The 303st meeting of the State Expert Appraisal Committee (SEAC) was held on 23 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. Jai Prakash Shukla, Member.

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

1. Case No. 2513/2015 Shri Kailash Jain Chouradiya, HIG-11, Deendayalpuram, Civil Lines, Balaghat (M.P.)Environment Clearance for approval of Miragpur Manganese Ore Mine Lease Area - 9.311 ha., Capacity- 5,000 MTPA at Khasra No. 273/1-8, 274, 275, 276/1, 276/2, 277, Vill.-Miragpur, Th.--Khairlanji, Dist-Balaghat (M.P.)

This is a Mining Project comprising mining of Manganese Ore in a lease area of 9.311 Ha. The project is proposed at Khasra No. 273/1-8, 274, 275, 276/1, 276/2, 277, Vill.-Miragpur, Th.--Khairlanji, Dist-Balaghat (M.P.). The Open-cast and Mechanized Mining is proposed in the project. Proposed production capacity in the project is 5000 MTPA.

Earlier this case was discussed in 59th SEAC-II meeting dated-11/11/2016 wherein it was observed that: this case was discussed in 191th SEAC meeting dated-07/05/2015 wherein it was observed that: "The Open-cast and Mechanized Mining is proposed in the project. Proposed production capacity in the project is 5000 MTPA. After deliberations Committee agreed to issue TOR with inclusion of following points in the EIA / EMP in addition to standard:

- Plan for the waste storage / disposal with details of the height of dumps, their slopes and stabilization.
- Cumulative impacts to be evaluated considering the other operating / proposed mines in the area.
- Appropriate Evacuation plan has to be prepared and presented with road map for transport of the material from the mining site up to the main trunk.
- All environmental monitoring shall be conducted through approved Laboratories.
- EIA shall be prepared only by Accredited Consultants in the field of Mining."

Today this case was again placed in agenda as PP has submitted the request letter dated-10/10/2016 for amendment in the TOR with respect to capacity for Manganese Ore mine from 5000 TPA to 400 TPA only as Mining plan was approved for only 400 TPA by the IBM. Committee after perusal and discussion recommends amending the capacity in TOR from the 5000TPA to 400 TPA as per the mine plan approved by the IBM. Committee also 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 considering all the existing mines within 500 meters radius.
- 4. Any alternate route avoiding the nearby habitations.
- 5. Disposal plan of excess mine water accumulated during rainy season be discussed in the EIA.
- 6. Top soil management plan be discussed in the EIA.

PP has submitted the EIA report vide letter dated 19/06/2017, which was forwarded by the SEIAA vide letter no. 847 dated 23/06/2017,

The case was scheduled for presentation in the 297th SEAC meeting dated 08.11.2017 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 after hearing from PP. A request has to be made by the PP for scheduling the case in coming meetings within a month's time after which the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

The case was again scheduled for presentation in 300th SEAC meeting dated 08.12.2017 this meeting 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 giving last chance to present their case and even if PP remains absent the case shall be returned to SEIAA assuming that PP is not interested to continue with the project.

This case was again scheduled for presentation in 303th SEAC meeting dated 23.12.2017, 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. However, PP vide letter dated 21/12/2017 has informed that due to sickness, he is not able to attend the meeting. Committee considering the request decided to call the PP in subsequent meetings of SEAC 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.

2. Case No. - 2332/2015 M/s D.P. Rai, Shri V.B. Rai, Nominated Partner, Nanhaka, 10, East High Court Road, Ramdeshpeth, Nagpur (MS)-440010 E.C For Pandharwaani Manganese Ore Mine, Lease Area – 14.90 Ha. for expansion in Production Capacity from 3000 Tonnes per annum to 10,000 Tonnes per annum, at Khasra Nos.3/1, 3/2, 4/2, 4/3, 4/1, 1/1, ½, 1/3, 1/4, 1/5, 2/1, 2/2, 2/3, 9/1, 9/3, 9/6, 10/1, 10/2, 10/3, 10/4, 10/6, 10/7, 10/8, 10/9, 10/10, 11/1, 11/2, 11/3, 11/5, 136/1, 136/2, 137, 138/1, 138/2 at Village-Pandharwani, Teh –Khairlanji, Disst-Balaghat (M.P).

This is an existing & operational mining project proposing expansion in terms of production capacity of Manganese Ore. The mine presently is O/C and it is proposed to continue the mining with O/C followed by U/G to achieve the targeted production. The project falls under purview of EIA notification and hence requires EC prior to initiate the proposed activity at site. The application for EC was forwarded by SEIAA to SEAC for scoping so as to determine TOR to carry out EIA study and prepare EMP.

Salient features of the project were presented by the PP and his consultant in the 188th SEAC meeting. The project is reported to be located at Khasra Nos.3/1, 3/2, 4/2, 4/3, 4/1, 1/1, ½, 1/3, 1/4, 1/5, 2/1, 2/2, 2/3, 9/1, 9/3, 9/6, 10/1, 10/2, 10/3, 10/4, 10/6, 10/7, 10/8, 10/9, 10/10, 11/1, 11/2, 11/3, 11/5, 136/1, 136/2, 137, 138/1, 138/2 at Village- Pandharwani, Teh – Khairlanji,Disst- Balaghat (M.P). Mining Lease area is 14.90 Ha. Production capacity of Manganese Ore is proposed to be enhanced from 3000 MTPA to 10000 MTPA. The mining shall be O/C as well as U/G using mechanized technology. It was informed by the PP that T-4 blasting shall not be carried out in the adjacent O/C mines and the mining shall be carried out only through using Jack & Hammer technique. PP presented the PFR and proposed TOR before the committee.

After deliberations committee recommended for inclusion of following points to be addressed in the EIA / EMP in addition to standard TOR in the 188th SEAC-II meeting dated 02.05.2015.

1. Subsidence study shall be carried out and presented in EIA with proposed mitigation in the EMP.

- 2. As the site falls within 10 Km from the notified Protected Area comments shall be obtained from Chief Wild Life Warden of M.P.
- 3. Inventory of all the existing OBs' shall be presented along with details of location, ownership of the land where the OBs' are located and other technical details.
- 4. Details method of U/G mining shall be presented with reclamation plan.
- 5. Public Hearing shall be conducted as per the provisions of EIA Notification.
- 6. Other standard TOR shall be addressed.

PP has submitted the EIA report vide letter dated 04/12/2017, which was forwarded by the SEIAA vide letter no. 1289 dated 07/12/2017.

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

Environment Setting

Particulars	Details
Locations	Pandharwani, Khairlanji, Balagha, MP
Latitude	21°37'26.30''-21°37'43.2''North
Longitude	79°50'23.20''-79°50'44.70'' East
General ground level	350m – 349m AMSL
Nearest National/state Highway	Bithali – Garrachouki road -1.25km- NNW
Nearest Railway Station	Katangi Railway Station – 16.50Km
Nearest Airport	Nagpur - 120 km
Nearest Tourist Place within 10km radius.	
Ecological Sensitive Areas (Wild Life Sanctuaries) within 10km radius.	None
Reserved / Protected Forest within	Mohanghat RF - 0.90km – ESE
10km radius (Boundary to boundary	Kapurwihiri RF – 2.30km - SW
distance)	Chikhla RF - 6.80km – NE
Nearest Town / City within 10km radius	None
Nearest Village	Jaitpur khapa - 0.05km - North
Nearest River/ Nalla	Bainganga River - 6.50 km -SW
	Biloni N - 8.50km - WSW
	Canal - 3.25km - N
	Village Pond - 0.15km - N

	Village Pond - 2.70km - SW Village Pond - 1.5km - S Village Pond - 0.90km - S		
Nearest Hill Ranges	None within 10km radius		
Other lease area within 2km radius	 4.232ha Pandarwani Mn Ore mine – Same Lessee – Running – Adjacent 9.311ha Miragpur Mn Ore mine- Shri – Kailash Jain Chouradiya- Proposed – West 24ha – DP Rai Miragpur Mn ore mine 		
Industry within 10km radius	None within 10km radius		

It was reported by the PP that

- The fresh lease was granted for period of 10 years from 21.06.1989 to 20.06.1999 and after that lease has been renewed for further 20 year upto 20.06.2020.
- The lease area comes under govt. & pvt. waste land
- The mine is being operated with opencast method.
- Four other leases area are located within 500m radius.
- 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	Opencast & Underground OTFM
Mining Lease Area	14.90 ha
Mineable Area	4.9637 ha
Area under existing Pits	4.9637ha
Area under existing dump	0.14ha
Area under Infrastructure	1.30 ha
Area under road (outside of pit)	1.12 ha
Area under mineral stack	0.60ha
Ultimate Pit Slope	60^{0}
Plantation	0.27 ha
Recoverable Reserve	389474 T
Ultimate Depth of Mining	Upto 240m AMSL

Existing capacity	3000 TPA
Proposed capacity	10,000 TPA
Expected Life of Mines	41 Years
Lease Period	20 years upto 2020
Thickness of soil	3-4 mt
Proposed mode to transportation of mineral	Road
Area to be covered under dumps in conceptual	Nil
period	
Area covered under pit in conceptual period	4.9637 ha
Area to be reclaimed by conceptual period end	2.2252ha
Area to be converted as water body	2.0 ha
Area to be covered under plantation by conceptual	7.2252 ha
period	
AMSL	350-349m
Ground water table	
Post and Pre Monsoon AMSL	15 m -20m bgl (334m)
Production per Day (T) (200day)	50T
Dumper per day (24T)	2No.

Existing pit details

Pit no.	Size-m	mRL	Logging in meters (average)
1	4.9637ha	303	Lateritic soil – 4m (348-344m)
			Mica Schist – 39m (344m – 303m)
			Mn ore $-5m$ (308-303m)

Geotechnical details of the mining project

Particulate	Details			
Geological reserves as per pervious mining scheme				
Proved (111)	73602.00 T			
Probable (121)	15780.00 T			
Resources (131)	15780.00 T			
Depletion of reserves during past mining	NA			
Additional reserves estimated	Fresh	reserves		

	calculated
Measured mineral resources (area x incline length) 4200m2 (350m L x 12m Width) x 45m ((35+35+65)/3) (331)	661500.00 T
Infrared mineral resources (333) (area x incline length) 900m2 (75m L x 12m Width) x 35m	110250.00 T
Feasibility mineral resources (221)	
Ore blocked in barrier zone T 7.5m x 12m x 100m x 3.5 BD	31500.00 T
Ore blocked in underground safety About 30% ore will be blocked = 661500 x 0.30	198450.00 T
Total minerals blocked 31500 + 198450	229950.00 T
Total geological reserves = 661500 – 229950	431550.00 T
Total recoverable reserves = 431550.00 x 0.95	409973.00 T
Total saleable mineral after 5% sub-grade mineral	389474.00 T
Production in next five year period	24978.00 T
Balance reserves 389474-24978	364496.00
Proposed capacity	10000.00 T
Hence mine life = $5 + 364496/10000.00 = 36.45+5$	41.45 says 41 years

- Opencast as well as underground other than fully mechanical mining method will be adopted.
- Loading and unloading on trucks has been done by excavator cum loader.
- Presently 4.9637ha area has been excavated during past mining activity upto 3-46m and during conceptual period working will be carried out in same pit in depth wise. No further excavation will be carried out.
- During the first year working main incline and vertical winze/shaft in the ore zone will be developed for underground working. The main incline is proposed upto excavated till mRL 240 and vertical winze/shaft upto mRL 250.
- During the conceptual period dump ore working will also be done.
- During the conceptual period about 2.2252ha will be backfilled using mine waste and rest of area will be backfilled using water.
- After manual screening of low grade manganese from sub-grade dump and mine waste dump, crushing will be done in lease area by crusher.

Underground mining

In the first year of the proposal period Main Incline and Vertical Winze/Shaft in the ore zone will be developed. It is proposed to commence Cross Cuts / Ore Drives as follows:

- 1. Main Incline from MRL 285, 270, 255 i.e. at 15 meter vertical interval
- 2. Vertical Shaft/ Winze: MRL 300 only in the North direction i.e. away from the pit MRL 285, 270, 255 at 15 meter vertical interval
- 3. The main incline is proposed up to be excavated till MRL 240 and Vertical Shaft up to MRL 250.
- 4. The thickness of the ore body varies from 10m to 19m. The strike direction is NE to SW. Dip is towards North and at an average angle of +70 degree to almost vertical.
- 5. Mode of entry:
 - Main Incline is proposed in the central part with angle of 20degree of the lease area and the advance will be in south west direction. Excavated size is 3.6 x 2.5m and finished size is 2 x 2.3m.
 - Vertical Shaft/ Winze from the northern portion of the lease area. This will provide second out let to the working from the main incline with excavated size of 6.0m x 4.0m and finished size is 5.0m x 4.0m
 - Cross cuts, ore derives raises and winzes from both the sides i.e. from main incline as well as from vertical shaft.

Proposed stoping method:

The Stoping method will be designed after the results of "GEOTECHNICAL INVESTIGATIONS" are to be carried out. However, the present available information indicates possibility of "Two Stoping" methods and they are

- "HORIZONTAL CUT & FILL" for Ore bodies having dip of more than 45°. This is again divided in two types viz.:
- Ore bodies of thickness less than 10 meters. In this case the length of stop will be along the strike.
- Ore bodies of thickness more than 10 meters. In this case the length of stope will be at right angle (90°) to the strike, with barrier pillar of "Ore" in between two stopes
- Stoping of ore bodies dipping at less than 45^o angle"
- Breast Stoping (Modified)" with "Dry Filling" or "Sand Stowing" for Ore bodies of thickness up to maximum of 2.5 meters.
- "Room & Pillar" or "Post Pillar" for Ore bodies of thickness more than 2.5 meters.

- After carrying out the exploration the stopes will be developed and stoping permission will be as per Rules applicable at the time of stoping.
- Method selected for proposed stoping
- With the various structural findings in the exploration the most probable method of stopping appears to be "Horizontal Cut and Fill in conjunction with dry filling or Sand Stowing".
- Vertical Winze/Shaft Pillar: Considerable quantity of ore will be blocked in these safety/protective pillars. All the pillars will be extracted just before closure of the mine and the technique of extraction will depend upon the geotechnical data and the equipment available at the point of time. It can be assumed that at least 70 to 75% of the ore blocked in the "Shaft Pillars" will be extracted safely other than blocked in the "barrier pillar" left between the opencast working and underground working.

Hoisting

It is proposed mine for underground working. Main Incline will be furnished with 40 lbs rails. Haulage will be installed at the surface (20HP). A one ton capacity tub will on the track line. Excavated materials from the Incline will be loaded into tub manually and the haulage will pull it up to the surface. As proposed, excavations including drives/x-cuts and winzes etc. will be carried out through Main Incline and Vertical Shaft No.1 both. Track lines will be laid in the Level drive and a set of 3-4 tubs will be provided. Excavated materials will be hoisted to the surface through the Main Incline and Vertical shaft no.1 both. The two main entries will be protected and maintained till the life of the mine and same arrangement as above will continue for transportation of minerals from u/g workings. Main Incline will also serve as Man way

Existing and proposed land use plan

Items	Existing	Conceptual Period
Total lease area	14.90 ha	
Ultimate depth of mining	46m bgl	Up to 240mRL (underground)
Ultimate pit slope	60 degree	60 degree
Area under dumps	0.14 ha	Nil
Area under sub grade dump	0.1792ha	Nil
Area under pits	4.9637ha	4.9637 ha
Area to be reclaimed	Nil	2.2252 ha
Infrastructure & Road	1.32 ha	1.32 ha
Mineral storage	0.6 ha	0.7 ha
Plantation	0.27 ha	7.2252 ha
Water body	1.2 ha	2.0 ha

VENTILATION PLAN

Natural ventilation will be established in all the workings from Vertical Shaft and Incline. During Conceptual period when stoping operation is undertaken, the maximum depth of working may be around 100m (Surface-350MRL, deepest level of workings-250MRL) & extent of workings is also within 300m range from NE to SW ML boundary. Man and Machineries requirement is expected to be moderate in view of the moderate level of production. Total man power to be deployed in underground in a shift is not likely to exceed 80 no.

Intake air

- 1. Vertical Shaft
- 2. Incline

Return air

Winze

Ventilation planning

Steps in ventilation planning

 CO_2 ---0.4-0.5% by volume for u/g mine air.

 O_2 -----19-20% by volume of u/g mine air.

N₂-----78% by volume of u/g mine air.

Humidity

Wet bulb temperature not exceeding 33.5°C & dry bulb temperature not exceeding 30.5°C. Arrangement are made to ventilate the same with a current of air moving at a speed of not less than 1m/s.

Calculation of Air Quantity

To supply the fresh air in adequate quantity to the working places in order to achieve and keep the standard of ventilation maintained at every time in mine. It is necessary to calculate

the quantity of air on the basis of Breathable air-0.5 m3/min/man when % of carbon dioxides not more than 0.5% in fresh air

 $O_2\%$ -----19% in fresh air

To get the planned production and development requirement of man power 80 man/shift.

So

Quantity of air required =80x0.5m³/min =40m³/min maximum

On the basis of dilution of various gas as produce due to blasting .In solid blasting ,ANFO based explosive produce noxious gas=800-900 litters/kg of explosive

For planned production level maximum of explosive used in u/g mine/shift= 2 (face) x 7 Kg/face = 14.00 kg explosive

Total quantity of noxious gas produced in a shift

= 14 x800=11200 litter/1000=11.20m³

Volume of mixing zone Vm= 2.4x2.0x8=38.4m3

Assuming length of mixing zone=15 m for development needing, and length of mixing zone in stope=10 m

For one face of blast

Q=2.3 Vm/t Log (CO/CP)+(V-Vm/t) m3/min

Where Vm = Volume of mixing zone (m3)

V= Volume of nitrous fume=0.8 to 0.9 m3/kg

CO= initial concentration of nitrous fume

=V/VM = (0.8X9.45 (Kg of explosive)/38.4)x100 = 19.69%

At t=0, V=Vm (Initial condition)

t=30 min (time required to clean the gas)

Q= $2.3 \text{ Vm/t } \text{X} \log \text{CO/CP} + (\text{V-Vm/t}) \text{ m3/min}$

- $=2.3 \text{ Vm/t X} \log \text{CO/CP m3/min} = 2.3 \text{ x} 38.4(\text{m3})/30(\text{m3}) \text{ x} \log(19.69/0.005)$
- $=2.3 \times 1.28 \times 3.60 = 10.60 \text{ m} \text{ m/min}$ For 2 faces of blasting $=2 \times 10.60 \text{ m} \text{ m/min}$
- (c) Air leakage depends on no. of stopping, no. of door, air crossing, pit top and pit bottom of every shaft, 2.3 when shaft is used as man winding. On the whole at least 40-50% of air circulated by fan is leaked. So this parameter must be considered during selection of size of fan.

Air quantity requirement =@ 6m3/min/head, total air quantity= 480 M3/min=say, 500M3/min.

Including leakages and other losses, Gross total air quantity required may be around 800 M3/Min.

Total Air pressure at fan- drift= 100mm w-g.

It is proposed to use Incline Shaft as INTAKE air way and Vertical shaft no.1 as RETURN air way

Fan Detail: U/G workings are yet to be commenced. It is essential to estimate the duty required of the fan during its working life before the choice of a particular type can be decided. Values must be allotted to (a) the quantity of air passed by the fan and (b) the maximum water gauge to be developed by the fan. However, where ventilating pressure is expected to be less than 10 inches W-G, the Axial –Flow fan will be preferred.

ILLUMINATION DETAILS

Adequate general lighting is provided on the surface at every place like shunting point, loading unloading point, marshaling yard etc. every place where persons have to work and during underground mining, adequate lighting will be provided at every landing, pit bottom, travelling road way, pumping stations, first aid room etc.

ENVIRONMENT IMPACT & MANAGEMENT: Ecology: Stage Wise Cumulative								
REQUIREMENTS OF PLANTS FOR AFFORESTATION/RECLAMATION								
Year	Unwor	ked	Outside	dumps	Inside	Top	soil	Total
	area	green	(reclaim	area)	dump	dump		
	belt							

	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees
Present	0.17	150	-	-	-	-	0.1	100	0.27	250
1 st to 3 rd	2.0	3000	-	-	-	-	-	-	2.0	3000
4 th to	2.0	3000	2.2252	4500	0.73	1100	-	-	4.9552	9600
conceptual										
period										
Total	4.17	6150	2.2252	4500	0.73	1100	0.1	100	7.2252	11850

Time Bound Plantation Programme

Year	Area (in ha)	Number of Plants
1 st	0.5+ 350 m (Road side)	750+280
2 nd	0.5 ha	750
3 rd	1.0	1500
4 th to CP	4.9552	9600
Total	6.9552+350m (road side)	11600+280

Proposed Plantation Detail

Description	Qty	Location		
Forest Trees				
Neem	2000	Along the lease Boundary in mine premises and		
Bans	2000			
Kachnar	300			
Ornamental T	rees	·		
Amaltash	500	Along the transportation road/ in premises		
	200	Along the transportation road/ Along the transportation road/		
Gulmohar		in premises		
Satparni	1000	Along the lease Boundary in mine premises		
	1000	Along the lease Boundary in mine premises and transportation		
Karanj		road		
Fruit Trees &	Ornament	al		
Awala	1000	In mine premises		

	500	Along the lease Boundary in mine premises and transportation
Mango		road
	300	Along the lease Boundary in mine premises and transportation
Jamun		road
	1000	Along the lease Boundary in mine premises and transportation
Imly		road
	400	Along the lease Boundary in mine premises and transportation
Kachnar		road
	400	Along the lease Boundary in mine premises and transportation
Bael		road
Medicinal Tree	es	
Drum Stick	1000	Along the lease Boundary in mine premises
Commercial va	lue Trees	•
		Along the lease Boundary in mine premises and transportation
Mahua	280	road
TOTAL		

Budge	Budget Allocation for Plantation					
S. No.	Head	Qty	Rate (Rs.)	Amount (Rs.)		
	Within lease area					
1 st	Saplings, with earth work and pesticides	750	140/-	1,05,000/-		
2 nd	Saplings, with earth work and pesticides	750	140/-	1,05,000/-		
3 rd	Saplings, with earth work and pesticides	1500	140/-	2,10,000/-		
4 th to CP	Saplings, with earth work and pesticides	9600	140/-	13,44,000/-		
	Total	11600		17,64,000/-		
	Along the transport road					
1 st	Saplings, with earth work	280	355/-	99,400/-		
year	and pesticides and tree guard			@ 1,00,000 /-		
	Total	280		1,00,000		
	Grand total	11880		18,64,000/-		

SN	Plan	Activity	Place of activity	Budgetary provisions (Rs in lakh)	
				Capital	Recurring
1.	Promotion of quality education	providing at leas 02 computers in nearby middles school as Pandarwani and Miragpur and providing facilities of teacher for computer education and basic education. (B) Providing financial support to the village school. (C) Computer room	n 25,000 Teacher @ Rs. t 8000/month. d Need based support d for building repairing, toilets, f fresh water supply retc through Gram Panchayat / Gram d Sabha	1.00	0.96 1.00
2		1	,		2.00
3	Free		Annually d s s		2.00

4	Sanitation	Toilet facility provide	Yearly		3.00
	facilities	with water tank and its			
		maintenance at nearby			
		villages Pandarwani tola,			
		Pandarwani & Miragpur			
		for villagers (Two toilet			
		for Man and two toilet			
		for women)			
	Total			2.50	8.96 @ 9.00

Total Cost Pertaining To Environmental Aspects

Total Cost (EMP + CSR+ plantation + Monitoring) (Lakh)				
Particular	Capital	Recurring		
Dust Suppression through tanker over 0.350km road * 6.0m (15Rs/km) Approx running per day 8.4km@300 day (over road)		0.38 @ 0.40 (2520X15)		
Dust Suppression through tanker over 0.5 km road * 6.0m (20Rs/km) Approx running per day 4.0km@300 day (over road)		0.25 @ 0.30 (1920X20)		
Sub total	-	0.70		
Roads repair and maintenance (1.50km@2.0 lakh per Km)	-	3.00		
Sub total	-	3.00		
Occupational health and safety exp.	5.00	2.00		
Sub-total	5.00	2.00		
Environmental Monitoring cost	10.00	5.87		
Sub-total	10.00	5.87		
Plantation (Capital cost) Along the village Road	1.0			
Maintenance of Plantation (Along the village Road & lease area)	-	5.34 @ 5.35		
Plantation (Capital cost) within lease area	17.64			
Sub-total	18.64	5.35		
Total cost for EMP	33.64	16.92		
CSR cost	2.50	9.00		

Sub total	2.50	9.00
PH issue		
Construction of road – 1.50km @9.00Lakh /km	13.50	-
Deepning of village pond	-	1.0
Provision of play ground	3.00	0.50
Water supply for school	3.00	0.50
Grand total	45.64	27.95

During EIA presentation, the ventilation scheme provided by the PP for U/g operation found satisfactory as they are maintaining Veq at the rate of 0.95 against the minimum limit of 0.70. The proposed level at U/g and surface is to be maintained properly to prevent entering of water in U/g operation. The proposed level of water sump at the point of U/g Operation are found satisfactory and PP were asked to maintain the same during future course of operation. The geo hydrological aspects were considered as given in the EIA and PP has asked top drain excess water at nearby tank after proper settling (meeting discharge norms prescribed by the MP Pollution Control Board) so that ground water table of the area shall be maintained. PP has also asked to monitor the water table within ML and outside ML at four villages in surrounding quarterly and record shall be maintained. The roof bolt support system was also discussed and found satisfactory the distance maintained by PP as one bolt at 1 sq mtrs. PP has asked to make strength test after every one hrs after fixing the bolt at roof. The public hearing issues were discussed in details. PP has also provided the budget for public hearing issues which is satisfactory. After presentation, PP was asked to submit response on following:

- 1. Proposal for sand stowing for underground backfilling.
- 2. Details of time required for establishing inter connection between vertical shaft and inclined shaft.
- 3. Revised EMP incorporating the budgetary provisions for desilting of village pond as per public hearing, Provision of play ground & Water supply for school as suggested by the committee.
- 4. Photographs showing boundary pillers.
- 5. Submission of production data from 1989.

PP has submitted the response of above quarries vide letter dated 23/12/2017 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

Ore for expansion in Production Capacity from 3,000 Tonnes per annum to 10,000 Tonnes per annum, Lease Area – 14.90 Ha. at Khasra Nos.3/1, 3/2, 4/2, 4/3, 4/1, 1/1, ½, 1/3, 1/4, 1/5, 2/1, 2/2, 2/3, 9/1, 9/3, 9/6, 10/1, 10/2, 10/3, 10/4, 10/6, 10/7, 10/8, 10/9, 10/10, 11/1, 11/2, 11/3, 11/5, 136/1, 136/2, 137, 138/1, 138/2 at Village- Pandharwani, Teh – Khairlanji, Disst-Balaghat (M.P).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 and before Commencing any mining activity fencing shall be carried out all around the lease area. Proper watch and ward arrangements should be made with installation of signage at 4 corners of lease area to avoid any untoward incident involving public and animals by the PP.
- 2. PP shall demarcate a barrier zone of 7.5 m as no mining zone in the periphery of mining lease area and develop a green belt excluding of the barrier zone of 4.45 ha which has been amalgamated with the subject proposal.
- 3. 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.
- 4. Authorization (if required) under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.
- 5. If any tree uprooting is proposed necessary permission from the competent authority should be obtained for the same.
- 6. Proper infrastructure with shelter, Drinking water, Toilet and first-aid facilities shall be provided for the laboures. A provision should be made to construct a pakka rest shelter of 8m x 6m along with toilets and drinking water facility.
- 7. For dust suppression, regular sprinkling of water should be undertaken.
- 8. PP will obtain other necessary clearances/NOC from respective authorities.

(B) MINING OPERATIONAL PHASE

9. Curtaining of site shall be done through thick plantation all around the boundaries of lease using tall saplings of minimum 2 meters height of species which are fast growing with thick canopy cover preferably of perennial green nature. Peripheral plantation all around the project boundary shall be carried out with 11,600 numbers

of trees and additional plantation of 280 should be done on both side of the transport road. 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. Transportation of material shall be done in covered vehicles.
- 11. Transportation of minerals shall not be carried out through forest area.
- 12. The existing and proposed land use plan of the mine is as follows:

Items	Existing	Conceptual Period
Total lease area	14.90 ha	
Ultimate depth of mining	46m bgl	Up to 240mRL (underground)
Ultimate pit slope	60 degree	60 degree
Area under dumps	0.14 ha	Nil
Area under sub grade dump	0.1792ha	Nil
Area under pits	4.9637ha	4.9637 ha
Area to be reclaimed	Nil	2.2252 ha
Infrastructure & Road	1.32 ha	1.32 ha
Mineral storage	0.6 ha	0.7 ha
Plantation	0.27 ha	7.2252 ha
Water body	1.2 ha	2.0 ha

- 13. PP should construct garland drain all along the lease area and OB dumps with total 08 number of settling pits with in drain and connect drains to large settling tanks through these pits to avoid silt discharge from open ended drains. PP should ensure zero discharge from the mined area. Apart from existing garland drain, following drain shall be constructed as proposed:
 - (a) $1000 \text{mx} \ 0.25 \text{m} \ \text{x} \ 0.50 \text{m}$
 - (b) 500.0m X 0.25mX 0.50m
 - (c) 275.0 mX 0.25mX 0.50m
- 14. As proposed 31 settling pits of (0.5mx0.35mx0.5m) connected with garland drains shall be provided for proper sedimentation.

- 15. Before monsoon all the drain and settling pits/tanks shall be cleaned. Following setting tanks shall also be constructed apart from the existing tanks for better management of water environment and condition of existing settling pits should be improved and stone pitching should be carried out for their stability:
 - (a) $10.0L \times 5.0W \times 5.0m D$
 - (b) 10.0L x 5.0W x 5.0m D
 - (c) 1.0ha x 5.0m D
- 16. PP shall ensure to conduct a regular monitoring of ground water level with in 2 km radius of mining lease area.
- 17. PP should follow all safely measures mentioned in DGMS norms.
- 18. Vibration study of the area shall be carried out as per the stipulated norms in consultation with the stakeholders through any authorized technical institution to mitigate the concern raised.
- 19. The ventilation surveys will be conducted in each quarter.
- 20. Periodic maintenance of haulage and village road will be carried out.
- 21. Proper care and safety precaution through intermittent studied shall be undertaken to avoid any land subsidence and void created after exploration of ore will be filled properly by mine waste/sand/fly ash as per approved mine plan. Sand stowing shall be carried out as per the plan submitted in EIA using sand and fly ash. Any other material such as tailing waste or slag should be used with sand for stowing only after confirming its suitability by lechate study and approval from M. P. Pollution Control Board.
- 22. The OB has been stacked outside the ML area and shall be stabilized completed after dump ore working as per the submitted plan. All the waste dumps should be stabilized and compacted properly by appropriate methods and continuous water spraying should be carried out during the handling of waste dumps and muck pile to avoid fugitive emissions.
- 23. For underground operations, natural ventilation should be provided (Veq at the rate of 0.85 to 0.95) in all working shifts through vertical shaft and main incline and ventilation survey should be conducted on each quarter and flow of air (intake and return) should be monitored on daily basis as per DGMS norms.
- 24. For mining operations following standard illumination should be provided as per DGMS norms.

	For underground Lighting					
Sl.No.	Location	Illumination in Lux				
1	Incline main travelling road way	0.5 lux				
2	Incline pit bottom	1.5 lux				
3	Vertical shaft bottom	1.5 lux				

- 25. For roof support system, as proposal steel roads should be at least 1.50 meter long with minimum 20 mm diameter and the diameter of holes should be less than 32mm.the load bearing capacity of each bolt shall be at least 02 tones of load in one hour, 04 tones of load in 04 hours and 06 tones of load in 08 hours.
- 26. The back of excavated area shall be supported by fully grouted cable bolts of 12 mm at an interval of 2.0 m X 2.0m in a grid pattern with one additional 2.0 m long fully grouted rock bolt in the center of the grid. Diameter of each cable bolt shall be at least 16 mm and cables bolts shall be installed in the back of the stope in such manner that its length in the back at no time shall be less than 4.0 m (for 8.0 m wide stops) and 6.0 m (for 22.0 m wide stops). Each cable bolt shall be capable of bearing at least 25 tones of load.
- 27. The hanging wall shall be supported by fully rock bolts at least 2.0 m long at maximum interval of 2.0m X 2.0m in grid pattern. The bolts shall be installed perpendicular to the foliation plan of rocks mass with one row of chocks shall be provided at an interval of 3.0 meter all along the hang wall side in the stope as and when required. Similarly, additional rack bolts shall be provided as and when required.
- 28. The freshly exposed footwall area shall be supported with cable bolts of suitable length and the distance between the cable bolt and footwall shall in no case be more than 2.0 m if required, inclined cable bolts shall also be provided to ensure the same. If clay bands/geological disturbances exposed in footwall, the side shall be immediately supported by 2.0 m long fully grouted steel bolts in a grid pattern of 2.0 m X 2.0 m. The bolts shall be installed perpendicular to foliation of the rock mass.
- 29. Wet drilling system and controlled NONAL blasting with low charge (if requited) as prescribed by DGMS should be practiced.
- 30. As proposed by PP, safety distance of 100 m between u/g and o/c operation shall be maintained to prevent entering of water in u/g operation. In this regard all the norms stipulated by DGMS should be complied.

- 31. Blast vibration study should be carried out once in a year and their record shall be maintained.
- 32. PP should carryout load testing after one hour of bolting.
- 33. For Management of mine water in underground operations, as proposed two underground sumps of $20m(L) \ X05m(W)X05m(D) \ \& \ 20m(L) \ X05m(W)X04m(D)$ with water pumps of suitable capacity shall be provided respectively.
- 34. Occupational health survey from the certified surgeon on monthly basis as initially underground mining is proposed with auxiliary fan.
- 35. Water sprinkling arrangement through pipeline should be provided at unloading point of underground material and all other dust prone area.
- 36. 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.
- 37. PP will take adequate precautions so as not to cause any damage to the flora and fauna during mining operations.
- 38. The commitments made in the public hearing are to be fulfilled by the PP.
- 39. Fund should be exclusively earmarked for the implementation of EMP through a separate bank account.
- 40. PPE's such as helmet, ear muffs etc should be provide to the workers during mining operations.

(C) ENTIRE LIFE OF THE PROJECT

- 41. The proposed EMP cost is Rs. 34.50 lacks and Rs. 13.60 lacks /year are proposed as recurring expenses out of which Rs. 18.64 lacks is proposed for green belt development and Rs. 05.35 lacks /year for recurring expenses for plantation in the proposed EMP of this project.
- 42. Under CSR activity, Rs. 02.50 lacks are proposed for the next 05 years in different activities with Rs. 9.00 lacks /year as recurring expenses and same should be implemented through respective committees.
- 43. 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.

- 44. 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.
- 45. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 46. PP will comply with all the commitments made vide letter dated 21/12/2017.
- 47. 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. <u>Case No. 484/2009 M/s Agrawal & Singh minerals Prop. Shri Upendra Singh R/o village- Budwa P.O. Teh- Beohari Distt- Shahdol, 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.</u>

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 45th 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 pre-occupational 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 255th 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 08th SEAC II meeting dated 20/02/2016 wherein PP remains absent. The case was again scheduled for presentation in the 37th 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 08th 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 08th SEAC-II meeting & 37th 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.

PP has submitted the Application dated: 21/6/17 which was forwarded by SEIAA vide letter no. 1136 dated 14/11/17.

The case was presented by the authorized representative of the PP in the 79th SEAC meeting dated 13/06/2017. 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: 25/6/14 any project or activity specified in category "B" will 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 25/6/2014.

The case was discussed in the 453rd SEIAA meeting dated 06/11/2017 wherein it was decided that that PP has made representation dated: 21/6/2017 in SEIAA regarding clarification of coordinates and distance from Tiger Reserve/ Wild Life Sanctuary. The above representation received from PP be sent to SEAC regarding reappraisal and reconsideration of the case. The case file was sent vide letter no. 1136/SEIAA/17 dated 14/11/2017.

The case was presented by the authorized representative of PP in the 300th SEAC meeting dated 23.12.2017 wherein during discussion it was informed to the committee by the representative that due to unavoidable circumstances they will not be able to present the case in this meeting and requested to consider their case for next meeting of committee for which a written request was also submitted by the PP vide letter dated 08/12/2017. Committee

considering the request decided to give another opportunity in subsequent meetings of SEAC.

Today, this case was again scheduled for presentation in 303th SEAC meeting dated 23.12.2017, 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.

4. <u>Case No. - 5613/2017 M/s Bharat Petroleum Corporation Ltd, BPCL LPG Bottling Plant, Village - Bhitoni, NH - 12, P.O. Shahpura, Dist. Jabalpur, MP Prior Environment Clearance for Construction of 3 x 1450 MT Mounded Storage Vessels at LPG Plant Village- Pondi, Bhitoni, Bhamki, Tehsil - Jabalpur, Dist. Jabalpur (MP)</u>

The project proposal is for Augmentation of existing BPCL POL depot Construction of 3 x 1450 MT Mounded Storage Vessels at LPG Plant Village- Pondi, Bhitoni, Bhamki, Tehsil - Jabalpur, Distt. - Jabalpur (MP) (Cat. - 6 (b) Isolated Storage Project). This Case was forworded by SEIAA to SEAC vide letter no. 1236 dtd. 01/11/17.

The case was presented by the PP and their consultant wherein during presentation; PP submitted that this proposal is of expansion for Construction of 3 x 1450 MT Mounded Storage Vessels at LPG Plant Bhitoni, Jabalpur with following details:

- Ministry of Petroleum & Natural Gas (MoP&NG), has been encouraging Oil Companies to augment their existing facilities and/or construct new facilities to bridge the gap between demand and supply.
- BPCL is one of the leading companies in Public Sector engaged in the oil refining and marketing of its products in the country.
- Pradhan Mantri Ujjwala Yojana (PMUY) aims to safeguard the health of women & children by providing them with a clean cooking fuel LPG to BPL homes.
- To meet the shortage of LPG cylinders supplied under this scheme, government in Jabalpur plans to expand the already existing BPCL LPG plant to match the market demands in and around the area.
- BPCL proposes to provide LPG Storage in the form of 3x 1450 MT Mounded Storage Vessels in the existing Plant at Bhitoni, Madhya Pradesh, which is distributed through LPG Cylinders in various markets of Madhya Pradesh.

S.No.	Tank	Tank Diameter	Tank/ Length (m)	Class	Tank Type	LPG Tank Capacity	Existing & Proposed Capacities	Final Capacity after expansion
		Existing LF	PG Storage S	pheres- Hor	ton Spheres			
1		14	Nil	Α	Sphere	650 MT		
2	LDC	14	Nil	Α	Sphere	650 MT	Existing Capacity: 2,600 MT	
3	LPG	14	Nil	Α	Sphere	650 MT		
4		14	Nil	Α	Sphere	650 MT		COFO NAT
Proposed LPG Storage Mounded Bullets								6950 MT
5		8	65.5	Α	MSV	1450 MT	Proposed	
6	LPG	8	65.5	Α	MSV	1450 MT	Capacity: 4,350 MT	
7		8	65.5	Α	MSV	1450 MT		

PROJECT DETAILS

Name of the Project	Proposed Construction of 3 x 1450 MT Mounded Storage Vessels at LPG Plant Bhitoni
Location	Village Bhitoni, N.H. 12, P.O. Shahapura, District, Jabalpur, Madhya Pradesh – 483119
S.No.in the schedule	6(b), category "B" (Isolated Storage & Handling of Hazardous Chemicals)
New/Expansion/Modernization	Expansion
Existing Capacity	4 X 650 MT, Horton Spheres for LPG Storage
Proposed Capacity	3 X 1,450 MT ,Mounded Storage Vessels
Cost of project	Rs. 7,845 Lakhs

AREA STATEMENT

S.No.	Particulars	Area (m ²)	Total Area (Acres)	Percentage (%)
1	Plant/ Storage Area	1,53,578.15	38	55
2	Roads	8,376.99	2.05	3
3	Green Belt	92,146.89	26.49	33
4	Area required for expansion	25,130.97	2.51	9
	Total Plant Area	2,79,233.00	69	100

RESOURCES REQUIREMENT

	Γ	T	1
S.No.	Particulars	Existing	Proposed
1	Water Requirement	TOTAL: 14 KLD (Domestic: 4 KLD, Industrial: 10KLD)	There will not be any change in the water requirement.
2	Power Requirement	450 KVA /MPEB Alternate Sources of power supply during energy shortage is met with diesel generators of 1 no. of 400 KVA, 380 KVA and 100 KVA (100 KVA capacity DG set will be used in emergency period).	Replacement of 380 kVA DG set by 700 kVA DG set.
3	Land Requirement	69 Acres	There will not be any change proposed expansion will be within the existing premises
4	Man power Requirement	120 nos. people (30 workers, 10 skilled, contract workman 80)	40 nos. in construction phase. 120 (No additional requirement in operation phase after expansion)

PROPOSED MOUNDED STORAGE VESSEL -Salient features:

- Protects from direct flame impingement caused by any eventual fire
- Prevent initiation of the sequence of events leading to an occurrence of BLEVE.

ENVIRONMENTAL SETTINGS

Latitude	23°8'34.27"N	
Longitude	79°40'49.05"E	
Nearest Town/City/District Headquarters	Jabalpur , 30 km	
Nearest highway	National Highway NH- 12	
Nearest Railway Station	Bhitoni (BHTN), 2 km	
Nearest Airport	Jabalpur Airport – 45 Km	
Seismic Zone of Site	Zone – III (Moderate)	
No National park/sanctuaries/ archeological sites etc. in 5 km radius		

After presentation committee decided to issue standard TOR prescribed by the MoEF&CC for carrying out EIA study with following additional TOR's:-

- All the safety related aspects should be proposed in the EIA report. 1.
- Site specific risk assessment study should be carried out and same should be submitted 2. with EIA report with disaster management plan and resique details.
- Detailed green belt plan with area, name of species and their number should be 3. provided along with the inventory of existing trees in EIA report.
- Tree failing is also proposed PP should submit the details of area with number of tree, 4. species and permission from the competent authority.
- Any other area marked for further expansion in this proposed unit should be detailed 5. out on a layout map and submitted with EIA report.
- Detailed fire fighting arrangements proposed should be discussed in the EIA report. 6.

- 7. If there is any sensitive area within 05 kms radius of the proposed project site, the proposed safety measures in case of any accident should be discussed in the EIA report.
- 8. Input and output of modeling data should be annexed with the EIA report.
- 9. Details of all construction material related to this expansion project should be submitted with the EIA report.
- 10. Detailed parking facilities wrt to existing capacity and expanded facility and detailed traffic management plan should be discussed in the EIA report.
- 11. PP should explore the possibility of providing alternate entry & exit road as proposed entry & exit is on the highway.
- 12. Cost benefit analysis should be carried out and discussed in the EIA report.
- 13. 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.
- 14. A time bound action plan should be provided in the EIA report for fulfillment of the EMP commitments mentioned in the EIA report.
- 15. 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.
- 16. 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.
- 17. The EIA report should be prepared by the accredited consultant having no conflict of interest with any committee processing the case.
- 18. Pre-dominant wind direction to be ascertained and accordingly the Safety & Environment Management Plans prepared and reported.
- 19. Details of Environmental Cell & CSR committee.
- 20. Public Hearing has to be carried out as per the provisions of the EIA Notification, 2006.

5. <u>Case No. - 5620/2017 M/s Om Smelters & Rollers Pvt. Ltd, Prem Prakash Sadan, Behind Radhika Mandapam, Gwalior Road, Jhansi, UP. Prior Environment Clearance for Expansion of Production Capacity of Mini Steel Plant at Village- Bharteri, Tehsil - Chinor, Dist. Gwalior (MP)</u>

This is a Mini Steel Plant. All non –toxic secondary metallurgical processing industries manufacturing >5000 tones/annum metal components are covered under the EIA Notification 2006 as amended 2009 and are mentioned at S.N. 3(a), B. Hence these projects are required

to obtain prior EC before establishment. The project is proposed at Village- Bharteri, Tehsil - Chinor, Distt. - Gwalior (MP).

PP has submitted ToR application forwarded by the SEIAA vide letter no. 1339 dated 18/12/2017.

This case was scheduled for presentation in 303th SEAC meeting dated 23.12.2017. The case was presented by the PP for issuing of TOR to carryout EIA studies with site specific details wherein PP submitted that monitoring has already been started. This is existing unit, located at Khasra No. 251, 274/2, 274/3, 283, 284, 285, 287/1, Village- Bharthari, Tehsil Chinor, Distt. Gwalior (M.P.) Non Toxic Secondary Metallurgical Industry Capacity – 80000 Metric Ton per Annum.

Background of the project

- 1. The industry is in operation since 2015, having valid Consents from State Pollution Control Board under section Water & Air Act, valid upto 30/09/2019
- 2. Existing Capacity 18000 MTPA
- 3. Products TMT Bars, MS Billets/ Ingots, MS Angle Channel, Rolling Product, Missroll & cutting
- 4. Location Village Bhartheri, Tahsil Chinor, District Gwalior, Madhya Pradesh.
- 5. Due to Market demand and available infrastructure the Company is planning to enhance the production capacity, by installing one more Induction furnace of capacity 12T.
- 6. The project is located in Gwalior District of Madhya Pradesh.
- 7. No sensitive feature is exists nearby the factory.

Salient features of the project

S. No.	Particulars	Details
1	Location	Khasra No. 251, 274/2, 274/3, 283, 284, 285, 287/1, Village-Bharthari

2	Land owners ship	Private land, diverted for industrial use.
3	Latitude	25 59'25.24.99 to 25 59'33.57" N
4	Longitude	78 15'0.11" to 78 15' 8.78" E
5	Nearest Highway	NH-75 (Gwi-Jhansi Road – 500 m. in E)
6	Nearest Railway Station	Anatpath – 4.6 km in SE
7	Nearest Village / Township	Manpur – 200 m in NW
8	Nearest Airport	Gwalior – 28.0 km in N
9	Nearest Major city	Gwalior – 26.0 km in N
10	Nearest River /Water body	Band Tal (a Pond) – 3000m
11	Ecologically Sensitive Zones (National, parks, Wildlife Sanctuaries)	Non within 10 km radius
12	Seismic Zone	II

Land use break - up

Office/Lab	200 sqm
Factory shed	5000 sqm
Existing Green Belt	1200 sqm
Proposed Green Belt	17600 sqm
Storage of finish products and others	10573 sqm
Open Land	22487 sqm
Total Land	57060 sqm

Capacity

S.	Unit	Product Existing	Existing	Product Proposed	Proposed
No.			Capacity		Capacity
1.	Rolling	TMT Bars, MS Billets /	18000	TMT Bars, MS Billets / Ingots, MS	80000
	Mill, IF	Ingots, MS Angle Channel,	MTPA	Angle Channel, Rolling Product,	MTPA
		Rolling Product, Missroll &		Missroll & cutting	
		cutting			

Existing Induction Furnace – 1 No – 10 TPH

Proposed Induction Furnace – 1 Nos. 12 TPH

Project Cost – 15.0 Crores (including Existing & proposed)

Raw Material Requirement

S.	Raw Material	Qty (Existing)	Qty (Proposed)	Source	mode of
No.					transportation
1	MS Scrap	20000 MTPA	88 000 MTPA	Indigenously	By Roads
	/Sponge Iron			Available	
2	Ferro Alloys	180 MTPA	600 MTPA	Indigenously	
				Available	

Committee after deliberations recommended to issue standard TOR prescribed by the MoEF&CC for conducting the EIA along with following additional TOR's:-

- 1. DFO certificate should submit with EIA report.
- 2. Monitoring stations should be located in such a way that they cover maximum nearby villages in the NE & SE direction.
- 3. Risk Assessment Plan with proposed safety measures should be studied in the EIA report.
- 4. Details of DG set proposed for installation should be submitted in EIA report.
- 5. Provision for heat recovery should be studies and discussed in the EIA report.
- 6. Methods proposed for water conservation should also be discussed in the EIA report.

- 7. Options of best available technologies (BAT) for manufacturing and pollution control in this manufacturing sector should be studied and discussed in the EIA report.
- 8. Green belt development Plan with numbers, species and area earmarked should be detailed out in the EIA report with the inventory of existing trees. If any tree falling is proposed same should be discussed in the EIA report.
- 9. Cost benefit analysis should be carried out and discussed in the EIA report.
- 10. 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.
- 11. A time bound action plan should be provided in the EIA report for fulfillment of the EMP commitments mentioned in the EIA report.
- 12. 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.
- 13. 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.
- 14. The EIA report should be prepared by the accredited consultant having no conflict of interest with any committee processing the case.
- 15. Pre-dominant wind direction to be ascertained and accordingly the Safety & Environment Management Plans prepared and reported.
- 16. Details of Environmental Cell & CSR committee.
- 17. Public Hearing has to be carried out as per the provisions of the EIA Notification, 2006.

6. Case No. - 5611/2017 M/s Shri Radheshyam Minerals, Khedia Bhawan, P.O.Bijuri, Dist. Anuppur, MP - 484440 Prior Environment Clearance for Granite Block in an area of 9.58 Ha. (1,517 cum per annum) at Village- Thangaon, Tehsil - Kotma, Dist. Anuppur (MP)

This is case of Granite Block. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at Village- Thangaon, Tehsil - Kotma, Dist. Anuppur (MP) 9.58 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 vides letter no. 998 dated: 19/5/17 has reported that there is no more mines operating or proposed within 500 meters around the said mine.

Particulars	Details
Locations	
Village	Thangaon, Tehsil- Kotma, Dist - Anuppur (MP)
Height above mean sea level	568-563 mRL
Nearest State Highway	NH 78 – Kotma Road – 6 km
Nearest Railway Station	Bijuri -4 km
Nearest Airport	Air Strip - Burhar- 65 km.
Ecological Sensitive Areas (Wild Life Sanctuaries)	No national parks and sanctuary in 5
within 10km radius.	km radius
Reserved / Protected forest within 10km radius (Boundary to boundary distance)	Nandlal patera RF -0.50 km - E Sonhari RF -3.50 km - SE
Nearest major city with 100000 population within 10km radius	Nil
Nearest Town / City within 10km radius	Bijuri – 1.50 km
Nearest Village	Sugudi - 0.90 km - W
Nearest habitation	0.100km - N
Nearest River	None
Nearest Nalla	Kenai Nala -2.30 km - N Haisa River - 0.75km - NE
Other mines within 10km radius	Coal Mine
Industry within 10km radius	Coal washeries

Salient feature of the lease area

Particulars	Details
Type of Mine	Open Cast
Mining Lease Area	9.580 ha
Mineable Area	8.1550 ha

Existing Dits & Oversion	Nil
Existing Pits & Quarries	
Existing Dumps	Nil
Infrastructure and road	Nil
Mineral Storage	Nil
Plantation	Nil
Total Minable Reserve	245588 cum
Proposed Capacity	1517 cum per year
Method of mining	Semi-Mechanised
Ultimate Depth of Mining	23m bgl (540 m MSL)
Expected Life of Mines	163 years
Lease Period	30 years
Existing mode to transportation	Road
Area to be covered under dumps in conceptual	Nil
period	
Area covered under pit in conceptual period	8.155 ha
Area to be reclaimed by Backfilling in conceptual	5.48 ha
period	
Area to be rehabilitated by afforestation in CP	7.155 ha
Area to be covered under water reservoir	2.0 ha
Ground water table	40m bgl (523m MSL)
Assumed per day production	5 M ³
Per day dumper requirement with capacity	1 dumper per day, capacity 0f
	dumper 7cum

GEOLOGY OF THE MINE

The applied area has been sanctioned for block mining of granite as Dolerite. During the period the exploration done by one number of trial pit and three core bore holes for total 44 m drilling, maximum drilling is for 25 m in one bore hole and rest two bore holes are of 8 m depth each. Elevation point of view, highest altitude is of 568 m towards the eastern side, while the lowest point is of 563 m is towards the western side, and thus the total elevation difference is of 5 m. From recovery point of view, average recovery of blocks in Granite formation is 15 % of Granite Zone.

Summarised of geological reserves and mineable reserves					
Particulate	Details				
Total geological reserves	2460004.00m ³				
Indicated mineral resources (332) recovery 15% = 2460004 x 0.15	369001.00 m ³				
Mineral block under barrier zone area – 1900 x 7.5x 15x 15%	57713.00 m ³				
Mineral block under maintaining slope –365 x 1200 m ² x 15%	65700.00 m ³				
Total blocked minerals - 222	123413.00 m ³				
Balance probable mineral reserve – (121 = 332-222) = 369001-123413	245588.00 m ³				
Proposed production capacity per year	1517.00 m ³				
First five year production	5718.00 m ³				
Hence mine life – balance Reserve /Production = 245588-5718 = 239870/1517 +5	158.12+5 = 163.12 or 163 years				

Existing and proposed land use plan

Sr. No	Land Use	Present (Ha)	Conceptual period (Ha)
1.	Pit	Nil	8.1150
2.	Dumps	Nil	Nil
3	Infrastructure & Roads	Nil	Nil
4	Mineral storage	Nil	Nil
5	Plantation Area	Nil	1.00
6	Un worked area	8.00	0.465ha
	Total	9.580	9.580
1	Backfilled area	Nil	5.48
2	Plantation area	Nil	7.1550 (14310 no.)
2.1	Backfilled area	Nil	5.48 (10960 no.)
2.2	Barrier zone	Nil	1.00 (2000 no.)

2.3	Bench	Nil	0.675 (1350no.)
3	Water body	0.10	2.00

The case was presented by the PP and their consultant and during presentation it was submitted by PP that this is a fresh grant case and proposed mining method is Block Mining by adopting the Gali Toda method by using help of wire saw, LD-4, Jack Hammer, Hydraulic Jack, Compressor, Tata Hitachi Shovel excavator and Crane. The individual bench faces will be kept nearly vertical (80° - 85°) while the pit slope will be less than 45°. The Northeastern part of the applied area will be developed from 566 m to 558 m with two benches of average 2-6 m height. Width of benches will be as per DGMS requirements and not less than the height where as Granite bench length will be as per production requirements. During this proposal period, the applied area will be developed with five to six production benches of 5 – 6 m height i.e. 0.692 ha and at the end of conceptual period about 8.155 ha will be developed with ultimate depth up to 540 m MSL. Block mining is proposed wherein block mining is to get three free faces known as the Gali (along the strike) and Toda (across the strike). The basic purpose to prepare the Gali and Toda is to get proper space for block cutting in L shape (combination of Gali and Toda) therefore first Gali and then Toda is developed which is localized for proper functioning of wire saw machine approximately 3 - 6 m space. After getting the L shape vertical and horizontal hole, required depth or height of the bench then making the thread alignment in the rectangular shape the holes are drilled with LD-4 portable DTH drill machine. After getting the bore hole drilled then diamond wire saw machine to cut the bottom with diamond pearls followed by both vertical cuts making rock free from all the sides and now this block is pushed with help of pneumatic bags or water bags with hydraulic jack 'Power jack' and cut down blocks are lifted to the surface by crane or pock land machine and waste material is kept at required places with the help of dumpers/ tractors.

During presentation PP submitted that about 1360 no. of trees will be planted on both side of the existing unpaved road (1700m) in single rows at plant spacing of 2.5m. Plants of large sized tree species will be planted at spacing of 10m and between any two plants of large size tree, three (03) plants of small sized tree/shrub species, will be planted. The selection of species will depend on the availability of quality planting material.

Following species will be planted both side of road:

Large tree species: Mango, Neem, Jamun, Imli, Mahua, Gulmohar etc

Small tree species: Karanj, Aonla, Amaltas, Bael, Sissoo, Kachnar etc

At the end of 5th year 2000 plants at 1.0 ha barrier zone will be planted and at the end of conceptual period about 7.1550 ha area will be plant with 14310number of plants

Proposed Pl	antation	n Detail		
Description	Qty	Location		
Forest Trees	6			
Neem	2000			
Mahua	2000	Along the lease Boundary in mine premises and along the road		
Bans	1000			
Ornamental	Trees			
Amaltash	1000	Along the transportation road/ in premises		
Gulmohar	1000	Along the transportation road/ in premises		
Satparni	1000	Along the lease Boundary in mine premises		
Ashoka		Along the lease Boundary in mine premises		
Tree	1000			
Fruit Trees	& Orna	mental		
Awala	1000	At the down side of hillock and along the dump		
Mango	1000	At the down side of hillock, Along the dump		
Jamun	1000	At the down side of hillock and along the dump		
Emli	670	At the down side of hillock,		
Commercial value Trees				
Sisam	1500	Along the lease Boundary in mine premises		
Sissoo	1500	Along the lease Boundary in mine premises and road		
TOTAL	15670			

Budget All	location for Plantation			
S. No.	Head	Qty	Rate (Rs.)	Amount (Rs.)
	Within lease area			
1 st	Saplings, with soil work and pesticides	2000	250/-	5,00,000/-
5 th to CP	Saplings, with soil work and pesticides	12310	250/-	30,77,500/-
	Total	14310		35,77,500/-
	Along the transport and haul road and ale	ong the	dump	
1 st year	Saplings, with soil work and pesticides and tree guard	1360	350/-	1,26,000
	Total	50		1,26,000/-
	Grand total			37,03,500/-

ENVIRONI Plantation	ENVIRONMENT IMPACT & MANAGEMENT: Ecology: Stage Wise Cumulative Plantation									
REQUIREN	REQUIREMENTS OF PLANTS FOR AFFORESTATION/RECLAMATION									
Year	Barrier green b		zone Backfilled Bench Inside dump		d Bench Inside dump Total					
	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees
Present	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
1 st to 5 th year	1.00	2000	-	-	-	-	-	-	1.00	2000
5 th to conceptual period	-	-	5.48	10960	0.675	1350	-	-	6.155	12310
Total	1.00	2000	5.48	10960	0.675	1350	_	-	7.155	14310

SOCIO ECONOMIC MEASURES

Pro	posed CRS			
	T -	Activity	Place of activity	Budgetary provisions (Rs in lakh)
				Capital Recurring
1.	Promotion of quality education	providing at least 02 computers in nearby middle school at Thangaon, Bijuri and providing facilities of teacher for computer	School (04no.) Computer @ Rs. 25,000 Teacher @ Rs. 10000/month. (weekly per village) Need based support for building repairing,	1.00 1.00 2.00
		school. (C) Computer Room with light arrangement (D) Scholarship of 5 students for higher education	Gram Sabha	

2	_	5 no. of Solar street light provide to nearby villages nearest habitation, Sugudi, Thangaon, Kudri, Mahuari, Bhagta			2.00
	medical	Medical Checkup facility, first aid and other welfare activities for nearby villagers	•		1.00
4	Vocational	Skill development center established at Bijuri for youth, woman's i.e. motor winding training, stitching training for woman and girls		10.00	2.00
5	Sanitation	Toilet facility provide with water tank and its maintenance at nearby villages Sugudi, Thangaon, Kudri, Mahuari, Bhagta (Two toilet each for man and women)		10.00	2.00
	Water supply	Drinking water supply with water filter	Yearly	2.50	1.00
	Play Ground	Provision of play ground	One time	2.50	
			Total	27.00	12.20

Total Cost (EMP + CSR+ plantation + Monitoring)

Particular	Capital	Recurring per
		annum
Dust Suppression through tanker over 1.70 km road * 6.0m (15Rs/km) Approx running per day 3.40km@300 day (over transportation road)	_	0.15@0.20
Dust Suppression through tanker over 0.20 km road * 8.0m (20Rs/km) Approx running per day 4km@300 day (over haul road)	1	0.24 @0.25
Sub total		0.45
Roads repair and Maintenance (1.70km@2.0lakh per Km)	-	3.40
Construction of transportation road -1.70km@9.0lakh	15.30	-

Sub total	15.30	3.40
Occupational health and safety exp.	4.0	1.80
Sub-total	4.0	1.80
Environmental Monitoring cost	31.50	9.34
Sub-total Sub-total	31.50	10.34
Plantation Along the village Road	1.26	-
Maintenance of Plantation (Along the village Road & lease area)	-	1.00
Plantation (Capital cost) within lease area	35.78	-
Sub-total	37.04	1.00
Fencing around the lease periphery (1948m @300 running meter)	6.00	1.00
Sub-total	6.00	1.00
Total EMP cost	93.84	16.99
CSR cost	27.00	12.20
Sub total	22.00	11.20
Grand Total	120.84	32.19

It was further submitted by PP that there is no water course in the lease area. The drainage of the lease area is mainly towards south west & south. The ultimate drainage of the area is mainly towards NE carrying the rain water to the Haisa River which is located at NE, direction with distance of 0.750km. The water table goes down 518m MSL i.e. 45 meters below surface during summer and rise upto 523m MSL i.e. 40m bgl during rainy season. At the end of the lease period, the working is likely to reach to 540m MSL i.e. 23mt bgl. Therefore, the water table will not be intersected during working hence hydrology of the area will not have impact. Proposed water body of 2.00ha will further help in water recharging of the area. Surface water source will not be affected in the quarry area as no first order stream is crossing the lease area. Adverse impact over the surface bodies at buffer zone is also not envisaged as mining is opencast type and at small level. Garland drain will be provided the foot of the small hillock in all direction to prevent the flow of silt towards the agricultural land. Three settling tanks is proposed in the lease area with size of 1180sqmx 5mD, 940sqmx 5mD and 630sqmx5mD near BP-3, BP_11 and BP-18 respectively. Collected water in settling tank will be used for dust suppression and green belt development purpose.

Construction of retaining wall need to be started along the foot of hillock prior to start of mining operation and may have dimension of 1mt height and 1500 mt length. The generated waste need to be utilized for backfilling purposes on concurrent basis. Pump of adequate capacity will be installed for dewatering of working pit. Regular de-silting of settling tank is proposed. The proposed drains will be connected to the settling tank. The said tank will be earthen type and will help in recharging of ground water as well as source of water supply to the farmer of the area. PP informed that the wire saw mining method will be used for cutting of Granite. After presentation PP was asked to submit revised CSR with additional budgetary provisions for water supply and play ground for nearby villages and provision for slop stability monitoring in EMP. PP vide letter dated submitted the reply which was found satisfactory and acceptable by the committee.

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':

- 1. Production of Granite to be used as dimention stone shall be as per mine plan with quantity not exceeding 1,517 cum per annum.
- 2. 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.
- 3. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 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. The proposed plantation should be carried out along as per the submitted proposal and PP would maintain the plants for five years including casualty replacement.
- 6. The OB should be properly stacked inside the ML area in barrier zone and disposed off as per the submitted plan.
- 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. Authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 should be obtained by the PP if required.
- 11. Garland drain will be provided the foot of the small hillock in all direction to prevent the flow of silt towards the agricultural land. Three settling tanks is proposed in the lease area with size of 1180sqmx 5mD, 940sqmx 5mD and 630sqmx5mD. All garland drains shall be connected to settling tanks through settling pits and settled water shall be used for dust suppression, green belt development. Regular de-silting of drains and pits/settling tanks should be carried out.
- 12. Construction of retaining wall need to be started along the foot of hillock prior to start of mining operation and may have dimension of 1mt height and 1500 mt length.
- 13. Regular water spraying should be provided on 0.20 km long and 08.00 meter wide haul road and 1.70 km long and 06.00 meter wide transportation road 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 proposed EMP cost is Rs. 92.54 lacks and Rs. 18.99 lacks /year are proposed as recurring expenses out of which Rs. 37.04 lacks is proposed for green belt development and Rs. 01.00 lacks /year for recurring expenses for plantation in the proposed EMP of this project.
- 18. Under CSR activity, Rs. 27.00 lacks are proposed for the next 05 years in different activities with Rs. 12.20 lacks /year as recurring expenses and same should be implemented through respective committees.
- 19. 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.
- 20. 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.
- 21. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
- 22. PP will comply with all the commitments made vide letter dated 23/12/2017.
- 23. 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.

7. Case No. - 5591/2017 M/s Dhruv Construction, Plot No. A, 21, Swastik Green City, District - Shahdol, MP - 484001 (SIA/MP/MIN/70635/2017) Prior Environment Clearance for Stone Mine in an area of 6.0 Ha.. (1,15,000 cum per annum) (Khasra no. 18/1 (P)) 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 (P) 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.-933, 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 07.943 ha including this mine.

In the 297th SEAC meeting dated 17-11-17 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.

The case was again scheduled in this 298th meeting dated 08-12-17 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 giving him last chance 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 wherein following details were submitted:

Environment setting

Particulars	Details
Locations	

Village	Dholar, Tehsil- Jaisinghnagar, Dist Shahdol (MP)
General ground level	440m MSL
Nearest State Highway	SH-10 - SW - 1.10km PWD road - SSE - 0.50km
Nearest Railway Station	Shahdol RS - 46.75m
Nearest Airport	Jabalpur - 148.00 km
Ecological Sensitive Areas (Wild Life Sanctuaries) within 10km radius.	
Reserved / Protected within 10km radius (Boundary to boundary distance)	
Nearest major city with 100000 population within 10km radius	Nil
Nearest Town / City within 10km radius	Jaisinghnagar - SSW - 2.7525km
Nearest Village	Dholar - EEN - 0.75km
Nearest River	Chundi Nadi - S - 5.50km
Nearest Nalla	Akharar Nala - SW - 0.21km Village Pond - S - 1.00km
Other quarries	01 within 500m radius
Industry	None within 10km radius

It was repoted by the PP that

- The lease area of 6.0 hectares was originally granted in favour of M/s Radheshyam minerals for 10 year
- No other lease area are located within 500m radius
- The scheme of mining with progressive mine closure plan has been approved by DGM.

Salient feature of the lease area

Particulars	Details
Type of Mine	Open Cast

Mining Lease Area	6.0ha
Mineable Area	6.0ha
Existing Pits & Quarries	0.77ha
Existing Dumps	Nil
Infrastructure and road	Nil
Mineral Storage	Nil
Plantation	Nil
Total Minable Reserve	6,23,970.00cum
Proposed Capacity	1,15,000m ³ per year
Method of mining	Semi-Mechanised
Ultimate Depth of Mining	10m bgl (427m MSL)
Expected Life of Mines	5.42 years
Lease Period	10 years
Existing mode to transportation	Road
Area to be covered under dumps in proposal period	Nil
Area covered under pit in conceptual period	5.2726 ha
Area to be reclaimed by conceptual period	Nil
Area to be rehabilitated by afforestation in CP	0.43 ha
Area to be covered under water reservoir	5.2726ha
Ground water table	30m bgl (407m MSL) to 35m bgl (402m MSL)
Assumed per day production	$383M^3$
Per day dumper requirement with capacity	32 dumper per day, capacity 0f dumper 12cum

Mining Method

- Proposed mining method is semi-mechanized mining by using JCB, Excavator etc.
- The individual bench faces will be kept nearly vertical (80° 85°) while the pit slope will be less than 45°.

- During the first five period, working will be started from top of area. no separate development bench will be required for OB/soil. Only 5% mine waste will be generated and same will be used for maintenance of haul road and approach road.
- During the life of mine about 60000m3 soil will be generated and same will be spread over the barrier zone for afforestation purpose
- During the SOM period working will be done up to 427m MSL.
- At the end of conceptual period about 5.2726ha will be developed with ultimate depth upto 427m MSL.
- Blasting and drilling will be carried out during mining.
 - ► Blasting parameter

➤ Depth of blast hole drilled by 34mm dia – 1.5 to 2.0m

➤ Spacing - 1.2m
 ➤ Burden - 1.5m
 ➤ Yield i.e. powder factor - 7.0T/kg

Charge per hole
 Type of explosive
 125-250grams cartridge/ hole
 Ammonium Nitrate slurry class 2

Existing and proposed land use plan

Sr. No	Land Use	Present (Ha)	Conceptual period (Ha)
1.	Pit	0.77	5.2726
2.	Dumps	Nil	Nil
3	Infrastructure & Roads	Nil	Nil
4	Mineral storage	Nil	Nil
5	Plantation Area	Nil	0.43
6	Un worked area	5.23	0.2974
	Total	6.00	6.00
1	Reclamation	Nil	Nil

2	Plantation	Nil	0.43 (860 no.)	
2.1	Backfilled area	Nil	Nil	
2.2	Road side Plantation	Nil	Nil	
2.3	Barrier zone	Nil	0.43 (860 no.)	
2.4	Bench	Nil	Nil	
3	Water body	Nil	5.2727	

EMP Details

Spraying of water over haul road for Dust suppression Length of road -600m, (5mt width) 600m X 5.0m = 3000Sqm No. of tankers required - 01 Tanker capacity - 5.0KL	ROM per day – 579M3, dumper capacity – 12M3, working hr/day – 10 hrs, dumper required per day – 48no, movement per hr –48/10= 4.8no. per hr Water Requirement @ 1.0lit per Sqm Hence 3000sqm @1.0 lite = 3000.0 liter per trip One trip per hours of water tanker and 10 trip of water tankers per day =3KL/trip X 10 = 30KLPD
Spraying of water over Transport road for dust suppression Length of road –630m, (5 mt width) 630m X 5m = 3150SQM	Production per day -383m3, dumper capacity - 12M3, working hr/day - 10 hrs, dumper required per day - 32no, movement per hr - 32/10 = 3.20no. per hr Water Requirement @ 1.0lit per Sqm

No. of tankers required – 01 Tanker capacity – 10.0KL	Hence 3850Sqm @1.0 lite = 3850.0 liter per trip One trip per hours of water tanker and 10 trip of water tankers per day Total water required per day = 3.85KL/trip X 10 = 38.50 saus 40.0KLPD
Water requirement for green belt development	Plantation area 4300sqm (@1.0lit/sqm) avg 4300sqm per day = 4.3 say 4.50KL/day
Domestic water requirement @45lit/person	Total worker – 30@45lit = 1.35 KL/day @ 2.0.0 KL /day
Total water required per day	Dust suppression – 70.0KL Domestic use – 2.0kl Green belt development –4.50KL Drilling – 2.0kl Total – 78.50KL

Plantation

About 500 no. of trees will be planted on both side of the existing unpaved road (630m) in single rows at plant spacing of 2.5m. Plants of large sized tree species will be planted at spacing of 10m and between any two plants of large size tree, three (03) plants of small sized tree/shrub species, will be planted. The selection of species will depend on the availability of quality planting material.

Following species will be planted both side of road:

Large tree species: Mango, Neem, Jamun, Imli, Mahua, Gulmohar etc

Small tree species: Karanj, Aonla, Amaltas, Bael, Sissoo, Kachnar etc

Time Bound Pla	Time Bound Plantation Programme				
Year	Area (in sq mt)	Number of Plants			
1 st	2000 + 630m (Transport road side)	400+ 500 =900			
2 nd to CP	2300	460			
1 st to 5 th	Out side lease area	3920			
Total	4300sqm + 630m	5280			

SOCIO ECONOMIC MEASURES

	Proposed CR	S Activities		
SN	Plan	Activity	Place of activity	Budgetary provisions (Rs in lakh)
				Capital Recurring
1.	Promotion	(A) Computer	Nearby Village	0.50 1.20
	of quality education	providing a least 0 computers i nearby middleschool a Dhoral an providing facilities of	School (02no.) It Computer @ Rs. 2 25,000 Teacher @ Rs. 10000/month. It Need based building repairing, for toilets, fresh water rsupply etc through	

		computer	Gram Panchayat /		
		_	Gram Sabha		
		basic			
		education.			
		(B) Providing			
		financial			
		support to the			
		village school.			
		(C) Computer			
		Room with			
		light			
		arrangement			
2		5 no. of Solar street	12 months		1.00
	light	light provide to			
		nearby villages			
		Dhoral, Mohani,			
		Nagarwah			
	Free	Medical Checkup	_		1.00
	medical	facility, first aid and			
	camp	other welfare			
		activities for nearby			
	T 7 . • •	villagers	***	~ ^ ^	1.00
4	Vocational	Skill development	•	5.00	1.00
	training	center established at			
		Dhoral for youth,			
		woman's i.e. motor			
		winding training,			
		stitching training for			
		woman and girls	7D 4 3	7 00	<i>5.</i> 20
			Total	5.00	5.20

$Total\ Cost\ (EMP+CSR+\ plantation+Monitoring)\ in\ (Lacs)$

Particular		Recurring
	Capital	
Dust Suppression through tanker over 0.630 km		
road * 5.0m (15Rs/km)	-	0.57@0.60
Approx running per day 12.60km@300 day (over		

road)		
Dust Suppression through tanker over 0.60 km haul road * 5.0m (20Rs/km) Approx running per day 12.0km@300 day (over road)		0.72@0.75
Sub total		1.35
Approach Roads repair and maintenance (1.00km@2.0lakh per Km)	-	2.00
PWD Roads repair and maintenance 5.0lakh per year	-	5.00
Sub total		7.00
Occupational health and safety exp.	4.0	1.80
Sub-total	4.0	1.80
Environmental Monitoring cost	33.50	8.60
Sub-total	33.50	8.60
Plantation Along the village Road	2.50	-
Maintenance of Plantation (Along the village Road & lease area)	-	1.00
Plantation (Capital cost) within lease area	3.01	-
Sub-total	5.51	1.00
Fencing around the lease periphery (1000m @300 running meter)	3.0	0.50
Sub-total	3.0	0.50
Total	46.01	20.25
CSR cost	5.00	5.20
Sub total	5.00	5.20
Total	51.01	25.45

During presentation it was submitted by PP that 5 dumper of ROM will be move on haul road in every hour during proposed operation. Hence one trip of water tanker in every hour (10 trips per day) is proposed. It is assumed that $383m^3$ of ore will be transported on per day basis through transport road (630 mt length- From lease area to pucca road) by dumper having capacity of $12M^3$ capacity. It means that, there will be movement of only 3 dumpers on road per hrs basis, one trip per hours of water tanker and 10 trip of water tankers per day. The periphery of 1000.0 mt shall be planted with two rows of trees. However further plantation shall be taken up on priority basis with provision of sampling of at least 3 ft height. Approx 30 no of workers will be worked in lease area. Dust mask is provided to all workers, but

wearing of the same should be made compulsory. Regular maintenance of vehicles and machines will be carried out in order to control emissions. Water will be sprayed over the muck pile to reduce the dust generation. During the drilling, water will be sprayed to reduce the dust emission. Since blasting is proposed at small level on regular basis and mining will be done by semi-mechanized mean, water spraying and time bound green belt development will help to control the fugitive emission that may be caused by the dust. It was further submitted by PP during presentation that there is no water course in the lease area. The drainage of the area is mainly towards north & south, carrying the rain water to the Akhrar nalla and Chundi Nadi which is located at SW and S direction with distance of 0.210km and 5.500km respectively. The water table goes down 402m MSL i.e. 35 meters below surface during summer and rise upto 407m MSL i.e. 30m bgl during rainy season. At the end of the lease period, the working is likely to reach to 427m MSL i.e. 10mt bgl. Therefore, the water table will not be intersected during working hence hydrology of the area will not have impact. Proposed water body of 5.2726ha will further help in water recharging of the area. Surface water source will not be affected in the quarry area as no first order stream is crossing the lease area. Adverse impact over the surface bodies at buffer zone is also not envisaged as mining is opencast type and Garland drain connected with settling tanks will be provided the foot of the hillock in all direction to prevent the flow of silt towards the agricultural land. Two settling tanks is proposed in the lease area with size of 50mL x 20mWx 5mD and 80mLx20mWx6mD near BP-3 and BP-4 respectively. Collected water in settling tank will be used for dust suppression and green belt development purpose. Construction of retaining wall need to be started along the foot of hillock prior to start of mining operation and may have dimension of 1mt height and 1000 mt length. During the proposal period about 29,484cubic meter mine waste will be generated and same will be used for maintenance of haul road and approach road. At the end of conceptual period total 60,000 cum soil will be generated and same will be used for plantation purpose. During presentation it was observed by the committee that is no sensitive features has observed within 500 meters of the ml area except a natural drain on the SW side of the lease which is approx 200 meters away and a village road in the northern side approx 230 meters away. Some broken area was observed from the Google image on the northern side of the lease for which PP submitted that the lease is allotted to them in this condition only and they have not started any mining activity yet. The 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 'A':

- 1. Production as per approved mine plan for **Stone** not exceeding 1,15,000 cum per annum.
- 2. Garland drain connected with settling tanks should be provided at the foot of the hillock in all direction to prevent the flow of silt towards the agricultural land. Two settling in the lease area with size of 50mL x 20mWx 5mD and 80mLx20mWx6mD

- shall also be provided. Collected water in settling tank will be used for dust suppression and green belt development purpose.
- 3. Construction of retaining wall of 1mt height and 1000 mt length along the foot of hillock prior to start of mining operation shall be provided.
- 4. During the proposal period about 29,484cubic meter mine waste will be generated and same will be used for maintenance of haul road and approach road.
- 5. At the end of conceptual period total 60,000 cum soil will be generated and same will be used for plantation purpose.
- 6. Overhead sprinklers arrangements should be provided for dust suppression at the exit gate of the lease area.
- 7. A budgetary provision for Environmental management Plan of Rs. 46.01 lacks (capital) is made with a recurring expenditure of 20.25 Lacks. 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. Under CSR for capital expenditure Rs. 05.00 lacks is proposed for various activities and Rs 05.20 lacks/year is proposed as recurring expenses. A separate bank account should be maintained for all the expenses made in the EMP and CSR activities by PP for financial accountability and these details should be provided in Annual Environmental Statement.
- 8. <u>Case No. 5580/2017 Shri Tushar Upadhyay S/o Shri Mukesh Upadhyay, D-04, Alkapuri, Front of Gandhi Convent School, Ratlam, Dist. Ratlam, MP 457001. Prior Environment Clearance for River Sand Deposit Quarry in an area of 8.30 Ha. (2550 cum per annum) (Khasra no. 526, 451) at Village- Ratangarh Pith, Tehsil Bajna, Dist. Ratlam (MP)</u>

This is case of River Sand Mining. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at (Khasra no. 526, 451) at Village- Ratangarh Pith, Tehsil - Bajna, Dist. Ratlam (MP) 8.30 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 vides letter no. 5911, dated: 19/6/16 has reported that there is no more mine operating or proposed within 500 meters around the said mine.

The case was earlier scheduled in 296th SEAC meeting dated 07-11-17 wherein 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 again scheduled in the 297th meeting dated 08-12-17 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 giving him last chance 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.

This 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. Earlier PP was also absent in the 296th & 297th SEAC 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.

9. <u>5610/2017 Shri Brij Mohan Singh S/o Shri Narayan SIngh, Vill. Goriyakheda, Teh. & Dist. Rajgarh, MP Prior Environment Clearance for River Sand Deposit Quarry in an area of 14.654 Ha.. (500 cum per annum) (Khasra no. 613, 1033) at Village-Goriyakheda, Tehsil - Rajgarh, Dist. Rajgarh (MP)</u>

This is case of River Sand Deposit. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site at (Khasra no. 613, 1033) at Village- Goriyakheda, Tehsil - Rajgarh, Dist. Rajgarh (MP) 14.654 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 vide letter no. 452 dated: 25/05/2015 has reported that there is no more mines operating or proposed within 500 meters around the said mine.

The case was presented by the PP and their consultant and during presentation it was observed this mine lease of river sand mine on **Newaj River** is spread over an area of 14.654 ha in Village - Goriyakheda, Tehsil- Rajgargh, District- Rajgargh of Madhya Pradesh State.

During presentation it was observed by the committee that as per the Google image of January, 2017 a stop dam on the northern side is in existence in the QL area thus committee decided that 200 meters area should be left as non mining area & safe zone from the stop dam in the QL. Committee further observed that as per the approved mine plan only 1.775 ha area is required for evacuation of 500 cum/year sand and which can be easily evacuate from the remaining area. The other submissions made by PP were found satisfactory and acceptable and thus the 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':

- 1. Production of Sand as per mine plan with quantity not exceeding 500 cum/year.
- 2. District Authority should record the deposition of sand in the lease area at an interval of 100 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.
- 3. Evacuation of sand should not be allowed through the roads passing through the villages.
- 4. If causeway (Rapta) is required to be constructed for mining. It should be removed completely before rainy season every year.
- 5. The river bank from where access ramps are made should be restored and access should be closed every year before rainy season.
- 6. No diversion of active channel should be allowed for mining.
- 7. A stop dam is in existence in the Ql area on the northern side and thus 200 meters area should be left from the dam in the lease as non mining area.
- 8. The lease area should be clearly distinguished and earmarked at the site.
- 9. A budgetary provision for Environmental management Plan of Rs. 00.40 lacks (capital) is made with a recurring expenditure of 00.75 Lacks. 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. Under CSR Rs. 00.03 lacks/year is proposed for various activities. A separate bank account should be maintained for all the expenses made in the EMP and CSR activities by PP for financial accountability and these details should be provided in Annual Environmental Statement.
- 10. All the mining activities shall be carryout in accordance with the Sustainable Sand Mining Management Guidelines, 2016 issued by the MoEF&CC.

10. Case No. 3183/15 Shri Hamid Mirza Raza S/o Shri Shabuddin, Chopal Bazar, Samthar, Teh.-Moth, District-Jhansi (UP)-284303. Prior Environment Clearance for approval of Stone Quarry Lease Area - 1.80 ha., Capacity - (8,820 cum/year) at Khasra No.-1105/1, Vill.-Sakuli, Teh.-Niwari, District-Tikamgarh (MP).

BACKGROUND

The case was presented by the PP in 232ed SEAC meeting dated 28/10/2015 wherein it was observed that a water body and a village are in close proximity of ML area. After deliberations, committee decided to carryout site visit of this project to ascertain the possible impacts of mining on the water body and village and also to suggest protection plan.

As decided, Shri K. P. Nyati, Member SEAC visited the site on 08/11/2015. During inspection, Dr. Abhaya K. Saxena, Sr. Scientific Officer and Dr. Sunil Sudhakaran, Scientist, MP Pollution Control Board, Bhopal and Shri Hamid Mirza, mine owner were also present.

PROJECT DETAILS

This is case of **Stone Quarry**. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at Khasra No.-1105/1, Vill.-Sakuli, Teh.-Niwari, District-Tikamgarh (MP) 1.80 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 vides letter no.361, dated: 6/05/2015, has reported that there is 04 more mines operating or proposed within 500 meters around the said mine and total land area 17.80 Ha.

This is a mine lease of Stone boulder in an area of 1.80 ha and the ML area is approx. 25.00 Kms away from Jhansi- Niwari- Tikamgarh main road and is connected through a metal road up to village Sakuli. From Village Sakuli, the mine site is approx 1.00 kms away and connected through a kachha road. The interstate boundary is at 9.00 Kms as submitted by the Tehsildar in the certificate issued vides letter no. 861 dated 27/12/2014. During inspection PP was asked to obtain fresh Tehsildar's certificate for distance from interstate boundary from the mine site. PP has submitted fresh certificate of Tehsildar issued vide letter no. 318 dated 15/12/2015 stating that the distance from the interstate boundary to the ML area is 9.00 kms.

The topography of the site is hilly and undulating at some places having an elevation of approx 10.00 meters. The quantity of top soil in the lease area is very thin. A crusher is also proposed to be installed in the ML area. Being a new mine, no mining activities were carrying out at the time of inspection. The mining is proposed to be carried out by semi-mechanized open cast method.

As per the observation made during site visit, the site is a hillock and about 450 meters away from the water body and village. Considering the topography of the site the northern side of ML area (area facing village and water body) is at higher elevation and thus most of the surface runoff will be drained to the other side of ML areas i.e. western side and eastern side.

Following recommendations are made after site visit:-

- 1. The Kachha approach road from ML area to the connecting village road should be maintained by the PP.
- 2. Garland drains with settling pit of suitable capacity may be provided to avoid any runoff in dam/nallah.
- 3. Thick plantation should be carried out towards dam and village side.
- 4. The mine should be properly fenced to avoid any incident of human/cattle slipping in to the mined pits.

The report of committee (Annexure-3) was discussed in the 256th SEAC meeting dated 03/01/2016 and after deliberations; 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':

- 1. Production of **Stone** per mine plan with quantity not exceeding 8,820 cum/year as.
- 2. The Kachha approach road from ML area to the connecting village road should be maintained by the PP.
- 3. Garland drains with settling pit of suitable capacity may be provided to avoid any runoff in dam/nallah.
- 4. Thick plantation should be carried out towards dam and village side.
- 5. The mine should be properly fenced to avoid any incident of human/cattle slipping in to the mined pits.

SEIAA vide letter no. 1350 dated 14/12/2017 has sent back the file to SEAC as vide letter dated 16/11/2017, PP has submitted the desired information and the case was placed before the committee. On backtracking the minutes of SEIAA, it was observed that SEIAA in its 285th meeting dated 25/01/2016 has asked PP to submit details of mine leases allotted/operated/approved within 500 meter periphery of said mine. As per the information submitted by PP, there are 04 more mines within the 500 meters periphery with total area

including this mine is 17.80 ha. Committee observed that on these facts this case was recommended for grant of EC in the 256th SEAC meeting dated 03/01/2016. Hence, committee decided to stand by its earlier recommendations taken in the 256th SEAC meeting dated 03-01-16 for grant of EC.

11. Case No. 3194/15 Shri Abdul Kalam S/o Shri Abdul Salam, 1732/2, State Bank Main Branch Ke Pass, Town & District-Jhansi (UP)-472442. Prior Environment Clearance for approval of Stone Quarry in an area of 2.00 ha. (13,720 cum/year) at Khasra No.-927, Village-Sakuli, Tehsil-Niwari, District-Tikamgarh (MP)

BACKGROUND

The case was presented by the PP in 211th SEAC meeting dated 06/08/2015 wherein cluster is observed in the project comprising cumulative lease area of 21.5 Ha. It was decided by the committee to visit the site before decision.

As decided, Shri K. P. Nyati, Member SEAC visited the site on 08/11/2015. During inspection, Dr. Abhaya K. Saxena, Sr. Scientific Officer and Dr. Sunil Sudhakaran, Scientist, MP Pollution Control Board, Bhopal and Shri Abdul Kalam S/o Abdul Salam, representing mine owner were also present.

PROJECT DETAILS

This is a case of mining of Stone Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is located at Khasra No.-927, Village-Sakuli, Tehsil-Niwari, District-Tikamgarh (MP) in **2.0** 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. 362 dated: 6/5/15, has reported that there are 05 more mines operating or proposed within 500 meters around the said mine and total Area-21.50 ha.

This is a mine lease of Stone boulder in an area of 2.00 ha and the ML area is approx. 25.00 Kms away from Jhansi- Niwari- Tikamgarh main road and is connected through a metal road up to village Sakuli. From Village Sakuli, the mine site is approx 1.00 kms away and connected through a kachha road. The interstate boundary is at 9.00 Kms as submitted by the Tehsildar in the certificate issued vides letter no. Q/reader/2014 dated 14/11/2014. During

inspection PP was asked to obtain fresh Tehsildar's certificate for distance from interstate boundary from the mine site. PP has submitted fresh certificate of Tehsildar issued vide letter no. 320 dated 15/12/2015 stating that the distance from the interstate boundary to the ML area is 9.00 kms.

The topography of the site is hilly and undulating at some places having an elevation of approx 07.00 meters. The quantity of top soil in the lease area is very thin. A crusher is also proposed to be installed in the ML area. Being a new mine, no mining activities were being carried out at the time of inspection. The mining is proposed to be carried out by semi-mechanized open cast method.

As per the observation made during site visit, the site is a hillock and about 200 meters away from the water body and 300 meters away from the village. Considering the topography of the site surface runoff of Northern side of Ml area may reach to the water body for which garland drains should be provided.

Following recommendations are made after site visit:-

- 1. The Kachha approach road from ML area to the connecting village road should be maintained by the PP.
- 2. Garland drains with settling pit of suitable capacity may be provided to avoid any runoff in dam/nallah.
- 3. Thick plantation should be carried out towards dam and village side.
- 4. The mine should be properly fenced to avoid any incident of human/cattle slipping in to the mined pits.

The report of committee (Annexure-4) was discussed in the 256th SEAC meeting dated 03/01/2016 and after deliberations; 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':

- 1. Production of **Stone** as per mine plan with quantity not exceeding 13,720 cum/year.
- 2. The Kachha approach road from ML area to the connecting village road should be maintained by the PP.
- 3. Garland drains with settling pit of suitable capacity may be provided to avoid any runoff in dam/nallah.
- 4. Thick plantation should be carried out towards dam and village side.
- 5. The mine should be properly fenced to avoid any incident of human/cattle slipping in to the mined pits.

SEIAA vide letter no. 1352 dated 14/12/2017 has sent back the file to SEAC as vide letter dated 16/11/2017, PP has submitted the desired information and the case was placed before the committee. On backtracking the minutes of SEIAA, it was observed that SEIAA in its 285th meeting dated 25/01/2016 has asked PP to submit details of mine leases allotted/operated/approved within 500 meter periphery of said mine. As per the information submitted by PP, there are 05 more mines within the 500 meters periphery with total area including this mine is 21.50 ha. Committee observed that on these facts this case was recommended for grant of EC in the 256th SEAC meeting dated 03/01/2016. Hence, committee decided to stand by its earlier recommendations taken in the 256th SEAC meeting dated 03-01-16 for grant of EC.

<u>DISCUSSIONS BASED ON QUERY REPLY SUBMITTED BY THE PP's / PENDING SINCE LONG</u>

12. Case No. – 1902/2014 M/s Jaipuria Leo Software & Systems Pvt. Ltd., Plot No. 4A, MIDC, Industrial Area, Hinga Road, Nagpur-440016 Jarah Mohgaon Manganese Ore Mine at Village-Jarah Mohgaon, Tehsil-Katangi, District-Balaghat (MP), Lease Area – 6.159 ha., Capacity -3000 TPA to 11705 TPA at Surveys nos. 89,90,91/1,92/2,93/1-6,94/1-3,95,96,97,98/1-2,99/1,99/2,100/2,100/3,102/1.

This is a mining project. Mining of Manganese ore is proposed in lease area of 6.159 ha. It was reported that the project has EC issued by MPSEIAA and the application has been made in view of proposed enhancement in production capacity from 3000 TPA to 11705 TPA. The activity is mentioned at SN 1(a) in the schedule of EIA Notification hence requires prior EC before commencement of production under the provisions of EIA Notification. The application for EC was forwarded by SEIAA to SEAC for scoping so as to approve/determine TOR to carry out EIA / EMP for the project.

The salient features of the project were presented along with the proposed TOR by the PP accompanied by his consultant in the 160th SEAC meeting dated 21/12/2014. The submissions and the presentation made by the PP revealed following:

- ➤ This is an Expansion Project.
- ➤ Prior environmental clearance for 3,000 TPA has been accorded by MPSEIAA vide letter no. 1678/SEIAA/12 dated 10/12/2012.

- ➤ Proposed expansion is planned to enhance production of Jarah Mohgaon Manganese Mine (from 3,000 TPA to 11,705 TPA 90% graded) within the existing Manganese mine lease of 6.159 ha located in Jarah Mohgaon Village, Katangi Tehsil, Balaghat District, Madhya Pradesh.
- Maximum ROM production as per the approved Mining Scheme for the period 2013-14 to 2017-18 is 13,006 T (11,705 TPA 90% graded).
- ➤ Proposed expansion will not require additional area i.e. mining for increased capacity will be done within existing lease area i.e. 6.159 Ha.

Regulatory permission obtained

- ❖ Government of Madhya Pradesh, MRD, Bhopal has allotted mine lease (6.159 Ha) to M/s. Jaipuria Leo Software & Systems Pvt. Ltd., as per order no. F3-36/2007/12/2 dated 14/08/2008 from 13/10/2008 to 12/10/2028 for 20 years.
- ❖ Mining plan with progressive mine closure plan for 3000 TPA was approved by IBM vide letter no. BGT/MN/MPLN -996/NGP dated 22/07/2008.
- Modification was also approved by IBM vide letter no. BGT/MN/MPLN -996/NGP dated 29/01/2013 for category A-OTFM.
 Subsequently scheme of mining with progressive mine closure plan for 11705 TPA graded 90% (ROM 13006 TPA) has been approved by IBM vide letter no. BGT/MN/MPLN -996/NGP dated 25/10/2013

Project Location

Village	Jarah Mohgaon				
Khasra No.	89, 90, 91/1, 91/2, 92/2, 93/1-6, 94/1-3, 95, 96, 97, 98/1-2, 99/1, 99/2, 100/2, 100/3, 102/1				
Tehsil	Katangi				
District	Balaghat				
State	Madhya Pradesh				
Topo Sheet No.	55 O/14				
Latitude	21 44'7.98"N to 21 44'21.12"N				
Longitude	79 54'10.86"E to 79 54'25.08"E				

Brief introduction

Lease Area : 6.159 haStripping Ratio : 1:0.80

• Bench Height & Width : 6 M Height 6 M Width (minimum in OB)

• Total No. of benches : 3

• Maximum Depth of Mining : 16.5 m (During Plan Period)

• Minable Reserve : 19,260 Tonnes (including sub grade)

Topsoil thickness : 0.05 m
 Overall final pit slope : 450

• Water requirement : 10-11 KLD

• Source of Water : Accumulated Pit Rain Water & nearby

Jarah Mohgaon Village Bore-well

• Power Source : MP Electricity board

• Manpower : 79 Nos.

After deliberations committee approved the proposed TORs' with inclusion of following additional points to be addressed in the EIA / EMP repoprt:

- > As the mine is operational the details including following has to be furnished in the EIA
 - a) Detailed inventory (including dimensions) of green area, dumps, pits and garland-drains etc. with location on conceptual lay-out of lease area.
 - b) Current photographs of the mine area clearly showing various features.
 - c) Complainces of the EC conditions duly validated from the R.O. MoEF.
 - d) Complainces of the Air / water consent conditions duly validated from the R.O. MPPCB.
- > Chemical analysis of ore from approved laboratory has to be furnished.
- > Environmental consequences of blasting including ground vibrations to be addressed.
- ➤ Mode and route for transportation of the materials to / from the mines. Details of the exisiting road net-work being / proposed to be used for transportation.
- ➤ Incremental GLC with respect to additional transport of materials shall be worked out and presented with appropriate modeling.
- ➤ Micro-level land-use / cover details in 5 Km radius around the mine shall be inventorized &depicted on map.
- ➤ Detailed activity-wise water consumption in the project with source and necessary permissions / NOC from the competent authorities to be furnished.

- Alternate mining methods to avoid blasting to studied and presented with rationalization for the selected technique.
- > Details of tribes (if any) in the region.
- ➤ Legal status of Mining Lease Area and adjoining land parcles w.r.t. forest etc. to be furnished.
- ➤ Details of existing ecology of the region and the expected impacts on the same due to mining.
- ➤ Mine-water management plan to be included in detail.

The TOR was approved in the 160th SEAC meeting dated 21/12/2014 and the same was issued to the PP vide letter no. 13 dated 20/01/2015 which was valid for 03 years. The validity of TOR expired on 20/12/2017. The above case was placed before the committee as the TOR validity has expired on 20/12/2017. The committee observed that PP has neither submitted the EIA report nor has applied for the extension of TOR's validity period and thus decided that this case may be recommended for delisting to SEIAA as TOR's validity has expired.

13. Case No. - 5600/2017 M/s Shiva Corporation India Pvt. Ltd, 312, Ganpati Plaza, MIG Road, Jaipur, Raj – 472331 Prior Environment Clearance for Sand Deposit Quarry in an area of 5.289 Ha.. (40,000 cum per annum) (Khasra no. 01) at Village- Pachghara, Tehsil - Lidhoura, Dist. Tikamgarh (MP)

This is case of Sand Quarry. The application was forwarded by SEIAA to SEAC for appraisal. The proposed site is at (Khasra no. 01) at Village- Pachghara, Tehsil - Lidhoura, Dist. Tikamgarh (MP) 5.289 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. 903 dated: 28/8/15, has reported that there is no more mines operating or proposed within 500 meters.

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

1. Name of the project &	Name of the Project:
its location:	Pachaghara Sand Mine on Dhasan river.

2. Name of the Company, Address Tele	Villa Tehsi Distr State	tion: ra No: 01 ge:Pachagh il:Lidhoura ict:Tikamg : Madhya I a Corpora	argh Pradesh	lia Pvt Lt	d.			
No. &E-mail:								
	E-ma	ail Id: envi	ro2000-	scipl@yał	noo.in			
3. Latitude and	Poi	Latit	ıde		Lo	ngitude		
Longitude of the project	nt							
	Α	25 08 0	4.25N		79 0	0 26.59 E		
	В	25 08 0 ²	1.85 N		79 0	0 29.94 E		
	С	25 07 42	2.29 N		79 00 13.75 E			
	D	25 07 4	1.86 N		79 00 11.58 E			
	Е	25 07 24	1.77 N		79 00 10.24 E			
	F	25 07 24	4.51N		79 00 08.00 E			
4. If a Joint venture, the names & addresses of the JV partners including their share	N.A.							
5. Project brief: nature of	Newl	Proposal						
proposal	Mine	Lease Ar	ea: 5.28	90 ha				
(new/expansion,) total	T 0	l IIaa Da44.						
area- land use, project components,	*Al	l Use Patte Forest	ern: Pvt.	_	Govt.	Total (Ha)		
connectivity	l	Land	Ag.		Land	Total (Ha)		
to the site etc.	the		Land					
	are							
	as							
	are							
	giv							
	en							

	in Hec tar es No n Util ized Tot al	-	-	-	5.2 5.2		5.289 5.289	
	Conr	nectivity: NH-26B	<u> </u>	NH – 7	5 20	N		
		SH-19		km SH		37	7km , 19 Km, W	
	Baı	rdi Halt Ra Station				km		
	Ra	ja Bhoj Ai Bhopal	rport,	Abou	Khajurao, About 98 km		E	
6. Whether the project is in the Critically Polluted Area (CPA):	No th	e project i	s not in	the Critic	cally F	Pollu	ited Area.	
7. Cost of the project :	125 1							
8. Employment		Category		Proposed				
generated/to be generated		visory staff		1				
55		t Manager		1			1	
		g Mate	1					
		Time keeper / store keeper cum first aider		1				
		Mali / Watchman / Pump operator			1			
	Skilled				1			
	Unski	lled	15-20					

	Supervisory staff	1		
	Permit Manager	1		
9. Benefits of the project:	The project is of utmost importance to the area/ region for further prevent widening of the river bed due to the deposition of sediments which if not mined out will result in rising of the river bed causing flooding, damage to the adjoining areas, destruction of life and property. It provides interest of mineral development and shall greatly contribute to improve the socioeconomic conditions of the local habitants. The operation of the proposed project will bestow various social and economic benefits to the local communities of the area in addition to providing better employment opportunities helping them earn livelihood. The mining project shall improve social infrastructure of the area, apart from increased financial benefits accruing to state and central agencies by ways of taxes, royalties, cesses etc.			
11. If for expansion, whether the application is under 7(ii) of the EIA Notification, 2006.	N.A.			
12. If expansion, please indicate the number and date of the certified Compliance Report of Regional Office of the MoEF.	N.A.			
13. No. and Date of the ToR /and revised ToR, if any, letter issued by the authority.	N.A.			
14. No. and Date of the EC and the revised EC letter issued by the MoEF (if this is a case	N.A.			

for reconsideration. If so, what specific reconsideration(s) being sought by the proponent)		
15. If the project was considered in EAC, Pl. gives dates of the meeting (s).	N.A.	
16. Type of Mine: (Open cast/Underground/mixed):	Open Cast	
17. Capacity of the mine applied for.	Total Production 40,000 m ³ /yr	
18. ML Area i. As per block allotment ii. As per approved mine plan	5.289 hectare	
19. Date of approval of mine plan, mine closure plan, status & date.	26/09/2015	
20. Date of Board's approval:		
21. Date of Ground water clearance:	Not Applicable	
22. Date of mine closure approval		
	CSR Budget:	
23. Cost of proposed EMP and CSR with	1 Promotion of Swachh Bharat Abhiyan	30000

detailed components & proposed activities.	2	Promotion of Digital India Programme				15000		
	3	Skill development of village women			40000			
	4	Ski	ill development of farme	(60000			
	5	Promotion of energy saving lighting i.e. LED			15000			
	6	Pro	omotion of Solar Energy	Use		35000		
	7		giene and health		25000			
	EM	P (Cost:					
	SI. Mea		Measures	_	otion of ork	Annual recurring cost(in Rs.) / Proposed		
	1.	•	Control-Dust will be unpaved from who carry sar		sprinkling done on roads ere trucks ad during vice a day.	60,000		
	2.	•	Pollution Monitoring	Yearly location	at 1	-		
	i)		Air pollution	locations	for water	15,000		
	ii))	Water pollution	and 1 loo	cation for	30,000		
	iii				during	15,000		
	3		Occupational Health	-	le medical t the site loyees	25,000		
	4		Green Belt	planted a	will be along the ank and Kachcha	200,000		

	road of lease phase	luring the period in s.	
	Total		3,45,000
25. Any river/Nallha	Dhasan river(onsite).		
flowing near or adjacent			
to the proposed mine. If			
yes, please give details.			

The case was presented by the PP and their consultant 299th SEAC meeting dated 07/12/2017 wherein after presentation PP was asked to provide following:

- 1. Revised plantation scheme as suggested by the committee.
- 2. Evacuation route marked on Google map.
- 3. Proposal for Environmental Management Cell.
- 4. Revised EMP and CSR cost (bifurcation in capitol and recurring) as suggested by the committee.

PP has submitted the reply vide letter dated 20/12/2017 which was placed before the committee. The reply submitted by PP was found satisfactory and acceptable <u>hence</u> 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':

- 1. Production of Sand as per mine plan with quantity not exceeding 40,000 cum/year.
- 2. District Authority should record the deposition of sand in the lease area at an interval of 100 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.
- 3. Evacuation of sand should not be allowed through the roads passing through the villages.
- 4. If causeway (Rapta) is required to be constructed for mining. It should be removed completely before rainy season every year.
- 5. The river bank from where access ramps are made should be restored and access should be closed every year before rainy season.
- 6. No diversion of active channel should be allowed for mining.

- 7. The lease area should be clearly distinguished and earmarked at the site.
- 8. A budgetary provision for Environmental management Plan of Rs. 02.00 lacks (capital) is made with a recurring expenditure of 03.45 Lacks. 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. Under CSR Rs. 00.65 lacks with recurring cost of 02.20 lacks / year is proposed for various activities. A separate bank account should be maintained for all the expenses made in the EMP and CSR activities by PP for financial accountability and these details should be provided in Annual Environmental Statement.
- 9. All the mining activities shall be carryout in accordance with the Sustainable Sand Mining Management Guidelines, 2016 issued by the MoEF&CC.

(Mohd. Akram Khan) Member (Dr. A.K. Sharma) Member (Dr. J. P. Shukla) 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 taurpoline 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 taurpoline 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.