The meeting conducted on 21st August 2012 was presided by was presided by Shri S.C. Jain, Chairman. Following members attended the meeting-

1. **S**hri K.P. Nyati, Member
2. Dr Mohini Saxena, Member
3. Shri A.P. Srivastava Member
4. Shri V.R. Khare, Member
5. Prof. V Subramanian, Member
6. Shri R.K. Jain, Member Secretary

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

1. **Confirmation of minutes of 98th & 99th meetings of SEAC dated 23th and 24th July 2012**
   The minutes of **98th & 99th meetings of SEAC dated 23th and 24th July 2012** were confirmed and approved. It was decided by the committee to forward the minutes to SEIAA for further action.
2. **Consideration of the Projects**
   12 cases were invited to make presentation before the SEAC.

Discussion on the methodology for quick disposal of the mining projects with mining lease area less than 5 ha

The committee members discussed above subject keeping in consideration, the following points to appraise the mining projects with lease area less than 5 Ha:

- Environmental damages should be minimum while carrying out such mining.
- Speedy disposal of smaller mining segments in accordance to the directions issued by the Hon'ble Supreme Court.
- Presently Small mines of minor minerals are not required to prepare Mining Plans / Schemes in many cases (as per prevailing Mining Rules), causing un-scientific mining practices ultimately resulting in to environmental damages.
- Continuous mineral deposits are sometimes unnecessarily broken in to smaller areas while granting of leases without giving proper weightage to environmental issues.
- The cumulative environmental impacts from clusters of small mines is sometimes much higher than a single large mine, as the environmental issues are not addressed properly by small mine owners. Besides, A comprehensive EMP cannot be executed for the region as a whole because the responsibility of the same is not held by a single operator. The mine operators being competitors & comparatively economically weaker they seldom agree to coordinate jointly for the compliance of any comprehensive EMP for the region.

Accordingly, the draft guidelines were formulated to handle the issue and it was decided by the committee that the guidelines shall be discussed at length in the meeting scheduled for tomorrow i.e. 22nd August 2012 so as to finalize the draft guidelines.

Latter, the deliberations taken up were summarized as below:

1. **Case No. 607/2010- Mining of Basalt Rock Total Lease Area - 37.5 ha. Village – Rangwasa, Teh. Depalpur, Distt. Indore Leasee - M/s IVRCL, Infrastructures & Project Ltd. (Mining Division) Vijaynagar Colony, Hyderabad (A.P.)- <u>EIA Presentation</u>.**
   [Consultant- M/s Creative Enviro Services, Shriram Kunj, E-8 Bharat Nagar, *Bhopal (M.P.)]*

   This is a case of mining project with lease area of 7.065 ha. Listed at SN 1(a) category B. The EIA of the project was forwarded by the SEIAA to SEAC for appraisal and necessary recommendations. The EIA report submitted by the PP was forwarded by the SEIAA to SEAC. PP and his consultant presented the EIA report before the committee. The submissions and the presentation made before the committee revealed following features of

(V. Subramanian) Member SEAC	**(K.P. Nyati) Member SEAC**	**(Dr Mohini Saxena) Member SEAC**	**(A.P. Srivastava) Member SEAC**

(S.C. Jain) Chairman	**(V.R. Khare) Member SEAC**	**(R.K. Jain) Member Secretary**

the project:

Project introduction:

IVRCL, Basalt Rock mining project is located at village–Rangwasa, Taluka & District Indore (MP).

The Basalt Rock mines has mining agreement dated from 02.06.2010 to 30.06.2012 for 3 years. Mining lease has been extended up to February 2013 by Indore Collector. M/s. IVRCL Infrastructures & Projects Ltd. has also installed a stone Crushing unit with capacity of 200TPH with size ranges from 6mm to 40 mm as per the requirement for the Indore–Gujarat Border NH-59 Road work from Km 9.500 to Km 171.100.

Location: Khasra no 62/1/1, Village Rangwasa Tehsil Dapalpur & dist. Indore

Production Schedule: The unit will operate till the road work is completed.

Energy from MPEB: 33KVA

Back Up Source: 600 KVA.

Proposed Capacity: 3 Lac cum / Annum.

Fuel consumption: 700 liters per day.

Salient features of the project:

Particulars	**Details**
Location	At khasra no 62/1/1 Village Rangwasa Tehsil Dapalpur & dist. Indore
Village	Rangwasa
Tehsil/Distt.	Depalpur/Indore
Latitude	22° 43‘ 16.38” N
Longitude	75° 34’ 16.09” E
Nearest National Highway	07 km (NH-59)
Nearest rail head	30Km (Indore Railway)
Historical / Tourist places	No with in 10 Km
Ecologically sensitive areas (National Parks / Wild life sanctuaries / bio-sphere reserves)	No with in 10 Km
Nearest town within 10 km radius	Rawad, Daultabad, Betma, Rangwasa

Project Description

Particulars	Details
Mining Lease Area	37.5 Ha
Expected Project cost	3.70 cores
Env. Mgt. Cost	8.41 cost per ton(in Rs.)
Method of mining	Open Cast
Mechanization	Semi Mechanized
Purpose of Mine	For construction of road works from Indore to Gujarat Border NH-59 (Chainage from Km 9.500 to Km 171.100)
Stone Crasher Capacity	200 TPH
Water Requirement	2.0 cum / Day
Manpower Requirement	25
Mining Lease Area	37.5 ha
Electricity from MPEB sub Station	33KVA
Back Up Source	600KVA

Forest land if any	No

Method of Mining:

Mining Method	Open cast Mining with mechanized method is proposed.
Activities	Ground preparation, Drilling, Blasting, Loading/ unloading, Sorting & Transportation
Drilling	Drilling & Blasting shall be carried out for loosing of Rock.
Explosive to be used	Gelatine cartridge and detonators
Blasting Parameter	Spacing – 2m
	Burden – 4m
	Depth of holes – 2.8 m to 3.0 m
	Charge per hole – 700-800 gms
	Dia of hole – 115 mm
	Powder factor – 6 t to 8 t per kg

Summary of Reserves

Total Mineral Reserve	75,00,000 tone
Life of mine	25 years
Mineral to be excavated	Basalt Rock
Proposed Production Capacity	3,00,000 MTPA

Land use pattern of mining lease

Particulars	Present (ha)	Post Mining (ha)
Excavation	Nil	5.0
Roads & other infrastructure	0.45	2.45
Green Belt / Plantation	Nil	2.0 after two years
Water reservoir	Nil	3.5 ha
Undisturbed area	37.00	24.55
Total Lease area	37.5 ha.	37.5ha.

Public Hearing:

Public Hearing was Conducted through Pollution Control Board, at M/s. IVRCL Infrastructures & Project Camp Office, Village Rangwasa, Tehsil Depalpur, Dist. Indore, dtd. 15 March 2012. The issues raised by the people were discussed in length the main points are summarized as follows:

Name & Address of the Person	Suggestions/issues raised in public hearing	Remedial Measures suggested by the PP
Shri Vikash Kumar Narmada Colony Betma, Dist. Indore	To reach mining unit at village Rangwasa, there must be an approach road.	Repairing of approach road is committed.
Shri Ishwar Singh Tehsil Depalpur, Dist. Indore	After excavation mining pits must be converted into water ponds.	About 3.5 ha is proposed to be left as water reservoir

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(R.K. Jain) **Member Secretary**

Shri Champa Lalji Kushwah Betma, Dist. Indore	There must be dense afforestation near by the mining unit.	A provision to plant at least thousand numbers (2000) trees of local species, surrounding of mining lease was committed.
Shri Gyanendra Pratap Village-Rangwasa, Dist. Indore	There must be employment for the local people.	Preference shall be given to the local people for employment; about 40 Nos. of local persons in various mining activities shall be engaged.
Shri Dharmendra Upadyay Betma, Dist. Indore	1. What would be the use of Rs. 8.41 per tone, which has to be collected for social responsibility of the proponent. 2. What would be safety measures & provision for ponds beautification? 3. Plan for Mine Closure.	1. The collected money shall be used for welfare of village as per our corporate social responsibility. 2. Mining pits shall be converted in to ponds, which shall be able to recharge ground water sources of the area. 3. Mine closure plan shall be as per Rules & regulations of mining department.
Shri Dharmendra Upadyay Betma, Dist. Indore	Assurance that the mining will be used for maintenance of NH-59 only.	Mineral shall be used for construction & Maintenance of the project.
Shri Rajaram Kushwah Village Rangwasa, Dist. Indore	1. After excavation mining pits must be converted in to water ponds. 2. To reach mining unit and the village there must be an approach road. 3. There must be provision for signage tin board/barricades and also provision of siren at the time of blasting.	1.Mining pits shall be converted in to ponds, which shall be help to recharge ground water sources of the area. 2. Repairing of approach road which is presently available shall be done by us. 3. Signage tin board/Barricades & Control blasting will be done as per Explosive Rules & regulations.
Shri Vinod Rajak Village-Daultabad, Dist. Indore	What will be preventive action for air pollution?	Water sprinkling will be done on regular basis.
Shri Yashwant Sing Chauhan Village-Rangwasa, Dist. Indore	1. What would be the safety measures for blasting? 2. Employment for local people.	Commitment as per above mentioned.
Shri Kailash Choudhari Village-Rangwasa, Dist. Indore	1. What will be preventive action for air pollution.	Commitment as per above mentioned.
Shri Puneshwar Sahu Rajawada, chowk, Betma, Indore	1. There must be signage tin board near by the mining site. 2. Employment for local people. 3. Controlled Noise Pollution	Commitment as per above mentioned.
Shri Dinesh Nagar Village-Daultabad, Dist. Indore	1. Repairing of Approach road. 2. Provision for disposal of domestic waste water.	1. Approach road shall be repaired by the PP. 2. Construction of septic tank/soak pits at the site shall be done by the PP for the proper disposal of domestic waste water

Environmental management plan (EMP)

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Air pollution control

- Water sprinkler has been provided to avoid dust generation during material unloading.
- The muck pile sprayed with water prior to loading.
- Quantity of dust fumes generated at the time of shattering and disintegration in strata is very less and settle down instantly which sometimes is also suppressed by effective watering.
- Dense plantation being carried in and around the Proposed mines will help in combating air pollution.
- The ambient air quality monitored in the surrounding villages is observed to be well within the prescribed standards.
- Afforestation of completely mined out area has been planned with minimum gap between excavation and afforestation to fix the dust and prevent from getting airborne.

Water pollution control

- The probable causes of surface water pollution in the proposed mining area are soil erosion and wash off from the stacked material. Adequate control measures have been adopted to check not only the wash-off and soil erosion but also uncontrolled flow of mine water. As there is no toxic substance present in the discharged water, there is no adverse effect on the water regime.
- The overburdens of the area are dumped at the boundary within the lease area and tree plantation is done in phased manner to develop green belt. As already brought out, the ground water table in the mine area or in surrounding area is not likely to be effected as no toxic chemicals are present.
- However, regular monitoring of water levels and quality in the existing wells in the vicinity is being carried out both with reference to areas spread and time intervals so as to study the hydrodynamics of the strata.

Noise control

The following control measures are proposed to control ambient noise levels:

- The prime movers/ engines are of proper design and are properly maintained covering the machinery with acoustic enclosure.
- A thick tree belt is being provided and will be made thicker in phased manner around the periphery of the mine to screen the noise.
- Tree plantation work shall continue periodically.
- Provision of protective devices like ear muffs/ear plugs at work place.
- Provision of sound insulated chambers for the workers deployed on machines producing higher levels noise machines like bulldozers, drills etc.
- Reducing the exposure time of workers to the high noise levels.

Control of vibration and fly rock generation during blasting

- The blast holes will be drilled by jack-hammers and explosive used for the 1st 3m. either gunpowder or ANFO, hence fly rock problem may not come up and there is no habitant in the vicinity of the mining area. Though there will be no hazards on this account, but if required, proper precautionary Measures will be taken up and muffle-blasting will be practiced for prevention of fly rocks. Ground vibration caused by blasting is proposed to be controlled by the i) By using explosives of low density and velocity of detonation for this ANFO is suggested to be used maximum extent. ii) By using safety fuse.

Biological management

- With rapid industrialization and consequent deleterious impact of pollutants on environment, values of environmental protection offered by trees are becoming clear. Trees are very suitable for detecting, recognizing and monitoring air pollution effects. Monitoring of biological effects of air pollutant by the use of plants as indicators has been applied on local, regional and national scale. So it is necessary to develop green belt (as per CPCB Guidelines) in and around the polluted site with suitable species to combat the air pollution effectively.

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Occupational safety & health

- The method of mining will be in small scale and of manual nature .There will not be any deployment of heavy machines in the area for carrying out mining operation which will create noise pollution, air pollution or any other operational hazards due to presence of machines. Precaution will be taken during drilling with jack hammers against inhaling dust or during blasting to be in the safe distance.

Anticipated environmental impacts and mitigation measures:

- The opencast mining operations in general cause environmental degradation and if adequate control measures are not taken to prevent/mitigate the adverse environmental impacts, these operations may cause irreversible damage to the ecosystem..
- The Basalt Rock in the leasehold area mostly covered with alluvial soil and murum. Due to mining activity there will be removal of alluvial soil and murum which will be dumped properly and it will be leveled so that the dump height should be uniform in all sides and subsequently plantation will be carried out. Through there will be some change in the landscape but it will be with improved greenery
- Water tanker Supply will arrange for water requirement at mining site. At present there is no water sources which are passing through the leasehold area and nearby surroundings. There may be accumulation of surface water during rainy season when the working pit will be developed due to future mining activity. But this will be pumped out by installing pumps in the working pit.
- PM10, PM2.5andNOx emissions are envisaged during transportation operations and blasting. But these will be kept under control by better operation, environment friendly techniques, and maintenance practices and by sprinkling of water on haul roads etc. As the method of mining operation is of manual nature and only drilling and blasting is carried out by jack hammer and blasting by ANFO mixture and the total numbers of holes blasted at any particular time will not be more than 25 Nos. There will not be appreciable vibration due to blasting operation. There are no settlements on the Core Zone thus no resettlement or rehabilitation is required. It is zero water discharge activity. All solid waste will be used for land filling for subsequent development of green belt. There is no waste water discharge from lease area.

Budget for Environmental Protection/ CSR Activity

Particular	Capital cost (Rs.)	Recurring cost (Rs)
Dust suppression	7,00,000.00	1,25,000.00
Environmental monitoring		1,50,000.00
Green belt development	1,00,000.00	25,000.00
Dump rehabilitation		50,000.00
Back filling		50,000.00
Medical aids as per norms	1,50,000.00	50,000.00
Village Road Construction	1,50,000.00	50,000.00
Arrangement for Drinking water	75,000.00	25,000.00
School Books for Children	25,000.00	25,000.00
Environment Celebration	25,000.00	25,000.00
Total	12,25,000.00	5,75,000.00

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After deliberations committee has asked the PP to submit response to the following queries along with the supporting documents where ever necessary:

1. The mining lease is reported to be valid only up to February 2013; the validity of prior EC shall then be restricted only up to February 2013 where as it was reported by the PP that the construction and completion of the road project shall take more time, hence the PP was asked to give a written request regarding the completion time line of the project so as to decided the validity of prior EC.
2. NOC from the concerned DFO has to be furnished for starting the project.
3. Regarding CSR activity proposed in the project the PP should submit activity-wise fund allocation in co-ordination with Gram Panchayat.
4. Approach road up to the mining site should be made up of tar.
5. Photographs of the site clearly showing the status of plantation to be furnished.
6. Hot-mix plant and a sizing unit (crusher) is also proposed to be installed at site hence PP is required to submit details of Pollution Control Measures proposed in these two units.

2. Case No.- 474/2010- Project Proponent - M/s Shukhdeo Prasad Goenka Station Road, Katni, Tehsil- Katni Dist. Katni (MP) - Lime stone mine (7.065 ha) at village – Harraiya, tehsil- Vijayraghogarh dist- Katni (MP)

This is a case of mining project with lease area of 7.065 ha. Listed at SN 1(a) category B. The EIA of the project was forwarded by the SEIAA to SEAC for appraisal and necessary recommendations. PP and his consultant presented the case before the committee. The submissions and the presentation made before the committee revealed following features of the project:

Back ground of project

Production Capacity	1,00,000, Tonne per Annum
Type of Mining	Open Cast / OFTM
Jurisdiction of Mine	Own Land
Public Hearing	15.07.2012
Khasara No	Old Khasara No. - 14 , 15/1 , 15/2, 16 New Khasar No – 10,77
Location of Mine	Village- Harriya , Tehsil- Vijayraghogarh, Dist.- Katni (MP)
Lessees	M/s Sukhdev Prasad Goenka Station Road, Katni
Lease Period	17.01.1989 to 16.01.2009

Environmental setting of project

Particulars	**Details**
Toposheet No.	63D/12
Latitude Longitude	24004'15" N 80037'55" E
General ground level	396 AMSL
Elevation range	Highest-400 m RL, Lowest- 394m RL
Nearest National Highway	None within 10km radius
Nearest Railway Station	Jhukehi - 17km
Nearest Airport	Jabalpur - 145km
Nearest Tourist Place	None within 10km radius

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Archaeological Important Place	None within 10km radius	
Ecological Sensitive Areas (Wild Life Sanctuaries)	None within 10km radius	
Reserved / Protected Forest within 10km radius	Hardua RF Bahjari RF Surma RF	- SE - 9.5km - SSW - 7km - WWS - 9.5km
Nearest Town / City within 10km radius	Kymore	- SW – 04 km
Village within 1 km area	None	
Nearest village	Dhanwahi	- SE - 1.5 km
Nearest River	Tones River Mahanadi	- NNW - 5km - S - 9.5km
Nearest Lake/ Ponds/Nallas	Jhadwan Nalla Jarjarar Nalla	- W - 0.5km - ENE - 4.5km
Nearest Hill Ranges	Kymore Hill	– N – 0.2km
Industry located within 10km radius	ACC Cement Works, Kymore Everest Industries Limited, Kymore	

Micro level features of 2km radius

PARTICULAR	**DETAIL**
Dhanwahi	Distance -1.5 km, Direction – SE, House Hold – 303, Population- 1509 no, Educational facility- Yes, Medical facility- No, Drinking water facility- Yes
Nawgaon	Distance -2.00 km, Direction – S, House Hold – 141, Population- 792no, Educational facility- Yes, Medical facility- Yes, Drinking water facility- Yes
Baihar	Distance -1.90km, Direction – NNW, House Hold – 80, Population- 383 no, Educational facility- Yes, Medical facility- No, Drinking water facility- Yes
Mine	4 no.
Surface water	Jhadwan Nalla- W-0.5km
Hill range	Kymore Hill – N – 0.2km

Conceptual plan

Items	**Existing**	**At the end of mine life**
Total lease area	**7.065ha**	
Total Mineable area	4.92 ha	
Ultimate depth of mining	2-15 mbgl	20 mbgl
Ultimate pit slope	45 degree	45 degree
Area under dumps	0.82 ha	Nil
Area under pits	3.80ha	4.92ha
Overburden quantity	68000cum	138000 cum
Area to be reclaimed	Nil	4.92 ha upto 2m
Infrastructure & Road	0.74 ha	0.74 ha
Mineral storage	Nil	Nil
Plantation	0.12 ha	1.405ha

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Water body	2.5ha	4.95ha

Method of Mining:

Mining Method	• Mining was being carried out by the open cast manual method of mining using hand tools such as spades, chisel, hammer etc. • Till date 3.80ha area has been developed with 2 to 6 benches. Four pits and one dug well are located in the area • Proposed mining operations will be carried out by opencast other than fully mechanized method of mining using heavy earth moving machineries. • Limestone will be loaded into the dumpers by loaders and will be transported to the railway siding. • Winning of mineral and handling of waste rock will be done by excavators.
Blasting detail	Spacing 1.20 m Burden 1.0m Depth of hole 1.5m Diameter of hole 35mm Powder factor 7 t. / Kg of explosive Charge per hole 250 gm
Water Consumption (Avg.)	Dust Suppression – 6 kl per day from mine pit water Domestic activity – 2 kl per day from hand pump & Dug well Green Belt - 2 kl per day from mine pit water
Water reservoir capacity	Existing – 2.5ha * 12m = 300000kl proposed – 4.92 ha * 15 = 738000kl

Details of Mining

Existing Pit Size			
PIT/TP	**Location**	**Size m**	**Logging m**
Quarry-1	Central	200 x 190x 2-15	0.0m -4.0m – Soil 4.0m – 11.0m - Limestone

Year wise development/ production for the first five years			
Year	**Soil (m3)**	**OB Waste (m3)**	**Prod. (t.)**
2nd	3960	600	11400
3rd	-	700	13307
4th	-	720	13680
5th	-	693	13167

During the first five year period working, following development will also be carried out

Retaining Wall: Waste will be kept in the eastern barrier zone and its stability will be maintained by constructing the retaining wall. Retaining wall will be made along the waste dumps which will be restrict/retain the loose particles. Height of retaining wall will be 0.50 m.

Garland drain: Proposal of garland drain around the working pit has been given. The garland drain will be drained according to the respective gradient. Length and depth of garland drain will be about 300m and 0.25m during first four year period.

Settling tank: Settling tank (20*10*2m) has been proposed in eastern boundary of lease area. All garland drain will join at settling tank.

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Salient features of the mining site

Particulars	Detail
Mining Lease Area	7.065 ha
Mineable Area	4.92 ha
Existing Pits & Quarries	3.80 ha
Existing Dumps & Mineral Storage	0.82 ha
Infrastructure	0.5 ha
Road	0.24 ha
Plantation	0.12 ha
Undisturbed Land	1.585 ha
Geological Reserve	2274440 tonnes
Recoverable Reserve	1104078 tonnes
Ultimate Pit Slope	45o
Proposed capacity of mines	100000 TPA
Expected Life of Mines	15 years from 2010
Lease Period	20 year upto 2029
Existing mode to transportation	By road up to railway siding
Dump area at the end of LP	Nil
Pit area at the end of LP	4.92 ha
Reclaimed area at the end of LP	4.92 ha upto 2m
Green belt area at the end of LP	1.405 ha
Water retaining body at the end of LP	4.92 ha
Average mRL	400-394AMSL
Ultimate Depth of Mining	20m bgl
Ground water table	22m bgl (372mRL) to 25m bgl (369mRL)

Environment Management Plan

Air pollution control measures

- It is proposed to carry out water spraying by the tanker.
- Considering the location of village i.e. Dhanwani at South East direction, and prominent wind direction, temporary dumping is proposed towards SW direction.
- Existing dumps has been stabilized with grasses and shrubs.
- Proposed Over burden will not be left active for longer period and will be used for reclamation purposes from 6th year onward.
- Proposed Over burden dumps will be temporary stabilized with legumes and grasses to prevent the erosion of soil and to arrest the dust emission during windy days.
- Water will be sprayed over the muck pile and dumps to reduced the dust generation;
- Dust mask will be provided to all workers.
- Regular maintenance of vehicles and machines will be carried out in order to control emissions;
- Water spraying at road to be used for transportation. The road is kuccha for 2 km.
- Plantation along both side the same road is also suggested, which prevent the dust emission may be generated from the transportation.

Noise pollution control measures

- Noise is considered as an occupational hazard. Blasting is impulsive event, which needs to be carried out in an isolated manner.

- No workforce shall be allowed during blasting time so that the workers are not exposed to impulsive noise level. The noise generating points will be enclosed to minimize the propagation of high noise intensity.
- The workforce working at the mining face, where high noise level is expected, will be provided with protective device for occupational safety.
- Apart from above, the formation of internal spoil dump and green belt development will also muffle the noise to a great extent.
- Regular maintenance of machines and vehicles hall be carried out.
- A barrier of green belt at mine boundaries will be made to reduce propagation of noise;

Water pollution control measures

- Nalla is located at 0.5 km away from the lease area in west direction. No dumps shall be created in same direction, to prevent the silt flow to the Nalla. The general slope in the lease area is in southern direction; hence water drainage pattern should also be towards the southern direction
- At the end of mining, no dumps shall be there and temporary dumps which will be used for backfilling shall be provided with the garland drain individually. Garland drain will be also constructed around the pit
- Retaining wall along with drain is proposed along the toe of the kymore hill in northern direction and the same drain will be connected to nalla.
- Retaining wall will be made along the waste dumps which will restrict/retain the loose particles.
- Length and depth of garland drain will be about 300m and 0.25m during first four year period.
- Settling tanks (20m*10*2m) are proposed in eastern part of the area. During lease period 4.92 ha area will be converted as a water reservoir.
- Quality of water of settling tank will be checked at pre-monsoon and post- monsoon.
- The accumulated water will be provided to farmers of the villages.

Solid waste management

- The overburden consists of surface soil. It is mixed grit and small pebbles. It is in loose form in the shape of chips and lumps.
- During the last mining period, 68000 m3 mine waste has been generated in the form of soil and mineral rejects, which has been dumped in the western direction, and covered 0.82ha area with 6m height. The thinly laminated phyllite (Chachri) intercalated within the limestone band and fines of limestone generated during mining will also form the waste material.
- 10000m3 soil will be generated, which will be used for plantation purpose and 60000m3 OB/mine waste as 5% siliceous murum will be generated which will be backfilled in excavated pit during lease period up to 2m.

Detail of year wise generation of OB/mine waste

Year	**Soil (m3)**	**O.B./M. Waste (m3)**
1st	3960	240
2nd	-	280
3rd	-	288
4th	-	277
Total:	**3960**	**1085**

Details of Proposed Dumps					
Year	**Quantity**	**Size in m.**	**Height**	**Angle of slope**	**Location**

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(A.P. Srivastava) **Member SEAC**

(S.C. Jain) **Chairman**

(V.R. Khare) **Member SEAC**

(R.K. Jain) **Member Secretary**

	m3	Length	width	m.		
1st	240	10	10	2.5	350	SW
2nd	280	11.2	10	2.5	350	SW
3rd	288	11.5	10	2.5	350	SW
4th	277	11.1	10	2.5	350	SW
Area covered by the proposed waste dumps 428m2						

SOCIO-ECONOMIC ENVIORNMENT

- The salient features of the study area are as follows:
- Total population of the villages in the study area is 58771
- The total no of household in the study area is 11252
- Sex ratio (no. of females per 1000 males) is 886
- The literacy rate in the study area is 38.57%
- The percentage of scheduled tribe in the study area is 24.75% while only 12.74% population is of scheduled cast
- Out of total population maximum people are workers i.e. 43.58% Followed by main workers 60.40% and marginal workers 39.60%.

Public Hearing

Public hearing was conducted on 15/07/2011. The proceedings of the public hearing were discussed at length. The public hearing was in general in favour of the project. About 07 persons have demanded that employment should be provided to the local residents and the wages should be as per the prevailing Govt. rules, for which the PP has agreed. Other demands from public such as plantation, supply of stone rejects etc. to the poor and needy was also accepted by the PP.

Budgetary provisions towards CSR activities:

Proposed Exp towards the Socio Economic activity	
Medical Checkup for villagers	Rs. 50,000/- per year
Drinking water Facility through hand pump in Dhanwani, Harriaya	Rs. 25000/- for each village
Provision of books, chairs, scholarships for schools at Dhanwahi, Harraiya and Naugawan	Rs. 25,000 for each school every year
Fund Fund Allocation for activities as proposed by Gram Panchayat	Rs. 50,000/- per year

Afforestation plan

ENVIRONMENT IMPACT & MANAGEMENT - Stage Wise Cumulative Plantation										
REQUIREMENTS OF PLANTS FOR AFFORESTATION/RECLAMATION										
Year	**Un-worked area green belt**		**Outside dumps**		**Inside Dumps**		Top soil dumps		**Total**	
	Area	**Trees**	**Area**	Trees	Area (Ha)	Trees	Area (Ha)	Trees	Area (Ha)	Trees
Present	0.12	200	-	-	-	-	-	-	0.12	200
1st to 4th	**1.285**	**1800**	**-**	**-**	**-**	**-**	**-**	**-**	**1.285**	**1800**
Total	**1.405**	**2000**	**-**	**-**	**-**	**-**	**-**	**-**	**1.405**	**2000**

After deliberations committee has asked the PP for submission of response to the following queries along with the supporting documents:

1. Information pertaining to the Corporate Environmental responsibility (CER) has to be furnished as per the MoEF Office memorandum dated 18 May, 2012

(V. Subramanian) **Member SEAC**

(K.P. Nyati) **Member SEAC**

(Dr Mohini Saxena) **Member SEAC**

(A.P. Srivastava) **Member SEAC**

(S.C. Jain) **Chairman**

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(R.K. Jain) **Member Secretary**

2. Final EMP incorporating the suggestions of the committee has to be submitted with signature and seal of the project proponent. The EMP should clearly mention the possible impacts and their mitigation measures as proposed.
3. Questionnaire prescribed by the MoEF for the mining sector has to be furnished.

3. Case no. 710/2012 – Shri Ajaypal Singh, Partner, M/s Khjraho Minerals, Toria House, P.O. & Distt. Chhatarpur (M.P) – Proposed expansion of Silonsaliya Pyrophyllite & diaspore Mine, crusher at khsra no. capartment no.- 558 forest range & div. Chhatarpur at Village silonsaliya tehsil Rajnagar, Distt. Chhatarpur (M.P) Proposed Cap- 25000 TPA (Existing Cap- 2000 TPA) Lease area- 5.0 Ha.

The project pertains to Item No. 1(a) category 'B' of the EIA Notification schedule, as the mining lease area of proposed mining project is less than 50 Ha. Hence it has to be appraised at SEIAA/SEAC of the state for grant of prior EC. The application and relevant documents were forwarded by the SEIAA to SEAC for scoping so as to determine TOR to carry out EIA /EMP.

Neither the 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. Hence the committee decided to call the PP in the meeting as per turn.

4. Case no. 69/2008 – Shri Vinod Kumar Shrivastava Burhagar, Sehora Road, NH-7, Jabalpur (M.P). Kurro Laterite & Manganese Mine Khasra No. 531, Village Kurro, Tehsil Sehora (M.P). Mining Lease area 7.30 Ha with proposed production capacity- 45,000 MT/Year.

This is case of mining and was admitted before the SEIAA for grant of prior EC to mine out Laterite mineral to the tune of 45000 MT/Year. The TOR was issued to carry out EIA vide letter dated 07/08/2008. Proponent submitted the final EIA report after getting the public hearing done. The EIA was appraised by SEAC in the ---- meeting dated --------. During it was observed by the committee that the EIA has been prepared for the mining of Laterite & Manganese minerals the Mining Plan submitted by the PP also consisted the mining of both the minerals. It was pointed out by the members of the committee that TOR was granted only for mining of Laterite hence it was suggested to the PP to first get the TOR revised covering both the minerals, accordingly the project proponent applied for revision of TOR to SEIAA. The application was forwarded to SEAC for scoping view of additional mineral in the project. Deliberations were made by the PP and his consultant before the committee. During presentation it was observed that the PP has already disclosed the mining of both the minerals in the public hearing. It was also pointed out by the committee members that the PFR consisted iron ore also however PP made it clear that it was quoted wrongly and only Laterite & Manganese ores are proposed to be mined out in the proposed project, an undertaking was also given by the PP in the meeting in this regard.

After deliberations committee has suggested following additional TORs' for the project:

1. The modified EIA should clearly spell out the production capacity of each of the minerals to be mined out yearly supported with documents..
2. Mine life viv-a-vis total deposits & production rate should be addressed clearly.
3. Chemical composition of both the minerals should be given.
4. Mode and route of transportation its impacts and proposed preventive measures should be addressed appropriately.
5. Public hearing may be exempted as it has already been conducted for the proposed project disclosing the mining of both the minerals.
6. The validity of the TOR shall be limited to only one year from the date of issue of this revised TOR.
7. All other terms and conditions of the earlier TOR have to be complied with.

(V. Subramanian)	**(K.P. Nyati)**	**(Dr Mohini Saxena)**	**(A.P. Srivastava)**
Member SEAC	**Member SEAC**	**Member SEAC**	**Member SEAC**

(S.C. Jain)	**(V.R. Khare)**	**(R.K. Jain)**
Chairman	**Member SEAC**	**Member Secretary**

5. Case no. 723/2012 - Lalpur limestone mine M.L. Area : 17.471 ha Village : Lalpur, Tehsil: Raghuraj Nagar, Distt: Satna (M.P) Proposed Capacity :– 0.20 MTPA. Project proponent- Shri Kamlendra Singh Village.- Lalpur, Post Siding Distt. - Satna (M.P)- Presentation for TOR

[Environmental Consultant - Grass Roots Research And Creation India (P)Ltd.]

This is a case of mining project with lease area of 17.471 ha. Listed at SN 1(a) category B. The EIA of the project was forwarded by the SEIAA to SEAC for appraisal and necessary recommendations. PP and his consultant presented the case before the committee. The submissions and the presentation made before the committee revealed following features of the project:

Background of the Project

- Originally the lease was granted in favour of Satna Stone & Lime Co. Ltd., up to 2000. The ML was cancelled by the Govt. of MP in year 2000, as the company defaulted on terms & conditions.
- The area was thrown open and notified for fresh grant under Mining Lease and the same was granted to the applicant vide state Government of M.P. no.-F3-21/2002/12/02 Bhopal Dated-09.12.2003 granted mining lease over the area for 30 years period. The mining lease was executed on 24.12.2003 for period upto 23.12.2033.
- It is proposed to start mining with the production capacity of 2,00,000 Tonnes of Limestone & Reject Stone

Project details

Location	Village : Lalpur Tehsil : Raghuraj Nagar District : Satna
Total Area	17.47 ha
Type of Lease Area / ownership	Agriculture Land & waste land
Cost of the Project	2.0 Crores
Mining Plan Approval	The Mining Plan has been approved by IBM. Mining scheme is under process of approval.

Road: The area can be approach by own conveyance or by buses plying on Satna- Shivpurwa PWD road upto Kaima (7kms) and then towards Sagma RS.
Railway Station: Nearest Railway Station is Sagma (2 km)
Airport:Khajuraho (125 km)
Nearest Town: Satna (7 km)
Dist. Headquarter: Satna (7 km)

Physiography

Elevation	:	320.4 m – 321.6 m AMSL
Ultimate depth of Mining:		15 m deep from existing surface level
Ground water table	:	25m bgl (No Ground Water Intersection)
Latitude	:	$24^0$37’46” to $24^0$38’02” North
Longitude	:	$80^0$50’35” to $80^0$50’57” East

Environmental Sensitivity

Simrawal Nadi	:	10 Km NE
Tons River	:	10 km SE
Badkar nalla	:	1.5 km East
Satna River	:	10 km SSW
Chuhar Nadi	:	9 km North
Open Mixed Jungle	:	9.5 km & 11km ESE

(V. Subramanian)	**(K.P. Nyati)**	**(Dr Mohini Saxena)**	**(A.P. Srivastava)**
Member SEAC	**Member SEAC**	**Member SEAC**	**Member SEAC**

(S.C. Jain)	**(V.R. Khare)**	**(R.K. Jain)**
Chairman	**Member SEAC**	**Member Secretary**

Salient Features of the project

Mining Methodology	Opencast other than fully mechanized
Total Mineable Reserve	Limestone-1.2 million tones Reject Stone-0.75 million tone
Total Waste Generation	3750 MT/month of solid waste (including soil and overburden)
Max. Rate of Production	0.2 MTPA
Anticipated Life of Mine	11 years
Water Requirement	20 m3/day
Dust suppression- 14.0 m3/day	Source- Ground water from dug wells / tube wells
Green belt- 2.0 (additional 2 cum of domestic waste)	
Domestic + Drinking- 4.0(2 cum will be reused for green belt)	

Mining Details

- Opencast other than fully mechanised method of mining is proposed in the lease area
- Drilling and controlled blasting of 32mm dia holes of depth 1.5m is proposed.
- The development and production will be done side by side
- Loading of OB by loader, loading of mineral by manual/HEMM means and transport by trucks or dumpers
- Average height of the bench in OB will be maintained at 1.5 m and in limestone & Reject Stone will be 6m and width will be 1.5 to 10m in both OB and Ore
- Total waste generation during life of mine is about 412500 MT
- The total waste generated is in the form of OB and Soil

Use of mineral- The Limestone of the lease area is of BF grade mainly and cement grade. The mineral is intended for sale to Steel plants and cement plants and other similar plants in India.

- The overburden generate will be utilised for preparation of protective bund besides temporarily stacking in form of external dump within the mine lease area and will be backfilled in the mined out pits after reaching full depth of mineralisation
- Transportation will be done through dumpers or trucks operating on diesel

Proposed Plantation Scheme

A	B	C			D	Species to be planted
Year	Plantation during the year (No. of sapplings)	Area covered during the year			Survival rate%	Neem, Gulmohar, Mango, Sagwan, Shisham, Kachnar, Gamhar, Jamun, Agaves, Babool, Sub-babool, Karanj and Amla etc
		Area Nos. Area (sqm)	Dumps Nos. Area (sqm)	Green belt . Area (sqm)		
Lease Period	11640	9000/ 45000	Nil	2640/ 1300	80	

(V. Subramanian) **Member SEAC**

(K.P. Nyati) **Member SEAC**

(Dr Mohini Saxena) **Member SEAC**

(A.P. Srivastava) **Member SEAC**

(S.C. Jain) **Chairman**

(V.R. Khare) **Member SEAC**

(R.K. Jain) **Member Secretary**

Budgetary provisions:

Description	Cost in Rs.
Land cost expenditure	25,00,000.00
Cost of infrastructure, Equipment, vehicles, Manpower, machineries, etc.	155.000.00.00
Environnemental protection (check dam etc)	10,00,000.00
Socio-economic development	10,00,000.00
TOTAL	2,00,00,000.00

It was observed by the committee that the four projects with case no. 723/2012, 724/2012, 725/2012 & 726/2012 belong to two owners are located adjacent to each other hence a comprehensive study for all the four projects is required to assess the environmental impact and plan an effective EMP for the region as a whole. Accordingly, after deliberations committee has approved the proposed TOR of the PP with inclusion of following points in the TOR to carry out EIA / EMP applicable to all the four projects mentioned above:

1. Appropriate EMP has to be prepared and reported for the Sarkhal Nalla situated at 250 meters from the boundary from the lease area.
2. Separate EIA has to be prepared for every project i.e. Case no. 723/2012, 724/2012, 725/2012 & 726/2012 along with a comprehensive EIA for all the four projects.
3. Common CSR shall be prepared clearly indicating the contribution of the individual lease holders of the four projects. CSR should be planned keeping in view the Socio-economic and Environmental up-liftment of the region as a whole.
4. Separate Public Hearing shall be conducted for each of the four projects as per the guidelines of MoEF and other three projects and common CSR will be discussed in each public hearing besides the individual project..
5. Other standard TOR as prescribed by the MoEF shall be applicable.

6. Case no. 724/2012 - Bathia Kala Limestone & Reject Stone Mine M.L. Area : 11.311 ha, Village : Bathia Kala, Taluka: Raghuraj Nagar, Distt: Satna (M.P) - Proposed Capacity :– 0.5 Lac TPA (0.25 Lac TPA Limestone + 0.25 Lac TPA Reject Stone) Shri Kamlendra Singh Village.- Lalpur, Post –Siding, Distt. - Satna (M.P).- Presentation for TOR

[Env. Consultant- Grass Roots Research And Creation India (P) Ltd.]

This is a case of mining project with lease area of 11.311 ha. The activity is listed at SN 1(a) category B. The application submitted by the PP for obtaining prior EC was forwarded by the SEIAA to SEAC for scoping and approval/issue of TORs' to carry out EIA /EMP for the project. PP and his consultant presented the case before the committee. The submissions and the presentation made before the committee revealed following features of the project:

Background of the project

- Originally the lease was granted in favour of Satna Stone & Lime Co. Ltd., up to 2000. The ML was cancelled by the Govt. of MP in year 2000, as the company defaulted on terms & conditions.
- The area was thrown open and notified for fresh grant under Mining Lease and the same was granted to the applicant vide state Government of M.P. letter no- F3-21/2002/12/2 Bhopal Dated-09.02.2004 for 30 years period. The mining lease deed was executed on 09.07.2004 for period upto 08.07.2034.
- It is a new mine and proposed production is 0.50 Lac Tonnes per annum.

Project	**Bathia Kala Limestone & Reject Stone Mine**

Location	Bathia Kala village, Tehsil Raghuraj Nagar, District Satna, Madhya Pradesh State.
Total Area	11.311 ha
Type of Lease Area / Ownership	**Partly Govt. Revenue land and partly private Land**
Cost of the Project	1.50 Crore
Mining Plan Approval	Letter No. – MP/Satna/Limestone/M.plan-G-34/03.04 dated 08.12.2003

Road: The area can be approach by own conveyance or by buses plying on Satna- Shivpurwa PWD road upto Bathia Kala (8.50kms) and then towards Sagma RS.
Railway Station: Nearest Railway station is Sagma (2.50 km)
Nearest Town: Satna 8.5 Km
Dist. Headquarter: Satna 8.5 km
Physiography
Elevation: 320 m AMSL – 318.11 m AMSL
Ultimate depth of Mining: 15 m deep from existing surface level
Ground water table: 25m bgl (No Ground Water Intersection)
Latitude: $24^0$37'20" to $24^0$37'48" N
Longitude: 80^0 51'07" to $80^0$51'19" E
Environmental Sensitivity
Simrawal Nadi : 11 km North East
Tons river : 9.75 km due South East
Badkhar nalla : 1 km South East
Chuhar River : 8 km North
Satna River : 10 km SSW
Open Mixed Jungle : 9 km & 11km ESE
Salient features of the project

Mining Methodology		Opencast other than fully mechanized
Total Mineable Reserve		Limestone-0.40 million tones Reject Stone-0.25 million tone
Total Waste Generation		1000 MT/month
Max. Rate of Production		0.50 lacTPA (0.25 Lac TPA Limestone + 0.25 Lac TPA Reject Stone)
Anticipated Life of Mine		18 years
Water Requirement		8 m^3/day
Dust suppression	4.0 m^3/day	Source From sump and Ground water from dug wells / tube wells
Green belt - 2.0 m^3/day (additional 1m^3 will come from domestic waste)		
Domestic + Drinking - 2.0 m^3/day (1m^3 of domestic waste will be used for green belt)		

Mining Details
- Opencast other than fully mechanized method, drilling and blasting may be carried out with 32mm dia holes up to 1.5m depth.

(V. Subramanian) **Member SEAC**	**(K.P. Nyati)** **Member SEAC**	**(Dr Mohini Saxena)** **Member SEAC**	**(A.P. Srivastava)** **Member SEAC**
(S.C. Jain) **Chairman**		**(V.R. Khare)** **Member SEAC**	**(R.K. Jain)** **Member Secretary**

- The development and production will be done side by side
- The OB and ore will be excavated and loaded manually/ mechanically on dumpers.
- In OB/ Reject Stone , the development will be carried out in 1st bench of 1.5 m height on average. The width of the bench will vary from 1.5 m to 10m.
- Total waste generation during life of mine is about 1000 MT/Month.
- The total waste generated is in the form of OB and Soil
- The OB/waste generated will be utilized for backfilling besides utilization for preparation of the protective bund on which plantation will be raised.

Composition of Mineral:

CaO : 35-46 %
MgO : 2-4 %
Silica: 4- 10%

Use of Minerals:

The Limestone of the lease area is of cement grade. The mineral is intended for sale to cement plants. Thus, there is always a good demand for the mineral in the domestic market

- Sorting, sizing and loading of ore will be done by manually as well as by HEMM.
- Transportation will be done through dumpers or trucks operating on diesel

Proposed Plantation Scheme:

						pecies to be planted
ear	Plantation during the year (No. of saplings)	rea covered uring the year			urvival rate%	Neem, Gulmohar, Mango, Sagwan, Shisham, Kachnar, Gamhar, Jamun, Agaves, Babool, Sub-babool, Karanj and Amla etc. tress will be planted every year
		F Area os. rea (sqm)	umps os. Area (sqm)	reen belt os. rea (sqm)		
Lease Period	6750	6000/80000	il	50/3750	)	

Budgetary provisions:

Description	**Cost in Rs.**
Land cost expenditure	1,00,00,000.00
Cost of infrastructure, Equipment, vehicles, Manpower, machineries, etc.	40,00,000.00
Environmental protection (check dams etc)	5,00,000.00
Socio-economic development	5,00,000.00
TOTAL	1,50,00,000.00

Standard TOR as prescribed in the guidelines was proposed by the PP. After deliberations committee has approved similar TORs to the PP to carry out EIA / EMP as suggested in case no 723/2012 and reproduced below.

It was observed by the committee that the four projects with case no. 723/2012, 724/2012, 725/2012 & 726/2012 belong to two owners are located adjacent to each other hence a comprehensive study for all the four projects is required to assess the environmental impact and plan an effective EMP for the region as a whole. Accordingly, after deliberations committee has approved the proposed TOR of the PP with inclusion of following points in the TOR to carry out EIA / EMP applicable to all the four projects mentioned above:

6. Appropriate EMP has to be prepared and reported for the Sarkhal Nalla situated at 250 meters from the boundary from the lease area.
7. Separate EIA has to be prepared for every project i.e. Case no. 723/2012, 724/2012, 725/2012 & 726/2012 along with a comprehensive EIA for all the four projects.

(V. Subramanian) **Member SEAC**

(K.P. Nyati) **Member SEAC**

(Dr Mohini Saxena) **Member SEAC**

(A.P. Srivastava) **Member SEAC**

(S.C. Jain) **Chairman**

(V.R. Khare) **Member SEAC**

(R.K. Jain) **Member Secretary**

8. Common CSR shall be prepared clearly indicating the contribution of the individual lease holders of the four projects. CSR should be planned keeping in view the Socio-economic and Environmental up-liftment of the region as a whole.
9. Separate Public Hearing shall be conducted for each of the four projects as per the guidelines of MoEF and other three projects and common CSR will be discussed in each public hearing besides the individual project..
10. Other standard TOR as prescribed by the MoEF shall be applicable.

7. Case No. 725/2012- Bathia Kala Limestone & Reject Stone Mine M.L. Area : 17.082 ha Village : Bathia Kala, Taluka: Raghuraj Nagar, Distt: Satna (M.P) Proposed Capacity :– 0.5 Lac TPA (0.25 Lac TPA Limestone + 0.25 Lac TPA Reject Stone) Project proposal - Shri Ramanand Shukla Village.- Kaima Post –Siding Distt. - Satna (M.P). Presentation for TOR

[Env. Consultant: Grass Roots Research And Creation India (P) Ltd]

This is a case of mining project with lease area of 17.082 ha. Listed at SN 1(a) category B. The EIA of the project was forwarded by the SEIAA to SEAC for appraisal and necessary recommendations. PP and his consultant presented the case before the committee. The submissions and the presentation made before the committee revealed following features of the project:

Back Ground of the project:

- Originally the lease was granted in favour of Satna Stone & Lime Co. Ltd., up to 2000. The ML was cancelled by the Govt. of MP in year 2000, as the company defaulted on terms & conditions.
- The area was thrown open and notified for fresh grant under Mining Lease and the same was granted to the applicant vide state Government of M.P. letter no- F3-21/2002/12/2 Bhopal Dated-09.02.2004. The ML is sanctioned over the area for 30 years period. The mining lease deed was executed on 09.07.2004 for period upto 08.07.2034.
- It is a new mine, and proposed production is 0.50 Lac Tonnes per annum.

Project Details:

Location	Bathia Kala village, Tehsil Raghuraj Nagar, District Satna, Madhya Pradesh State.
Total Area	17.082 ha
Type of Lease Area / Ownership	Partly Govt. Revenue land and partly private Land
Cost of the Project	2.0 Crore
Mining Plan Approval	Letter No. – MP/Satna/Limestone/M.plan-G-24/03.03 dated 13.10.2003

Road: The area can be approach by own conveyance or by buses plying on Satna-Shivpurwa PWD road upto Bathia Kala (8.50kms) and then towards Sagma RS.

Railway Station: Nearest Railway station is Sagma (3.25 km)

Nearest Town: Satna 8.5 Km

Dist. Headquarter**:** Satna 8.5 km

Physiographic features:

Elevation : 320 m AMSL – 318.9 m AMSL

Ultimate depth of Mining : 15 m deep from existing surface level

Ground water table: 25m bgl (No Ground Water Intersection)

Latitude : $24^0$36’58” to $24^0$37’43” N

Longitude: $80^0$50’44” to $80^0$51’50” E

Environmental settings:

Simrawal Nadi: 11 km North East
Tons river: 9 km due South East
Badkhar nalla: 0.25 km South East
Chuhar River: 8 km North
Satna River : 10 km SSW
Open Mixed Jungle: 9 km & 11km ESE

Mining Details

- Opencast other than fully mechanized method, drilling and blasting may be carried out with 32mm dia holes up to 1.5m depth.
- The development and production will be done side by side
- The OB and ore will be excavated and loaded manually/ mechanically on dumpers.
- In OB/ Reject Stone , the development will be carried out in 1st bench of 1.5 m height on average. The width of the bench will vary from 1.5 m to 10m.
- Total waste generation during life of mine is about 1200 MT/Month.
- The total waste generated is in the form of OB and Soil.
- The OB/waste generated will be utilised for backfilling besides utilisation for preparation of the protective bund on which plantation will be raised.

Composition of Mineral:

CaO : 35-46 %

MgO : 2-4 %

Silica: 4- 10%

Use of Minerals:

The Limestone of the lease area is of cement grade. The mineral is intended for sale to cement plants.

Thus, there is always a good demand for the mineral in the domestic market

- Sorting, sizing and loading of ore will be done by manually as well as by HEMM.
- Transportation will be done through dumpers or trucks operating on diesel.

Proposed Plantation Scheme

A	B	C			D	Species to be planted
Year	Plantation during the year (No. of saplings)	Area covered during the year			Survival rate %	Neem, Gulmohar, Mango, Sagwan, Shisham, Kachnar, Gamhar, Jamun, Agaves, Babool, Sub-babool, Karanj and Amla etc. tress will be planted every year
		BF Area Nos. Area (sqm)	Dumps Nos. Area (sqm)	Green belt Nos. Area (sqm)		
Lease Period	13824	6700/33500	Nil	7124/35620	80	

Budgetary Provisions:

Sr. no.	Description	Cost in Rs.
1	Land cost expenditure	1,50,00,000.00
2	Cost of infrastructure, Equipment, vehicles, Manpower, machineries, etc.	40,00,000.00
3	Environmental protection (check dams etc)	5,00,000.00

(V. Subramanian) **Member SEAC**

(K.P. Nyati) **Member SEAC**

(Dr Mohini Saxena) **Member SEAC**

(A.P. Srivastava) **Member SEAC**

(S.C. Jain) **Chairman**

(V.R. Khare) **Member SEAC**

(R.K. Jain) **Member Secretary**

4	Socio-economic development	5,00,000.00
TOTAL		**2,00,00,000.00**

Standard TOR as prescribed in the guidelines was also proposed by the PP.

After deliberations committee has approved similar TOR to the PP to carry out EIA / EMP as suggested in case no 723/2012 and reproduced below

It was observed by the committee that the four projects with case no. 723/2012, 724/2012, 725/2012 & 726/2012 belong to two owners are located adjacent to each other hence a comprehensive study for all the four projects is required to assess the environmental impact and plan an effective EMP for the region as a whole. Accordingly, after deliberations committee has approved the proposed TOR of the PP with inclusion of following points in the TOR to carry out EIA / EMP applicable to all the four projects mentioned above:

11. Appropriate EMP has to be prepared and reported for the Sarkhal Nalla situated at 250 meters from the boundary from the lease area.
12. Separate EIA has to be prepared for every project i.e. Case no. 723/2012, 724/2012, 725/2012 & 726/2012 along with a comprehensive EIA for all the four projects.
13. Common CSR shall be prepared clearly indicating the contribution of the individual lease holders of the four projects. CSR should be planned keeping in view the Socio-economic and Environmental up-liftment of the region as a whole.
14. Separate Public Hearing shall be conducted for each of the four projects as per the guidelines of MoEF and other three projects and common CSR will be discussed in each public hearing besides the individual project..
15. Other standard TOR as prescribed by the MoEF shall be applicable.

8. Case no. 726/2012 - Hadbadpur Limestone & Reject Stone Mine M.L. Area : 20.623 ha Village : Hadbadpur, Taluka: Raghuraj Nagar, Distt: Satna (M.P) Proposed Capacity :– 0.5 Lac TPA (0.25 Lac TPA Limestone + 0.25 Lac TPA Reject Stone) - Project proponent - Shri Ramanand Shukla Village.- Kaima Post –Siding Distt. - Satna (M.P).

[Environment Consultant: Grass Roots Research And Creation India (P) Ltd.]

This is a case of mining project with lease area of 20.623 ha. Listed at SN 1(a) category B. The EIA of the project was forwarded by the SEIAA to SEAC for appraisal and necessary recommendations. PP and his consultant presented the case before the committee. The submissions and the presentation made before the committee revealed following features of the project:

Background of the project

- Originally the lease was granted in favour of Satna Stone & Lime Co. Ltd., up to 2000. The ML was cancelled by the Govt. of MP in year **2000**, as the company defaulted on terms & conditions.
- The area was thrown open and notified for fresh grant under Mining Lease and the same was granted to the applicant vide state Government of M.P. letter no- **F3-21/2002/12/2** Bhopal Dated- **09.02.2004** for **30 years** period. The mining lease deed was executed on **20.07.2004 for period upto 19.07.2034.**
- It is a new mine and proposed production is **0.50** Lac Tonnes per annum.

Project	**Hadbadpur Limestone Mine**
Location	Hadbadpur village, Tehsil Raghuraj Nagar, District Satna, Madhya Pradesh State.

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Total Area	20.623 ha
Type of Lease Area / Ownership	**Partly Govt. Revenue land and partly private Land**
Cost of the Project	5.0 Crore
Mining Plan Approval	Letter No. – MP/Satna/Limestone/M.plan-G-30/03.04 dated 17.10.2003

Road: The area can be approach by own conveyance or by buses plying on Satna-Shivpurwa PWD road upto Kaima (7 kms) and then towards Sagma RS.
Railway Station: Nearest Railway station is Sagma (0.5 km)
Nearest Town : Satna 7Km
Dist. Headquarter: Satna 7 Km

Physiography
Elevation : 323.15 m AMSL SW – 320.80 m AMSL NE
Ultimate depth of Mining : 15 m deep from existing surface level
Ground water table : 25m bgl (No Ground Water Intersection)
Latitude : $24^0$37'18" to $24^0$37'37" N
Longitude : $80^0$49'44" to $80^0$50'14" E

Environmental Sensitivity
Simrawal Nadi : 11 km North
Tons river : 10 km due South East
Badkhar nalla : 2.0 km South East
Chuhar River : 9 km North
Satna River : 9 km SSW
Open Mixed Jungle : NA

Salient Features of Mining

Ore to be mined		Limestone
Mining Methodology		Opencast other than fully mechanized
Total Mineable Reserve		Limestone-0.60 million tones Reject Stone-0.50 million tone
Total Waste Generation		1400 MT/month
Max. Rate of Production		0.50 lac TPA (0.25 Lac TPA Limestone + 0.25 Lac TPA Reject Stone)
Anticipated Life of Mine		22 years
Water Requirement		**8 m^3/day**
Activity	**Water requirement**	**Source**
Dust suppression	4.0 m^3/day	From sump
Green belt	2.0 m^3/day (additional 1m^3 will come from domestic waste)	
Domestic +	2.0 m^3/day (1m^3 of	Ground water from dug wells / tube wells

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Drinking	domestic waste will be used for green belt)	
Total	**8.0 m^3/day**	

Mining Details

- Opencast other than fully mechanized method, drilling and blasting may be carried out with 32mm dia holes up to 1.5m depth.
- The development and production will be done side by side.
- The OB and ore will be excavated and loaded manually/ mechanically on dumpers.
- In OB/ Reject Stone , the development will be carried out in 1st bench of 1.5 m height on average. The width of the bench will vary from 1.5 m to 10m.
- Total waste generation during life of mine is about 1400 MT/Month.
- The total waste generated is in the form of OB and Soil.
- The OB/waste generated will be utilised for backfilling besides utilisation for preparation of the protective bund on which plantation will be raised.

Composition of Mineral:

CaO : 35-46 %

MgO : 2-4 %

Silica: 4- 10%

Use of Minerals:

The Limestone of the lease area is of cement grade. The mineral is intended for sale to cement plants.

Thus, there is always a good demand for the mineral in the domestic market

- Sorting, sizing and loading of ore will be done by manually as well as by HEMM.
- Transportation will be done through dumpers or trucks operating on diesel.

A	**B**	**C**			**D**	**Species to be planted**
Year	**Plantation during the year (No. of saplings)**	**Area covered during the year**			**Survival rate%**	Neem, Gulmohar, Mango, Sagwan, Shisham, Kachnar, Gamhar, Jamun, Agaves, Babool, Sub-babool, Karanj and Amla etc. tress will be planted every year
		BF Area Nos. Area (sqm)	**Dumps Nos. Area (sqm)**	**Green belt Nos. Area (sqm)**		
Lease Period	13700	9800/49000	Nil	3900/19500	80	

Budgetary provisions:

Sr. no.	**Description**	**Cost in Rs.**
1	Land cost expenditure	4,50,00,000.00
2	Cost of infrastructure, Equipment, vehicles, Manpower, machineries, etc.	40,00,000.00
3	Environmental protection (check dams etc)	5,00,000.00
4	Socio-economic development	5,00,000.00
TOTAL		**5,00,00,000.00**

After deliberations committee has approved similar TORs to the PP to carry out EIA / EMP as

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suggested in case no 723/2012 and reproduced below

It was observed by the committee that the four projects with case no. 723/2012, 724/2012, 725/2012 & 726/2012 belong to two owners are located adjacent to each other hence a comprehensive study for all the four projects is required to assess the environmental impact and plan an effective EMP for the region as a whole. Accordingly, after deliberations committee has approved the proposed TOR of the PP with inclusion of following points in the TOR to carry out EIA / EMP applicable to all the four projects mentioned above:

1. Appropriate EMP has to be prepared and reported for the Sarkhal Nalla situated at 250 meters from the boundary from the lease area.
2. Separate EIA has to be prepared for every project i.e. Case no. 723/2012, 724/2012, 725/2012 & 726/2012 along with a comprehensive EIA for all the four projects.
3. Common CSR shall be prepared clearly indicating the contribution of the individual lease holders of the four projects. CSR should be planned keeping in view the Socio-economic and Environmental up-liftment of the region as a whole.
4. Separate Public Hearing shall be conducted for each of the four projects as per the guidelines of MoEF and other three projects and common CSR will be discussed in each public hearing besides the individual project..
5. Other standard TOR as prescribed by the MoEF shall be applicable.

9. Case No. 730/2012- Shri Tarun Kathuria, Director, M/s A.R. Infrastructure Private Ltd. 15, UGF, Indra Prakash Building, 21 Barakhamba Road, New Delhi – 110001 - Proposed group housing project at Moja Talavali Chanda, Distt. Indore, Madhya Pradesh

This is a housing project covered in the EIA notification at SN 8, as the built-up area is more than 1, 50,000 m^2 EIA report has to be prepared for the project and the project hence falls in category 8(b). The case was forwarded by the SEIAA to SEAC for scoping and appraisal. PP had submitted an EIA report along with the application and during meeting requested to consider the same; the additional TOR recommended by the committee can be addressed later. PP and his consultant presented the case before the committee. It was observed by the committee that the land for the project in question has been acquired by the PP from several owners through various agreements. But the project has been submitted under the name of only single company. Thus PP was asked to submit a 'Joint Venture' signed between all the land owners, document should spell out the responsibility for compliance of the conditions of EC and other Environmental legislations, only than the TOR can be issued. The submissions made by the PP revealed following salient features of the project:

Location features

S. N	Features	Description	Distance, Direction
1.	Nearest Railway Station	Lakshmi Bai Nagar Railway Station	8.17 km, SW
2.	Nearest Airport	Devi Ahillyabai Holkar Airport	13.74 km, WSW
3.	Nearest Highway	NH-3	0.36 km, West
4.	Nearest Sensitive Areas	Bloomberg Orchid Park	13.5 km,
5.	Nearest School	St.Xevier School	0.5 Km,
6.	Nearest Hospital	Bombay hospital	4.48 km,
7.	Water Body	Kshipra River	8km
8.	Nearest Temple	Hanuman Mandir	3.90 km,

Area statement

S.No.	Particulars	Area(in m^2)	Area (in Hectares)
1.	Total Plot Area	1,99,222.618	19.92
2.	Permissible Ground Coverage (@ 30 %)	59,766.78	5.97

3.	Proposed Ground Coverage (@ 30 %)	59,766.78	5.97
4.	Permissible FAR (@1.01%)	201,400.34	20.14
5.	Proposed FAR (@1.01%)	201400.34	20.14
	• Bungalow Zone	143,500.34	14.35
	• Residential Zone	52,500	5.25
	• Commercial Zone	5,400	0.54
6.	Landscape Area (@33.5%)	66,739.58	6.67
7.	Parking Area	49,645.12	4.96
	• Stilt	3,087.12	0.30
	• Basement	2450	0.24
	• Open	11,625	1.16
8	Built Up Area	206,937.46	20.69

Infrastructure details proposed in the project:

NO.	PARTICULARS	DESCRIPTION
	• Total water requirement • Domestic water requirement • Fresh water requirement	1,404.625 KLD 987.15 KLD 691 KLD
	Electricity Requirement and Source	3118 KVA , Madhya Pradesh State Electricity Board (MPSEB).
	Power back-up	2 no. of DG sets i.e. (1 x 125 KVA) (1 x 63 KVA)
	Total Population	9,470
	Solid waste Generation	4,485 kg /day
	Parking facilities: • As per MoEF bye-laws • As per M.P. bye-laws • Parking Proposed	 633 ECS 368 ECS 637 ECS

S.No.	Unit Type	.	PU	Total Population
1.	Residential including EWS			1325
				1290
			x3	1035
				1400
				370
				780
				780
				6,980
2.	Total Staff Conventional Shop & Club =120 +60			

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	Sector- B + Sector-C School Sector-B } = 70 Total = 250
3.	Visitors Conventional Shop & Club Sector- B + Sector- C } = 1000+ 600 School Sector- B } = 640 Total = 2,240
	,470

Waste water Management in the project:

No.	LIKELY IMPACT	MANAGEMENT / MITIGATIVE MEASURES
A)	DURING CONSTRUCTION PHASE	
	Source : Private Water Tankers Approx. Water Demand = 1,035 ML Waste Water Generation = 30 KLD (@ 45 lpcd/worker)	1. The site drainage shall be planned in such a way that there is no accumulation of waste water within the project area or in the vicinity of the site. 2. Mobile sulabh shauchalaya type toilets to be provided. Modular STP for Waste water generation will be provided in construction phase.
B)	DURING OPERATION PHASE	
	Source :Ground Water Total Water Demand = 1,404.625 KLD • Domestic water demand = 987.15 KLD • Horticulture = 412 KLD • DG Cooling = 1 KLD • Waste Water Generation = 849 KLD • Treated Sewage = 764 KLD	1. All urinals in toilets of convenient shopping area will have automatic flushing through sensing devices. 2. Flushing WC proposed to be low water consumption type. 3. The waste water will be treated in well designed Sewage treatment plant (STP 1,019 KLD), which will be provided by the proponent at the project site. 4. Drip and spray irrigation techniques will be employed for irrigation.

Solid waste Management: (During construction phase)

Solid waste during the construction phase would comprise mainly of:

- Separate stock piles for excavated top soil.
- Concrete debris with bits and pieces of steel.
- Packaging material.

Cement bags, waste paper and packing material (cardboard) will be sold off to recyclers. Unusable steel bits and pieces will be collected at site and sold. The construction debris will be re-used for filling the project premises.

Solid waste Management: (During operation phase)

S. No.	Category	Waste Generation per capita per day	Waste generated (kg/day)
1.	Residents	6,980 @ 0.55kg/day	3,839
2.	Staff	250 @ 0.25 kg/day	62.5

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3.	Visitors	2,240@ 0.15 kg/day	336
4.	Landscape waste	16.5 acres @ 15 kg/acre/day	247.5
	Total solid waste generated		**85 kg/day**

S. No.	Likely impact	Management / mitigation measures
1 2.	4,485 Kg/day of solid waste would be generated per day which can be categorized as follows: a) 60% bio-degradable waste b) 30% non-bio degradable c) 10% inert waste Periodic STP sludge	1. Adequate number of colored bins (green blue and dark grey) is proposed to be provided at strategic locations within the site. 2. The solid waste will be segregated at source & collected. 3. The inert solid waste will be stored temporarily within the project premises till it will disposed off till a govt. designated landfill site comes up in the area. 4. STP sludge is proposed to be used for horticultural purposes. Vermi-composting /disposed to MSW sites pit will be provided in secondary processing area getting surrounded with green muffler.

- Roof top rain water harvesting has been proposed for the recharge of ground water which would be accessible for regular cleaning.

After deliberations committee has agreed to issue additional TORs' to the PP with inclusion of following points in the report:

1. The TOR shall be issued only after submission of appropriate 'Joint Venture'
2. The PP is required to submit a 'Joint Venture' signed between all the land owners, the document should spell out the responsibility for compliance of the conditions of EC and other Environmental legislations, only than the TOR can be issued in name of the concerned person/ firm as per the said joint Venture. This JV document should be acceptable to the Registrar for the sale of the land belonging to different owners to any buyer, by the single person/firm as authorized under the joint venture.
3. The base-line data used in the submitted EIA report shall be validated / reviewed and necessary changes shall be made in the proposed EMP based on the projected impacts.
4. Green building concepts adopted in the project have to be highlighted separately in the report.
5. ECBC guidelines shall be applicable wherever required; the same have to be planned and presented in the EIA report.
6. Other TORs will be as per the standard TORs prescribed by the MoEF.

10. Case No. 731/2012- Sarkana Pyrophyllite & Diaspore Mine M.L. Area : 20.23 ha Village : Sarkana, Taluka: Bijawar Distt: Chhatarpur (M.P)- Proposed Capacity :– 55,000 TPA. Project proponent- M/s. Jindutt Minerals Pvt. Ltd. 6th km Sagar Road, Dhadari P.O. & District - Chhatarpur (M.P.) - Presentation for TOR

This is a case of mining project with lease area of 20.23 ha. Listed at SN 1(a) category B. The EIA of the project was forwarded by the SEIAA to SEAC for appraisal and necessary recommendations. PP and his consultant presented the case before the committee. The submissions and the presentation made before the committee revealed following features of the project:

Background of the Project:

- The ML area was previously sanctioned under mining lease for 20 years expiring on 15.10.1996. The lessee applied for renewal of mining lease for 20 years period under the provisions of Rule 24 of MCR 1960.
- The total ML area is 20.23 ha. Out of this 12.80 ha is forest land and rest 7.43 ha is Revenue land.
- The forest clearance was accorded by the Government of India, MoEF vide letter no.:- 8C/5/575/98-FCW dated 7.01.2000 and by the State Forest Department vide letter no.:-

5/41/98/10/3 dated 10.01.2000. The approval by the forest department has been given for 20 years period. Hence the State Govt. of M.P. vide order no.:- 14-198/98/12/1 dated 12/01/2000 renewed the ML area for 20 years period w.e.f. 16.10.1996 to 15.10.2016.

Project Details:

Location	Sarkana village, Tehsil Bijawar, District Chhatarpur, Madhya Pradesh State.
Total Area	20.23 ha
Type of Lease Area / Ownership	Government Revenue Land & Protected Forest Land
Cost of the Project	1.0 Crore
Mining Plan Approval	Letter No. – MP/Chhatarpur/Pyro./M.Sch-02/2010-11 dated 20.07.2010

Accessibility Details

Road: The lease area is 75 kms from distt.-Headquarter Chhatarpur in S-W direction via Bara Malhara(45 Km) on Chhatarpur- Sagar N.H.-75 and then 30 kms. towards Tikamgarh via Bhagwan and Ghuwara (21 km) and then taking right turn on approach road(9 km) to the lease area.
Railway Station : Nearest Railway station is Tikamgarh (40 km)
Nearest Town: Chhatarpur 75 km
Dist. Headquarter: Chhatarpur 75 km

Physiographic features

Elevation : 353m AMSL East– 286m AMSL North
Ultimate depth of Mining: Up to 290 m RL
Ground water table: 280 m to 282m m RL (No Ground Water Intersection)
Latitude: $24^0$35'27" to $24^0$35'44" N

Environmental Sensitivity

Seasonal Water Course	:	50 m North & North East
Bachhedi nalla	:	2 km North East
Dhasan River	:	4 km North
Sarkana PF	:	Within Mine Lease
Protected Forest	:	4.50 Km WNW

Salient Features of Mining

lining Methodology	Opencast other than fully mechanized
otal Mineable Reserve	24.50 Lac Tonnes
otal Waste Generation	5000 MT/month
lax. Rate of Production	55000 TPA
nticipated Life of Mine	50 years
/ater Requirement	10 m^3/day

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Dust suppression- 4.0 m^3/day Green belt- 2.0 m^3/day (additional $1m^3$ will come from domestic waste) Domestic + Drinking- 4.0 m^3/day ($1m^3$ of domestic waste will be used for green belt)	Source From sump and Ground water from dug wells wells

Mining Details

- Opencast other than fully mechanized method, Drilling and controlled blasting of 32mm dia holes of depth 1.5m is proposed.
- In order to prevent haphazard excavation of pits, the development has been proposed at one place in the quarry.
- The OB and ore will be excavated and loaded manually/ mechanically on dumpers.
- In OB/ Reject Stone , the development will be carried out in bench of height & width equal to 6 m each.
- Total waste generation during life of mine is about 5000 MT/Month.
- The total waste generated is in the form of quartzite etc.
- The OB/waste generated will be utilized for preparation of protective bund besides temporarily stacking in form of external dump within the mine lease area and will be backfilled in which plantation will be raised.

Use of Minerals:

- The mineral Pyrophyllite is used in handicraft industry, pesticides, Ceramic, Soap and detergents industry. The Diaspore will be used in refractory unit. The Pyrophyllite & Diaspore has a good potential market in the country as well outside country
- Sorting, sizing and loading of ore will be done by manually as well as by HEMM.
- Transportation will be done through dumpers or trucks operating on diesel

Proposed Plantation Scheme:

A						Species to be planted
Year	Plantation during the year (No. of saplings)	rea covered during the year			Survival rate%	Sheesham, Neem, Tendu, Kachnar & various fire-wood trees will be planted every year
		BF Area os. Area (sqm)	umps os. Area (sqm)	reen belt os. rea (sqm)		
Lease Period	)000	4000/70000	300/24000	.200/107300	)	

Budgetary Provisions:

S. no.	escription	Cost in Rs.
1	Land cost expenditure	Nil
2	Cost of infrastructure, Equipment, vehicles, Manpower, machineries, etc.	90,00,000.00
3	Environnemental protection (check dams etc)	5,00,000.00
4	Socio-economic development	5,00,000.00
TOTAL		1,00,00,000.00

The project involves forest land for which the PP has already obtained Forest Clearance a copy the same has been submitted by the PP.

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Standard TOR as prescribed in the guidelines was proposed by the PP. After deliberations committee has approved the proposed TOR of the PP with inclusion of following points in the TOR to carry out EIA / EMP:

1. The water requirement vis-à-vis water use has to be reviewed and has to be furnished in the EIA.
2. Detailed proposal for utilization of pit water in dust suppression has to be provided with estimations of accumulated water and pit capacity.
3. Drip-irrigation system for plantation has to be planned and accordingly the plan to be included in the related chapter of EIA / EMP.
4. Two minerals are proposed to be dug out; annual production capacities of each of the minerals have to be furnished.
5. Compliance of the consent conditions shall be obtained from the Regional Office of MPPCB and included in the EIA report.
6. All Env. Impacts from the activities shall be summarized and presented in EIA vis-à-vis mitigation measures proposed / adopted.

11. Case No. 734/2012- Shri S.P. Jain, Sr. Vice President (P&D). M/s Khiatan Chemicals & Fertilizers Ltd. 301-308, Apollo Arcade, 3rd Floor, ½ Old Palasia Indore (M.P) – 452018. Proposed Green Field Sulphuric Acid (500 MTPD), GSSP (3X400 MTPD) and captive Power Plant (5MW) production Units, Khaitan Chemicals & Fertilizers Ltd. at Village – Gudaholla, Tehsil- Javad, District – Neemuch (M.P) – <u>For TOR.</u>

[Envi. Consultant: M/s Asian Consulting Engineers Pvt. Ltd. 66, Hemkunt Colony, Nehru Palace New Delhi]

This is project pertaining to installation of- Sulphuric Acid (500 MTPD), GSSP (3X400 MTPD) and captive Power Plant (5MW) production Units. It is covered under EIA Notification at SN 5(a), B, at Village – Gudaholla, Tehsil- Javad, District – Neemuch (M.P) hence it has to be appraised by the SEIAA / SEAC for grant of prior EC. The case with supporting documents was forwarded by the SEIAA to SEAC for appraisal of the same. The case was placed before the SEAC in this meeting whereby PP and his consultant made a presentation of the EIA report and salient features of the project. The submissions and the presentation revealed the following features of the project:

Sl. No.	Particular	Detail
1.	Name of the Proponent	M/s Khaitan Chemicals and Fertilisers Ltd.
2.	Name of Consultant	M/s Asian Consulting Engineers Pvt. Ltd. Certificate No. NABET/EIA/1013/012
2.	Location of the Unit	KCFL Ltd, Gudaholla, Jawad, Neemuch, Madhya Pradesh.
3.	Proposed Capacity	SSP - 2×600 MTPD GSSP - 3×400 MTPD SA- 500 MTPD Captive Power plant – 5 MW
4.	Total Area	1,20,200 m2
5.	Estimated cost of the project	Approx. 100 cr.
6.	Permission from Ministry of Commerce and Industry	IEM No. 3060/ SIA/IMO/2011 dt. 27/09/2011.

Geographical settings of the proposed location:

Sl. No.	Particulars	Details
1.	Latitude and Longitude	24° 40’ 34.81” N and 75° 04’ 4.17” E
2.	Nearest city	Diken Town- 4.97 km

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3.	Nearest villages	Gurdhola Village -1.31 km Malgarh Village - 1.97 km Panoli Village - 2.00 km
4.	Nearest Railway station	Neemuch - 30.55 km
5.	Nearest Airport	Neemuch Airstrip - 30.55 km Nagda Airport - 140.93 km
6.	Nearest water bodies	Malgarh Dam : 1.0 km Morwan Dam: 7.58 km Chambleshwar Dam : 8.73 km
7.	Ecological Sensitive Area	No

Total Land Area Distribution

Sl. No.	Particulars	Details
1.	Total plot area	1,20,200 m2
2.	Total plant area	25,000 m2
3.	Utility building	9,500 m2
4.	Road	6,000 m2
5.	Area for future expansion and landscaping	79,700 m2

SSP manufacturing principle

- SSP is the product of reaction between sulfuric acid and phosphate rock.
- The Calcium fluoride present in the rock phosphate reacts with sulfuric acid and produces corrosive hydrogen fluoride gas. The HF reacts further with Silica and water (scrubber system) to produce hydro-fluo-sililic acid(recycled again or dilution of Sulfuric Acid).

Sulphuric Acid manufacturing principle

Molten sulphur is mixed with excess of air to form sulphur-dioxide. The catalytic oxidation of this sulphur-dioxide in presence of vanadium pentaoxide results in formation of sulphur trioxide. The sulphur trioxide when subjected to hydrolyses forms sulphuric acid.

Captive Power generation

The waste heat generated from the exothermic reactions while manufacturing sulphuric acid is proposed to be used in power generation for captive use.

Raw Material Requirement – following raw materials are being proposed:

S. No.	Name	Quantity
1.	Rock Phosphate	18833 MT/month
2.	Sulfur (or Sulphuric Acid)	4606 MT/month

Water Consumption

Plant	Requirement	Source
SSP	0.30 MT / MT	• Bore well.
GSSP	0.06 MT / MT	
SA	1.75 MT / MT	
Captive Power Plant	6 kg / kWh	
Domestic	25 kL / day	

Beside above the proponent had also submitted the proposed TOR to carry out EIA studies. After deliberations committee has approved the TORs to carry out EIA / EMP with inclusion of following points:

1. Analysis of Uranium shall be done in Rock phosphate used as raw material as well in the SSP through approved laboratory.

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(R.K. Jain) **Member Secretary**

2. Use of agro waste has been proposed in the project- type, quantum and source of such agro-wastes have to be detailed in the report
3. The design parameters of the furnaces / boilers have to detailed in the report justifying the use of proposed fuel in the same. Besides, and Air Pollution Equipments may be proposed for installation, accordingly.
4. COC of 10 has been proposed for the cooling tower; the same may be elaborated with mass balance and the regulated temperature.
5. The estimated quantum of SO_2 gas escaping per ton from the process of production of Sulphuric acid has to be calculated and furnished in the related chapter of EIA.
6. Permission from Central Ground Water Authority has to be obtained and furnished for abstraction of ground water, along with the Hydro-geological report of the region.
7. Use of RO has been proposed in the treatment plant. This may be justified in accordance to the proposal.

12. Case No. 680/2012- Shri Mukesh Mittal Director, M/s Liberty Urvarak Limited, 304, Bafna Tower – Opp. Fortune Lanmark Hotel, Vijay Nagar, Indore (M.P) 452010-Proposed Expansion of Single Super Phosphate Plant (300 MTPD SSP and 450 MTPD GSSP) Nimrani Industrial Area, Nimrani, Khargone, Madhya Pradesh. TOR issued vide latter dated 06/06/2012.

EIA Presentation.

[Env. Consultant: EQMS India Pvt. Ltd.]

This is project pertaining to product enhancement from 300 MTPD of SSP to 450 MTPD of GSSP. It is covered under EIA Notification at SN 5(a), B, hence it has to be appraised by the SEIAA / SEAC for grant of prior EC. The EIA report with supporting documents was forwarded by the SEIAA to SEAC for appraisal of the same. The case was placed before the SEAC in this meeting whereby PP and his consultant made a presentation of the EIA report and salient features of the project. The submissions and the presentation revealed the following features of the project:

Introduction

Item	**Details**
Existing Unit Proposed Expansion Project Post Expansion Product Total plant Area	SSP Plant : 300TPD GSSP Plant: 150 TPD, SSP-300 TPD; GSSP-450 TPD GSSP-600 TPD 31617 Sq. m
New/Expansion/Modernization	Expansion
Applicability of General Conditions	No
Location:	
Plot No.	413(A) Nimrani Industrial Area
Tehsil	Kasrawad
District	Madhya Pradesh
Nearest Highway	NH-3 [NNW]
Nearest railway station along with distance in Km	55 KM- Mhow Railway Station
Nearest town, city, District headquarters along with distance in Kms	Dhamnod-13 KM (NE)

Raw Material: Raw materials required for the manufacturing of proposed expansion of SSP and GSSP Single Super Phosphate:

Material	Quantity (MT/Day)	Source
Rock Phosphate	174	RSMM/IMPORTED
Sulphuric Acid (98% Conc.)	110	HINDUSTAN ZINC LTD
Water	66	FROM OUTSIDE SOURCES
Loose SSP for GSSP	450	By Process

Power: Total power requirement for the project will be approximately 18 units per Ton of SSP/GSSP produced. The power will be taken from M.P.P.K.V.V C.L. Small DG set is available for lighting purpose only.

Land Requirement:

Land	.m
Total Land	617
Green Area and Green development	433
Plant Area	89

Water: Total water requirement 141.88 KLD for the manufacturing of proposed SSP and GSSP products. During normal operation over all water demand will be 153 KLD. The ~142 KLD water will be used for Industrial purpose, 5 KLD for plantation and 06KLD for Domestic use. There will not be any additional water requirement for the expansion project. .

Manpower: The proposed unit will require the services of 95 nos. till its commissioning phase of which 35 personnel would be provided with direct employed and 60 personnel would be hired from nearby villages.

Area Breakup

Particular	Area (sq. m.)	Area (%)
Plant Area	1316	4.2
Storage Area	6773	21.4
Office	175	0.5
Green Area	2500	8.1
Paved Area & Parking	100	0.3
Roads	160	0.5
Future Expansion	75	0.2
Others	20518	64.8
Total	31617	100

Project Cost and Proposed Cost towards Environmental Protection:

- The total project cost of the proposed SSP\GSSP plant is Rs. 150 lacs crores. The total capital cost of air pollution control measures is Rs. 17.4 Lacs.
- The recurring cost for pollution control will be about 2 Lacs/ annum. In addition to that separate budget will be provided for greenbelt development within the premises.

Reported features within 10 Km radius

- No national park or wild life sanctuary.
- No reserved forest (RF) & protected forest (PF).
- No sensitive receptor.

Impact assessment revealed following:

(V. Subramanian) **Member SEAC** | **(K.P. Nyati)** **Member SEAC** | **(Dr Mohini Saxena)** **Member SEAC** | **(A.P. Srivastava)** **Member SEAC**

(S.C. Jain) **Chairman** | **(V.R. Khare)** **Member SEAC** | **(R.K. Jain)** **Member Secretary**

- Maximum 24 hourly average incremental maximum GLC of SPM and F due to existing plant is 3.756 µg/m^3 and 0.268 µg/m^3 respectively.
- Maximum 24 hourly average incremental maximum GLC of SPM and F due to Proposed project is 3.892 µg/m^3 and 0.235 µg/m^3 respectively.

Wastes generation & disposal plan as proposed by the PP:

It was reported that following hazardous wastes are expedted to generate from the process:

Expected Hazardous Waste	Annual quantity (Approx)	Proposed Disposal Mode
Silica From Wet Scrubber	188 MTA	Silica sludge is being collected in proper and is being used a filler in our product Single Super Phosphate
Hydro Fluoro silicic Acid	6022 KL/Annum	Being recycled in the process in acidulation section/Sales to registered recycler, hence maintaining Zero discharge (zero effluent system)
Spent Oil	0.20 KL/Annum	Utilized inside plant

- There will be no major source of hazardous waste generation due to the proposed project.
- Annual generation of Spent Oil will be approximately 0.20kla In addition to that, Silica Sludge (188 MT per annum) & Hydro fluoro Silicic acid (6022 KL per annum) will be generated which will be reused in the process or sold in the market.
- Spent Oil will be reused or sold to the approved recyclers.
- Coal ash will be sold to brick manufacturers.

Budgetary provisions towards the Corporate Social Responsibility

Year	Budget	Plan
2012-2013	5.0 Lacs	Kisan mela, Health camp, Soil testing
2013-2014	5.0 Lacs	Mobilization of farmer groups, training/exposure visit of farmers improving their Participation in technology dissemination process.
2014-2015	5.0 Lacs	Agri-Exhibitions, Regional Fairs, Krishi Expos, Rewards and Incentives, Farmer Awards, and Monitoring

Environment Management Cell – has been proposed in the project comprising a Managing Director, General Manager, Chemist and an Operator.

After deliberations Committee has asked the PP for submission of response to the following queries along with the supporting documents:

1. Analysis of Uranium in the Rock Phosphate intended to be used as raw material and in the product has to be got done from an authorized laboratory for the purpose and to be submitted .
2. Possible negative impacts and their mitigation measures with respect to Air, Water, Soil and Noise environment to be to be detailed in EMP.
3. A certificate certifying the authenticity of the data used in the report and owing the responsibility has to be furnished.

The next month's meetings were decided for 11th &12th September 2012.

**** The meeting ended with thanks to the Chair ****

(V. Subramanian) **Member SEAC**

(K.P. Nyati) **Member SEAC**

(Dr Mohini Saxena) **Member SEAC**

(A.P. Srivastava) **Member SEAC**

(S.C. Jain) **Chairman**

(V.R. Khare) **Member SEAC**

(R.K. Jain) **Member Secretary**