Tailing shall be stored over the HDPE lined surface of suitable thickness.
27. Garland drains and settling tanks shall be provided all around the tailing ponds.
28. The waste water generated from the beneficiation plant shall be reused as committed by the PP.
29. Solid waste generated from the beneficiation process shall be utilized for value added materials such as brick manufacturing /other beneficial uses as per the proposal submitted by the PP.
30. Backfilling of taling residue shall be avoided and if no other ways are available, it should be carried out only after lechate study and with the permission of M. P. Pollution Control Board.
31. No effluent from the unit shall be discharged outside the plant premises and Zero discharge shall be maintained. PP should also install Internet Protocol PTZ camera with night vision facility along with minimum 05X zoom and data connectivity must be provided to the MPPCB's server for remote operations.
32. Hazardous wastes (if any) should be disposed off as per the authorization issued by MP Pollution Control Board.

**(C) ENTIRE LIFE OF THE PROJECT**

33. The proposed EMP cost is Rs. 23.00 lacks and Rs. 09.30 lacks /year are proposed as recurring expenses out of which Rs. 11.00 lacks is proposed for green belt development and Rs. 1.00 lacks /year for recurring expenses for plantation in the proposed EMP of this project.
34. Under CSR activity, Rs. 10.96 lacks/year is proposed as recurring expenses in different activities and should be implemented through respective committees.
35. The environment policy of the company should be framed as per MoEF&CC guidelines and same should be implemented through monitoring cell. In case the allocated EMP budget for mitigative measures to control the pollution is not utilized fully, the reason of under utilization of budgetary provisions for EMP should be addressed in annual return.

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36. A separate bank account should be maintained for all the expenses made in the EMP activities by PP for financial accountability and these details should be provided in Annual Environmental Statement.
  37. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
  38. PP will comply with all the commitments made vide letter dated 22/12/2017.
  39. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity/ built-up area/ project area, addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.
- 3. Case No.-5285/2016 M.P. State Mining Corporation Ltd Paryawa Bhawan, Block No. 1, 2nd Floor, Jail Road, Bhopal. Prior Environment Clearance for Bauxite Mine in an area of 4.90 ha. (50000 TPA) at Khasra No. 3852 & 3853 at Village-Tikar, Tehsil - Huzur, Dist. Rewa (MP)**

This is case of Tikar Bauxite Mine. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at Khasra No. 3852 & 3853 at Village-Tikar, Tehsil - Huzur, Dist. Rewa (MP) 4.90 Ha. The project requires prior EC before commencement of any activity at site.

**Environment setting**

Particulars	Details
Locations	
Village	Tikar
Tehsil	Huzoor
District	Rewa
State	MP
Nearest National/state Highway	Govindgarh – Rewa MDR Road - 4.50 km - NW
Nearest Railway Station	Rewa - 23.75km - NW
Nearest Airport	Churhata Rewa - 23.25km - NW
Nearest Tourist Place	None in 10 km radius
Archaeological Important Place	None in 10 km radius
Ecological Sensitive Areas (Wild Life Sanctuaries)	None in 10 km radius
Reserved / Protected Forest within 10km radius (Boundary to boundary distance)	Govindgarh Reserved Forest



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Nearest major city with 100000 population	None within 10km radius
Nearest village	Bilhilihatola - 3.80km - N
Nearest Town	Rewa - 20km - N
Physiography	Hilly
Elevation	647-621m AMSL
Slope	Radial
Nearest River	Son River -9.50 km - SE Bichya nadi -7.15 km - N Banas River - 10.0km - SE
Nearest nalla/ pond/canal	Phapho nala - 5km -S Kataha nala - 4.30km- S Pakariar Nala - 4.15km -N Marhawal Nalla - 5.80km – SSE Canal - 1.50km - S
Nearest hill/valley	Jaliadhar Pahar

**Salient feature of the lease area**

<b>Particulars</b>	<b>Details</b>
Type of Mine	Open Cast
Mining Lease Area	4.90ha
Existing Pits & Quarries	3.55 ha
Existing mineral stack	0.68 ha
Infrastructure and road	0.10ha
Plantation	0.15 ha
Total geological Reserve	1545660mt
Total Movable Reserve	865252 mt
Method of mining	OTFM
Ultimate Depth of Mining	612mRL
Expected Life of Mines	20 years
Stripping Ratio	1:0.15
Existing mode to transportation	Road
Area to be covered under dumps in conceptual period	Nil
Area covered under pit in conceptual period	4.50 ha
Area to be reclaimed till conceptual period	4.50ha
Area to be rehabilitated by afforestation in conceptual period	4.90ha
Area to be covered under water reservoir	Nil
Ground water table	
Monsoon period	60m (561 m AMSL)
Dry month	70 m (551 m AMSL)

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Production per day (MT) (275 working day)	182
Truck per day (24 MT)	8
Requirement of metal	Aluminum plants and Cement plants
Supply location	All over India

**GEOLOGY OF THE MINE**

<b>Geology and deposit appraisal</b>	
Local geology	Bauxite like other high level deposits, occurs in the laterite profile as lenses and as irregular segregations in the blanket of laterite at high altitude. Bauxite has also been encountered at lower level, which may be secondary i.e. either detrital or removed to lower levels by breaking-off of scarp known's as "Scrap retreat" and has been included in the float deposit. The enrichment of alumina at places has given rise to good quality massive Bauxite, the thickness of which exclusively established upto 18m and is in lenticular form.
Lithology	<b>0.0 to 0.50m</b> - Lateritic Soil <b>0.0 to 0.50m</b> - Pilolitic Laterite/ Upper Laterite 12.0 to 18.0m – Upper Aluminous Laterite Bauxite Lower aluminous laterite
Borehole	20m depth
Lease area	4.90ha
Mineable area	4.50ha
Mineral depth	9m bgl (upto 612m AMSL)
AMSL	Max. – 647m and min. - 621m
Height of bench and no of bench	Existing – 1 & 3m and 5 no. Proposed – 1& 6m and 5 no.
Width of bench	Min. 6m
Width of haulage road	10m
Gradient	1:16

**Post land use plan**

<b>Items</b>	<b>Existing</b>	<b>At the end of conceptual period</b>

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<b>Total lease area</b>	<b>4.90 ha</b>	
Mineable area	4.50 ha	
Ultimate depth of mining	7mbgl (614m AMSL)	9m bgl (612 m AMSL)
Ultimate pit slope	Nil	45 <sup>o</sup>
Area under mineral store	0.68 ha	Nil
Area under pits	3.55 ha	4.50ha
Area to be reclaimed	Nil	4.50 ha
Infrastructure & Road	0.10 ha	Nil
Plantation	0.15ha	4.90ha
Water body	0.50 ha	Nil

PP has submitted a copy of approved Mining Plan, letter from Mining Officer certifying the leases within 500 meters radius around the site and requisite information in the prescribed format duly verified by the Tehsildar and DFO. Concerned Mining Officer vide letter no.-1157 dated: 18/05/16, has reported that there is no more mine operating or proposed within 500 meters around the said mine.

The case was presented by the PP and their consultant. Being it's a case of major mineral, it was decided to consider this case as B-1 category and committee recommended to issue standard TOR prescribed by the MoEF&CC for conducting the EIA along with following additional TOR's:-

1. Detailed evacuation plan with transport route, required infrastructure and man-power is to be discussed in the EIA report.
2. Transportation plan & traffic management plan should be discussed in the EIA report.
3. Inventory of all sensitive receptors in 2 Km & 5 Km around the mine.
4. Mine water discharge plan with details of garland drains and settling tanks should be detailed out on a map in the EIA report.

5. Compliance of consent conditions of M. P. Pollution control Board from concerned Regional Office.
6. Year wise details of minerals already excavated till date should be submitted with EIA report.
7. Aforestration plan with some species of meditational plants.

The PP has submitted the EIA report vide letter dated 23/11/17, which was forwarded by the SEIAA vide letter no. 1329 dated 12/12/2017.

The case was scheduled for the presentation today but Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings and even if the PP remains absent, the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

4. **Case No. - 5612/2017 M/s Bhaskar Venkatesh Products Pvt. Ltd (Unit-II), Bhawani Complex, 35, Hanumanganj, Jumerati, Bhopal, (M.P.) 1238 dated 01-12-17. Rec. dt. 05/12/17. Prior Environment Clearance for Manufacturing of Acid Slurry (LABSA) and Spent Acid - by product at Plot No. 70, Village- Kajipalasia (Khudel), Tehsil - Indore, Distt.- Indore (M.P.) Cat. - 5 (f).**

The project is covered under the provisions of EIA Notification as item no. 5(f), hence it requires prior EC before commencement of activity at site. The application was forwarded by SEIAA to SEAC for scoping so as to determine TOR to carry out EIA and prepare EMP for the project site. The case was forwarded by SEIAA to SEAC vide letter no. 1238 dtd. 01/11/17.

PP and their consultant presented the case for ToR before the SEAC in this meeting. The submissions and the presentation made by the PP and his consultant revealed following:

- The Acid Slurry (LABSA 100%) project is proposed within the existing Premises of Detergent unit with capacity of 9000 TPA and By product i.e. Spent Acid 7500TPA at Village-Kajipalasiya Tehsil-Indore Dist.- Indore (MP).
- The project is proposed by M/s Bhaskar Venkatesh Products Pvt. Ltd. which is occupied by Shri Akash Goyal .
- **BHASKAR VENKATESH PRODUCTS PVT. LTD.** is a joint venture company of DAINIK BHASKAR GROUP and ANANT GROUP.

- **BHASKAR VENKATESH PRODUCTS PVT. LTD** came into existence on 12th May 2006 and entered into edible SALT market with the brand name BHASKAR. During its expansion period, we have launched the FMCG items i.e. ATTA and DETERGENT under the brand name of TAN MAN.
- Linear alkyl benzene (LAB), the material used to produce LABSA, is derived exclusively from petroleum bi-products--benzene and paraffin derived from kerosene. LAB currently represents the active ingredients in detergents worldwide.
- LABSA eliminates dirt by its physicochemical mechanism and it is one of the surfactants most widely used in liquid cleaners and in powder. LABSA has been used for more than 45 years in the manufacture of detergents and it is known for its excellent quality/price ratio.

### **Project at a Glance**

Site Address	Village-Kajipalasiya, Tehsil-Indore,Dist.-Indore (M.P.)
Production Capacity	Linear Alkaline Sulfonic Acid(LABSA)-9000 MTPA Spent Acid(By Product)- 7500 MTPA
Cost of Project	17 Crore
Raw Material Requirement	Linear Alkaline benzene (LAB)-6000 MTPA Sulphuric Acid(H <sub>2</sub> SO <sub>4</sub> )-9000 MTPA Water -1500 MTPA
Fuel	Diesel: 12Lit/Hr for one D.G. Set For Capacity of 100 KVA
Net fresh Water Requirement	The water requirement for proposed unit will be 04 KLD and total requirement for existing and proposed unit will be 12 KLD, whereas domestic requirement will be about 15 KLD. The water is/will be supplied by the tankers.
Power Requirement	350 HP
Capital Cost for Environmental measures ( proposed )	15 Lacs
Proposed area for plantation	18426 Sq.mt.
Existing area of plantation	1535 Sq.mt.
Alternative Source of Power	DG set of 100 KVA

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Land acquired	The Total land area available with the unit is 37452.1 sq.mt. Out of that 9254 sq.mt. Land is required for the proposed LABSA plant.
Solid /Hazardous waste Generation	No solid waste Generation in our process.
Nearest Highway	Nemawar Road (NH-59) -0.14 km
Nearest Railway Station	Indore- 17 km
Nearest Airport	Indore -23 km
Nearest Forest/ Sanctuary/Eco- sensitive zone.	No Such Areas within 10 km raidus

**Land Use Of The Proposed Site**

<b>Particulars</b>	<b>Total Area (Sq.mt.)</b>
<b>Total Land Area</b>	<b>37452.1</b>
Shed Area	5400
Slurry plant area	732
Office area	2600
Toilet	50
Labour	472
<b>Land Required for Proposed Unit</b>	<b>9254</b>
Open Space 1 Area	18,426
Open Space 2 Area	1490
Open Space 3 Area	45

Open Space 4 Area	1,000
<b>Total 22,556 Sq.mt. (60.2%)</b>	

The committee after deliberations decided to issue standard TOR prescribed by MoEF&CC with following additional TORs:

1. During presentation it was observed by the committee that near the LABSA proposed site some under construction civil structures were seen for which PP submitted that these are upcoming staff quarters. For safety purpose committee suggested that these staff quarters should be relocated at a safe distance from the LABSA plant and same should be discussed in the EIA report.
2. Management and disposal of hazardous wastes should be addressed in the EIA report.
3. Transportation and traffic management should be provided in the EIA report.
4. Risk assessment Plan and Disaster Management Plan should be discussed in the EIA report.
5. Justify in EIA report how zero discharge will be maintained.
6. Justify in EIA report wrt to available space and proposed machinery for the new plant and other facilities. (Landuse)
7. Green belt plan with name of species, their numbers on layout map should be provided with the EIA report.
8. The EIA report should clearly mention activity wise EMP and CSR cost details and should depict clear breakup of the capital and recurring costs along with the timeline for incurring the capital cost. The basis of allocation of EMP and CSR cost should be detailed in the EIA report to enable the comparison of compliance with the commitment by the monitoring agencies.
9. A time bound action plan should be provided in the EIA report for fulfillment of the EMP commitments mentioned in the EIA report.
10. The name and number of posts to be engaged by the PP for implementation and monitoring of environmental parameters should be specified in the EIA report.
11. EIA report should be strictly as per the TOR, comply with the generic structure as detailed out in the EIA notification, 2006, baseline data is accurate and concerns raised during the public hearing are adequately addressed.
12. The EIA report should be prepared by the accredited consultant having no conflict of interest with any committee processing the case.

**5. Case No. - 5608/2017 M/s Helios Lifesciences Limited, 79 & 100, Industrial Growth Center, Malanpur, (M.P.) Prior Environment Clearance for Manufacturing Unit for Bulk Drugs and Intermediates at Malanpur Industrial Growth Center, Tehsil - Gohad, Dist. Bhind, (M.P.) Reference No. for online tracking of project details-SIA/MP/IND/20973/2017.**

The project is covered under the provisions of EIA Notification as item no. 5(f), hence it requires prior EC before commencement of activity at site. The application was forwarded by SEIAA to SEAC for scoping so as to determine TOR to carry out EIA and prepare EMP for the project site. The case was forwarded by SEIAA to SEAC vide letter no. 1230 dtd. 30/11/17 rec. at SEAC on dated 05/12/17.

The case was scheduled for the presentation today but Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings and even if the PP remains absent, the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

**6. Case No. - 5617/2017 Shri Yogesh Khare, Sakin Khare Building, Gandhiganj, Katni, MP – 483501. Prior Environment Clearance for Limestone & Dolomite Mine in an area of 1.870 Ha.. (25266 ton per annum) (Khasra no. 503 New 867, 955) at Village-Rupaund, Tehsil - Badwara, Dist. Katni (MP)**

This is case of Limestone & Dolomite Mine. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at ((Khasra no. 503 New 867, 955)) at Village- Rupaund, Tehsil - Badwara, Dist. Katni (MP)1.870 Ha. The project requires prior EC before commencement of any activity at site. PP has submitted ToR application forwarded by the SEIAA vide letter no. 1358 dated 15/12/2017.

The case was scheduled for the presentation today but Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings and even if the PP remains absent, the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.



7. **Case No. - 5618/2017 M/s V.S.Minerals, 1st floor, Near of Guru Nanak Dharamkanta, NH - 7, Bargawan, Dist. Katni, MP – 483501 Prior Environment Clearance for Limestone & Dolomite Mine in an area of 10.21 Ha.. (Expansion from 5000 TPA to (Limestone - 26502 TPA and Dolomite - 24499 TPA) (Khasra no. 276, 274, 262, 263, 260, 244, 278, 261) at Village- Sejha, Tehsil - Badwara, Dist. Katni (MP)**

This is case of Limestone & Dolomite Mine. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at ((Khasra no. 276, 274, 262, 263, 260, 244, 278, 261)) at Village- Sejha, Tehsil - Badwara, Dist. Katni (MP) 10.21 Ha. The project requires prior EC before commencement of any activity at site. PP has submitted ToR application forwarded by the SEIAA vide letter no. 1360 dated 15/12/2017.

The case was scheduled for the presentation today but Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings and even it the PP remains absent, the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

8. **Case No. - 5619/2017 Mr. Sameer Khan S/o Shri Muneer Khan, 87, Shastri Ward, Pathak Lekhan Bahawan Ke Pass, Station Road, Bina, Dist. Sagar, MP – 473443 Prior Environment Clearance for Sand Auctioned Quarry in an area of 6.0 Ha. (4,000 cum per annum) (Khasra no. 363) at Village- Badouli, Tehsil - Moungaoli, Dist. Ashoknagar MP.**

This is case of **Sand Auctioned Quarry**. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located (**Khasra no. 363**) **Village- Badouli, Tehsil - Moungaoli, Dist. Ashoknagar (MP) 6.0 Ha**. The project requires prior EC before commencement of any activity at site.

The PP has submitted a copy of approved Mining Plan, information in the lease's within 500 meters radius around the site and other requisite information in the prescribed format duly verified in the Collector's office (Ekal Praman Patra) vide letter no. 218 dated: NIL has reported that there is no more mine operating or proposed within 500 meters around the said mine.

The case was scheduled for the presentation today but Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make

any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings and even if the PP remains absent, the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

**9. Case No. 5540/17 M/s Digiana Industries Pvt. Ltd, G-1, Sapna Chambers, 12/1, South Tukoganj, Indore, MP (SIA/MP/MIN/62976/2017). Prior Environment Clearance for River Sand Deposit in an area of 5.600 ha. (1,20,000 cum per annum) (Khasra no. 671) at Village- Barua, Tehsil - Gourihaar, Dist. Chhatarpur (MP)**

This is case of River Sand Deposit quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at (Khasra no. 671) at Village- Barua, Tehsil - Gourihaar, Dist. Chhatarpur (MP) 5.600 ha. The project requires prior EC before commencement of any activity at site.

PP has submitted a copy of approved Mining Plan, letter from Mining Officer certifying the leases within 500 meters radius around the site and requisite information in the prescribed format duly verified by the Tehsildar and DFO. Concerned Mining Officer through Ekal Praman-Patr vide letter no.516, dated: -04/03/2017, has reported that there are no more mines operating or proposed within 500 meters around the said mine.

Earlier this case was presented by the PP and their consultant in the 72<sup>nd</sup> SEAC-II meeting dated 11/04/2017 *wherein during presentation it was observed as per the Google image of Jan, 2017 based on the co-ordinates provided by the PP that > 90 % of the lease area is submerged in river water. Hence after presentation, PP was asked to submit revised operational production (mine working) plan of the lease area with recent photographs of the site.*

PP has submitted the revised operational production (mine working) plan of the lease area with recent photographs of the site vide letter dated 19/06/2017.

The case was scheduled for the query presentation in the 297<sup>th</sup> SEAC meeting dated 08/11/2017 and 302<sup>nd</sup> SEAC meeting today but PP remains absent. The committee observed that PP has neither appeared for query presentation nor has requested for providing additional time for the same and the case is pending for query appraisal from last six months. Hence committee after deliberations decided that this case may be

recommended for delisting to SEIAA as per MoEF&CC OM No. F-11013/5/2009-IA-II (Part) dated 30/10/2012.

**10. Case No. - 5488/2016 M/s Digiana Industries Pvt. Ltd, G-1, Sapna Chambers, 12/1 South Tukoganj, Indore, MP- 462001 Prior Environment Clearance for Sand Quarry in an area of 11.500 ha. (3,45,000 cum per annum) (Khasra no. 854) at Village- Baghari, Tehsil - Chandala, Dist. Chhatarpur (MP)**

This is case of Sand Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at (Khasra no. 854) at Village- Baghari, Tehsil - Chandala, Dist. Chhatarpur (MP) 11.500 Ha. The project requires prior EC before commencement of any activity at site.

PP has submitted a copy of approved Mining Plan, letter from Mining Officer certifying the leases within 500 meters radius around the site and requisite information in the prescribed format duly verified by the Tehsildar and DFO. Concerned Mining Officer through Ekal pramn-patr vide letter no.-503, dated: 21/04/16, has reported that there is 01 more mine operating or proposed within 500 meters around the said mine with total area of 24.00 ha including this mine.

The case was presented by the PP and their consultant in the 65<sup>th</sup> SEAC meeting dated 17/01/17 and 81<sup>st</sup> SEAC meeting dated 22/06/2017 where in PP was asked to submit comprehensive EMP.

The case was scheduled for the presentation today but Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to give reminder to PP for submission of comprehensive EMP within 30 days otherwise the case will be considered for delisting.

**11. Case No. - 5614/2017 M/s Digiana Industries Pvt. Ltd, G-1, Sapna Chambers, 12/1 South Tukoganj, Indore, MP – 452001 Prior Environment Clearance for Sand Deposit Quarry in an area of 10.0 Ha.. (240000 cum per annum) (Khasra no. 1540/1) at Village- Padwar, Tehsil - Gourihar, Dist. Chhatarpur (MP)**

This is case of Sand Deposit Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located (Khasra no. 1540/1) at Village- Padwar, Tehsil - Gourihaar, Dist. Chhatarpur (MP) 10.0 Ha. The project requires prior EC before commencement of any activity at site.

PP has submitted a copy of approved Mining Plan, information in the lease's within 500 meters radius around the site and other requisite information in the prescribed format duly verified in the Collector's office (Ekal Praman Patra) vide letter no. NIL dated: NIL has reported that there is no more mine operating or proposed within 500 meters around the said mine.

The case was scheduled for the presentation today but Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings and even it the PP remains absent, the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

**12. Case No. - 5615/2017 M/s Digiana Industries Pvt. Ltd, G-1, Sapna Chambers, 12/1 South Tukoganj, Indore, MP – 452001 Prior Environment Clearance for Sand Deposit Quarry in an area of 12.500 Ha.. (375000 cum per annum) (Khasra no. 277/1) at Village- Harrai, Tehsil - Chandala, Dist. Chhatarpur (MP)**

This is case of Sand Deposit Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located (Khasra no. 277/) at Village- Harrai, Tehsil - Chandala, Dist. Chhatarpur (MP) 12.500 Ha. The project requires prior EC before commencement of any activity at site.

PP has submitted a copy of approved Mining Plan, information in the lease's within 1000 meters radius around the site and other requisite information in the prescribed format duly verified in the Collector's office (Ekal Praman Patra) vide letter no. 505 dated: 21/4/17 has reported that there are 01 more mine operating or proposed within 1000 meters around the said mine with total area of 24.0 ha. Including this mine

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OF 302<sup>st</sup> MEETING**

The case was scheduled for the presentation today but Neither the Project Proponent (PP) nor his representative was present to explain the query which might be raised or to make any commitment which may be desired by the committee during the deliberation. Committee decided to call the PP in subsequent meetings and even if the PP remains absent, the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

**(Dr. Mohd. Akram Khan)**  
**Member**

**(Dr. A.K. Sharma)**  
**Member**

**(Dr. R. Maheshwari)**  
**Member**

**(Dr. Sonal Mehta)**  
**Member**

**(Prashant Shrivastava)**  
**Member**

**(Mohd. Kasam Khan)**  
**Chairman**

Following standard conditions shall be applicable for the mining projects of minor mineral in addition to the specific conditions:

**Annexure- 'A'**

**Standard conditions applicable to Stone/Murrum and Soil quarries:**

1. The amount towards reclamation of the pit and land in MLA shall be carried out through the mining department. The appropriate amount as estimated for the activity by mining department has to be deposited with the Collector to take up the activity after the mine is exhausted.
2. The lease boundary should be clearly demarcated at site with the given co-ordinates by pillars.
3. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA
4. Transportation of material shall be done in covered vehicles.
5. Necessary consents shall be obtained from MPPCB and the air/water pollution control measures have to be installed as per the recommendation of MPPCB.
6. Curtaining of site shall be done using appropriate media.
7. The proposed plantation should be carried out along with the mining @45 trees per hectare and PP would maintain the plants for five years including casualty replacement.
8. Transportation shall not be carried out through forest area.
9. Appropriate activities shall be taken up for social up-liftment of the area. Funds reserved towards the same shall be utilized through Gram Panchayat.
10. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
11. PP should maintain a log book wherein daily details of water sprinkling and vehicle movement are recorded.
12. NOC of gram panchayat should be obtained for the water requirement.
13. PP should also maintain a log book containing annual details of tree plantation and causality replacement.
14. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity addition with change in process and or technology and any change in product - mix in proposed mining unit shall require a fresh Environment Clearance.
15. Mining should be done as per the submitted land use plan submitted by PP.

**Annexure- 'B'**

**Standard conditions applicable for the sand Mine Quarries\***

1. The amount towards reclamation of the land in MLA shall be carried out through the mining department; the appropriate amount as estimated for the activity by mining department has to be deposited with the Collector to take up the activity after the mine is exhausted.
2. The lease boundary should be clearly demarcated at site with the given co-ordinates by pillars.
3. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
4. Plantation shall be carried out on the banks for stabilization of the banks.
5. The mining activity shall be done manually.
6. No heavy vehicles shall be allowed to enter the river bed and the transportation of the sand from the excavation pits of the leased area to the loading point shall be through trollies (tractor trollies) and not by heavy vehicles. Only registered tractor trollies which are having the necessary registration and permission for the aforesaid purpose under the Motor Vehicle Act and also insurance coverage for the same shall alone be used for said purpose.
7. NOC of gram panchayat should be obtained for the water requirement.
8. Transport vehicles will be covered with tarpoline to minimize dust/sand particle emissions.
9. For carrying out mining in proximity to any bridge and/or embankment, appropriate safety zone on upstream as well as on downstream from the periphery of the mining site shall be ensured taking into account the structural parameters, location aspects, flow rate, etc., and no mining shall be carried out in the safety zone.
10. No Mining shall be carried out during Monsoon season.
11. The depth of mining shall be restricted to 3m or water level, whichever is less.
12. No in-stream mining shall be allowed.
13. The mining shall be carried out strictly as per the approved mining plan and ensure that the annual replenishment of sand in the mining lease area is sufficient to sustain the mining operations at levels prescribed in the mining plan.
14. Established water conveyance channels should not be relocated, straightened, or modified.
15. If the stream is dry, the excavation must not proceed beyond the lowest undisturbed elevation of the stream bottom, which is a function of local hydraulics, hydrology, and geomorphology.
16. After mining is complete, the edge of the pit should be graded to a 2.5:1 slope in the direction of the flow.
17. PP shall take Socio-economic activities in the region through the 'Gram Panchayat'.
18. EC will be valid for mine lease period subject to a ceiling of 5 years.
19. Mining should be done as per the submitted land use plan submitted by PP.

**Annexure- 'C'**

**Standard conditions applicable for the Khodu Bharu sand Mine Quarries\***

1. Mining should be done only to the extent of reclaiming the agricultural land.
2. The lease boundary should be clearly demarcated at site with the given co-ordinates by pillars.
3. Only deposited sand is to be removed and no mining/digging below the ground level is allowed.
4. The amount towards reclamation of the land in MLA shall be carried out through the mining department; the appropriate amount as estimated for the activity by mining department has to be deposited with the Collector to take up the activity after the mine is exhausted.
5. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
6. The mining activity shall be done manually.
7. Heavy vehicles shall not be allowed for removal of sand.
8. The sand shall be transported by small trolleys up to the main transport vehicle.
9. Transport vehicles will be covered with tarpoline to minimize dust/sand particle emissions.
10. No Mining shall be carried out during Monsoon season.
11. PP shall take Socio-economic activity in the region through the 'Gram Panchayat'.
12. NOC of gram panchayat should be obtained for the water requirement.
13. EC will be valid for mine lease period/mine plan subject to a ceiling of 5 years.
14. The mining shall be carried out strictly as per the approved mining plan.