The 79<sup>th</sup> meeting of the Second State Expert Appraisal Committee (SEAC-II) for mining projects was held on 13<sup>th</sup> June, 2017 under the Chairmanship of Dr. Navin Chandra for discussion on the query responses submitted by the PP and the projects issues received from SEIAA. The following members attended the meeting-

- 1. Shri. Mohd. Kasam khan, Member.
- 2. Shri Anil Kumar Sharma, Member.
- 3. Shri Rajendra Kumar Sharma, Member.
- 4. Dr. Mohd. Akram khan, Member.
- 5. Shri. Prashant Shrivastava, Member.
- 6. Dr. Sonal Mehta, Member.

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

1. <u>Case No. - 3974/15 Shri Sailendra J. Worah, Director & Owner, M/s N.M. Dubash Stone & Lime Company Pvt. Ltd., Station Road, P.O.-Maihar, District-Satna (MP).Prior E.C for approval of Limestone & Dolomite Mine in an area of 4.57 ha. (1,39,200 TPA) at khasra No.-37 P, & 38 P, Vill.-Bistara, Tehsil-Murwara, District-Katni (MP) (EIA Consultant: M/s CRIPL,Noida)</u>

This is case of mining of Limestone. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at khasra No.-37 P, & 38 P, Vill.-Bistara, Tehsil-Murwara, District-Katni (MP) 4.57 ha. The project requires prior EC before commencement of any activity at site.

The case was presented by the PP and their consultant in 262<sup>nd</sup> SEAC meeting dated-09/01/2016. It being 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 with following additional conditions:-

- 1. Inventory of operating / proposed mines within 2 Km around the said mine.
- 2. Inventory of all sensitive receptors in 2 Km & 5 Km around the mine.
- 3. Evacuation Plan on a map to be provided with transport route, required infrastructure and man-power.

PP has submitted EIA vide letter no.-14/05/2017 which was forwarded by the SEIAA vide letter no.519 dated-23/05/2017. EIA was presented by the PP and their consultant wherein following submissions were made by the PP:

The Mining lease was initially granted for 10 years period to Smt. Azra Begam w.e.f. 02.11.1977 to 01.11.1987. The ML area was transferred to Shri J.P. Mishra for period 08.01.1987 to 01.11.1997 and renewed up to 01.11.2017. The ML was again Transferred to Shri Ravi Kumar Kankane and then to the present lessee. The ML area is deemed to have been extended upto 50 years period from date of 1<sup>st</sup> grant of ML i.e. upto 01.11.2027 under the provisions of The MM (D & R) Amendment Act 2015. As per EIA notification 2006 and its subsequent amendment thereof proposed project fall in category B1. The mining plan has been approved via Letter No. – MP/Katni/Limestone/M.Sch.-122/14-15/2901 dated 18.05.2015.

### **Salient Features of Project**

Name of the applicant	M/s. N.M. Dubash Stone & Lime Co. Pvt. Ltd.
Address of Lessee	Station Road, P.O Maihar District – Satna (M.P.)
	PIN Code – 485771, Phone No. – 07674 – 232055
	E-mail – <u>nmdubashmaihar@gmail.com</u>
Name of Mine	Bistara Limestone Mine
Village	Bistara
Tehsil	Murwara (Katni)
District & State	Katni, Madhya Pradesh
Latitude	23°58'16.4" to 23°58'25.4" N
Longitude	80°26'57.2" to 80°27'07.3" E
Toposheet Number	63 A/5
Mineral	Limestone
Area (ha)	4.57 Ha.
Postal Address	Station Road, P.O Maihar District – Satna (M.P.)
	PIN Code – 485771Phone No. – 07674 – 232055
	E-mail – nmdubashmaihar@gmail.com
Period of Lease	50 years

# **Basic Requirements for the Project**

S. No	Requirement	Quantity	Source
1	Land	4.57 Ha.	It's a Existing mine

2	Water	15 KLD	Ground water from Ground water source within
			the ML area and mine sump.
3	Manpower	40	From nearby villages

### **Details of Mining**

Method of mining	Opencast other than fully mechanized mining
Bench Height and Width	Height:6m Width:10 m
Ultimate pit depth	60 m bgl
Ground water Depth	62 -65 m bgl
Life of the Mine	13 Years

**Drilling**: Overburden shale and mineral will require drilling and blasting, The limestone will be drilled by 32 mm diameter holes by Jack hammer.

# a) Blasting

Spacing - 1m
Burden - 0.8 m
Depth of hole - 1.5m
Dia of hole - 33mm

**b)Explosive to be used=** Nitrate Mixture/Ordinary Detonator/ED and Safety Fuse.

#### **Land Use Pattern**

Sl.No.	Particular	Existing	5th Year	Lease Period
			end	
1	Total area excavated (broken)	2.80	3.07	(3.60)
2	Area fully mined out (out of 1)	0	0	(3.60)
3	Area fully reclaimed (Backfilled out of 2)	0	0	(0.56)
4	Area rehabilitated out of 3 by afforestation	0	0	0.56

5	Area reclaimed by water harvesting	0	0	3.04
6	Total area under dumps	0.60	0.60	0
7	Area under active dumps	0.40	0.40	0
8	Area under mineral stack	0	0	0
9	Area under Road	0.10	0.10	0
10	Area under plantation (on dump and green belt)	0.13	0.33	0.97
11	Area under infrastructure	0.10	0.10	0
12	Undisturbed area	0.84	0.37	0

During presentation it was also submitted by the PP that the own railway siding of the lessee is about 100 meters in north from where dispatch of lime stone to steel and cement plants will be carried out. The PWD road from Jukehi to Kaymore is at about 150 meters away in north direction. Towards eastern side there is another ML of the lessee over 17.07 ha for which permission under regulation 111 of MMR, 1961 has been granted to mine out the common boundary between both the leases. The crusher of the lessee is on the northern side but outside of the ML area. After presentation, PP was asked to submit response on following queries:

- 1. Top Soil Management Plan to be submitted by the PP.
- 2. During presentation PP has submitted that wet drilling is proposed for which committee suggested that it being an existing mine details of wet drilling machines should be submitted.
- 3. Back-up calculation of wind-rose diagram should be submitted.
- 4. Minimum and maximum values of silica should be submitted.
- 5. Impact factor of drilling & blasting, transportation, loading & unloading shall be submitted.
- 6. Authenticated analysis report issued by the accredited lab along with Lab accreditation Certificate to be submitted.
- 7. Revised CSR as suggested by the committee incorporating budget for drinking water supply as committed during public hearing should be submitted.

PP has submitted the response on above quarries vide letter dated 13/06/2017 which was placed before the committee and same was found satisfactory and acceptable by committee. The EIA/EMP and other submissions made by the PP were also found to be satisfactory and acceptable, hence committee decided to recommend the case for grant of prior EC subject to the following special conditions:

- 1. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 2. Necessary consents shall be obtained from MPPCB and the air / water pollution control measures have to be installed as per the recommendation of MPPCB.

- 3. Transportation of material shall be done in covered vehicles.
- 4. Transportation of minerals shall not be carried out through forest area.
- 5. Curtaining of site shall be done through thick plantation all around the boundaries of all part of lease.
- 6. The OB (if any) should be properly stacked inside the ML area in barrier zone and disposed off as per the submitted plan. PP shall bound to compliance the final closure plan as approved by the IBM.
- 7. Production of Limestone shall be as per the approved mining plan with quantity not exceeding 1, 39,200 TPA.
- 8. 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.
- 9. Authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.
- 10. As proposed, garland drains with protective bunds all around the lease boundary (300mx2.0mX1.5m) shall be provided along with 03 settling tanks (20mX7.5mX03m) with one sump of 30mX20mX03m for proper sedimentation and retention connected with garland drains shall be provided.
- 11. 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.
- 12. Fixed typed sprinklers should be provided on 440 meter long 05 meter wide haul roads. However, regular water spraying should be practiced on 500 meter long 06 meter wide transportation road for dust suppression.
- 13. If any tree uprooting is proposed necessary permission from the competent authority should be obtained for the same.
- 14. 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.
- 15. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
- 16. The commitments made in the public hearing are to be fulfilled by the PP.

- 17. 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.
- 18. PP will comply with all the commitments made in by the letter dated 13/06/2017.

# 2. <u>Case No. - 3943/15 Shri Shailendra Nagrath S/o Late Shri Ram Prakash Nagrath C/o Civil Line, P.O. & District-Katni (MP)-483501.Prior E.C for approval of Limestone Mine in an area of 3.456 ha. (1,00,000 TPA) at khasra No.-101, Vill.-Kachhagawan, Tehsil-Katni, District-Katni (MP).(EIA Consultant: M/s CRIPL,Noida)</u>

This is case of Limestone Mine. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at khasra No.-101, Vill.-Kachhagawan, Tehsil-Katni, District-Katni (MP) 3.456 ha. The project requires prior EC before commencement of any activity at site. The ML area is waste land. There is no agriculture land, forest land or any water body in the lease area. No national park, sanctuary or any eco sensitive area exists within 10 kms radius. The nearest forest boundary is about 600m in north. The nearest water bodies are Keolari Nalla in 3.0 km south, Amha Nalla in 5 km west, Tamas River in 3 kms NNW and Katni Nadi in 9.0 kms south. Opencast Other Than Fully Mechanised method of mining will be adopted in the lease area. Proposed Capacity of the project is 1,00,000 TPA of Limestone. The district head quarter –Katni is at 17 kms. The nearest railway station is Jhukehi at 3.3 kms in WNW and the nearest airport is Jabalpur. N.H.-7 passes at 4.25 kms in WNW direction.

The case was presented by the PP and their consultant in 05<sup>th</sup> SEAC-II meeting dated-17/02/2016. It's being 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. Inventory of operating / proposed mines within 2 Km around the said mine.
- 2. Inventory of all sensitive receptors in 2 Km & 5 Km around the mine.
- 3. Evacuation Plan on a map to be provided with transport route, required infrastructure and man-power.
- 4. Any alternate route avoiding the nearby habitations.
- 5. Compliance of M. P. Pollution Control Board's consent conditions through concerned Regional Officer.
- 6. The ground water quality monitoring locations should be atleast 05 excluding proposed locations in core zone. In core zone monitoring of existing bore well and water accumulated in excavated pit (if any) should also be monitored.

PP has submitted EIA vide letter no.-09/05/2017 which was forwarded by the SEIAA vide letter no.444 dated-15/05/2017. EIA was presented by the PP and their consultant wherein following submissions were made by the PP:

The Proposed project is for mining of Limestone by open cast other than fully mechanized method. The proposed mine lease area is located in Village- Kachagawan, Tehsil-Katni, District-Katni, Madhya Pradesh over an area of 3.456 Ha. The lease area is mostly broken and waste land and no forest land is involved in the mine lease area. The proposed capacity of the project is 1,00,000 TPA of Limestone. The Mining lease was initially sanctioned for 20 years period w.e.f. 17.02.1976 to 16.02.1996 and renewed for 20 years period upto 16.02.2016 in the name of Shri R.P. Nagrath. Shri R.P. Nagrath expired and his legal heir/son Shri Shailendra Nagrath is the lessee as per rules. The ML has been extended to 50 years in accordance with the MM (D&R) Amendment Act 2015 up to 16.02.2026.

### **Salient Feature of the Project**

ect site		Kachhagawan, Tehsil Katni, District				
·						
dinates	Lat	<b>itude:</b> - 23	°58'34.0" to 2	23°58'42.0" N		
	Lon	<b>Longitude:</b> -80°27'44.9" to 80°27'51.5" E				
sheet No.	64	A/5				
ra No.	10	1				
	N	Iine Lease	Area Details	S		
Lease Area	3.4	56 Ha				
Type of Land		Khasra No.	Area (ha.)	Type of Land		
		101	3.456	Waste Land	-	
Copography	Aln	Almost Plain having general slope towards south.				
Site Elevation Range	Fro	From 384 to 386 AMSL				
Name of mineral mined	Lir	Limestone				
Rate of production	1,0	1,00,000 TPA				
Life of mine	9 Y	9 Year				
Method of mining	Op	Opencast Other than Fully Mechanized Mining				
	dinates  Sheet No.  ra No.  Lease Area  Type of Land  Sopography  Site Elevation Range  Name of mineral mined  Rate of production  Life of mine	Isheet No. 64 Isheet No. 64 Ira No. 10 ILease Area 3.4 Type of Land Interpretation Range From State of production 1,0 Interpretation Range 9 Years (1,0) Interpretation Range 1,0 Interpretation Range 1,0 Interpretation 1,0	Katni Madhy dinates  Latitude:- 23  Longitude: - 64 A/5  ra No.  101  Mine Lease Lease Area  Type of Land  Khasra No.  101  Sopography  Almost Plain 1  Site Elevation Range  From 384 to  Limestone  Rate of production  1,00,000 TPA  Life of mine  9 Year	Katni Madhya Pradesh  Latitude:- 23°58'34.0" to 2  Longitude: -80°27'44.9" to 2  Isheet No.	Katni Madhya Pradesh  dinates  Latitude:- 23°58'34.0" to 23°58'42.0" N  Longitude: -80°27'44.9" to 80°27'51.5" E  sheet No.  101  Mine Lease Area Details  Lease Area  3.456 Ha  Type of Land  Khasra Area (ha.) Type of Land No.  101  Site Elevation Range  From 384 to 386 AMSL  Limestone  Rate of production  1,00,000 TPA  Life of mine  9 Year	

Ground water level		43-48 m bgl			
Ultimate depth of m	nine	41	m bgl		
Water Requirement	& Source	ce 15 kld			
Manpower Requires	ment	70			
Total Working Day annually	S	275	5		
		C	ost Details		
Cost of the project	Rs 1 crore	)			
	Rs 11.0 la				
Cost of CSR	Rs 5.0 la	akh			
	Details	of E	Environmental Settin	ıg	
Ecological Sensitive	Areas T	here	is no National Park	, Wild Life Sanctuary, and Biosphere	
(National Park, Wild	l Life w	ithir	10 KM distance from	n the lease area.	
Sanctuary, Bio	sphere O	nly	Open & Dense Mix	Jungle are present in the study area	
Reserve, Reserve	-	•	are as follows:		
Protected Forest etc.)	within				
10 km distance		S	Particulars	Distance from the MI Doundary (in	
			Particulars	Distance from the ML Boundary (in	
		N		km) & Direction from the ML	
				Boundary	
		1	Dense Mix Jungle	600 m North	
		2	Open mixed Jungle	5 km in WNW and 5.5 Km South	
		3	Bhainswahi Khap RF	9 km in SW	
Water Bodies		1	Katni Nadi	9 km S	
		2	Aloni River	9 km SW	
		3	Keolari Nalla	3.0 Km South	
		4	Tons or Tamasa	3 Km NNW	
		5	Amha Nalla	5.0 Km West	
Nearest Town	K	Kymore – 16 km SW			

Nearest Railway Station	Jukehi Railway Station 3.54 km. NW Patwara Railway Station-8.92 km SW
Nearest National & State Highway	NH-7- 4.80 KM in West direction NH-78- 11.0 KM in SW Direction
Nearest Airport	Jabalpur Airport – 98 Km towards SW direction.
Seismic Zone	As per the 2002 Bureau of Indian Standards (BIS) map, Madhya Pradesh also falls in Zones III.

During presentation it was also submitted by the PP that the nearest railway station is at Jhukehi, which is 3.54 km away from the site in NW direction. Nearest highway is NH 7 is about 4.80 km in west direction. The nearest town is Kymore at a distance of 16 kms. Life of the mine is 09 years. Ultimate depth of the mine is 41m bgl and water table of the area varies from 43m to 48m bgl. Controlled blasting will be carried out.

## Conceptual land uses at different stage are given below:

Sl.No.	Particular	Existing	End of Life of
			Mine
1	Total area excavated (broken)	2.20	(3.10)
2	Area fully mined out (out of 1)	0.20	(3.10)
3	Area fully reclaimed (Backfilled out of 2)	Nil	(0.80)
4	Area rehabilitated out of 3 by afforestation	Nil	0.80
5	Area reclaimed by water harvesting	Nil	2.30
6	Total area under dumps	0.80	Nil
	Total area under active dumps	0.50	Nil
7	Area under Road	0.10	Nil
8	Area under Plantation	0.0	0.346
9	Site Services	0.01	0.01
10	Undisturbed	0.346	Nil
11	Total	3.456	3.456

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

- 1. Top Soil Management Plan to be submitted by the PP.
- 2. During presentation PP has submitted that wet drilling is proposed for which committee suggested that it being an existing mine details of wet drilling machines should be submitted.
- 3. Back-up calculation of wind-rose diagram should be submitted.
- 4. Minimum and maximum values of silica should be submitted.
- 5. Impact factor of drilling & blasting, transportation, loading & unloading shall be submitted.

- 6. Authenticated analysis report issued by the Accredited lab along with Lab accreditation Certificate to be submitted.
- 7. Revised CSR as suggested by the committee incorporating budget for drinking water supply as committed during public hearing should be submitted.
- 8. Revised plantation scheme with revision in number of trees to be planted.

PP has submitted the response on above quarries vide letter dated 13/06/2017 which was placed before the committee and same was found satisfactory and acceptable by committee. The EIA/EMP and other submissions made by the PP were also found to be satisfactory and acceptable, hence committee decided to recommend the case for grant of prior EC subject to the following special conditions:

- 1. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 2. Necessary consents shall be obtained from MPPCB and the air / water pollution control measures have to be installed as per the recommendation of MPPCB.
- 3. Transportation of material shall be done in covered vehicles.
- 4. Transportation of minerals shall not be carried out through forest area.
- 5. Curtaining of site shall be done through thick plantation all around the boundaries of all part of lease.
- 6. The OB (if any) should be properly stacked inside the ML area in barrier zone and disposed off as per the submitted plan. PP shall bound to compliance the final closure plan as approved by the IBM.
- 7. Production of Limestone shall be as per the approved mining plan with quantity not exceeding 1, 00,000 TPA.
- 8. 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.
- 9. Authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.
- 10. As proposed, garland drains all around the lease boundary (750mX02mX1.5m) shall be provided along with 04 settling tanks (20mX7.5mX03m) for proper sedimentation and retention connected with garland drains shall be provided.

- 11. 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.
- 12. Fixed typed sprinklers should be provided on 300 meter long 06 meter wide haul roads. However, regular water spraying should be practiced on 750 meter long 06 meter wide transportation road for dust suppression.
- 13. If any tree uprooting is proposed necessary permission from the competent authority should be obtained for the same.
- 14. 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.
- 15. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
- 16. The commitments made in the public hearing are to be fulfilled by the PP.
- 17. 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.
- 18. PP will comply with all the commitments made in by the letter dated 13/06/2017.

# 3. Case No. -5160/16 M/s J.K. Mineral, Main Road, District-Balaghat (MP). Prior Environment Clearance for Manganese Ore Mining Project in an area of 3.38 ha. (3,000 TPA) at Khasra NO. 526, 527, 545 at Village-Katangjhari, Tehsil-Lalaburra, District-Balaghat (MP) EIA Consultant – Creative Enviro Services, Bhopal.

This is case of Manganese Ore Mining. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at Khasra No.-526, 527, 545 at Village-Katangjhari, Tehsil-Lalaburra, District-Balaghat (MP) 3.38 ha. The project requires prior EC before commencement of any activity at site.

The case was presented by the PP in the 25<sup>th</sup> SEAC-II meeting dated-17/05/2016. It's being 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. Inventory of operating / proposed mines within 2 Km around the said mine.

- 2. Inventory of all sensitive receptors in 2 Km & 5 Km around the mine.
- 3. Evacuation Plan on a map to be provided with transport route, required infrastructure and man-power.
- 4. Hydro geological studies should be carried out and be discussed in the EIA report.
- 5. Compliance of consent conditions of M. P. Pollution Control Board from concerned Regional officer.
- 6. Detailed plantation scheme with budgetary allocations be provided in the EIA report.
- 7. Mine water management plan be provided in the EIA report.

PP has submitted EIA vide letter no.-17/05/2017 which was forwarded by the SEIAA vide letter no.517 dated-23/05/2017.

The case was presented by the PP and their consultant wherein PP submitted that the mine is on undulating surface having elevation from 334-329 mRL. Mine is surrounded by the agricultural land and two other mines are in 2 km radius however, no other mine is located within 500 mt radius. Reserve detail were discussed and found as per the details provided in the approved mining plan. Geo technical details were also discussed and found satisfactory considering proposed bottom area of the ultimate pit. As reported during presentation that water table is around 15-20 mt BGl and ultimate depth is proposed 48 mtrs. The present operation has already intersect the water table. Geo hydrological study was carried out and recommendation made to drop the seeped water at Katangjhari tnal which is 100 mt away from the lease after providing proper settning time. PP was asked to impliemnet the recommendation of geo hydrology report. PP further submitted that he has developed green belt in the lease area consisting of approx 500 numbers of trees and proposed to develop additional two rows of planatation along the transport route. Issues raised in public hearing were also discussed and PP was asked implement all the commitments made during the public hearing. It was submitted by the PP that fresh lease was granted for period of 20 years from 30.10.1999 and extended to 29.10.2049 and the lease area comes under govt. waste and private land. The scheme of mining with progressive mine closure plan has been approved by IBM, Nagpur. Following details were submitted by the PP during presentation;

Particulars	Details
Village	Katangjhari
Tehsil	Lalburra
District	Balaghat
State	MP
Latitude Longitude	21 <sup>0</sup> 50'33" to 21 <sup>0</sup> 50'29.9" North 79 <sup>0</sup> 57'23.5" to 79 <sup>0</sup> 57'29.2" East

Nearest Village	Katangjhari - 0.75 km – ESE
Nearest National/state Highway	None within 10 km radius
Nearest Railway Station	Savangi - 6.60 km - SE
Nearest Airport	Nagpur – 125.00 km
Archaeological Important Place within 10km radius.	None within 10km radius
Ecological Sensitive Areas (Wild Life Sanctuaries) within 10km radius.	None within 10km radius
Reserved / Protected Forest within 10km radius (Boundary to boundary distance)	G. F. Sonewani RF -3.00km- N
Nearest major city with 100000 population within 10km radius	Nil
Nearest Town / City within 10km radius	None
Nearest River/ Nalla/ pond	Katngajhari Canal -0.10km -E Chapa Tank -3.75 -WNW Katangjhari Tank -0.10km - N Kas Nalla -4.25km - W Dokariya Nalla -5.50km – SW Mahadeo Nalla - 0.90km –WSW
Nearest Hill Ranges	None within 10km radius
Other mines located within 10km radius	06 mines
Industry located within 10km radius	None

# Salient feature of the lease area

Particulars	Details
Type of Mine	Open Cast
Mining Lease Area	3.38 ha
Mineable Area	1.61 ha
Existing Pits & Quarries	0.876 ha
Existing Dumps (Soil+OB)	0.3974ha
Plantation	0.115 ha
Mineable Reserve	25719.00 T
Method of mining	Semi- Mechanized
Ultimate Depth of Mining	48 mbgl (281 mRL)
Ultimate Pit Slope	45°
Expected Life of Mines	9 years
Lease Period	50 year 30.10.1999 to 29.10.2049
Existing mode to transportation	Road

Area to be covered under dumps in conceptual period (Soil + OB)	0.9114 ha
Area covered under pit in conceptual period	1.61 ha
Area to be reclaimed by conceptual period	0.08 ha
Area to be covered under plantation by conceptual period	1.3504 ha
Elevation	334-329 mRL
Ground water table	
Monsoon period	15m bgl (314 MRL)
Dry month	20mbgl (309 MRL)
Production Per Day	12 MT
Dumper required per day & Capacity	1 Dumper per day

#### **GEOLOGY OF THE MINE**

# **Geological Characteristics of the Applied Lease Area**

Soil mixed with murrum - 3-4 m Mica Schist - 20 m

Mn Ore with Gondite − 2.4 m thickness up to 281 mRL

Subject mine is in operation. Ore body over a strike length about 110 meters has exposed where the thickness is 2.4 m at 312 RL. There is one band of Manganese ore. 4 bore holes have been drilled in dip side to know the dip side extension of the ore body, out of which ore body have intersected only in 2 bore holes at 287.7 and 281.1m the lowermost intersection RL is 281.1 m.

# **Details of existing pits**

Pit	Surface pit area	mRL	Bottom pit area	Pit area	00 0
no.					(Average)
1	160mL x 45m - 30m W	312	123mL x 28m – 20m W		Lateritic soil – 3.0 m Mica Schist – 20.0 m
					Mn ore $-2.4 \text{ m}$

# Method of mining

Presently the mining operation is being carried out by Opencast Semi Mechanized method with production of 3000 MT per year with JCB for excavation of side/over burden. The over burden/side burden is removed by excavator. Ore zone up to 281 have already been established. The present pit bottom is 312 m. In first three years of plan period, mining operation will be

commenced in northern end and will advance in southern direction in future. Deepening of the pit will start from fourth year. During the ensuring period of SOM, the pit bottom will reach to 306 RL. There will be little lateral expansion of the existing pit, bench height of 3 m and width of 4 m will be maintained.

Year	Pit Mining (MT)	Dump Mining (MT)	Total (MT)
1 <sup>st</sup>	978	2023	3001
2 <sup>nd</sup>	979	2021	3000
3 <sup>rd</sup>	981	2023	3004
4 <sup>th</sup>	2527	243	2770
5 <sup>th</sup>	2985	0.0	2985
Total	8450	6309	14760

# Existing and proposed land use plan

Items	Existing	Conceptual Period
Total lease area	3.38 ha	
Ultimate depth of mining	17mbgl (312 m MSL)	48m bgl (Up to 281 m MSL)
Ultimate pit slope	60 degree	45 degree
Area under dumps	0.4619 ha	0.9115 ha
Area under pits	0.876 ha	1.61 ha
Area to be reclaimed	0.08 ha	0.08 ha
Mineralized dump	0.5258 ha	Nil
Infrastructure & Road	0.2588 ha	Nil
Sub grade Yard	Nil	Nil
Plantation	0.45 ha	1.50ha
Water body	0.6ha	1.50ha

Process	<b>Existing in KL</b>	Proposed in KL	
a) Mine Site			
Dust suppression	5.00	16.00	
Green Belt	2.00	5.00	
a) Domestic			
Drinking & Washing	1.00	1.50	
Total (a + b)	8.00	22.50	
Domestic waste water	0.70	1.2	

The presentation of EIA & EMP made by PP was found adequate and committee after deliberations decided that the submissions made by PP are found to be satisfactory and acceptable hence the case was recommended for grant of prior EC subject to the following special conditions:

- 1. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 2. Necessary consents shall be obtained from MPPCB and the air / water pollution control measures have to be installed as per the recommendation of MPPCB.
- 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. Transportation of minerals shall not be carried out through forest area.
- 6. Curtaining of site shall be done through thick plantation of two to three rows all around the boundaries of all part of lease and dominant wind direction.
- 7. The OB should be properly stacked inside the ML area in barrier zone and disposed off as per the submitted plan. PP shall bound to compliance the final closure plan as approved by the IBM.
- 8. Production of Manganese shall be as per the approved mining plan with quantity not exceeding 3,000 TPA.
- 9. 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. Authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.

- 11. As proposed, garland drains (existing 422mX0.25mX0.50m, 470mX0.25mX0.20m, 141mX0.25mX0.25m,167mX0.25mX0.25m,194mX0.25mX0.25m and proposed 375mX1.0mX1.0m and 174mX1.0mX1.0m) shall be provided along with 11 settling pits of suitable sizes to avoid silt discharge.
- 12. 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.
- 13. Regular water spraying system should be provided on 1363 meter long and 06 meter wide village roads. However, regular water spraying should be practiced on haul road (200 meter long and 05 meter) for dust suppression. PP should also explore the possibility of providing fixed types of sprinklers for dust suppression.
- 14. If any tree uprooting is proposed necessary permission from the competent authority should be obtained for the same.
- 15. 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.
- 16. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
- 17. The commitments made in the public hearing are to be fulfilled by the PP.
- 18. 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.
- 4. Case No. 484/2009 M/s Agrawal & Singh minerals Prop. Shri Upendra Singh R/o village-Budwa P.O. Teh-Beohari C/o 48, Prabhat Vihar Colony, Satna-M.P.Dhari No.1, ochre, white clay & Laterite mine 46.761 ha. at village Dhari, Teh-Beohari, Distt-Shahdol-M.P.

This is a case of ochre, white clay & Laterite. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at village Dhari, Teh- Beohari, Distt- Shahdol- M.P 46.761 ha. The project requires prior EC before commencement of any activity at site.

Earlier this case was discussed in 66<sup>th</sup> SEAC-II meeting dated-06/02/2017 wherein it was recorded that:

"this case was discussed in 45<sup>th</sup> SEAC-II meeting dated-09/08/16 wherein it was recorded that: This being a mining project with lease area between 5 ha to 50 ha is listed at S.N. 1(a) of schedule under 'B' Category of EIA Notification, 2006 and is to be appraised by SEAC.

The case was earlier discussed in the 46th SEAC meeting dated 28/01/2010 wherein the applicant, presented the salient features of the project .Information pertaining to the above project was examined by the committee. This is a case of a new mine. Open-cast, manual mining has been proposed, mining shall not intersect the GW table. Nearest village is Dhari which is about 600 mts from the lease area boundary. Site is surrounded by Reserve forest and nearest Magrodhaha RF boundary about 0.5 Km from the site. River Banas is located at 1.5 Km from the site. One temple and four huts have been reported in the lease area. One stop dam is also located in the lease area. After detailed deliberations, the SEAC has recommended the inclusion of following TORS in the preparation of EIA/EMP:-

- Duly attested & certified Mining Plan approved by competent authority has to be submitted along with the copy of current lease deed and lease letter.
- Monitoring has to taken up as per the norms using appropriate air/water quality modeling, based on meteorological data (wind-rose) of the region.
- All chemical analyses report from approved laboratory in original format. The chemical analyses should incorporate method of analyses, instruments used and the details of standards used. The date and time of sampling should also be mentioned in the report.
- Total area for which afforestation has been proposed plan stating how much plantation shall be taken up yearly, has to be submitted. Plantation of local species along with Sheesham, Neem, Tendu, Kachnar & various fire-wood trees should be taken up. Map showing green belt to be submitted.
- Plantation in at least 33% of the total area has to be ensured with the lease period; accordingly plan has to be submitted with EIA.
- PFR should include cost benefit analyses considering- social cost, environment cost and preoccupational cost.
- For welfare of the mine-workers various activities such as regular health checkups, first-aid, shelter for rest and meals, drinking water etc. has to be taken up. Nearby mine owners may form a society and funds for welfare of mine-workers may be created from various govt. schemes and other sources. This aspect has to be covered in the EMP.
- Management of OB solid waste generated during mining has to be addressed through incorporation of a concrete plan for the same.
- Water-shed management plan to be submitted, in view of the damages caused in the catchment-area of rivers falling in the prescribed study area of mining region & to support the ground-water recharging.

- In land use map, details regarding the agricultural crops pattern around the mining area should also be added.
- Map depictions: coloured maps depicting land use of the region showing sensitive / fragile features and detailed lay-out of the site clearly showing green-belt (existing & planned)
- Species proposed in the green belt development should be notified.
- Satellite Image of the location of mine should be submitted with demarcation of other proposed/in operation mines in nearby area.
- Location is also to be shown in Tehsil map procured from revenue department.
- The EIA should be prepared based on model TOR for appraisal of mining projects issued by MoEF, Delhi
- NOC from Gram Sabah.
- NOC from forest department mentioning the distances of lease area from reserve forest, wild life sanctuaries, national parks etc.
- Notifications, Rules and Guidelines issued by MoEF and CPCB from time to time have to be followed strictly while executing the project. Accordingly, provisions have to be made in the EIA/EMP.
- Temple should be preserved and open to all.
- Water from the dam should be open to all.

The TOR was issued to the PP vide letter no. 150 dated 18/02/2010. The PP has submitted the EIA report to SEIAA vides letter no. 459 dated 21/11/2011 but same was not sent to SEAC due to payment related issues related to public hearings. SEIAA vide letter no. 6038/SEIAA/16 dated 06/10/2015 has forwarded the file to SEAC for appraisal stating that "the case was kept on hold by SEIAA in view of non-payment of the charges of news paper advertisement about public hearing. It is informed by the concerned officer, MPPCB that the payment has been made by the PP to the concerned news agency. Hence the case may be forwarded to SEIAA further action in the matter".

The case was discussed in the 255<sup>th</sup> SEAC meeting dated 02/01/2016 wherein it was decided by the committee that to place it for appraisal in forthcoming meetings of SEAC. The case was scheduled for the presentation in the 08<sup>th</sup> SEAC II meeting dated 20/02/2016 wherein PP remains absent. The case was again scheduled for presentation in the 37<sup>th</sup> SEAC II meeting dated 12/07/2016 wherein it is recorded that "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. Earlier PP was also absent in the 08<sup>th</sup> SEAC II meeting dated 20/02/2016. Committee decided to give last chance to PP for making presentation in the subsequent meetings of SEAC after which the case shall be returned to SEIAA assuming that PP is not interested to continue with the project". Accordingly, PP was also informed vide this office letter no. 1200 dated 18/07/2016.

The case was again 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. Earlier PP was also absent in the 08<sup>th</sup> SEAC-II meeting & 37<sup>th</sup> SEAC II meeting. Committee decided that since sufficient opportunities have been given to the PP for appraisal and consideration of the project wherein PP remain absent, the case shall be returned to SEIAA for delisting assuming that PP is not interested to continue with the project.

Today, this case was again placed in agenda as SEIAA has forwarded this case file vide letter no-4909 dated-06/01/17 stating that "PP has submitted a letter dated-16/12/2016 showing his inclination to present the case in SEAC. Therefore it has been decided to relist the case and send the file back to SEAC for appraisal."

The case was presented by the PP wherein during discussion and scrutiny of the document it was observed by committee that DFO vide letter no. 7490 dated 16/12/0214 has issued a certificate stating that Tiger Reserve, Sidhi (a notified PA) is situated approx. 05 kms away from the project site and thus the case becomes category-A. PP during discussion submitted that the Tiger Reserve, Sidhi is approx. 6.5 Kms away from the site and requested to ask DFO with exact distance as in the submitted certificate approximate distance is mentioned by the DFO and also submitted a written request. Considering the request of PP, committee decided to obtain Revised DFO certificate with the exact distance from the nearest boundary pillar of the lease within 30 days for further consideration of this project. PP was also instructed to peruse the case with the DFO for its timely submission.

The case was placed in the agenda as PP vide letter dated 03/06/2017 has submitted the letter of DFO, Shahdol.

The case was presented by the authorized representative of the PP. During discussion it was observed by the committee that DFO, Shahdol vide letter no. 2092 dated 01/06/2017 has submitted that applied area is 2060 meters away from the Son Ghariyal Abhayaran and as per MoEF&CC Notification dated 25/06/2014 any project or activity specified incategory 'B' will be appraised at the central level as category 'A', if located in whole or in part within 05 kms from the boundary of protected areas notified under the Wildlife (protection) Act, 1972. Thus committee after deliberations decided to forward this case to SEIAA as the applied area is 2060 meters away from the Son Ghariyal Abhayaran for onward necessary action as per MoEF&CC Notification dated 25/06/2014.

5. <u>Case No. – 2660/2015 Shri Sagar Raj Gurjar C/o Jai Shri Balaji Mines & Minerals, Govardhan Vilas, Valicha By Pass, Udaipur (Rajasthan)-313002. Makdawan Laterite Mine</u>

# <u>Lease Area - 14.20 ha., Capacity - 2,00,000 TPA, at Khasra no.-397 P, Vill.-Makdawan, Teh.-Shamgarh, District-Mandsaur (MP)</u>

This is a case of Makdawan Laterite Mine. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at Khasra no.-397 P, Vill.-Makdawan, Teh.-Shamgarh, District-Mandsaur (MP) 14.20 ha. The project requires prior EC before commencement of any activity at site.

The TOR was issued to the PP in as per the recommendations made in the 196<sup>th</sup> SEAC meeting dated 02/06/2015 wherein it is mentioned that after deliberations committee approved the standard TOR to carry out EIA study and prepare EMP for the proposed project with following additional points:

- Since there is a Nala nearby ML area, special focus / chapter be added on impact of mining on natural drainage system, siltation and ground water etc and a well designed imitative plan as part of EMP.
- Impact of mining on natural drainage system
- Protection of siltation in down stream
- Effect on ground water regime.

PP has submitted the EIA report vide letter dated 06/12/2016 which was forwarded by the SEIAA vide letter no. 4812/SEIAA/16 dated 22/12/2016 and the case was scheduled for presentation.

### PROJECT DETAILS

Project Proponent	Shri Sagar Raj Gurjar C/O Jai Shree Balaji Mines & Minerals, Goverdhan Vilas, Valicha Bye Pass, Udaipur-313002 (Raj.)
<b>Project Activity</b>	Mining of Laterite.
Lease Area	14.20 Ha(Govt. Waste land)
<b>Proposed Production</b>	2, 00,000 TPA (Laterite)
Location	Near Village- Makdawan , Tehsil – Shamgarh, Dist- Mandsaur (M.P.)

Latitude	24° 11' 52.02" to 24° 11' 39.99" N
Longitude	75° 40' 01.53" to 75° 39' 44.17" E
Topo sheet no	45 P/12
Nearest village	Makdawan village is 1.0 km in South direction from applied area
Nearest Railway station	The nearest railway station is Shamgarh which is about 2.0 Kms from the applied area.
Nearest Airport	The nearest airport is at Indore which is about 218 Km. from mine site.
Nearest highway	SH 19A about 17.0 km in east direction from applied area.
Wildlife sanctuary	No wildlife sanctuary within core & buffer zone.
Nearest water bodies	Kanthari Nadi – 8.5 km in SE direction. Ansar Nadi – 3.5 km NW direction.
Road Link	The applied area is approachable from Makdawan village which is 1.0 km from lease area. & Makdawan is about 1.8 Km from Tehsil Shamgarh.

# SALIENT FEATURES OF THE PROJECT

Total Mineable Reserves	12,65,057 Tones.
Life of mine	16 years.
General Surface level of the lease area	Minimum 458mRL & Maximum 493 mRL.
Ultimate Working depth	475mRL.
Ground Water Table	Post Monsoon-466mRL & Pre Monsoon-461mRL.

National	Parks,	Sa	nctuaries,	Biosphere	There is no	National	Parks, Sanc	tuaries,	Biosphere
Reserves,	Wildli	fe	corridors,	Tiger 1	Reserves,	Wildlife	Corridors,	Tiger	/Elephant
Elephant r	eserves				reserves ex	kist within	the study are	ea.	

#### **GEOLOGY OF THE LEASE AREA**

#### **Local Geology**

- 1. **Alluvium/Lateritic Soil:** There is capping of soil cover Deccan Trap formation in the area. The Soil is pale brown in color. The average thickness of soil is considered to be about 0.2 m as seen in the area.
- **2. Deccan Trap:** Deccan traps are found to be very thin, highly weathered as small boulders and pebbles on lateritic soil cover in this area.

Laterite: Laterite is a weathering product of basalt. It is formed by Leaching process from Deccan Trap. It is rusty brown to red in color.

#### **STRUCTURAL FEATURES:**

The fractures are developed along the joints and sometimes they are filled with calcareous and argillaceous materials.

# Local Geology:-

Comprehensive study of the lease area hold area reveals that the laterite occurs widely spread in the area around Makdawan as capping on the Deccan trap. The ordinary laterite is deep red in color, massive with pitted appearance and it sometime occur as large lump like bodies its thickness is ranging from 15-18m.

#### **METHOD OF MINING**

Mining will be done by mechanized open cast method of mining. Following broad design parameters have been considered.

- The diameter of the blast hole will be 115mm.
- Excavator with bucket capacity of 0.93 Cu. m will be used.
- Tippers will be used for the transportation of ore and waste.
- ➤ Haul road with gradient not more than 1:16 will be developed.
- > Blasting is required occasionally.
- Water sprinkler will be used for dust suppression in the mine.
- A protecting barbed fencing shall be laid around the periphery of the void (formed at the end of fifth year period) to check the inadvertent entry of men and animals.

### **EXTENT OF MECHANISATION**

S. No.	Machinery	Units	Total HP	Capacity
1	L& T Komatsu PC 200-6 Excavator	1	128	$0.93 \text{ m}^3$
2	Rock Drill, Atlas Copco Air Roc D35	1	110	
3	Truck, Tata Engineering LPK2516	2	110	14 m <sup>3</sup>
4	Water Tanker, 9 KL Capacity	1	110	
5	Road Roller	1	85	
6	Compressor CM-341	1	120	400 cfm

# DRILL MACHINE REQUIRED (IR -D35)

Production per day	200000.0	mt
Working no. of day	300.0	
Production per day	666.7	mt
Blasting per hole 5.0 m	228.0	mt
No. of hole required	2.92	say 3 hole
Drill machines required	one	10.0 m per hr. capacity
Dia of drill machine	110mm	
Spacing	4.5m	
Burden	3.5m	
Use powder factor in blasting		6 tone/hole
Broken Rock per hole	228tone	

# YEAR WISE PRODUCTION DETAIL

Year	Total tentative Excavation	Top Soil(cum)	ROM(Tonnes)

	Cu m		
1 <sup>st</sup> year	59282	7179	200008
2 <sup>nd</sup> year	9925	1425	200008
3 <sup>rd</sup> year	69207	2355	200008
4 <sup>th</sup> year	69207	566	200008
5 <sup>th</sup> year	69207	694	200008
Total	346873	12219	1000040

Earlier this case was discussed in the 65<sup>th</sup> SEAC-II meeting dated -17/01/2017 wherein EIA was presented by the PP and their consultant. After presentation, PP was asked to submit response on following:

- 1. Detailed reserve calculations and year wise production details.
- 2. Input values of modeling data should be provided.
- 3. Duly verified revised DFO Certificate for 250 meters forest boundary.
- 4. Dimensions of Garland drain & settling tank which should be overlaid on surface map.
- 5. Size of the sump to be increased and resubmitted as suggested during presentation by committee.
- 6. Revised water demand chart wrt no. of tankers, capacity and their frequency.
- 7. Commitment from the PP that fixed type of sprinklers will be used within mine lease for dust suppression and solar lights and solar pump will be provided. Their commensurate budgetary provisions should be proposed in EMP and submitted.
- 8. Revised CSR according to the needs of the public as demanded during public hearing and suggested by the committee during presentation.

PP has submitted the reply of above quarries vide letter dated 13/02/2017 which was placed before committee in the 74<sup>th</sup> SEAC-II meeting dated-03/05/2017 for query reply presentation. During presentation consultant submitted that their modeling expert could not come today and thus he is unable to explain the queries related to modeling. Hence after discussion, PP was asked to come again for presentation on queries related to modeling in upcoming SEAC meeting. It was also instructed to the PP that the width of the garland drains should be minimum 02 meters and fixed types of sprinklers should be provided within the lease area for dust suppression. It was also suggested to the PP that solar lights should be provided for illumination within the lease area.

Today this case was again scheduled for presentation as PP has submitted the reply of above quarries vide letter dated 02/06/2017 which was placed before committee. The case was

presented by the PP and their consultant. The presentation of Query Reply made by PP was found adequate and committee after deliberations decided that the submissions made by PP are found to be satisfactory and acceptable hence the case was recommended for grant of prior EC subject to the following special conditions:

- 1. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 2. Necessary consents shall be obtained from MPPCB and the air / water pollution control measures have to be installed as per the recommendation of MPPCB.
- 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. Transportation of minerals shall not be carried out through forest area.
- 6. Curtaining of site shall be done through thick plantation of two to three rows all around the boundaries of all part of lease and dominant wind direction.
- 7. The OB should be properly stacked inside the ML area in barrier zone and disposed off as per the submitted plan. PP shall bound to compliance the final closure plan as approved by the IBM
- 8. Production of Laterite shall be as per the approved mining plan with quantity not exceeding 2,00,000 TPA.
- 9. 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. Authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.
- 11. All garland drains all around the lease area (minimum 02 meters width) shall be provided and should be connected to 06 settling tanks (3mX2mX2m) 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.
- 12. Regular water spraying system should be provided on village roads. However, regular water spraying through sprinklers should be practiced on haul road (600 meter long and 03 meter wide) for dust suppression.

- 13. Regular water spraying should be practiced on haul road for dust suppression. PP should also explore the possibility of providing fixed types of sprinklers for dust suppression.
- 14. If any tree uprooting is proposed necessary permission from the competent authority should be obtained for the same.
- 15. 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.
- 16. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
- 17. The commitments made in the public hearing are to be fulfilled by the PP.

# 6. <u>Case No. 5543/17 M/s Prathvi Infrastructure Pvt. Ltd, 18, Udyog Nagar, Newawar Road, Indore, MP - 452002 (SIA/MP/MIN/63575/2017). Prior Environment Clearance for Stone Quarry in an area of 20.0 Ha.. (1,00,000 cum per annum) (Khasra no. 62/1/1) at Village-Rangwasa, Tehsil - Depalpur, Dist. Indore (MP)</u>

This is case of Stone Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at (Khasra no. 62/1/1) at Village- Rangwasa, Tehsil - Depalpur, Dist. Indore (MP) 20.0 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.-401, dated: 23/03/17, has reported that there are 02 more mines operating or proposed within 500 meters around the said mine with total area of 23.00 ha including this mine.

Earlier this case was scheduled in 75<sup>th</sup> SEAC-II meeting dated-04/05/2017 wherein it was recorded that: *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.* 

The case was presented by the PP and their consultant in the 76<sup>th</sup> SEAC-II meeting dated-23/05/2017. After presentation the committee decided that since concerned Mining Officer vide letter no.-401, dated: 23/03/17, has reported that there are 02 more mines operating or proposed

within 500 meters around the said mine with total area of 23.00 ha including this mine. PP should submit a comprehensive EMP through QCI/NABET **accredited** consultant addressing following issues:-

- 1. EMP with one month data for Air, Water and Noise monitoring.
- 2. EMP should also address the protective measures proposed for the two villages existing on the both sides of the lease from air pollution and mine water discharge (if any).
- 3. Inventory of existing trees with their number and species on the lease and detailed plan if any existing tree is to be uprooted for the mining.
- 4. Details of plantation scheme to be submitted by the PP.
- 5. Management and disposal plan of OB.
- 6. Surface plan clearly showing the area left due to roads as per MMR, 1996 and location and size of settling tanks and garland drains.
- 7. Management of mine water discharge.
- 8. Transportation and evacuation plan of minerals considering production volume of all the mines within 500 meters radius."
- 9. Other mining activities were seems in the nearby area but Mining Officer vide letter dated 23/03/2017 has indicated only 02 more mines within 500 mts of this lease. PP was asked to submit revised letter of concerned Mining Officer according to MoEF&CC Notification dated 15/01/2016.

PP has submitted the comprehensive EMP vide letter dated 05/06/2017 and thus the case was placed for the presentation of comprehensive EMP.

The case was presented by the PP and their consultant wherein during presentation it was submitted by the PP that they have obtained revised MO certificate issued by the concerned mining officer vide letter no. 1009 dated 12/06/2016 which was placed before the committee. The committee observed that there are 13 leases within 500 meters area of this project out of which 11 were sanctioned prior to 09/09/2013 and only two leases (2.00ha and 1.80 ha) are sanctioned after 09/09/2013 and thus the cluster area considering MoEF&CC Notification dated 15/01/2016 is 23.80 ha and PP has submitted comprehensive EMP through QCI/NABET accredited consultant as discussed in the 76<sup>th</sup> SEAC-II meeting dated 23/05/2017. During presentation of comprehensive EMP it was observed by the committee through Google image that Rangwasa village is approx. 1000 meters away on the northern side of the lease and a black top road is passing approx. 100 meters away from the southern side & 700 meters away from the eastern side of the QL which is in accordance with the per the MMR, 1961. It was further observed by the committee that on the southern side of the lease approx. 70 meters away some shades are in existence for which PP submitted that these shades are established by M/s IVRCL

Company which are now not in use as this company has windup their operations and the QL which is allotted to them is including the area which was earlier allotted to M/s IVRCL Company. It was further observed by the committee that a crusher and some shades are also in existence in the QL area for which PP submitted that these shades are also belongs to M/s IVRCL Company from whom they have purchased this lease and will be used by them as per their requirements. PP informed that this 20.00 ha lease was allotted to them vide office order no. 2744/khaniz/2017 dated 17/02/2017 by Office of Director, Geology and Mining, Bhopal. Committee after deliberations suggested that since shades are in existence outside the lease area, PP should erect 03 meter high wind breaking wall all around the crusher unit and three rows thick plantation should be developed towards Rangwasa village and towards shades to act as a wind curtain.

The EMS and other submissions submitted by the PP were found to be satisfactory and acceptable, hence committee decided to recommend the case for grant of prior EC subject to the following special conditions in addition to the standard conditions at annexure 'A':

- Production as per mine plan with quantity not exceeding for Stone 1,00,000 cum/Year.
- Some shades are in existence approx 70 meters away from the QL area thus three rows thick plantation should be provided towards Rangwasa village and shades side.
- 03 meter high wind breaking wall of suitable material should be provided all around the crushing unit.
- PP will comply with all the commitments made in by the letter dated 13/06/2017.

# 7. Case No. - 5565/2017 M/s Dhruv Construction, Shri Anupam Singh Bhadauriya, R/o Plot No. A-21, Swastik City, Dist. Shahdol, MP (SIA/MP/MIN/64227/2017). Prior Environment Clearance for Stone Mine in an area of 6.0 Ha. Production Capacity-10,000 cum per annum (Khasra no. 18/1) at Village- Dholar, Tehsil - Jaisinghnagar, Dist. Shahdol (MP)

This is case of Stone Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at (Khasra no. 18/1) at Village- Dholar, Tehsil - Jaisinghnagar, Dist. Shahdol (MP) 6.00 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.-9331, dated: 06/04/17, has reported that there is 01 more mines operating or proposed within 500 meters around the said mine with total area of 07.93 ha including this mine.

The case was presented by the PP and their consultant and during presentation it was observed that the Tehsildar's Certificate submitted by the PP is of Revenue Inspector, while as per the instruction given by the SEIAA it should be issued from the competent authority (Tehsildar) in prescribed format. Hence committee after discussion decided to obtain revised Tehsildar's Certificate in prescribed format which should be duly signed by the competent authority for further consideration of this project.

# 8. <u>Case No. - 5569/2017 Mr. Amit Khampariya, 3162, Ganga Nagar, Jabalpur, MP (SIA/MP/MIN/18467/2017). Prior Environment Clearance for River Sand in an area of 20.0 Ha. (1,60,000 cum per annum) (Khasra no. 1144) at Village- Basadi, Tehsil - Badwada, Dist. Katni (MP).</u>

This is case of River Sand Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at (Khasra no. 1144) at Village- Basadi, Tehsil - Badwada, Dist. Katni (MP) 20.00 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.-308, dated: 01/02/17, has reported that there is 01 more mines operating or proposed within 500 meters around the said mine with total area of 40.00 ha including this mine.

The case was presented by the PP and their consultant in 69<sup>th</sup> SEAC-II meeting dated-07/03/2017 as case no.-5514/2017, wherein it was found that earlier this case was recommended for EC with other case number and Hon'ble NGT has rejected the earlier EC and instructed for re-application in B-2 category. On perusal of Form-1 submitted by PP, it was observed by the committee that PP has not presented these facts in Form-1 at designated place and thus form-1 becomes incomplete and null and void.

Committee after deliberations decide that PP should submit the revised Form-1 through SEIAA enclosing date wise summery of proceedings along with all the orders passed by the Hon'ble NGT in this case as it is very important for the committee to understand the grounds on which the case was rejected earlier.

Today, case was presented by the PP and their consultant with revised form-I and during presentation it was observed that concerned Mining Officer vide letter no.-308, dated: 01/02/17, has reported that there is 01 more mines operating or proposed within 500 meters around the said mine with total area of 40.00 ha including this mine. It being a case of cluster where the total area is > 25 ha it was decided to consider this case as B-1 and committee recommended to issue standard TOR prescribed by MoEF&CC with following additional TORs:-

- 1. Detailed evacuation plan along with road condition is to be discussed in the EIA report along with requirement of manpower.
- 2. EIA/EMP is required to be prepared for entire cluster in order to cover all the possible externalities. The report should cover carrying capacity, transportation and other related issues for the cluster.
- 3. Photographs and maps depicting all the mines present in the cluster.
- 4. On a Google map, show all the mines in a cluster with all four co-ordinates of individual mines.
- 5. The date and duration of carrying out the base line data collection and monitoring be informed to the concerned Regional Officer of the M. P. Pollution Control Board.
- 6. Photographs of individual mine during EIA process with date.
- 7. Justify the production from each mine and also justify the duration when mining is possible.
- 8. Detailed production plan with section should be provided in the EIA report considering the safe area to be left for the prevention of bank erosion.
- 9. If on the evacuation route there are human settlements justify how they will be protected or suggest alternate evacuation route.
- 10. Show on a map, where temporary storage facility of sand will be created along with environmental protection measures proposed for such storage facility.
- 11. Discuss and assess impacts of sand mining on pisciculture.
- 12. Discuss and assess impacts of sand mining on agricultural practices (such as growing of water melons etc) if taking place in the cluster area.
- 13. Discuss the measures that will be adopted for the bank erosion.
- 14. Indicate in EIA the structures such as bridges/barrages/dams close to individual leases in cluster and effects of mining on their structure stability with protection plan.
- 15. Provide the historical data of last 05 years about the sand already evacuated and the replenishment capacity of individual mine lease.
- 16. If a habitation is in close vicinity of ML area then possible impacts & mitigation measures be addressed in EIA.
- 17. During presentation (in some cases) it was observed that there is difference in cluster area information submitted by the mining officer and presentation made by the PP & their consultant. If this is the situation in this case, the OIC, MP State Mining Corporation Ltd., was asked to get the area revivified from mining officer and same should be submitted with the EIA report.

9. <u>Case No. - 5577/2017 M/s Shakti Traders, Near Jalpa Devi Temple, Jalpa Ward, Katni, MP (483501(SIA/MP/MIN/65205/2017).Prior Environment Clearance for Sand Deposit Quarry in an area of 6.0 Ha. (85,500 cum per annum) (Khasra no. 55 (Part)) at Village- Mohana, Tehsil - Ajaygarh, Dist. Panna (MP).</u>

This is case of Sand Deposit. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at (Khasra no. 55 (Part)) at Village- Mohana, Tehsil - Ajaygarh, Dist. Panna (MP) 6.00 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 dated: 11/11/2016, has reported that there are no more mines operating or proposed within 500 meters around the said mine.

The case was earlier appraised by SEAC-II in its 62<sup>nd</sup> meeting dated 23.12.2016 as case no. 5475/2016 based on the facts submitted by the PP and recommended to SEIAA. The SEIAA has considered the case in its 401<sup>st</sup> meeting dated 13.01.2017 and accorded environment clearance vide no5070-71/SEIAA/17 dated 23.01.2017.

Later on another sand lease was sanctioned by MPSMC at same village Mohana Tehsil Ajaygarh Dist Panna. During the demarcation of both quarries, it is noted by the district administration that coordinates of the both the quarries not machining. The coordinates of quarry area of M/s Shakti Traders was not appropriate and varies slightly. Hence PP has modified and gets the approval of the mining plan with revised coordinates. The PP has submitted the application for amendment in the EC with respect to changed coordinates and after considering the case SEIAA has cancelled the previous EC and asked PP to apply fresh in 436<sup>th</sup> meeting dated 29.05.2017

The case was submitted as fresh with revised coordinates to SEIAA and SEIAA has forwarded the case to SEAC for appraisal. The activity is mentioned at S.N. 1 (a) of the Schedule of EIA Notification 2006 as amended from time to time. The project is reported to be at a distance of more than 5 Km from the interstate boundary; thus is not attracted by the general conditions and falls under category 'B-2" by virtue of its location and mining lease area. Hence the project requires prior Environmental Clearance from the SEIAA. The case was forwarded by SEIAA to SEAC for scoping so as to determine B-2.

Project proponent and his consultant presented the salient features of the project and the proposed EMP before the committee. The presentation and the submissions made by the PP reveals following:

It was submitted that this is proposed mine for five year period. The proponent wish to have capacity 85,500 cubic meter per year, from opencast mining. Accordingly the mine plan has been approved.

# **Environment setting**

Particulars	Details
Locations	
Village	Mohana
Tehsil	Ajaygarh
District	Panna
State	MP
Revised Coordinates	1. 24°55'59.072" N - 80°07'12.008" E
Latitude	2. 24°55'52.546"N - 80°07'27.128" E
Longitude	3. 24°55'47.998" N- 80°07'24.967" E
	4. 24°55'56.398"N - 80°07'10.046" E
Previsous Coordinates	1. 24°55'52.20" N - 80°08'33.00" E
	2. 24°55'48.70"N - 80°07'41.90" E
	3. 24°55'02.90" N- 80°07'44.30" E
	4. 24°55'55.90"N - 80°08'27.70"
General ground level	134 m
Nearest National/state Highway	SH- 49 - 14km – SE
Nearest Railway Station	Rajnagar R.S. – 25.50 km
Nearest Airport	Khajuraho – 23.50 km

Ecological Sensitive Areas (Wild Life	Panna Tiger Reserve National park-
Sanctuaries) within 10km radius.	7.50 km
	Ken Ghadiyaal Wild life Sanctuaries- 4.50 km
Reserved / Protected Forest within 10km radius	P.F1 - 2.50 km -S
	P.F2 - 1.25 km - N
Nearest major city with 100000 population within 10km radius	None
Nearest Town / City within 10km radius	None within 10km radius
Nearest Village	Mohana – 1.0 km - W
Nearest River	Urmal Nadi - 6.00 km - W
Nearest Nalla/water reservoir	Ken Canal - 2 km - S
	Balraha Nala - 1.0 km - ESE
Nearest Hill Ranges	Sunoa pahar -9.50 km -WSW
Other mines within 1 km radius	None
Industry within 10km radius	None
Distance of transport road	5.75 km

The case was presented by the PP and their consultant, wherein it was observed that Case was presented by PP and their consultant. During presentation, it was observed that as per the certificate issued by the DFO vide letter no. 2347 dated 15/05/2015, Panna Tiger Reserve is at a distance of 7.5 kms and Ken Ghariyal Abhayaran is at a distance of 4.5 kms (a Notified PA) Clearance from NBWL is therefore needed. PP has submitted the copy of online application made for wild life clearance with proposal no. FP/MP/MIN/970/2016 and date of submission is 14/11/2016. The EMS and other submissions made by the PP were found to be satisfactory and

acceptable, hence committee decided to recommend the case for grant of prior EC subject to the following special conditions in addition to the standard conditions at annexure 'B':

- Production of Sand as per mine plan with quantity not exceeding 85,500 cum/year.
- District Authority should record the deposition of sand in the lease area at an interval of 50 meters annually in the last week of September and maintain the records in RL (Reduce Level) Measurement Book. Accordingly authority may allow lease holder to excavate the replenished quantity of sand in the subsequent year.
- Evacuation of sand should not be allowed through the roads passing through the villages.
- Heavy vehicles (Hywa) should not be allowed on Kachcha, narrow roads.
- If causeway (Rapta) is required to be constructed for mining. It should be removed completely before rainy season every year.
- The river bank from where access ramps are made should be restored and access should be closed every year before rainy season.
- No diversion of active channel should be allowed for mining.
- The grant of Environmental Clearance should be subject to necessary Wild Life Clearance from NBWL to be obtained by PP.

10. Case No.-3769/15 Shri Sanjiv Beri, (Owner), Managing Director, M/s S.N.S. (Minerals) Ltd., NH-7, Rewa Road, P.O. Maihar, District-Satna (MP)-485771. Prior Environment Clearance for approval of Limestone and Dolomite Mine in an area of 3.50 ha. (production capacity 88,710 TPA) at Khasra No.-514, 517, 518, 532, Village-Jamuwani Kala, Tehsil-Vijayraghogarh, District-Katna (MP).

This is case of Limestone and Dolomite Mine. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at Khasra No.-514, 517, 518, 532, Village-Jamuwani Kala, Tehsil-Vijayraghogarh, District-Katni (MP) 3.50 Ha. The project requires prior EC before commencement of any activity at site.

The case was presented by the PP and their consultant for the TOR in the 241<sup>st</sup> SEAC Meeting dated: 06/11/2015. After deliberations, committee recommends to issue standard TOR prescribed by the MoEF&CC with following additional TORs:-

- 1. Since the forest boundary is only 416 meters away from the lease area, the PP should address the possible impacts of this mining activity in EIA and the proposed mitigation plan in the EMP.
- 2. Issue of shifting of high tension line (if any) should be addressed in the EIA with supporting documents.

- 3. Details of afforestration done till date should be provided in EIA with supporting photographs.
- 4. Details of compliance made by the PP of consent conditions issued by the M. P. Pollution Control Board should be provided in EIA.

PP vide letter dated 01/03/2017 has submitted Revised Form-I anf PFR along with necessary annexures for reduction in production Capacity from 88,710 TPA to 68,228 TPA which was forwarded through SEIAA vide letter no. 5484 dated 07/03/2017. Based on above case was discussed for Revised TOR for this Production Capacity from 88, 710 TPA to 68,228 TPA as per the quantity sanctioned in the approved mine plan. After deliberations, committee recommends to issue standard TOR prescribed by the MoEF&CC with following additional TORs as per the recommendations of 241<sup>st</sup> SEAC meeting dated: 06/11/2015:-

- 1. Since the forest boundary is only 416 meters away from the lease area, the PP should address the possible impacts of this mining activity in EIA and the proposed mitigation plan in the EMP.
- 2. Issue of shifting of high tension line (if any) should be addressed in the EIA with supporting documents.
- 3. Details of afforestration done till date should be provided in EIA with supporting photographs.
- 4. Details of compliance made by the PP of consent conditions issued by the M. P. Pollution Control Board should be provided in EIA.

(R. K. Sharma, Member)

(A.K. Sharma, Member)

(Dr.Sonal Mehta, Member)

(Prashant Shrivastava, Member)

(Mohd. Kasam Khan, Member)

(Dr.Mohd. Akram Khan, Member)

(Dr. Navin Chandra, Chairman)

# SECOND STATE EXPERT APPRAISAL COMMITTEE-2 (MINING) MINUTES OF THE 79<sup>th</sup> MEETING

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. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA
- 3. Transportation of material shall be done in covered vehicles.
- 4. Necessary consents shall be obtained from MPPCB and the air/water pollution control measures have to be installed as per the recommendation of MPPCB.
- 5. Curtaining of site shall be done using appropriate media.
- 6. 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.
- 7. Transportation shall not be carried out through forest area.
- 8. Appropriate activities shall be taken up for social up-liftment of the area. Funds reserved towards the same shall be utilized through Gram Panchayat.
- 9. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
- 10. PP should maintain a log book wherein daily details of water sprinkling and vehicle movement are recorded.
- 11. PP should also maintain a log book containing annual details of tree plantation and causality replacement.
- 12. 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.
- 13. 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. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 3. Plantation shall be carried out on the banks for stabilization of the banks.
- The mining activity shall be done manually.
- 5. 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.
- 6. Transport vehicles will be covered with taurpoline to minimize dust/sand particle emissions.
- 7. 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.
- 8. No Mining shall be carried out during Monsoon season.
- 9. The depth of mining shall be restricted to 3m or water level, whichever is less.
- 10. No in-stream mining shall be allowed.
- 11. 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.
- 12. Established water conveyance channels should not be relocated, straightened, or modified.
- 13. 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.
- 14. After mining is complete, the edge of the pit should be graded to a 2.5:1 slope in the direction of the flow.
- 15. PP shall take Socio-economic activities in the region through the 'Gram Panchayat'.
- 16. EC will be valid for mine lease period subject to a ceiling of 5 years.
- 17. 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. Only deposited sand is to be removed and no mining/digging below the ground level is allowed.
- 3. 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.
- 4. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 5. The mining activity shall be done manually.
- 6. Heavy vehicles shall not be allowed for removal of sand.
- 7. The sand shall be transported by small trolleys up to the main transport vehicle.
- 8. Transport vehicles will be covered with taurpoline to minimize dust/sand particle emissions.
- 9. No Mining shall be carried out during Monsoon season.
- 10. PP shall take Socio-economic activity in the region through the 'Gram Panchayat'.
- 11. EC will be valid for mine lease period/mine plan subject to a ceiling of 5 years.
- 12. The mining shall be carried out strictly as per the approved mining plan.