

**MINISTRY OF ENVIRONMENT & FORESTS  
(IA DIVISION)**

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**SUMMARY RECORD OF 15<sup>th</sup> MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.**

The 15<sup>th</sup> Meeting of the Reconstituted Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) of the Ministry of Environment and Forests was held during **16<sup>th</sup> & 17<sup>th</sup> December, 2013**. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the Agenda Items was taken up ad-seriatim.

**Item No. 1:**

**1.1 Confirmation of the minutes of the 14<sup>th</sup> EAC Meeting.**

The Minutes of the 14<sup>th</sup> Meeting of EAC held on **November 20-22, 2013** were confirmed and circulated.

**Agenda Item No. 2:**

**2.1 Kotapadu Limestone Mine (ML area 234.032ha and production capacity of 2.14 MTPA) by M/s Dalmia Cements (Bharat) Ltd. at village Kotapadu, in Kolimigundla Madal, in Kurnool District, Andhra Pradesh. (Consultant: M/s. Environmental System Consultants & Ambiente Lab Solutions Private Limited, Chennai)- Environmental Clearance.**

The proposal is for captive limestone mine 234.032 ha ML area with production capacity of 2.14 MTPA by M/s Dalmia Cement (Bharat) Ltd. The proposed project is located in Village Kotapadu, in Kolimigundla Mandal, in Kurnool District, Andhra Pradesh. The proposed captive mine is covered in the survey of India Toposheet No. 57 I/4 and lies between N 15°04'07.6" - 15°05'40.9" Latitude and E 78°08'47.1" - 78°10'53.8" Longitude.

The proposal was considered by the Expert Appraisal Committee (Industry) in its meeting held during 8-9<sup>th</sup> April 2009 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. TOR, for mine, was issued by MoEF vide letter no. J-11015/35/2009-IA.II (M) dated 30<sup>th</sup> April 2009. The Mining Lease comprises of 234.032 ha. The entire area is non-forestland.

Mining Plan has been approved by Indian Bureau of Mines vide Letter No. MP/AP/KNL/Lst-134-SZ dated 19.02.2007 in favour of M/s Eswar Cements. M/s Eswar Cements Private Limited (ECPL) has since been amalgamated with M/s Dalmia Cement (Bharat) Limited (DCBL) under Sections 391 & 394 of the Companies Act, 1956 through the Scheme of Amalgamation as duly approved by the Hon'ble High Court of Judicature, Andhra Pradesh at Hyderabad on 3<sup>rd</sup> November 2008 in Company Petition No. 67 of 2008.

The mine working will be carried out by conventional opencast fully mechanized mining method involving drilling, blasting, loading and transportation of the excavated

material. Deep hole blasting will be carried out with slurry explosives/ ANFO. Non-electric initiation system (NoNel) of blasting with appropriate delay detonators will also be used for minimizing ground vibrations. The height of the benches will be maintained at 8-9.0 m. Width of the bench will be 30 m. The slope of the individual benches will be maintained 10<sup>0</sup>-15<sup>0</sup> to the vertical. The excavated material will be loaded into the 20/35 tonnes capacity Tipplers. Mining will not intersect the ground water table.

The total estimated mineable reserves are 69.73 million tonnes. Anticipated life of mine at proposed capacity will be approximately 35 years. 11,277 m<sup>3</sup> of topsoil and 1,83,244 m<sup>3</sup> of over burden will be removed during the first five years and 1.49 million tonnes top soil and 5.06 million tonnes solid waste will be generated during the entire life of mine. The average height of topsoil dump shall be about 2.5 meter and overburden 6 m. Topsoil shall be dumped in 7.5 m safety zone along the lease area and overburden will be stacked as dumps earmarked on the plan. Out of 234.032 ha of the proposed mining lease area, around 210 ha of land will be mined. Out of 210 ha of land, 31.38 ha of land will be backfilled and the remaining 178.62 ha of land will be converted into a reservoir.

The total water requirement for the project will be 70 m<sup>3</sup>/day. This requirement will be met initially from borewells and after development of the mine pit, DCBL will augment the mine pit water for meeting the requirement. The mine working will not intersect ground water Table. However, hydrology study has been carried out. It was reported by proponent that there is no Wild Life Sanctuary or National Park or Biosphere or Hotspots within the study area of 10 km. Belum cave is about 4.5 km from the proposed mine towards NW.

Baseline studies were carried out during Post Monsoon Season-2012 (October, November and December 2012). Ambient air quality was monitored at twelve different locations. On the whole, the prevailing ambient air quality within the study area is well within the NAAQS standard.

The Public Hearing for the project was conducted near Anjaneya Swami Temple, Meerjapuram Village, Kolimigundla Mandal, Kurnool District in A.P. on 23.04.2013. The Public Hearing was conducted under the Chairmanship of Joint Collector and Additional District Magistrate, Kurnool District. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included increased land price, establishment of a cement plant in the area, job opportunities for local people, land for cattle grazing, social welfare activities for the local villages like educational & medical facilities, roads, construction of temple, library facility, water tankers, ambulance facilities, etc. As per the villager's requirements, it was informed by PP that they would take care of all these issues. PP also informed that a budgetary provision of Rs. 2.75 Cores. is allocated under CSR to adhere with the issues raised.

The Project Cost is Rs. 55 Crores. An amount of Rs. 23.30 lakhs has been earmarked for Pollution Control Measures and about Rs.9.00 lakhs/annum as Recurring Cost. It was reported by the PP that there is no court case/litigation pending against the project and there are no violations.

After deliberations, the Committee sought the following additional information:

- i. Documents from Company Law Board supporting merging of M/s Eswar Cements with M/s Dalmia Cement (Bharat) Ltd.

- ii. Scheme for Rain water harvesting within Mine lease during initial years of operation in addition to those proposed during conceptual phase and during mining operation (with reference to TOR point no 17).
- iii. Details of Re-habilitation & Re-settlement.
- iv. Belum caves are located at a distance of 4.5 km from core zone. A detailed report on impact of mining activity on these caves shall be submitted.

The aforesaid information was submitted by PP on the same day in the meeting. The PP submitted following:

- i. Documents from Company Law Board supporting merging of M/s Eswar Cements with M/s Dalmia Cement (Bharat) Ltd.
- ii. Rain Water Harvesting will be carried out in the low lying area of the Lease during initial years of operation. In the Mine lease, there are some old pits (area 13.86 ha) which will be used for storing of rain water during operational phase. Estimated water available for recharge would be 3,44,610 m<sup>3</sup> per annum (Considering annual avg. rainfall of 735 mm). Expected augmentation of ground water will be about 20% of stored water. About 15 to 20% is expected by loss due to evaporation and balance shall be utilized for different activities. Additionally, all buildings in the Mine will be provided with rainwater harvesting arrangement to harvest the rainwater.
- iii. It was reported by the PP that there is no human habitation within the mine Lease boundary or its close vicinity. Hence no direct re-habilitation plan is envisaged. The area is owned by 102 Pattadars. In order to provide meaningful mean of livelihood and settlement of the land owner, an appropriate program on the basis of NBA study was carried out; the PP confirmed that for the benefit of the local people with special emphasis to land oustees, they have identified various support programs and schemes for their sustainable livelihood.
- iv. Several studies have been conducted by different reputed organisations like IBM, CIMFR for similar situations, in which it was concluded that as the distance increases vibration goes on decreasing and at a distance of more than 500 mts from blast site, vibration level is nil or < 5mm/sec. IBM, in its study, has also concluded that at maximum explosives charge per delay 150 kg the peak particle velocity arrived is only 2.27 mm/sec at a distance of 0.380 km, which is well within the permissible limits of 5mm/sec. However, to minimize impact of vibration following measures will be adopted:
  - a. Ground vibrations shall be continuously monitored during Blastings using a Minimate Seismograph.
  - b. For normal charge, the Peak Particulate Velocity (PPV) shall be well within the limit value of 12.5 mm/sec fixed for mines.
  - c. Blasting shall be carried out using optimum burden, charge and milli second delay detonators.
  - d. As the distance increases the PPV value reduces. The ground vibrations generated by blasting during mining operation will be well within the standards prescribed by DGMS by controlled blasting.
  - e. By adopting controlled blasting, the problems will be minimal at mines. The impacts are also minimized by choosing proper detonating system, optimizing total charge and charge/delay, use of Non-electric system of blasting etc. and there will be no effect on Belum Caves.

Based on the information submitted, presentation made by the proponent and discussions held, the Committee **recommended** the proposal for environmental clearance.

## **2.2 Proposed Silica Sand Mine of M/s Hanuman Minerals, Village Loddipalli Mandal Orvakal, District Kurnool, A.P. (153.097ha) (65000TPA) (Pioneer Enviro Laboratories & Conustants Pvt. Ltd.)- Environmental Clearance.**

The proposal is for Open cast manual mining of Silica sand proposed by M/s Hanuman Minerals at Survey No.s 270, 273, 275, 279/a, 278/b, 282/a & 284, Village Loddipalli, Mandal Orvakal, District Kurnool, Andhra Pradesh (153.097 ha). The Latitude and Longitude of the site is 15° 40' 50.0" N and 78° 09' 0.0" E.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 28 - 30<sup>th</sup> of September, 2010 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/267/2010-IA.II (M) dated 25.10.2010. The requested for extension of TOR validity was considered by the EAC in its meeting held during 20- 22<sup>nd</sup> February, 2013 to extend the TOR validity. TOR validity extension letter was issued by MoEF vide letter no. J-11015/267/2010-IA.II (M) dated 20.03.2013

The mine lease area is 153.097 Ha, which is Govt. waste land. The Mining plan is approved by Joint Director of Mines & Geology vide Mining plan approval Letter No. 4047 / MP - KNL / 09 dated 12-06-2009. In the MLA the quartzite- silica sand is exposed to surface completely and it is highly disintegrated, therefore, it was proposed to undertake open cast manual mining using crowbars, pick-axe and gammelas. The Silica Sand will be produced by cutting 1.25 to 2 m height benches, then pounding the quartzite with the help of hammers manually. The loose sand will be loaded manually into trucks. Normally the quartzite will be dispatched in lumps form directly to the glass industry. No further processing of material is proposed.

No waste generation is anticipated as entire material will be utilized. There will not be any Overburden / Top soil generation from the Mine activity. However 10 % of the production i.e. 6,500 TPA of Mineral waste is expected as handling losses. Water required for proposed mining activity will be 12 KLD and it will be met from Borewell / Mine pit. No intersection of mining activity with ground water table is anticipated. It was reported by the PP that there are no Wild Life Sanctuary/Tiger Reserve/National Park/Schedule I species etc. within 10 km of the mine lease area.

Baseline studies were carried out during Summer season 2013(March, April, May). All the parameters for water and air quality were within permissible limits. The Public Hearing for the Proposed Project was conducted behind A.P. Tourism Punnami Hotel, Pudicherla Village, Orvakal Mandal, Kurnool District, Andhra Pradesh on 07.08.2013 chaired by Shri. Sri K. Khanna Babu, IAS, Joint Collector and Addl. Dist. Magistrate, Kurnool District, Andhra Pradesh. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included that priority to local people in employment, effective implementation of measures to control dust pollution and not harm the nearby fields. As per the villager's requirements, it was informed by the PP that they would give priority to local employment and implement all the measures to control dust pollution. These have been incorporated in the Project Plan with budgetary provisions.

The cost of the project is Rs. 51.50 Lakhs. Cost for Environmental protection and

occupational health is Rs. 4.5 Lakhs. For CSR Rs. 25,000 / annum will be allocated. No court case is pending or any violation has been done in this proposed project

Based on the information submitted, presentation made by the proponent and discussions held, the Committee **recommended** the proposal for environmental clearance with additional specific conditions (i) The measures to prevent silicosis to the workers shall be taken, (ii) the available technical and personal measures to prevent or control the generation, release and dissemination of dust in the workplace shall be done (iii) *Tylophora indica* shall be propagated and planted in the green belt, and (iv) The funds for CSR shall be increased to 2% of the total turnover.

**2.3 Twenty six (26) proposals for Minor Mineral Mining of M/s Department of Industries & Commerce, Punjab (Grass Roots Research & Creation India (P) Ltd)– Reconsideration of EC.**

The fifty five (55) proposals for mining of sand/gravel (minor minerals) from various Districts of Punjab namely Patiala, Rupnagar, S.A.S. Nagar, Gurdaspur & Pathankot were considered for environmental clearances in 6<sup>th</sup> EAC meeting held during 16<sup>th</sup> to 18<sup>th</sup> April, 2013. The matter was further examined in the Ministry and out of these 55 proposals, 27 proposals were granted EC. It was observed that two sites namely Barhi Haveli (Rupnagar) & Jaswan (Pathankot) located on river bed of Satluj and Ravi respectively, whose details are listed below are located within 1km from the protected areas stated against each site:

- (i) Village Jaswan, Tehsil Pathankot, District Pathankot, Punjab for the production of 6.0 Lakh TPA for lease area of 45.0 ha. The mine is reported to be located adjacent to Kathlaur Kaushlian Wildlife Sanctuary.
- (ii) Village Barhi Haveli, Tehsil Rupnagar District Rupnagar, Punjab for the production of 27,078 TPA for mine lease area of 25.51 ha. The mine is reported to be located adjacent to Ropar Wetland.

In view of the above, as per the order of Supreme Court in Writ Petition (c) No. 202 of 1995 in matter of T.N. Godhavarman Thirumulpad Vs. Union of India and ors. which, inter alia, states that no mining activity can be allowed within 1 km distance of protected areas. Therefore, the above mentioned proposals for sand mining located at village Jaswan and Barhi Haveli were rejected.

In respect of twenty three proposals it was found that the public hearing was chaired by Sub-Divisional Magistrate/Tehsildaar/Naib Tehsildaar. As per EIA Notification, 2006, the public hearing has to be supervised and presided over by District Magistrate/ District collector/Deputy Commissioner or his or her representative not below the rank of Additional District Magistrate. Hence it was requested to conduct the public hearing afresh as per the procedure laid down in EIA Notification, 2006.

It was also observed that the following nine proposed sites are located in close proximity (within a distance of less than 1 km) to each other for which cumulative impact assessment study report was asked to be submitted. The details of the proposals are as follows:

S. No.	File No.	Cumulative Study Reports for Projects	Adjacent to
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1	J-11015/160/2012-IA.II(M)	River Bed Mining project at Shehar, Pathankot	River Bed Mining project at Bherian, Pathankot J-11015/160/2010-IA.II(M) <b>(EC Granted)</b>
2	J-11015/152/2012-IA.II(M)	River Bed Mining project at Chhan, Pathankot	
3	J-11015/164/2012-IA.II(M)	River Bed Mining project at Talwara Gujran, Pathankot	River Bed Mining project at Talwara Jattan, Pathankot J-11015/153/2012-IA.II(M) <b>(EC Granted)</b>
4	J-11015/145/2012-IA.II(M)	River Bed Mining project at Chharh-barh, SAS Nagar	River Bed Mining project at Salempur, SAS Nagar J-11015/159/2012-IA.II(M)
5	J-11015/148/2010-IA.II(M)	River Bed Mining project at Tiwana, SAS Nagar	River Bed Mining project at Jhajn, SAS Nagar J-11015/319/2010-IA.II(M)

On submission of information, the proposals were considered in the present meeting. The details of public hearing along with date, time, notification and the name of the officer who chaired/presided the public hearing for twenty three projects, district wise are as follows:

#### District Patiala

S. No	Site	Area (in ha)	Production (in tonnes)	Public Hearing Notification		Public Hearing held on		Chaired By Name/Designation
				English (Date)	Vernacular (Date)	Date	Time	
1	River Bed Mining project at Rajgarh	11.73	2.52 lakhs	The Times of India & Daily Post (09-08-13)	Jag Bani (09-08-13)	09-09-13	3:00 PM	Ms. Anindita Mitra (ADC)
2	River Bed Mining project at Nanheri	11.28	2.24 lakhs	The Times of India & Daily Post (09-08-13)	Jag Bani (09-08-13)	09-09-13	11:00 AM	Ms. Anindita Mitra (ADC)

#### District Gurdaspur

S. No	Site	Area (in ha)	Production (in tonnes)	Public Hearing Notification		Public Hearing held on		Chaired By Name/Designation
				English (Date)	Vernacular (Date)	Date	Time	
1	River Bed Mining	19.2	1.7 lakhs	Hindustan Times (09-08-	Daily Ajit (09-08-	09-09-13	11:00 AM	Sh S. P. Singh (ADC)

	project at Chak Ram Sahai		13)	13)		
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**District Rupnagar**

S. No	Site	Area (in ha)	Production (in tonnes)	Public Hearing Notification		Public Hearing held on		Chaired By Name/Designation
				English (Date)	Vernacular (Date)	Date	Time	
1	River Bed Mining project at Belaramgarh	105.22	1.76 lakhs	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	11-07-13	11:00 AM	Sh. S. P. Singh Brar (ADC)
2	River Bed Mining project at Bhallrhi	41.69	49,000	The Times of India & Daily Post (09-08-13)	Jag Bani (09-08-13)	11-09-13	11:00 AM	Sh. Gurtej Singh (ADC)
3	River Bed Mining project at Nangran	32.39	11,540	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	11-07-13	3:00 PM	Sh. S. P. Singh Brar (ADC)
4	River Bed Mining project at Raipur Sani	18.71	22,330	The Times of India & Daily Post (09-08-13)	Jag Bani (09-08-13)	09-09-13	11:00 AM	Sh. Amarjit Singh Shahi (ADC)
5	River Bed Mining project at Chandpur	61.44	81,000	The Times of India & Daily Post (09-08-13)	Jag Bani (09-08-13)	09-09-13	3:00 PM	Sh. Amarjit Singh Shahi (ADC)
6	River Bed Mining project at	26.01	88,500	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	12-07-13	11:00 AM	Sh. S. P. Singh Brar (ADC)

	Baihara			13)				
7	River Bed Mining project at Swarha	62.69	2.08 lakhs	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	12-07-13	3:00 PM	Sh. S. P. Singh Brar (ADC)
8	River Bed Mining project at Majri Sarsa	11.78	10, 300	The Times of India & Daily Post (09-08-13)	Jag Bani (09-08-13)	10-09-13	11:00 AM	Sh. Gurtej Singh (ADC)
9	River Bed Mining project at Lodhipur	10.97	17, 000	The Times of India & Daily Post (09-08-13)	Jag Bani (09-08-13)	10-09-13	3:00 PM	Sh. Gurtej Singh (ADC)

**District S.A.S. NAGAR**

S. No	Site	Area (in ha)	Production (in tonnes)	Public Hearing Notification		Public Hearing held on		Chaired By Name/Designation
				English (Date)	Vernacular (Date)	Date	Time	
1	River Bed Mining project at Tiwana	17.97	8, 160	Hindustan Times & Daily Post (09-08-13)	Ajit (09-08-13)	09-09-13	11:00 AM	Sh. Puneet Goyal (ADC)
2	River Bed Mining project at Sarangpur	29.3	42, 000	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	11-07-13	11:00 AM	Sh. Parveen Kumar Thind (ADC)
3	River Bed Mining project at Bahourh	42.91	1.28 lakhs	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	11-07-13	3:00 PM	Sh. Parveen Kumar Thind (ADC)

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4	River Bed Mining project at Ibrahim pur	13.29	30, 600	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	12-07-13	11:00 AM	Sh. Puneet Goyal (ADC)
5	River Bed Mining project at Bhankharpur	20.26	28, 000	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	12-07-13	3:00 PM	Sh. Puneet Goyal (ADC)
6	River Bed Mining project at Mubarik pur	27.78	56, 660	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	15-07-13	11:00 AM	Sh. Puneet Goyal (ADC)
7	River Bed Mining project at Chharbarh	5.59	23, 330	Hindustan Times & Daily Post (09-08-13)	Ajit (09-08-13)	09-09-13	3:00 PM	Sh. Puneet Goyal (ADC)
8	River Bed Mining project at Bhagwanpur	5.73	90, 000	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	15-07-13	3:00 PM	Sh. Puneet Goyal (ADC)
9	River Bed Mining project at Salempur	6.35	46, 600	Hindustan Times & Daily Post (11-06-13)	Ajit & Jag Bani (11-06-13)	16-07-13	11:00 AM	Sh. Parveen Kumar Thind (ADC)
10	River Bed Mining project	21.56	1.56 lakhs	Hindustan Times & Daily Post	Ajit & Jag Bani (11-	16-07-13	3:00 PM	Sh. Parveen Kumar Thind (ADC)

	at Hansala			(11-06-13)	06-13)			
11	River Bed Mining project at Jhajon	26.97	2.26 lakhs	Hindustan Times & Daily Post (09-08-13)	Ajit (09-08-13)	10-09-13	11:00 AM	Sh. Parveen Kumar Thind (ADC)

During the public hearing, the issues raised were regarding the compensation to be paid to the land owners, welfare of the village, maintenance of roads, doubt about the implementation of the scheme and overall management of the entire mining activities, commitment to which was submitted by PP as follows:

The common points raised along with the action plan prepared and budget allocated are given below:

S.No	Points Raised	Action Plan	Budget Allocation
1	Villagers have suffered a lot due to the illegal mining. We do not want to allow it to suffer more losses due to illegal mining.	The solution lies only with legal mining when carried out in a scientific way. This will suppress illegal mining and ensure better mining practice. The Punjab Minor Mineral Rules, 2013, Rules 72 to 76 in Chapter VII, provides enough legal and administrative action for transportation of minor minerals and prevention of illegal mining. Mining will be done as per the provisions made and restrictions imposed as covered in the Rules and EC conditions.	Fine will be imposed on such cases which violate the provisions of Punjab Minor Mineral Rules, 2013.
2	What is the monetary benefit for the villagers and the village panchayat.	As per the Punjab Minor Mineral Rules, 2013, (Rule 69 & 70), Environmental Management Fund (EMF) has been created which will be used for development of the area of the village.	An additional Amount equivalent to 10% of the contract value will be paid as per EMF (Environment Management Fund) to the Mining Officer which will be spent for the welfare of the village and other non-mining activities (as per Rule 69 of the PMMR 2013) which shall be

			utilized through the District Level Committee.
3	Problem of ground water level having gone very deep as mining is been done upto 40-50ft.	Under the scientific mining process the mining will only be done either 3m depth or up to the ground water table whichever comes first. Mining up to this depth will have no impact on the underground level of water going down in any way.	-
4	There is no passage to the mining sites; therefore the mining vehicles shall not be allowed to pass through the village as these will make roads in dilapidated conditions	Repairing of road will be done by the Contractors prior to the start of work and will maintain their condition at his own cost. A separate fund has also been allotted as Environment Management Fund for such works in and around the mining area. This will be under the supervision of Regulator.	As per PMM Rules, 2013, (clause No.69) 10% of the auction money value has been allotted for such activities.
5	Accidents due to trucks	Roads will be kept in good condition. Provisions like speed breakers, dust suppression and keeping the road leveled fortnightly, provision of electronic weigh bridges to keep a check on overloading will go a long way to set a right kind of environmentally sound transporting activity. A Committee (Members including from Panchayat) to check the vehicular movement within the village has been proposed to have a check on vehicular movement.	Weigh bridges will be set up by the contractors (As per Clause No. 82 of PMM Rules, 2013). A separate amount @ Rs. 15, 000/- per hectare will be kept as Environment Performance Guarantee Fund with the Director, DIC as an FD (Fixed Deposit) to ensure effective implementation of all stipulated environmental measures in the EIA report. PMMR 2013 and conditions mentioned in the Environment Clearance given.
6	The dust pollution created by transportation of vehicles on roads and by spillage of minerals from the trucks	This practice will no longer prevail as the loaded trucks will be made wet at the top before leaving the mine site, kept covered with tarpaulin, water sprinkling on the road for dust suppression and fortnightly scraping of road by bulldozer off accumulated	-

		dust will improve the entire scenario altogether.	
7	Children not able to cross or pass through roads because of narrowness of the roads and movement of dumpers/trucks .	The state government has proposal to provide warning signboards and speed breakers where the same are necessary for the safety of school children. Further alternate evacuation route will be planned for heavy loaded trucks so that it will cause least damage/ least affect to the residents. A Committee (members including from Panchayat) to check the vehicular movement within the village has been proposed to have a check on vehicular movement.	As per PMM Rules, 2013, 10% of the auction money value has been allotted (in conformance to clause No.69 & 70).
8	Petty compensation and its non-availability to owners of land.	The compensation will be paid by the contractors as per Punjab Minor Mineral Concession Rules, 2013 to the land owners.	Punjab Government has notified the Punjab Minor Mineral Rules, 2013, by which the land owners whose land will be utilized for mining purposes will be paid compensation i.e. an amount equivalent to one-third of the auction value will be paid by the contactors.
9	A number of people are needing mining activity as it provided them with jobs and livelihood even though under a difficult environment.	This is positive sign of requiring mining project to come up. The sand and gravel plays a pivotal role in the Construction Industry and the extraction of the minor minerals shall help channelize the river bed.	-
10	The general opinion of the public was that if it is ensured that the mining will be done in a scientific way, and proper compensation to the land	This is positive sign of requiring mining project to come up. The sand and gravel plays a pivotal role in the construction industry and the extraction of the minor minerals shall help to channelize the river bed.	An additional compensation amount (1/3rd of auction amount) will be given by the contractor to the land owner in lieu of damage to the land. An additional Amount equivalent to 10% of the contract value will be paid

	owners and the said amount of 10% will be utilized for non-mining activities for the village they will support the project.		as EMF (Environment Management Fund) which will be spent for the welfare of the village and other non-mining activities (as per Rule 69 of the PMMR 2013) through the District Level Committee.
11	Proper management of Environment Management Plan	<p>The division of responsibility has been allotted between the Operator &amp; Regulator which has been described in the responsibility matrix. Action will be taken as per the PMM Rules, 2013, (clause No. 57).</p> <p>For effective implementation of all environmental measures a Sub-Committee headed by an environmental engineer will monitor the site/quarry and will give its report twice a month to the District Level Environment Management Cell (DLEMC) headed by DC. The DLEMC will report to the State Level Environment Management Cell (SLEMC) once a month. The SLEMC, headed by the Chief Secretary will review the implementation of all stipulations made (as per Rule 66 of the PMMR 2013).</p>	An amount equivalent of Rs. 15000/- per hectare has been provided separately as EPG (Environment Protection Guarantee) Fund to ensure effective management of all aspects of environment in every measure proposed in the EIA report. This will make a paradigm shift from the illegal mining to a very effective process of mining with good practices.

As per the observation, the cumulative impact assessment study was undertaken considering the traffic scenario, level of service of the roads & fugitive dust emission. Based on this the mitigative measures like intensive spraying of water for dust suppression, repair & maintenance of evacuation routes & a proposal to form a Committee to ensure proper traffic movement has been made for the above mentioned projects.

The details of the 26 aforementioned proposals are as follows:

**1. River Bed Mining of Sand from River Ghaggar, located in Village Rajgarh, Tehsil Rajpura, District Patiala, Punjab (11.73 ha).**

The proposal is for environmental clearance for Tepla Sand Mining Project from the bed of River Ghaggar in Village Rajgarh, Tehsil Rajpura, District Patiala, Punjab for a production of 2.52 lakh TPA. The mine lease area is of 11.73 ha. The proposed mining area is reported lying between Latitude - 30° 24' 54.44" to 30° 25' 27.38" N and Longitude - 76° 44' 05.76"

to 76° 44' 25.40" E in topo sheet No. 53 B/11. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-6 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.78 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Rajgarh. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.75 lakh and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/41/2010-IA.II(M)] on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22729-*ghi* dated 28-12-2012. The Public hearing was held on 09.09.2013 at village Rajgarh, Patiala by Punjab Pollution Control Board chaired by Ms. Anindita Mitra (ADC), Patiala. Major issues raised by the Public were regarding, start of mining in the area, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

## **2. River Bed Mining of Sand from River Ghaggar, located in Village Nanheri, Tehsil Rajpura, District Patiala, Punjab (11.28 ha).**

The proposal is for environmental clearance for Tepla Sand Mining Project from the bed of River Ghaggar in Village Nanheri, Tehsil Rajpura, District Patiala, Punjab for a production of 2.24 lakh TPA. The mine lease area is of 11.28 ha. The proposed mining area is reported lying between Latitude - 30° 22' 26.84" to 30° 22' 51.06" N and Longitude - 76° 41' 32.87" to 76° 41' 52.57" E in topo sheet No. 53 B/11. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4-6 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.69 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Nanheri. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.70 lakh and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-

11015/44/2010-IA.II(M)] on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22731-*ghi* dated 28-12-2012. The Public hearing was held on 09.09.2013 at village Nanheri, Patiala by Punjab Pollution Control Board chaired by Ms. Anindita Mitra (ADC), Patiala. Major issues raised by the Public were regarding, compensation to the land owners, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

### **3. River Bed Mining of Sand from River Ravi, located in Village Chak Ram Sahai, Tehsil Gurdaspur, District Gurdaspur, Punjab (19.20 ha).**

The proposal is for environmental clearance for Chak Ram Sahai Sand Mining Project from the bed of River Ravi in Village Chak Ram Sahai, Tehsil Gurdaspur, District Gurdaspur, Punjab for the production of 1.7 lakhs TPA. The mine lease area is 19.20 ha. The proposed mining area is reported lying between Latitude - 32° 11' 5.23" to 32°11' 15.51" N and Longitude - 75° 21' 46.06" to 75° 22' 21.37" E in topo sheet No. 43P/8. An international boundary between India and Pakistan lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Kathlaur Kaushlian Wildlife Sanctuary lies within buffer zone of the mine at a distance of 9.5 km in North West direction. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5-7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.06 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Chak Ram Sahai. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.20 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2745-*ghi* dated 06-02-2013. The Public hearing was held on 09.09.2013 at village Chak Ram Sahai, Gurdaspur by Punjab Pollution Control Board chaired by Sh. S. P. Singh (ADC), Gurdaspur. Major issues raised by the Public were regarding, overloading of the vehicles, compensation to be paid to the land owners, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **4. River Bed Mining of Sand from River Ghaggar, located in Village Tiwana, Tehsil Dera Bassi, District SAS Nagar, Punjab (17.97 ha).**

The proposal is for environmental clearance for Tiwana Sand Mining Project from the bed of River Ghaggar in Village Tiwana, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 8,170 TPA. The mine lease area is of 17.97 ha. The proposed mining area is reported lying between Latitude - 30°27'41.83"N to 30°28'1.89"N and Longitude - 76°44'50.48"E to 76°45'26.67"E in topo sheet No. 43K/11 and 43K/15. An Interstate Boundary between Punjab and Haryana lies within 10 km radius of the mine lease area. No forestland is involved. Bir Bagarpura Protected Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.83 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Tiwana. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.10.2 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/148/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings at one site is exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22737-ghi dated 28-12-2012. The Public hearing was held on 09.09.2013 at village Tiwana, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Puneet Goyal (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. Cumulative study report, taking into consideration the traffic scenario along with level of service of the road as per IRC and fugitive dust emission has been submitted by the proponent.

#### **5. River Bed Mining of Sand from River Ghaggar, located in Village Sarangpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (29.30 ha).**

The proposal is for environmental clearance for Sarangpur Sand Mining Project from the bed of River Ghaggar in Village Sarangpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 44,000 TPA. The mine lease area is of 29.30 ha. The proposed mining area is reported lying between Latitude - 30°24'18.77"N to 30°24'55.57"N and Longitude - 76°54'15.44"E to 76°54'45.81"E in topo sheet No. 43A/15. An Interstate Boundary between Punjab and Haryana lies within 10km radius of mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary/Elephant Reserve

within 10 km from the boundary of the mine lease. Mine working will be manual. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.45 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Sarangpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.12 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref. No. J-11015/149/2010-IA.II(M)) on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22727-*ghi* dated 28-12-2012. The Public hearing was held on 11.07.2013 at village Sarangpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Parveen Kumar Thind (ADC), SAS Nagar. Major issues raised by the Public were regarding, mining procedure, employment, compensation to be paid to the land owners, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

## **6. River Bed Mining of Sand from River Ghaggar, located in Village Bahourhi, Tehsil Dera Bassi, District SAS Nagar, Punjab (42.91 ha).**

The proposal is for environmental clearance for Bahourhi Sand Mining Project from the bed of River Ghaggar in Village Bahourhi, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 1,28,877 TPA. The mine lease area is 42.91 ha. The proposed mining area is reported lying between Latitude - 30°34'5.54"N to 30°34'56.44"N and Longitude - 76°46'29.99"E to 76°46'32.92"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Bagarpura, Bir Baraul, Bir Dadrala and Bir Kheri Protected Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-Mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.1 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bahourhi. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.75 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/154/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible

limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22719-*ghi* dated 28-12-2012. The Public hearing was held on 11.07.2013 at village Bahourhi, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Parveen Kumar Thind (ADC), SAS Nagar. Major issues raised by the Public were regarding, weigh bridge, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **7. River Bed Mining of Sand from River Ghaggar, located in Village Ibrahimpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (13.29 ha).**

The proposal is for environmental clearance for Ibrahimpur Sand Mining Project from the bed of River Ghaggar in Village Ibrahimpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 30,600 TPA. The mine lease area is of 13.29 ha. The proposed mining area is reported lying between Latitude - 30°35'46.41"N to 30°36'0.46"N and Longitude - 76°47'47.46"E to 76°48'13.76"E in topo sheet No. 43A/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Dadrala Protected Forest, and Bir Bagarpura Protected Forests within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.72 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Ibrahimpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.28 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/154/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms at one site because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22721-*ghi* dated 28-12-2012. The Public hearing was held on 12.07.2013 at village Ibrahimpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Puneet Goyal (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **8. River Bed Mining of Sand from River Ghaggar, located in Village Bhankarpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (20.26 ha).**

The proposal is for environmental clearance for Bhankarpur Sand Mining Project from the bed of River Ghaggar in Village Bhankarpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 28,000 TPA. The mine lease area is of 20.26 ha. The proposed mining area is reported lying between Latitude 30°36'16.10"N to 30°36'48.35"N and Longitude - 76°49'7.45"E to 76°49'52.50"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Dadrala and Bir Bagarpura Protected Forest lie within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.02 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bhankarpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.25.2 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/157/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4464-*ghi* dated 11-03-2013. The Public hearing was held on 12.07.2013 at village Bhankarpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Puneet Goyal (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **9. River Bed Mining of Sand from River Ghaggar, located in Village Mubarikpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (27.78 ha).**

The proposal is for environmental clearance for Mubarikpur Sand Mining Project from the bed of River Ghaggar in Village Mubarikpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 56,667 TPA. The mine lease area is of 27.78 ha. The proposed mining area is reported lying between Latitude - 30°37'5.79"N to 30°37'29.12"N and Longitude - 76°50'59.98"E to 76°51'45.16"E in topo sheet No. 53B/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius from mine lease area. No forestland is involved. Bir Bagarpura, Bir Dadrala and Bir Kheri Protected Forest lie within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order

to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.15 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Mubarikpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.47 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/158/2010-IA.II(M)] on 28.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22735-ghi dated 28-12-2012. The Public hearing was held on 15.07.2013 at village Mubarikpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Puneet Goyal (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, employment etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **10. River Bed Mining of Sand from River Ghaggar, located in Village Chharh-Barh, Tehsil Dera Bassi, District SAS Nagar, Punjab (5.59 ha).**

The proposal is for environmental clearance for Chharh-Barh Sand Mining Project from the bed of River Ghaggar in Village Chharh-Barh, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 23,300 TPA. The mine lease area is of 5.59 ha. The proposed mining area is reported lying between Latitude - 30°30'10.77"N to 30°30'23.25"N and Longitude - 76°45'47.10"E to 76°45'53.68"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Bagarpura Protected Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7-9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.40 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Chharh-Barh. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.14 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms at one location because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan

which was approved by State Geologist, Director of Industries, Punjab vide letter number 4472-*ghi* dated 11-03-2013. The Public hearing was held on 09.09.2013 at village Chharh Barh, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Puneet Goyal (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, lowering down of ground water level etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. Cumulative study report, taking into consideration the traffic scenario along with level of service of the road as per IRC and fugitive dust emission has been submitted by the proponent.

#### **11. River Bed Mining of Sand from River Ghaggar, located in Village Bhagwanpur, Tehsil Dera Bassi, District SAS Nagar, Punjab (5.73 ha).**

The proposal is for environmental clearance for Bhagwanpur Sand Mining Project from the bed of River Ghaggar in Village Bhagwanpur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 90,000 TPA. The mine lease area is of 5.73 ha. The proposed mining area is reported lying between Latitude - 30°35'2.11"N to 30°35'12.38"N and Longitude - 76°54'0.03"E to 76°54'11.77"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Bagarpura, Bir Dadrala and Bir Kheri Protected Forest and Bir Pir Machhela Reserved Forest lies within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7-9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.40 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bhagwanpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.54 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1211-*ghi* dated 17-01-2013. The Public hearing was held on 15.07.2013 at village Bhagwanpur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Puneet Goyal (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **12. River Bed Mining of Sand from River Ghaggar, located in Village Salempur, Tehsil Dera Bassi, District SAS Nagar, Punjab (6.35 ha).**

The proposal is for environmental clearance for Salempur Sand Mining Project from the bed of River Ghaggar in Village Salempur, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 46,600 TPA. The mine lease area is of 6.35 ha. The proposed mining area is reported lying between Latitude - 30°30'22.42"N to 30°30'43.84"N and Longitude - 76°45'48.06"E to 76°45'57.12"E in topo sheet No. 43A/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Hansala Protected Forest, Bir Baraul Protected Forest and Bir Bagarpura Protected Forests within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.55 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Salempur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.42 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1209-*ghi* dated 17-01-2013. The Public hearing was held on 16.07.2013 at village Salempur, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Parveen Kumar Thind (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, bank protection, benefits to the villagers etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. Cumulative study report, taking into consideration the traffic scenario along with level of service of the road as per IRC and fugitive dust emission has been submitted by the proponent.

### **13. River Bed Mining of Sand from River Ghaggar, located in Village Hansala, Tehsil Dera Bassi, District SAS Nagar, Punjab (21.56 ha).**

The proposal is for environmental clearance for Hansala Sand Mining Project from the bed of River Ghaggar in Village Hansala, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 1, 56,000 TPA. The mine lease area is of 21.56 ha. The proposed mining area is reported lying between Latitude - 30°31'26.95"N to 30°32'2.63"N and Longitude - 76°46'5.45"E to 76°46'29.82"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. Bir Bagarpura, Bir Baraul, Bir Dadrala and Bir Kheri Protected Forest lie within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m

depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.1 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Hansala. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.122 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/321/2010-IA.II(M)] on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1207-*ghi* dated 17-01-2013. The Public hearing was held on 16.07.2013 at village Hansala, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Parveen Kumar Thind (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **14. River Bed Mining of Sand from River Ghaggar, located in Village Jhajon, Tehsil Dera Bassi, District SAS Nagar, Punjab (26.97 ha).**

The proposal is for environmental clearance for Jhajon Sand Mining Project from the bed of River Ghaggar in Village Jhajon, Tehsil Dera Bassi, District SAS Nagar, Punjab for the production of 2.26 Lakh TPA. The mine lease area is of 26.97 ha. The proposed mining area is reported lying between Latitude - 30°27'58.65"N to 30°28'43.30"N and Longitude - 76°45'34.34"E to 76°46'17.98"E in topo sheet No. 43K/14. An Interstate Boundary between Punjab and Haryana lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 7 - 9 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.1 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Jhajon. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.14 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF [Ref No.: J-11015/319/2010-IA.II(M)] on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire

catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2912-*ghi* dated 08-02-2013. The Public hearing was held on 10.09.2013 at village Jhajon, SAS Nagar by Punjab Pollution Control Board chaired by Sh. Parveen Kumar Thind (ADC), SAS Nagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. Cumulative study report, taking into consideration the traffic scenario along with level of service of the road as per IRC and fugitive dust emission has been submitted by the proponent.

#### **15. River Bed Mining of Sand/gravel from River Chakki, located in Village Belaramgarh, Nangal, District Rupnagar, Punjab (105.22 ha).**

The proposal is for environmental clearance for Belaramgarh Sand Mining Project from the bed of River Satluj in Village Belaramgarh, Tehsil Nangal, District Rupnagar, Punjab for a production of 1.76 Lakhs TPA. The mine lease area is 105.22 ha. The proposed mining area is reported lying between Latitude - 31°16'29.33"N and Longitude - 76°24'37.88"E in topo sheet No. 53A/7. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10 km radius of the mine lease area. No forestland is involved. There is Katarthar Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 9.5 km in East direction. The mine working will be opencast by semi-mechanized method without involving drilling and blasting. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 4.43 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Belaramgarh. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.144 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/369/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4433-*ghi* dated 08-03-2013. The Public hearing was held on 11.07.2013 at village Belaramgarh, Rupnagar by Punjab Pollution Control Board chaired by Sh. S. P. Singh Brar (ADC), Rupnagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, bank protection, mining process, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **16. River Bed Mining of Sand from River Soan, located in Village Bhallrhi, Nangal, District Rupnagar, Punjab (41.69 ha).**

The proposal is for environmental clearance for Bhallrhi Sand Mining Project from the bed of River Soan in Village Bhallrhi, Tehsil Nangal, District Rupnagar, Punjab for a production

of 49,000 TPA. The mine lease area is 41.69 ha. The proposed mining area is reported lying between Latitude - 31°17'34.20"N to 31°18'8.04"N and Longitude - 76°20'8.87"E to 76°20'35.03"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10 km radius of mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.97 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Bhallrhi. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs .40.10 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.:J-11015/365/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4425-*ghi* dated 08-03-2013. The Public hearing was held on 11.09.2013 at village Bhallrhi, Rupnagar by Punjab Pollution Control Board chaired by Sh. Gurtej Singh (ADC), Rupnagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, bank protection, maintenance of road etc.

### **17. River Bed Mining of Sand from River Soan, located in Village Nangran, Nangal, District Rupnagar, Punjab (32.39 ha).**

The proposal is for environmental clearance for Nangran Sand Mining Project from the bed of River Soan in Village Nangran, Tehsil Nangal, District Rupnagar, Punjab for a production of 11,542 TPA. The mine lease area is 32.39 ha. The proposed mining area is reported lying between Latitude 31°17'0.20"N to 31°17'30.75"N and Longitude - 76°20'41.11"E to 76°21'1.49"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be manual. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.41 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Nangran. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.18 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project

were issued by MoEF (Ref No.: J-11015/135/2010-IA.II(M)) on 28.02.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4670-*ghi* dated 14-03-2013. The Public hearing was held on 11.07.2013 at village Nangran, Rupnagar by Punjab Pollution Control Board chaired by Sh. S. P. Singh Brar (ADC), Rupnagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, employment, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

### **18. River Bed Mining of Sand from River Satluj, located in Village Raipur Sani, Anandpur Sahib, District Rupnagar, Punjab (18.71 ha).**

The proposal is for environmental clearance for Raipur Sani Sand Mining Project from the bed of River Satluj, in Village Raipur Sani, Tehsil Anandpur Sahib, District Rupnagar, Punjab, for a production of 22,300 TPA. The mine lease area is 18.71 ha. The proposed mining area is reported lying between Latitude - 31°13'22.41"N to 31°13'46.10"N and Longitude - 76°33'50.92"E to 76°34'8.48"E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 6 km in North West direction. The mine working will be opencast by manual method without involving drilling and blasting using hand tools like shovel, pan, sieve etc. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.88 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Raipur Sani. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.59.0 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/362/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22316-*ghi* dated 21-12-2012. The Public hearing was held on 09.09.2013 at village Raipur Sani, Rupnagar by Punjab Pollution Control Board chaired by Sh. Amarjit Singh (ADC), Rupnagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, bank protection, maintenance of

road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

### **19. River Bed Mining of Sand from River Satluj, located in Village Chandpur, Anandpur Sahib, District Rupnagar, Punjab (61.44 ha).**

The proposal is for environmental clearance for Chandpur Sand Mining Project from the bed of River Satluj in Village Chandpur, Tehsil Anandpur Sahib, District Rupnagar, Punjab for a production of 81,000 TPA. The mine lease area is 61.44 ha. The proposed mining area is reported lying between Latitude - 31°11'7.54"N to 31°11'35.61"N and Longitude - 76°30'32.11"E to 76°31'14.25" E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of mine lease area. No forestland is involved. There is Raipur Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 8 km in North direction. The mine working will be opencast by semi-mechanized method. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 2.91 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Chandpur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.67.04 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/367/2010-IA.II(M)) on 04.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4435-ghi dated 12-03-2013. The Public hearing was held on 09.09.2013 at village Chandpur, Rupnagar by Punjab Pollution Control Board chaired by Sh. Amarjit Singh (ADC), Rupnagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, mining process, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

### **20. River Bed Mining of Sand from River Satluj, located in Village Baihara, Tehsil Anandpur Sahib, District Rupnagar, Punjab (26.01 ha).**

The proposal is for environmental clearance for Baihara Sand Sand Mining Project from the bed of River Satluj in Village Baihara, Tehsil Anandpur Sahib, District Rupnagar, Punjab for a production of 29,500 TPA. The mine lease area is 26.01 ha. The proposed mining area is reported lying between Latitude - 31°12'57.08"N to 31°13'24.83"N and Longitude - 76°26'39.31"E to 76°27'3.41"E in topo sheet No. 53A/08. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It

was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of 8 km in North East direction. The mine working will be opencast by manual method without involving drilling and blasting using hand tools like shovel, pan, sieve etc. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 1.26 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Baihara. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.51.22 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/352/2010-IA.II(M)) on 27.02.2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM10 value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22318-ghi dated 21-12-2012. The Public hearing was held on 12.07.2013 at village Baihara, Rupnagar by Punjab Pollution Control Board chaired by Sh. S. P. Singh Brar (ADC), Rupnagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

## **21. River Bed Mining of Sand from River Soan, located in Village Swarha, Anandpur Sahib, District Rupnagar, Punjab (62.69 ha).**

The proposal is for environmental clearance for Swarha Sand Mining Project from the bed of River Soan in Village Swarha, Tehsil Anandpur Sahib, District Rupnagar, Punjab for a production of 69,500 TPA. The mine lease area is 62.69 ha. The proposed mining area is reported lying between Latitude 31°14'54.95"N to 31°15'27.03"N and Longitude - 76°22'57.10"E to 76°23'37.39"E in topo sheet No. 53A/07. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mchanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for next layers. The ground water level is reported to be 4-5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 2.7 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Swarha. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.69.06 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued on 04.03.2011 by MoEF (Ref No.: J-11015/355/2010-IA.II(M)). Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality

Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22739-*ghi* dated 28-12-2012. The Public hearing was held on 12.07.2013 at village Swarha, Rupnagar by Punjab Pollution Control Board chaired by Sh. S. P. Singh Brar (ADC), Rupnagar. Major issues raised by the Public were only regarding, maintenance of road. The objections and suggestions raised by the participants were taken on record and responded by the PP.

## **22. River Bed Mining of Sand from River Sirsa, located in Village Majri Sarsa, Tehsil Rupnagar, District Rupnagar, Punjab (11.78 ha).**

The proposal is for environmental clearance for Majri Sarsa Sand Mining Project from the bed of River Sirsa in Village Majri Sarsa, Tehsil Rupnagar, District Rupnagar, Punjab for the production of 10,300 TPA. The mine lease area is of 11.78 ha. The proposed mining area is reported lying between Latitude - 31° 3'5.02"N to 31° 3'18.67"N and Longitude - 76°35'6.39"E to 76°35'33.23"E in topo sheet No. 53A/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forestland is involved. There is Himmatpur Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Ropar Wetland lies within buffer zone of the mine at a distance of 6.5 km in South West direction. The mine working will be opencast by manual method. No drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.7 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Majri Sarsa. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.11.06 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by MoEF (Ref No.: J-11015/368/2010-IA.II(M)) on 4.03.2011. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 22029-*ghi* dated 18-12-2012. The Public hearing was held on 10.09.2013 at village Majri Sarsa, Rupnagar by Punjab Pollution Control Board chaired by Sh. Gurtej Singh (ADC), Rupnagar. Major issues raised by the Public were regarding, employment, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

## **23. River Bed Mining of Sand from River Satluj, located in Village Lodhipur, Tehsil Anandpur Sahib, District Rupnagar, Punjab (10.97 ha).**

The proposal is for environmental clearance for Lodhipur Sand Mining Project from the bed of River Satluj in Village Lodhipur, Tehsil Anandpur Sahib, District Rupnagar, Punjab for the production of 17,000 TPA. The mine lease area is of 10.97 ha. The proposed mining area is reported lying between Latitude - 31°12'51.11"N to 31°13'8.40"N and Longitude - 76°29'1.51"E to 76°29'12.50"E in topo sheet No. 53A/08. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10km radius of the mine lease area. No forest land is involved. There is no Protected Forest within 10 km radius from mine lease boundary. It was reported by the project proponent that Jhajjar Bachauli Wildlife Sanctuary lies within buffer zone of the mine at a distance of about 7 km in North East direction. The mine working will be opencast by manual method without involving drilling and blasting using hand tools like shovel, pan, sieve etc. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 4 - 5 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.58 KLD which will be sourced from nearby village, NOC from the Gram Panchayat has been procured for the utilization of water from the village Lodhipur. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs.15.3 Lakhs and EMP cost is Rs 5.1 lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4435-*ghi* dated 08-03-2013. The Public hearing was held on 10.09.2013 at village Lodhipur, Rupnagar by Punjab Pollution Control Board chaired by Sh. Gurtej Singh (ADC), Rupnagar. Major issues raised by the Public were regarding, compensation to be paid to the land owners, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP.

#### **24. River Bed Mining of Sand/Gravel from River Chakki, located in Village Talwara Gujran Tehsil Pathankot, District Pathankot, Punjab (11.7 ha).**

The proposal is for environmental clearance for Talwara Gujran Sand/Gravel Mining Project from the bed of River Chakki in Village Talwara Gujran, Tehsil Pathankot, District Pathankot, Punjab for the production of 1.34 Lakh TPA. The mine lease area is of 1.7 ha. The proposed mining area is reported lying between Latitude - 32°10' 24.57"N to 32°10'36.59"N and Longitude - 75°37'03.47"E to 75°37'20.46"E in topo sheet No.43P/11 & 43P/12. An Interstate Boundary between Punjab and Himachal Pradesh lies within 10 Km radius of the mine lease area. No forest land is involved. Nehar ki Bir and Damtal Reserved Forest and Malkot Karar Protected Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers.

The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.68 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Talwara Gujran. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 50 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 02.04.2012 at Village Talwara Gujran, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 1485-A dated 01-02-2013. Cumulative study report, taking into consideration the traffic scenario along with level of service of the road as per IRC and fugitive dust emission has been submitted by the proponent.

## **25. River Bed Mining of Sand/gravel from River Ravi, located in Village Shehar, Tehsil Pathankot, District Pathankot, Punjab (9.8 ha).**

The proposal is for environmental clearance for Shehar sand/gravel mining project from the bed of River Ravi in Village Shehar, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA. The mine lease area is of 9.8 ha. The proposed mining area is reported lying between Latitude - 32°20' 39.45" to 32°20'54.44"N and Longitude - 75°33'24.61" to 75°33'39.43"E in topo sheet No. 43P/7 & 43P/11. An Interstate Boundary between Punjab and Jammu & Kashmir lie within 10 Km radius of the mine lease area. No forestland is involved. Dhanor Reserved Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.5 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Shehar. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 70 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits except for PM<sub>10</sub>. The PM<sub>10</sub> readings are exceeding the norms because of the wheat harvesting season in which the left over wheat stubble are burnt, this entrainment in higher PM<sub>10</sub> value is a temporary phase. Sediment budget calculation was done by using Dandy-Bolton

Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 21.03.2012 at Village Shehar, Pathankot by Punjab Pollution Control Board chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 4439-*ghi* dated 08-03-2013. Cumulative study report, taking into consideration the traffic scenario along with level of service of the road as per IRC and fugitive dust emission has been submitted by the proponent.

## **26. River Bed Mining of Sand/gravel from River Ravi, located in Village Chhan, Tehsil Pathankot, District Pathankot, Punjab (9.7 ha).**

The proposal is for environmental clearance for Chhan Sand/Gravel Mining Project from the bed of River Ravi in Village Chann, Tehsil Pathankot, District Pathankot, Punjab for the production of 1 Lakh TPA. The mine lease area is of 9.7 ha. The proposed mining area is reported lying between Latitude - 32°20' 31.70" to 32°20'44.53"N and Longitude - 75°33'06.32" to 75°33'22.57"E in topo sheet No. 43P/7 & 43P/11. An Interstate Boundary between Punjab and Jammu & Kashmir lie within 10 Km radius of the mine lease area. No forestland is involved. Dhanor Reserved Forest lies within 10 Km radius from mine lease boundary. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the mine lease. Mine working will be semi-mechanized. However, no drilling & blasting is proposed. Ultimate working depth will be upto 3 m from river bed level. Mining will be done in layers of 1 m depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers. The ground water level is reported to be 5 - 7 m below ground level. In order to maintain safety and stability of river banks 3 m or 10% of the width of the river whichever is more will be left intact as no mining zone. Water requirement will be 0.5 KLD which will be sourced from nearby villages; NOC from the Gram Panchayat has been procured for the utilization of water from the village Chhan. It was reported by the project proponent that there is no court case pending against the project. Cost of the project is Rs. 70 Lakhs and EMP cost is Rs 5.1 Lakhs per annum. The terms of reference for the project were issued by SEAC-Punjab (Reference No. SEAC/11223-30) dated 4/3/2010. Draft EIA/EMP report was prepared by complying the TOR points. Baseline studies were conducted during March-May, 2011. Ambient Air Quality Parameters were reported to be within permissible limits. Sediment budget calculation was done by using Dandy-Bolton Equation, in which the entire catchment area of the river was considered to calculate the annual replenishment rate. The Public hearing was held on 22.03.2012 at Village Chann, Pathankot by Punjab Pollution Control Board Chaired by Smt. Sarojini Gautam Sharda, Additional Deputy Commissioner, Pathankot. Major issues raised by the Public were regarding, villagers employment, dust pollution, bank protection, maintenance of road etc. The objections and suggestions raised by the participants were taken on record and responded by the PP. The proponent has also submitted the Approved Mine Plan which was approved by State Geologist, Director of Industries, Punjab vide letter number 2735-*ghi* dated 06-02-2013. Cumulative study report, taking into consideration the traffic scenario along with level of service of the road as per IRC and fugitive dust emission has been submitted by the proponent.

Based on the information submitted, presentation made by the proponent and discussions held, the Committee **recommended** the above 26 proposals for environmental clearance with additional specific conditions; viz:

- (i) To submit annual replenishment report certified by an authorized agency. In case the replenishment is lower than the approved rate of production, then the mining activity / production levels shall be decreased / stopped accordingly.
- (ii) To establish a Monitoring Committee including Local Panchayat, to check on traffic due to transportation and submit an annual report on the same.
- (iii) All the provisions made and restrictions imposed as covered in the Punjab Minor Mineral Rule, 2013 are to be complied with, particularly regarding Environment Management Practices and its fund management & Payment of compensation to the land owners.
- (iv) The PP shall make arrangement for drinking water, first aid facility (along with species specific anti-venom provisioning) in case of emergency for the workers.
- (v) The cumulative impact of the mining activity is high; therefore the mining in mines located within one km radius of each other shall be done in a phased manner.

**(2.4). Enhancement of production capacity of China Clay from 0.025 million TPA to 0.24 million TPA and production of red ochre with a capacity of 0.045 million TPA by M/s Bhilwara Mines & Minerals, located at Village(s) Itawa & Kesarpura, Tehsil-Kotri, District Bhilwara, Rajasthan (278.69ha)-EC**

The proposal is of M/s. Bhilwara Mines & Minerals for enhancement of production capacity of China Clay from 0.025 million TPA to 0.24 million TPA and production of red ochre with a capacity of 0.045 million TPA. The mine lease is located at Village(s) Itawa & Kesarpura, Tehsil: Kotri, District: Bhilwara, Rajasthan. The Latitudes & Longitudes of the site are 25° 22' 56.71"N to 25° 24' 17. 26"N and 74°59'54.61" E to 75° 01'12.9" E respectively & part of study area falls within the Survey of India Toposheet No.45 O/3, 45 K/15.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 16<sup>th</sup>-18<sup>th</sup> April, 2012 to determine Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no J-11015/41/2012-IA.II (M) dated 6<sup>th</sup> June, 2012. The proponent submitted the EIA/EMP Report to the Ministry for seeking environmental clearance after conducting public hearing. The project proponent made a presentation with regard to the compliance of TORs.

The mine lease area is 278.69 ha, out of this, 98.06 ha is waste land, 28.31ha is grazing land and 152.32ha is Agricultural land. No forest land is involved. The Mining Lease for mineral China Clay (M.L. no 34/95, M.L Area 278.69 ha) was granted vide Government order no. F.2 (52) Gr.3/80, dated 28.06.1980 for 20 years. Mining lease was renewed for further twenty years, from 28.06.2000 to 27.06.2020. Mining Plan & Progressive Mine Closure Plan has been approved by the IBM vide letter no. 584(4)(3)(1117)/10-RCM-AJM, dated 21.09.2010. Total mineable reserves are (China Clay: 64, 10,431 tonnes, Red Ochre: 2, 48,429 tonnes). The life of the mine is 27 years for China Clay and 6 Years for Red Ochre. NOC from Gram Panchayat w.r.t gaucher land has been obtained vide letter no. Pra.P.Ga.2012/6-21 dated 05.04.2012. The Committee noted that the original mine lease is for china clay and further the mineral Red Ochre was included vide Rider agreement dated 16.03.2000.

Mining is by semi-mechanized opencast method to produce China Clay @ 0.24 million TPA and Red Ochre @ 0.045 million TPA by digging, sorting of minerals & transportation by trucks/dumpers. Mineral will be sorted and graded manually and transported through trucks. Total water requirement for the project is 25 KLD which will be sourced from Ground water purchased from nearby villages & mine sump water. Water table will not intersect during mining operation.

Proponent reported that there is no National Park, Wildlife Sanctuary, Biosphere Reserve, Wildlife corridors, Tiger/Elephant Reserves/Schedule-I species, within 10 km radius of the mining project site. Three Reserved Forest and Three Protected Forest exist within 10 km radius of mine site.

The baseline data was generated for the period during post monsoon seasons i.e. October to December 2012. The Committee deliberated on the baseline data and found that the principle environment parameters are well within the permissible limits as prescribed by the CPCB.

The Public Hearing was conducted on 9<sup>th</sup> May, 2013 at village Itawa, Tehsil: Kotri, District: Bhilwara (Rajasthan) in the Chairmanship of Shri Tikam Chand Bohra, Additional District Collector, Bhiwara. The issues raised during public hearing were discussed during the meeting, which inter-alia, included, local employment and socio economic development i.e. drinking water facilities, medical and education etc. As per the villager's requirements, it was informed by the Proponent that they would prefer to take care of local employment, assistance in medical, drinking water and education facilities etc. These have been incorporated in the action plan with budgetary provisions.

The total capital cost of the project is Rs. 1.25 Crores. The Proponent has earmarked Rs. 2.0 Lakhs towards Environmental Protection Measures and Rs. 6.25 Lakh per annum towards recurring expenses. Proponent informed that Rs. 3.0 Lakhs have been earmarked towards socio-economic welfare measures for the nearby villages. Proponent has informed that there is no court case/litigation is pending against the mining project.

Based on the presentation made and discussions held, the Committee noted following deficiencies:-

- (i) The Committee noted that it is a **violation case** as the Proponent had mined out red ochre during 2001-2006 without requisite environmental clearance. In this context, the Committee was of the view that Ministry to take actions on violation as per prescribed procedures;
- (ii) The Committee noted that the proponent has not circulated the certified copy of compliance report of earlier EC. In this context, PP mentioned that they have downloaded the compliance report from the RO of MOEF Lucknow website and presented the same. The Committee was of the view that the PP needs to submit the certified copy of compliance report;
- (iii) Details of TORs compliance for the conditions no. 6-9 are not adequate and needs to augmented;
- (iv) The Committee noted that the details of land use plans as mentioned in the

earlier EC and TOR prescribed are not consistent with the Mining Plan. The Committee was of the view that PP has to submit modified/detailed land use plan and Revised Questionnaire;

- (v) Compliance of TOR no. 26 w.r.t. details of water Table before mining and impact of mining on the same are not brought out adequately and needs to be resubmitted with requisite details; and
- (vi) Monitoring of ground water has not been undertaken as per the earlier EC condition no. ix. This needs to be rectified.

The Committee decided to **defer the proposal** to be brought back to the Committee after the aforesaid information is submitted in the form of an Addendum to the EIA/EMP Report.

**(2.5). Enhancement of production of bauxite from 0.15 million TPA to 0.3 million TPA for Kujam-II Bauxite mine by M/s Hindalco Industries Limited, located at Village(s) Kujam & Chirodih, Thana-Bishnupur, District-Gumla, Jharkhand (157.38ha) (Consultant: Vimta Labs, Hyderabad)-EC**

The proposal is for enhancement of production of bauxite from 0.15 million TPA to 0.3 million TPA for Kujam-II Bauxite mine by M/s Hindalco Industries Limited. The mine lease area is located near village(s)- Kujam & Chirodih, Thana - Bishunpur, District-Gumla, Jharkhand. The mine lease area lies between Latitude 23°16'15" to 23°17'30" N, Longitude 84°17'10" to 84°18'30" E and is covered by topo sheet no. 73 A/7.

The proposal was considered by the Expert Appraisal Committee (Mining) in its meeting held during 21<sup>st</sup> February 2012 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by the Ministry vide letter no. - 11015/297/2011-IA.II (M) dated 26<sup>th</sup> March 2012. The proponent submitted the EIA/EMP report to the Ministry for seeking environmental clearance after conducting public hearing.

The mining lease was originally granted over an area of 157.38 ha, vide order no. 3BM II-2-97-1589/M dated 19.08.2005 in the name of M/s Indian Aluminum Company Limited (INDAL) and accordingly the Environment Clearance was obtained vide letter no. J-11015/242/2005-IA.II (M) dated 14.08.2006 for a production capacity of 0.15 million TPA of bauxite. It is reported by the PP that M/s INDAL merged with M/s Hindalco Industries Limited and accordingly the mining Lease deed is executed. PP informed that the Application has been submitted to the MoEF regarding transfer of name in the Environmental Clearance from M/s INDAL to M/s Hindalco vide letter no-HIL/AVP (M)/MoEF-EC/1014, dated 01.03.2012, However, the earlier EC has not been transferred in the name of M/s Hindalco Industries Limited.

The certified compliance report of the conditions stipulated in the earlier EC was submitted by the Regional Office of MoEF, Bhubaneswar vide letter dated 01.10.2013. The Committee deliberated the compliance status of earlier EC at length and noted that the Regional Office has pointed out the following deficiencies:-

- (i) PP has not prepared the rain water harvesting plan in the mine lease area;

- (ii) The seasonal changes in the ground water level have not been measured and report not submitted (specific EC condition no. ix);
- (iii) Proponent has not submitted the details of compensation paid to the project affected families (specific EC condition no. xvii);
- (iv) Proponent has not compiled the specific EC condition no. (viii) with regard to fencing and protection of area around the water bodies;
- (v) Proponent has not prepared any plan for conservation and protection of flora and fauna in the core & buffer zone as mentioned in the general EC condition no. (iii);
- (vi) Proponent has not complied w.r.t. separate environmental management cell and financial closure land development work as mentioned in the general EC condition no. (x) & (xi); and
- (vii) No green plantation has been developed. Needs to submit the details of plantation along with the names of species planted or to be planted;
- (viii) Details of impacts due to other mining activity in the Study Area need to be provided.

The Committee was of the view that the PP needs to submit the details about the above mentioned deficiencies, which may be verified by the RO and accordingly a fresh compliance report may please be submitted by the RO.

The mine lease area is 157.38 ha. No forest land is involved. Out of 157.38 ha, 140.10 ha is agricultural land, 17.28 ha is waste land. Modified Mining Plan has been approved by IBM vide letter dated 22.07.2011. The life of the mine would be about 13 years. The mine lease will expire on 12.03.2026.

The method of mining is opencast mechanized. The blasted material would be sorted out manually, loaded into trucks and sent to the Railway siding to be transported to their captive Al. Plant at Muri. Proponent reported that at the end of the life of mine, reclaimed area will be 94.91ha (92.71 ha reclaimed by plantation and 2.2 ha converted into water reservoir). As per approved scheme of mining, total waste generation will be 8,04,181 cum at the end of FY 2013-14. It was reported that Ground water will not be intersected during scheme period. The site elevation is about 1068 m above MSL. The total water requirement of Kujam II mine lease is about 23 m<sup>3</sup>/day. As there are no perennial sources of water on the hill-top, the villagers get potable water from nearby natural springs and hand pumps.

Proponent reported that there is no National Park, Wildlife Sanctuary, Biosphere Reserve, Wildlife corridors, Tiger/Elephant Reserves/Schedule-I species/migratory paths of birds and animals, within 10 km radius of the mining project site. Three Reserved Forests and Eighteen Protected Forests exist within 10 km radius of mine site.

The Baseline environmental monitoring studies were conducted during pre-monsoon season i.e. March 2012–May 2012. The Committee deliberated on the Baseline data and found that the principle environment parameters are well within the permissible limits as prescribed by the CPCB. In ecological study, 327 plants species were recorded during study period. There are no endangered species of fauna reported or observed in the vicinity of the project area. As per 2011 census, the study area consisted of 46,203 persons inhabited in study area of 10 km radius distance from the periphery of the ML area.

Public Hearing was conducted on 11.07.2013 at Government Primary School, Banari village, Teshil-Bisunpur, District-Gumla under the Chairpersonship of Smt. Christina Hansda, AC, Gumla. The representative of Regional Office SPCB was also present. The issues raised

during public hearing were discussed during the meeting, which inter-alia, included, local employment, regular water spraying to prevent pollution and socio economic development i.e. water facilities, medical and education etc. As per the villager's requirements, it was informed by the Proponent that they would prefer to take care of local employment, assistance in medical, drinking water and education facilities etc. These have been incorporated in the action plan with budgetary provisions.

The total capital cost of the project is Rs. 8.75 Crores. The Proponent has earmarked Rs. 3.35 Crores towards Environmental Protection Measures Proponent informed that about 3.0 ha land with 6000 samplings will come under greenbelt development plan. Total Rs. 86 Lakhs has been spent for the rural and community development activities during the period of 2005-2013. Proponent has informed that there is no court case/litigation pending against the mining project.

Based on the presentation made and discussions held, the Committee noted following deficiencies:-

- (i) The details of land use plans as mentioned in the earlier EC are not consistent with the Mining Plan. The Committee was of the view that PP has to submit detailed land use plan and Revised Questionnaire;
- (ii) Details of R&R plan need to be submitted;
- (iii) Details of precautions for protection of Chirodh PF which is adjacent to the mine lease area to be provided;
- (iv) Details of impacts due to other mining activity need to be provided;
- (v) Detailed analysis report with regard to contamination of crop planted i.e. potato need to be submitted; and
- (vi) The Committee pointed out the deficiencies as stated in the certified compliance report of Regional Office and as discussed above. In this context, PP needs to submit the details of the above mentioned deficiencies, which may be verified by the RO and a fresh compliance report may please be submitted by the RO accordingly.

The Committee decided to **defer the proposal** to be brought back to the Committee after the aforesaid information is submitted in the form of an Addendum to the EIA/EMP Report.

**(2.6). Mohanpura Limestone Mines with production capacity of 0.80 million TPA (ROM) by M/s Ultra Tech Cement Ltd., located at village(s) Mohanpura, Soyla, Attarsuma, Karondiya, Badiya, Ghursal, District Dhar, Madhya Pradesh (1026ha) (Consultant: JM Environet Pvt. Ltd., Haryana)-EC**

The proposal is for proposed Limestone Mine with limestone production capacity of 0.80 million TPA (ROM) in the Mine Lease Area of 1026 ha. The mine is located at Villages- Mohanpura, Soyla, Attarsuma, Karondiya, Badiya, Ghursal, Chikhli, Borghata, Sali & Chakrud, Tehsil- Gandhwani District- Dhar, Madhya Pradesh. The site falls between 22°20'

54.41"N - 22 °23'45.08"N Latitude and between 75°01' 00.07"E - 75° 05' 04.91"E Longitude and study area falls within the Survey of India Toposheet No. 46 N/3, 46 J/15.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 21<sup>st</sup> -23<sup>rd</sup> February, 2012 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/275/2011- IA II (M), dated 26<sup>th</sup> March, 2012 and further amended on 9<sup>th</sup> September 2013. The proponent submitted the EIA/EMP Report to the Ministry for seeking environmental clearance after conducting public hearing. The project proponent made a presentation with regard to compliance of TORs for mining of Limestone with a capacity of 0.80 million TPA.

The mine lease area is 1026 ha, out of which 689.47ha is Agricultural land, 154ha is waste land, 3.28ha is grazing land and 179.25ha is surface water bodies. No forest land is involved. The Mining plan is approved by IBM, vide letter no. 314 (3)/2011-MP/MS/PMCP 31, dated 21.12.2011. Life of mine is 17 years. Mining will be carried out by Fully Mechanized Opencast Mining Method. The diameter of drill hole will vary from 150 to 165 mm. Total material extracted will be 0.80 million tonnes per annum. Limestone will be transported from Mohanpura Limestone Mine to the crusher located in Sitapuri Limestone Mine (965 ha) via dumpers & further from Sitapuri Mine to Proposed Cement Plant via covered conveyor belt (~ 8 km). The quantity of topsoil and OB waste that will be removed at the end of life of mine would be 0.24million m<sup>3</sup> of topsoil and 1.61 million m<sup>3</sup> of OB waste respectively. Total water requirement for the mine will be 150 KLD, which will be sourced from Bore well or surface water and Rain water accumulated in Mine Sump. Application for water has been submitted to CGWA and is under process with the department. No intersection of ground water table is proposed.

Proponent reported that there is no National Park, Wildlife Sanctuary, Biosphere Reserve, Wildlife corridors, Tiger/Elephant Reserves/Schedule-I species/migratory paths of birds and animals, within 10 km radius of the mining project site. Nine Reserved Forest exist within 10 km radius of mine site. Baseline studies were carried out during Summer Season of 2012. The Committee deliberated on the baseline data and found that the principle environment parameters are well within the permissible limits as prescribed by the CPCB.

The Public Hearing was conducted on 7th June, 2013 at 11:00 am at Primary School, Majara, Hanumanpura under the Chairmanship of Mr. B.S Solanki, Additional District Magistrate, District: Dhar, Madhya Pradesh. The issues raised during public hearing were discussed during the meeting, which inter-alia, included, local employment, benefits to the local community, land issues, fossil conservation, pollution control measures to be adopted, protection measures for Man Dam, plantation, health issues, CSR activities to be carried out etc. As per the villager's requirements, PP informed that they would prefer to take care of local employment, implementation of CSR action plan, land acquisition as per Govt. norms, fossil conservation, pollution control measures, protection measures for Man Dam, plantation, health care facilities etc. These have been incorporated in the Project Plan with budgetary provisions.

Based on the presentation made and discussions held, the Committee noted following deficiencies:-

- (i) TOR condition no. 1 w.r.t use of surface miners has not been adequately reflected in the EIA/EMP report i.e. samples are not analyzed as per the prescribed methods. The Committee was of the view that PP need to reanalyze

the sample as per prescribed standards;

- (ii) Details of villages and habitants surrounded by the MLA are not adequate and need to be augmented;
- (iii) Sukar River is 500 m from the boundary of MLA. Details of impact due to mining and transportation needs to be provided;
- (iv) Details of land use, area acquired and to be acquired have not been submitted. The Committee was of the view that PP has to submit detailed land use plan and Revised Questionnaire;
- (v) Details of occupational health need to be furnished;
- (vi) Details of primary survey for flora fauna need to be submitted; and
- (vii) Use of explosives as stated, appears to be excessive. This needs to be examined for reduction as may be possible.

The Committee decided to **defer the proposal** to be brought back to the Committee after the aforesaid information is submitted in the form of an Addendum to the EIA/EMP Report.

**(2.7). Enhancement of production capacity of Bauxite mining from 63,808 TPA to 2,59,250 TPA by M/s Orient Abrasives Ltd., Village Mewasa, District Jamnagar, Gujarat (50.18ha)(Consultant: Kadam Environmental)-Re-consideration of EC**

The proposal is for enhancement of production capacity of bauxite from 63,808 TPA to 2,59,250 TPA. The mine lease area is located in Village Mewasa, Taluka-Kalyanpur, District Jamnagar, Gujarat. The Latitude and Longitude of the mine lease area are 23°13'10.2" N and 69°19'7.7" E respectively on toposheet no. 41/F/8.

The proposal was considered by the Expert Appraisal Committee (Mining) in its meeting held during 17<sup>th</sup>-19<sup>th</sup> March, 2010 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by the Ministry vide letter no. J-11015/31/2010.IA.II (M) dated 28.04.2010. The proponent submitted the EIA/EMP report to the Ministry for seeking Environmental clearance after conducting public hearing.

The project was earlier appraised by the Reconstituted Expert Appraisal Committee in its 4<sup>th</sup> Meeting held during February 20-22, 2013 wherein the Committee sought additional information as follows:

- (i) There will be severe depletion of groundwater Table with possible increase in its pollution, due to cumulative impact of withdrawal by multiple users of groundwater.
- (ii) Proponent has not submitted any report on vibration studies at Mewasa.
- (iii) Proponent has not submitted any Conservation Plan for flora and fauna including endangered and endemic species of the study area
- (iv) Proponent has not submitted Wildlife Clearance from Standing Committee of National Board of Wildlife

- (v) There were two violations, while operating the mine and after the second violation, IBM has clearly instructed the proponent not to start any mining activity, unless the observations made by IBM are rectified. Compliance status on this has not been brought forth.

The PP vide letter dated 07.08.2013 has submitted the requisite information and accordingly, the proposal was considered in the present meeting. The Committee deliberated and discussed the information submitted by the PP on the pending issues. The Committee was of the view that the Proponent has to conduct the vibration study after the commencement of mining operation in the vicinity of the village adjacent to the mine lease area by a reputed Institution.

The total mining lease area is 50.18 ha and is designated as government wasteland. No grazing land is involved. No forest land is involved. The Scheme of Mining along with progressive mine closure plan has been approved by Indian Bureau of Mines, Udaipur, vide letter no. 682(23) (MS-491)/2009 MCCM (N) dated 21.08.2009. PP reported that 23.41 ha area will be used for excavation, 0.068 ha for infrastructure development, 0.720 ha for preparation of roads, 10.69 ha for Green belt development and 15.30 ha area will be the undisturbed area. The mineable reserves are 27,55,867 Metric tonnes and Life of mine is 14 years.

PP informed that mine lease does not come under Eco-Sensitive Zone. Marine Sanctuary and National Park is located at a distance of 4.50 km from the mine lease. Distance certificate has been issued by Chief Conservator of Forests, Marine National Park, Jamnagar dated 26.10.2013. No other National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors or Tiger/ Elephant Reserves are located within 10 km of the mine lease boundary. Only one Schedule-I species (Common peafowl) was reported within buffer zone. The species specific Conservation plan has been prepared. The Committee discussed the conservation plan and noted the steps stated in the Conservation plan to protect the scheduled species.

Mining will be by semi-mechanized opencast method. The mining process involves drilling & blasting, loading and transportation of the excavated material. The proposed drilling will be done by digging holes of 4.0 m depth and carried out by using Wagon Drill machine. Overall pit slope will be 70°. The excavated material will be loaded in trucks and transported to Company's Abrasive plant located at Porbandar in Gujarat State. It was reported by the PP that Ground water will not be intersected during scheme period. The total water requirement for the project will be 16.442 KLD which is sourced by tankers from dug well of M/s Ranjit Enterprises and from water stored in mined out pits. Waste water will be disposed of through soak pits.

The parameters for water and air quality generated as part of the baseline data were within permissible limits. The Public hearing was held on 05.06.2012 under the chairmanship of Shri Sandip Kumar, Collector and District Magistrate, Jamnagar. The representative of Gujarat Pollution Control Board was present. Major issues raised during public hearing were related to grazing land, gamtal/village land, construction of road, employment generation and provision of drinking water.

The total cost of the project is Rs. 70.56 Lacs. The PP has earmarked Rs. 16.46 lacs towards Environmental Protection Measures and Rs. 3.3 Lakh per annum towards recurring expenses. PP informed that Rs. 7.75 Lakhs/year have been earmarked towards CSR

activities. PP reported that there is a case/litigation pending against the project for excess production.

The Committee deliberated the issues and based on the discussion held on the information submitted; the Committee **recommended** the proposal for environmental clearance for bauxite mining with production capacity 2,59,250 TPA of bauxite with additional specific condition that the Proponent has to conduct the vibration study after the commencement of mining operation in the vicinity of the village adjacent to the mine lease area by a reputed Institution and report submitted.

**(2.8). Enhancement of production capacity of Soapstone & Dolomite to 2,20,000 TPA (Soapstone 20,000 TPA and Dolomite 2,00,000 TPA) Mine of M/s S. Sohan Singh Joginder Singh & Co., Village Semal, Tehsil Girwa, Distrit Udaipur, Rajasthan (405.462ha) (Consultant: Apex Mintech Consultants, Rajasthan)-Reconsideration of EC**

The PP vide letter dated 12.12.2013 has sought the deferment of the proposal and the Committee deferred the proposal.

**(2.9). Captive Limestone Mining Project with production capacity of 1.5 million TPA by M/s Ultra Tech Limited, located at Distt. Neemuch, Madhya Pradesh. (Consultant: J.M. Enviro Net Pvt. Ltd.)- Amendment in EC**

The proposal is for amendment in EC and was earlier considered in the EAC meeting held during September 25-27, 2013 wherein the Committee sought additional information. Proponent has submitted the requisite information and accordingly the proposal is considered in the present meeting.

The Ministry of Environment & Forests has accorded the Environmental Clearance to Vikram Cement Limited for limestone mining of 1.5 million TPA vide J-11011/38/2011.IA. II (M), dated 21<sup>st</sup> July, 2003. The plant is located at villages Suvakheda, Morka and Maheshpura, Tehsil Jawad, Distt. Neemuch, Madhya Pradesh.

PP requested for amendment in the specific condition no. A (viii) of EC letter from "No new crusher should be installed. Existing crushers should operate with high efficiency bag filters. All the transfer, loading and unloading points and screening plant should be equipped with proper de-dusting system." to "Primary crusher (1600 TPH) will be installed within the lease area with high efficiency bag filters at all the transfer, loading and unloading points and screening plant should also be equipped with proper de-dusting system".

The Committee noted that PP has not yet taken the approval of Mine Plan & Progressive Closure plan. The Committee was of the view that the impact of crusher on Environmental parameters like transportation data, AAQ, Noise, dust, habitation needs to be submitted. After deliberations, the Committee sought the following additional information:

- (i) Impact of crusher on related Environmental parameters like AAQ, Noise, dust, habitation etc. needs to be submitted; and
- (ii) A copy of approved of Mine Plan & Progressive Closure plan mentioning the capacity of Primary crusher (1600 TPH) which will be installed within the lease area should be furnished.

The Committee deliberated the information submitted by the PP and based on the discussion held the Committee **recommended** the amendment in specific condition no. A (viii) of EC letter from "No new crusher should be installed. Existing crushers should operate with high efficiency bag filters. All the transfer, loading and unloading points and screening plant should be equipped with proper de-dusting system." to "Primary crusher (1600 TPH) will be installed within the lease area with high efficiency bag filters at all the transfer, loading and unloading points and screening plant should also be equipped with proper de-dusting system".

## **2.10 Rowale Bauxite Mine of M/s. Ashapura Minechem Limited located at village Rowale Taluka Dapoli, Dist. Rantnagiri, Maharashtra (218.285ha) Expansion of Bauxite Mining from 2.5LTPA to 8.0LTPA) (Bhagavathi Ana Labs Ltd.)-TOR**

The proposal is for expansion of bauxite production from 2.5 LTPA to 8.0 LTPA from Rowale Bauxite Mine with 218.285 ha mine lease area of M/s Ashapura Minechem Ltd., located at Rowale Village, Dapoli Taluk, Ratnagiri District, Maharashtra. The Khasra No/Survey Nos of the proposal are 15 to 21, 27 to 31, 34, 35, 56 to 59, 69, 70 & 74 in Rowale village. The DGPS coordinates of the mine lease area are as follows:

Corners

1. 17° 54' 38.93"N, 73° 06'37.89"E
- 14 17° 55' 05.79"N, 73° 05'42.96"E
- 23 17° 54' 40.16"N, 73° 04'44.46"E
- 45 17° 54' 39.86"N, 73° 05'34.08"E
- 73 17° 54' 16.32"N, 73° 06'34.12"E
- 79 17° 53' 02.40"N, 73° 06'01.11"E

The mine lease area of 218.285 ha consists of non forest patta land. It is reported by the Project Proponent (PP) that Rowale Bauxite Mine is an existing mine with a capacity of 0.25 MTPA of Bauxite. The Bauxite deposit is well exposed on the flat hill top of the area with thin or no soil cover and soil cover with recoverable fragments of bauxite of about 0.2 – 0.4 m. The deposit is wide enough for opening along any direction. Mining will be done up to bed rock which is at a depth from 4.5 to 5.0 m. Simultaneous backfilling of mined out pits will be carried out from first year of the mining scheme.

The anticipated life of the mine is 17 years. The water requirement is estimated as 80.0 KLD, which will be obtained from ground water. It is reported by the PP that Total Reserves are 13.614 million tonnes. Conceptual mine development will be carried out in 167.151 Ha area, green belt will cover an area of 9.25 ha, entire area disturbed will be reclaimed by backfilling. Pit depth will be upto 5 m bgl. The overall pit slope will be 45°. Bharja River flows at a distance of 1.7 km from MLA. It was reported by the PP that there are no wild life sanctuaries, tiger reserves, National Parks etc within 10 km radius of lease area.

The estimated cost of the project is Rs 4.65 Crores. It was reported by the PP that there is no court case/litigation pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that the Umbershet Bauxite Mine of the PP is located adjacent to this mine lease; therefore, both the mine leases shall be amalgamated and submitted as a single proposal.

**2.11 Umbershet Bauxite Mine of M/s. Ashapura Minechem Limited located at village Umbershet Taluka Dapoli, Dist. Rantnagiri, Maharashtra. (99.8619ha) (Expansion of Bauxite Mining from 2.26LTPA to 5.0 LTPA) (Bhagavathi Ana Labs Ltd.)-TOR**

The proposal is for expansion of bauxite production from 2.26 LTPA to 5.0 LTPA from Umbershet Bauxite Mine with 99.8619 Ha mine lease area of M/s Ashapura Minechem Ltd., located at Umbershet Village, Dapoli Taluk, Ratnagiri District, Maharashtra. The Khasra No/Survey Nos of the proposal 66 – 122, 163 – 171, 212 – 216, 770 – 772, 785 – 786, 788 – 884. The DGPS coordinates of the mine lease area are as follows:

Corners

- 12. 17° 55' 28.89"N, 73° 05'35.18"E
- 56. 17° 55' 24.47"N, 73° 05'15.73"E
- 83. 17° 55' 33.92"N, 73° 05'24.80"E

The mine lease area is 99.8619 ha (non forest patta land). It is reported by the Project Proponent (PP) that Umbershet Bauxite Mine is an existing mine with a capacity of 2.26 LTPA of Bauxite. The Bauxite deposit is well exposed on the flat hill top of the area with thin soil cover. The deposit is wide enough for opening along any direction. Simultaneous backfilling of mined out pits will be carried out from first year of the mining scheme. The anticipated life of the mine is 13 years. The water requirement is estimated as 50.0 kld, which will be obtained from ground water. It is reported by the PP that Total Reserves are 6.138 million tonnes. Conceptual mine development will be carried out in 96.049 Ha area, green belt will cover an area of 2.10 ha, entire area disturbed will be reclaimed by backfilling. Bharja River flows at a distance of 1.1 km from MLA. It was reported by the PP that there are no wild life sanctuaries, tiger reserves, National Parks etc within 10 km radius of lease area.

The estimated cost of the project is Rs 3.00 Crores. It was reported by the Project Proponent that there is no court case/litigation pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee was of the view that the Rowale Bauxite Mine of the PP is located adjacent to this mine lease; therefore, both the mine leases shall be amalgamated and submitted as a single proposal.

**2.12 Kamarda Chromite mines of M/s B.C. Mohanty & Sons Pvt. Ltd. Located at village Kamarda, Tehsil Sukinda in jajpur district of Odisha. (107.24ha) (36000TPA to 66000TPA) ERS(I) Pvt. Ltd., Bhubaneswar - TOR.**

The proposal is for Handling of Existing Dump and Modification / Modernization of Existing Chrome Ore Beneficiation Plant for Enhancement of Production of Chrome Ore Concentrate in COB Plant from 36,000 TPA to 66,000 TPA. The mine lease area of Kamarda Chromite Mines of M/s B. C. Mohanty & Sons Pvt. Ltd. is located in village Kamarda and spread over the villages Kamarda, Balipada & Tailangi under Tehsil Sukinda in Jajpur district of Odisha State. The COB plant is located inside the Leasehold area. The area is located in Survey of India Toposheet No. 73 G / 16. The total lease area is 107.24 Ha. Out of this, Forest land is 101.850 Ha and non forest land is 5.390 Ha. Forest Clearance order over an area of 87.44 ha. has been obtained as per FC Act. 1980, vide letter no. 8-81/1996-FC dated 28<sup>th</sup> March, 2008 by Govt. of India, Ministry of Environment & Forests (FC Division). And balance 14.41 Ha comes under Safety Zone.

The Project Proponent has obtained Environmental Clearance from MoEF vide letter No-J-11015/418/2006-IA.II(M) dated 08.05.2008 for production of 0.088 million tonnes or 88,000 TPA of Chromite ore by opencast semi mechanized method of mining and production of 36,000 TPA of chrome Concentrate. Out of 88,000 TPA of Ore production, the recovery of saleable grade ore (+40% Cr<sub>2</sub>O<sub>3</sub>) is around 31,000 tonnes and the balance 57,000 tonnes are of around 35% Cr<sub>2</sub>O<sub>3</sub> which is proposed to be fed to COB Plant for beneficiation. After beneficiation of these ores, 36,000 TPA of concentrate as mentioned above with +48% Cr<sub>2</sub>O<sub>3</sub>, can be recovered. During the mining operation since last 45 years, huge quantity of Overburden/ waste material, having low chrome content, have been generated which are dumped over different non mineralized zones / locations within the mining lease area. Therefore, it is proposed to handle the existing OB dump and undertake modification or modernization of existing Chrome Ore Beneficiation (COB) Plant for enhancement of production of Chrome Concentrate from 36,000 TPA to 66,000 TPA. This eco-friendly change-over is also appreciated by the State Pollution Control Board.

Mining will be carried out strictly as per Approved Scheme of Mining with a view to optimize all resources available. Both surface water from mine pit and Ground water will be used for dust control & suppression and potable use; i.e. quantity required for mining operation and domestic use respectively. The proposed requirement of water is 590 m<sup>3</sup>/day. It was reported by the PP that there are no wild life sanctuaries, tiger reserves, National Parks etc within 10 km radius of lease area. The estimated cost of the project is Rs 3.00 Crores. It was reported by the Project Proponent that there is no court case/litigation pending against the project.

The Committee noted that the consultant (M/s ERS(I) Pvt. Ltd., Bhubaneswar) who prepared the Form I and PFR report is not accredited by QCI/NABET. However, consultant submitted an order passed by the Hon'ble High Court of Odisha in CWP No. 12639 of 2012, dated 05.10.2012 for staying the applicability of QCI accreditation to the instant consultant. Hence, the consultant was allowed by the Committee to present the proposal.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I.

**(2.13). BartiFifir Limestone Mines with production capacity of 0.27 million TPA by M/s Jaiprakash Associates Ltd., located at near village BartiFifir, Tehsil-Rampur Baghelan, District Satna, M.P.(159.218ha)-TORs**

The proposal is of M/s Jaiprakash Associates Ltd. for production of 0.27 million TPA of Limestone in the ML Area of 159.218 ha. The Mine Lease area is located near village BartiFifir, Tehsil- Rampur Baghelan, District Satna, Madhya Pradesh. The Latitude and Longitude of the mine lease area are 24<sup>0</sup>36'34" to 24<sup>0</sup>38'37" N and 81<sup>0</sup>04'30" to 81<sup>0</sup>06'25" E respectively. The present proposal of Barti Fifir Mines with a production capacity of 0.27 million TPA is to cater the partial requirement of Jaypee Sanjeevani Cement Plant which is located at a distance of 8 km towards south.

The mine lease area is 159.218ha. No forest land is involved. Method of mining will be opencast mechanized. The working depth of the mine is 37 m. The life of the mine is 32 years. The mine plan has been approved for 0.27 million TPA by IBM vide letter no: 314(3)/09-MCCM(C)/MP-11, dated: 07/09/2009. The grant of mine lease for the said project obtained from Government of Madhya Pradesh vide letter no: 3-45/2003/12/1,

dated: 30/08/2008. Water requirement of 75 m<sup>3</sup>/day will be met from water reservoir of Naubasta limestone mine. PP reported that there is no court case/litigation is pending. The total cost of the project is Rs 10 Crores.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I.

**(2.14). Production enhancement of Limestone Mine from 0.825 million TPA to 3.0 million TPA by M/s Prism Cement Ltd., located at village Hinauti & Sijhatta, Tehsil Rampur Baghelan, District Satna, Madhya Pradesh (ML Area-772.067ha) (Consultant: J.M. Enviro Net Pvt. Ltd.)- Reconsideration of TOR.**

The proposal is of M/s Prism Cement Ltd. for Production Enhancement of Limestone Mine from 0.825 million TPA to 3.0 million TPA of limestone in the ML Area of 772.067 ha. The Mine Lease area is located at Villages Hinauti & Sijhatta, Tehsil Rampur Baghelan, District Satna, Madhya Pradesh. The Latitude and longitude of the mine lease area is between are 24<sup>0</sup> 33' 22.8" N to 24<sup>0</sup> 36' 25.7" N and 80<sup>0</sup> 59' 19.4" E to 81<sup>0</sup> 01' 56.1" respectively.

Mining is opencast mechanized mine. Mining will be done up to 270 mRL. Water requirement will be 45m<sup>3</sup>/day which will be sourced from water reservoir developed in mining lease area. No court case/litigation is pending against the mining project. Life of Mine is 13 years. Total cost of the project is 25 Crores, Capital cost for EMP is 135 lakhs and recurring cost for EMP is 37 lakhs.

The Proponent submitted that they had already started the collection of base line data from winter season i.e. December, 2013. Based on the request made by the Project Proponent w.r.t. use of collection of base line data i.e. the winter season i.e. December, 2013 to February, 2014, the Committee agreed for the same.

The proposal of TOR was earlier considered in the EAC meeting held during February 20<sup>th</sup>-22<sup>nd</sup>, 2013 wherein the Committee sought additional information on following:

- (i) Certified Compliance Report from the Regional Office of MoEF.
- (ii) Detailed Report on the R&R implementation already completed by Proponent.

PP has mentioned that compliance report of earlier EC conditions have been submitted regularly to the Regional office. PP also mentioned that they have requested to Regional office for certified report of compliance vide dated 13.12.2012 & 06.08.2013, however compliance report from Regional office is awaited. With regard to detailed R&R implementation, the PP mentioned that compensation for land along with other assets purchased so far has been paid on mutually agreed terms.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs to furnish (i) Earlier EC compliance report by the Regional Office of MoEF; and (ii) Status of commitments made in the earlier Public Hearing.

**(2.15). Production enhancement of Limestone Mine from 2.175 million TPA to 3.0 million TPA) by M/s Prism Cement Ltd. located at village Hinauti & Sijhatta, Tehsil Rampur Baghelan, District Satna, Madhya Pradesh (ML Area-253.326ha) - (Consultant: J.M. Enviro Net Pvt. Ltd.)- Reconsideration of TORs.**

The proposal is of M/s Prism Cement Ltd. for Production Enhancement of Limestone Mine from 2.175 million TPA to 3.0 million TPA of limestone in the ML Area- 253.326 ha. The Mine Lease area is located at Villages Hinauti & Sijhatta, Tehsil Rampur Baghelan, District Satna, Madhya Pradesh. The Latitudes and Longitudes of the mine lease area are 24° 33' 18.2" N to 24° 34' 7.4" N and 80° 59' 19.3" E to 81° 00' 48.7" respectively.

Mining is by opencast mechanized method. Mining will be done up to 272 mRL. Water requirement will be 20 m<sup>3</sup>/day which will be sourced from water reservoir developed in mining lease area. No court case/litigation is pending against the mining project. Life of Mine is 7 years. Total cost of the project is 12.7 Crores, Capital cost for EMP is 64 lakhs and recurring cost for EMP is 13.7 lakhs.

The Proponent submitted that they had already started the collection of base line data from winter season i.e. December, 2013. Based on the request made by the Project Proponent, use of base line data i.e. the winter season i.e. December, 2013 to February, 2014, the Committee agreed for the same.

The proposal of TOR was earlier considered in the EAC meeting held during February 20<sup>th</sup>-22<sup>nd</sup>, 2013 wherein the Committee sought additional information on following:

- (iii) Certified Compliance Report from the Regional Office of MoEF.
- (iv) Detailed Report on the R&R implementation already completed by Proponent.

PP has mentioned that compliance report of earlier EC conditions have been submitted regularly to the Regional office. PP also mentioned that they have requested the Regional office for certified report of compliance vide letter dated 13.12.2012 & 06.08.2013, however compliance report from Regional office is awaited. With regard to detailed R&R implementation, the PP mentioned that compensation for land along with other assets purchased so far has been paid on mutually agreed terms.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I with additional TORs to furnish (i) Earlier EC compliance report by the Regional Office of MoEF; and (ii) Status of commitments made in the earlier Public Hearing.

**2.16: Enhancement of production capacity of limestone mines of M/s ACC Ltd. located at village Jamul Dhaur and Kurud, Tehsil & Distt. Durg, Chhattisgarh (1.8 MTPA to 3.0 MTPA and installation of 1500 TPH crusher; 269.95 ha MLA)- TOR.**

The proposal is for expansion of limestone production from 1.8 MTPA to 3.0 MTPA and installation of 1500 TPH crusher from limestone mines of M/s ACC Ltd. located at village Jamul Dhaur and Kurud, Tehsil & Distt. Durg, Chhattisgarh with 269.95 ha mine lease area. The area can be located in Survey of India Toposheet No. 64G/7, 64G/8. The latitude of mine lease are 21° 14' 48.4"N to 21°15'27.1"N and longitude are 81°21'15.5"E to 81°22'48.2"E.

The mine is operating since 12.06.1963. The mining will be conventional opencast mechanized involving drilling and blasting. The anticipated life of the mine is 28 years. The water requirement is estimated as 342 kld, which will be obtained by rain water harvesting reservoirs in the MLA. During the conceptual period 19.46 lakh tonnes of top soil and 241.49 lakh tonnes of OB and waste dump will be generated. The Tandula canal flows 1.2 km from the boundary of MLA. It was reported by the PP that there are no wild life sanctuaries, tiger reserves, National Parks etc within 10 km radius of lease area.

The estimated cost of the project is Rs 48.5 Crores. It was reported by the Project Proponent that there is no court case/litigation pending against the project.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I.

**2.17(a): Nuagaon Iron Ore Mines, M/s KJS Ahluwalia, located at village(s) Nuagaon, Guali, Topadihi, Barpada and Katasahi, Tehsil Barbil, Keonjhar District, Odisha over an area of 767.284 Ha- EC Amendment.**

The Nuagaon Iron Mine of M/s KJS Ahluwalia (767.284 Ha) is located in village(s) Nuagaon, Guali, Topadihi, Barpada and Katasahi, tehsil Barbil, Keonjhar District, Odisha. The mine is being worked for a rated capacity of 5.62 Million Tonnes Per annum (MTPA). Out of the total area of 767.284 ha, 525.762 ha is forest area and the remaining 241.522 ha is non forest area. Forest clearance was obtained under FC Act 1980 for 371.192 ha vide letter no: 8-17/2001-FC, dated 22.04.2004. Forest clearance for the entire forest area including the safety zone has already been applied for. Present Lease period is valid till 03.12.2019.

Environment clearance for 5.62 MTPA iron ore production was issued by MOEF vide letter no. J-11015/1156/2007-IA.II (M) dated 2.2.2010. The Environmental clearance stipulates a specific condition (item V) "Alternative transport system such as dedicated Railway siding for transportation of mineral from their mine shall be studied and put in place at the earliest but not later than five years. No mineral transportation by road shall be permitted beyond 5 years".

Thus the proposal is for amendment of EC condition item V. The Committee noted that the PP had not taken any compliance action on this EC stipulation during the last three years, nor had they informed the Ministry about their intent not to fulfil the same. The present appraisal is therefore without any prejudice to the binding nature of the item V.

The Agenda item before the Committee relates to withdrawal of the aforesaid special condition V in the EC. It was requested by the PP that in view of widening and expanding of the NH-215 in the vicinity, as also development Works of the Railways to augment the evacuation capacities from the existing Sidings onwards to bulk unloading destinations like the Paradeep Port, now there is no specific requirement of an additional Railway Siding within their lease hold area. They claim that Road transportation up to the existing Railway Sidings within the 20 Km vicinity and Rail transportation thereafter, appear to be a better alternative to the aforesaid special EC condition. The basic purport of their contention appeared to be that there has been a substantial expansion of road/rail transport capacities since pre-EC stage of the project (i.e. in the year 2008-09), hence there is no more any need for the stipulated additional dedicated Railway Siding.

In support of their above request for continuation of 'status quo', the PP has brought out a field study on existing road and rail network, present mode of transport of mineral, various capacity building works on both the modes of mineral movement from the Mines towards their destinations and possibility and viability of alternate modes of transport. Authorship of the 'study' was attributed to 'Creative Engineers & Consultants, Chennai and a'XYKno Infrastructure Pvt. Ltd, Nagpur.

The Committee Members who had perused the 'Study Report', observed that the Report lacks authenticity, as the credentials of the Consultancy Firms, their 'Accreditation status', the experience and expertise profiles of the Study Team Members are not at all clear. The study period, details of public source documents relied upon, certification/endorsements of the Agencies involved like NHAI, Indian Railways, CPWD/PWD were also not provided. As multiple Users are involved, the present traffic densities quoted and projections made also need to be verified/authenticated by the concerned Agencies. The comparative studies of Rail/Road/Belt Conveyor alternatives lack details and are far from convincing. There is no evidence of any consultation/discussion with the concerned Authorities of the State Govt/ Railways in regard to various claims made/conclusions drawn.

The Committee opined that PP be asked to resubmit a thoroughly Refurbished Report after rectifying all the aforesaid deficiencies, before the Committee can undertake any meaningful appraisal of the stated proposal.

The Committee therefore decided to **defer** the proposal to **be brought back** after the refurbished Study Report is prepared and submitted and necessary consultations with the State Government and other concerned Authorities like the Railways, NHAI, CPWD/PWD are held and their views on the subject matter ascertained and reported.

**2.17(b): Nuagaon Iron Ore Beneficiation plant, M/s KJS Ahluwalia, located at village(s) Guali and Barpada, Tehsil Barbil, Keonjhar District, Odisha, within the existing mine lease area of 767.284 ha- EC Amendment.**

The Nuagaon Iron Ore Beneficiation plant, M/s KJS Ahluwalia, is located at village(s) Guali and Barpada, Tehsil Barbil, Keonjhar District, Odisha, within the existing mine lease area of 767.284 Ha. The beneficiation plant is working with a rated capacity of 2 MTPA. Environment clearance for 2.0 MTPA beneficiation plant (within the existing mine lease) was issued by MOEF vide letter no. J-11015/317/2009-IA.II (M) dated 16.02.2012. The NOC has been obtained from CGWA for Ground water drawl. Site specific Wild life conservation plan had been approved vide Memo no – 549 dated 28.01.09.

Environmental clearance for 2 MTPA beneficiation plant was issued vide no. J-11015/317/2009-IA.II (M) dated 16.02.2012 with specific condition (no. VIII) "Mineral transportation after the 5th year shall be carried out only by rail".

Thus the proposal is for amendment of EC condition no. VIII i.e. "Mineral transportation after the 5th year shall be carried out only by rail". The Committee noted that the PP had not taken any compliance action on this EC stipulation during the last three years, nor had they informed the Ministry about their intent not to fulfil the same. The present appraisal is therefore without any prejudice to the binding nature of the item VIII.

The Agenda item before the Committee relates to withdrawal of the aforesaid special condition VIII in the EC. It was requested by the PP that in view of widening and expanding of the NH-215 in the vicinity, as also development Works of the Railways to augment the evacuation capacities from the existing Sidings onwards to bulk unloading destinations like the Paradeep Port, now there is no specific requirement of an additional Railway Siding within their lease hold area. They claim that Road transportation up to the existing Railway Sidings within the 20 Km vicinity and Rail transportation thereafter, appear to be a better alternative to the aforesaid special EC condition. The basic purport of their contention appeared to be that there has been a substantial expansion of road/rail transport capacities since pre-EC stage of the project (i.e. in the year 2008-09), hence there is no more any need for the stipulated additional dedicated Railway Siding.

In support of their above request for continuation of 'status quo', the PP has brought out a field study on existing road and rail network, present mode of transport of mineral, various capacity building works on both the modes of mineral movement from the Mines towards their destinations and possibility and viability of alternate modes of transport. Authorship of the 'study' was attributed to 'Creative Engineers & Consultants, Chennai and a'XYKno Infrastructure Pvt. Ltd, Nagpur.

The Committee Members who had perused the 'Study Report', observed that the Report lacks authenticity, as the credentials of the Consultancy Firms, their 'Accreditation status', the experience and expertise profiles of the Study Team Members are not at all clear. The study period, details of public source documents relied upon, certification/endorsements of the Agencies involved like NHAI, Indian Railways, CPWd/PWD were also not provided. As multiple Users are involved, the present traffic densities quoted and projections made also need to be verified/authenticated by the concerned Agencies. The comparative studies of Rail/Road/Belt Conveyor alternatives lack details and are far from convincing. There is no evidence of any consultation/discussion with the concerned Authorities of the State Govt/ Railways in regard to various claims made/conclusions drawn.

The Committee opined that PP be asked to resubmit a thoroughly Refurbished Report after rectifying all the aforesaid deficiencies, before the Committee can undertake any meaningful appraisal of the stated proposal.

The Committee therefore decided to **defer** the proposal to **be brought back** after the refurbished Study Report is prepared and submitted and necessary consultations with the State Government and other concerned Authorities like the Railways, NHAI, CPWD/PWD are held and their views on the subject matter ascertained and reported.

## **2.18 Bauxite Mine project of M/s Bhartesh Construction Company at village Girgaon, Tehsil Shahuwadi in District Kolhapur in Maharashtra- EC Amendment.**

The proposal of amendment in EC is with regard to change in mining method from 'Opencast and Manual' to 'Opencast and Fully-mechanized'. The MoEF had earlier accorded the Environmental Clearance to the project of Girgaon Bauxite Mine with a production of 25,000 Tonnes per month of M/s Bhartesh Construction Company, vide MOEF letter no. J-11011/3/2007-IA II (M) dated 12<sup>th</sup> January 2007.

The Project Proponent informed that the public hearing was conducted on 26.10.2006 and the EIA/EMP was submitted to the MoEF for obtaining Environmental Clearance. The method of mining as mentioned in Public Hearing, Mining Plan as well as in EIA/EMP report

were opencast and semi-mechanized. However, the EC was granted for 'Opencast and Manual' method. In this context, PP vide letter dated 07.11.2013 requested for Amendments in EC. The PP submitted the impact study with regard to change in technology.

The project proponent informed that Mining Lease was granted by the Government of Maharashtra over an area of 140.20 hectares vide GO letter no. MMN/1120/7844/Desk/4 dated, 20.06.2000. The lease deed was executed on 08.12.2000 for a period of 30 years. At the time of grant of Mining Lease, a Mining Plan was approved from the Indian Bureau of Mines in the year 2000 for a period of 5 years. Further, on 16.09.2005, approval for the Mining Scheme was granted by the Indian Bureau of Mines, Goa, for a period of 5 years vide letter no. MSH/OTF.MECH-04(MAH)/GOA/2005-06 dated 16.09.2005. The method of mining mentioned in this Mining Scheme was "Opencast and Semi-mechanized". Further, the Mining Scheme was approved by the Indian Bureau of Mines, for a period of 5 years, vide letter no. MS/KLP/GOA(MAH)/BX-58-SZ/1183 dated 29.02.2012. The details of method of mining is mentioned as "Opencast and Fully-mechanized".

The public hearing was conducted on 26.10.2006, and an EIA/EMP was submitted to the MoEF for obtaining environmental clearance. The method of mining mentioned here was "Opencast and Semi-mechanized" method. The Project Proponent submitted the impact study with regard to change in technology from "Opencast and Manual" to "Opencast and Fully-mechanized" and noted that the adverse impact due to mining activity will be decreasing. Mobile Crushing unit will be engaged at the pits mouth to size the Bauxite ore and then load directly onto the dispatch trucks. This will reduce the rehandling of the Bauxite ore which would otherwise have been done (if labour were engaged), leading to minimal dust generation. The Project Proponent also submitted this mechanization is being done due to the non-availability of labour, who were being employed for sizing of Bauxite ore. The Project Proponent also assured that no retrenchment of permanent labour will be done and they would be employed in activities of tree plantation, other environmental protection works and other suitable works by training them if necessary. It was also submitted by the PP that there will no increase in pollution level and no reduction in man power or employment will be done.

The Committee decided to **defer** the proposal **to be brought back** after informing the Public by bringing out the change of method of mining from manual to mechanized through SPCB via advisement in the Newspaper for seeking comments of the public at large, which comments of the Stake Holders shall be intimated to the Committee.

## **2.19 Silica sand beneficiation plant of M/s Manglore Minerals Pvt. Ltd. at village Momidi, Gudur, Andhra Pradesh-TOR**

The beneficiation plant area is located at village momidi, Gudur, district Nellore. The village momidi is 0.5 km from the site. The area of project is 37,964.3 Sq.m. The Existing production capacity is 54,000 MT & proposed production capacity is 6,60,000 MT per annum. The beneficiation plant is located on Toposheet No. - 66 B/4 & the Latitude & Longitude of the location are 14°11'27.19"N & 80° 3'5.28"E.

The selected site at Momidi in Nellore district was acquired by MMPL in the year 1998-1999. Thereafter washing plant was established which started production in 2001 after obtaining necessary clearances from Andhra Pradesh Pollution Control Board. Raw sand required will be purchased from the local mines & carted to the Plant site storage yard of the

MMPL. The silica sand will be washed (Simple Water) in multiple stages and taken for separating different sizes.

After proposed expansion of the Plant, 3,000 KL per annum of fuel will be required for operation of the Plant. Total 208 KLD water will be required & provided through Tube-well/Hand-pump & 2207 KLD waste water will be generated, which will be treated and reused. It was reported by the project proponent that there is no National Park/Wildlife Sanctuary within 10 km from the boundary of the project area. The estimated cost of the project is about Rs 15 Crores.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs for undertaking detailed EIA study as per Annexure-I.

### **Any other matter with the permission of the Chairman**

#### **3.1: Kujam Bauxite Mine with production capacity of 4,01,990 TPA (ROM) by M/s Gyanchand Prasad Agrawal, located at District Gumla, Jharkhand (76.40ha) (Consultant: Grass Root Research & Creation India Pvt. Ltd, Noida)-Reconsideration of EC**

The proposal is for bauxite mining with production capacity 4,01,990 TPA. The mine lease area is located near Village-Kujam, Tehsil-Bishunpur, District-Gumla, Jharkhand. The Latitudes and Longitudes of the mine lease area are 23° 17' 51.0" N & 23° 17' 37.8" N and 84° 17' 50.5" E & 84° 18' 43.1" E respectively on toposheet no. 73A/7. The proposal was earlier considered in the EAC meeting held during November 20-22, 2013 wherein the Committee sought the additional information.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 21<sup>st</sup> -23<sup>rd</sup> September, 2011 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by the Ministry vide letter no. J-11015/149/2011.IA.II (M), dated 10.01.2012. The Proponent submitted the EIA/EMP report to the Ministry for seeking environmental clearance after conducting public hearing. The Project Proponent made a presentation with regard to compliance of TORs for mining of bauxite with a capacity of 4,01,990 TPA.

The total mining lease area is 76.40 ha. No forest land is involved. The Mining plan along with progressive mine closure plan has been approved by Indian Bureau of Mines, Nagpur vide letter no. 314(3)/2011- MCCM (C)/MP-36, dated 21<sup>st</sup> June, 2012. PP reported that 56.03 ha area will be used for excavation, 0.36 ha for infrastructure development, 1.30 ha for road, 0.44 ha for water reservoir, 1.37 ha for Green belt development and 16.9 ha area will be the undisturbed area. The mineable reserves are 60, 35,738 tonnes and Life of mine is 13 years.

Mining is by fully mechanized opencast method. The mining process involves drilling and blasting, loading and transportation of the excavated material. Bauxite drilling will be done by Jack hammers and blasting. The wagon drills will be operated with compressed air supplied by air compressor. Blasted material after proper sizing, will be transported by using dumpers. Overall pit slope will be 37°. At the end of the life of mine, out of total mining lease area, excavated area will be 56.03 ha (40.39 ha will be backfilled & available for agricultural purpose and 11.43 ha will be converted into water reservoir). As per approved

mine plan, total waste generation will be 14.57 million tonnes at the end of the life of the mine. It was reported by the PP that ground water will not be intersected during scheme period. The total water requirement for the project will be 12 KLD which is sourced from the nearby villages. The Grampanchyat NOC has been obtained for the use of water from the nearby villages.

There is no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant Reserves etc. exist within the study area (10 km radius of the mining lease boundary). There are three Reserved Forests & eleven Protected Forests within the study area. Three Schedules-I species namely Indian Pangolin, Sloth Bear & Indian Peafowl were reported within buffer zone. The species specific Conservation Plan has been prepared and submitted to divisional forest officer, Gumla. The Committee discussed the Conservation Plan and noted the steps in the Conservation Plan to protect the scheduled species.

The baseline data was generated for the period during March 2012 to May 2012. All the parameters for water and air quality were within permissible limits. The Committee deliberated on the baseline data and found that the principle environment parameters are well within the permissible limits.

The Public hearing was held on 05.12.2012 under the Chairmanship of Smt. Cristina Hansda, Addl. District Collector of Gumla at Village Kujam, Tehsil Bishunpur in District Gumla (Jharkhand). The representative of Regional Office from the Jharkhand State Pollution Control Board was present. Major issues raised during public hearing were related to employment, water availability and leveling of earth surfaces. The issues raised during the public hearing were discussed during the meeting.

The total cost of the project is Rs. 237 lakhs. The PP has earmarked Rs. 3.52 lakhs towards Environmental Protection Measures and Rs. 5.15 Lakhs per annum towards recurring expenses. PP informed that Rs. 11.85 Lakhs have been earmarked towards CSR activities for next five years of mining operation. PP reported that there is no court case/litigation pending against the project.

The Committee sought the following additional information during its meeting held during November 20-22, 2013 and decided to defer the proposal:-

- (i) Environment Policy need to be revised as pointed out;
- (ii) Meteorological data collected during March 2012- May 2012 shall be compiled and resubmitted; and
- (iii) Justification regarding air monitoring stations in north east direction.

The PP vide letter dated 25.11.2013 has submitted the details with regard to revised Environment Policy, compiled Meteorological data and justification regarding air monitoring stations in north east direction. The Committee deliberated the issues and based on the discussion held on the information submitted; the Committee **recommended** the proposal for environmental clearance for bauxite mining with production capacity 4,01,990 TPA of bauxite with additional specific condition to implement the Environment Policy and Conservation Plan.

The meeting ended with a vote of thanks to the Chair.

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## **Annexure-I**

<b>S. No.</b>	<b>Terms of Reference (TORs)</b>
1)	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification, 1994 came into force w.r.t. the highest production achieved prior to 1994.
2)	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
3)	All documents including approved mine plan, EIA and public hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management and mining technology and should be in the name of the lessee.
4)	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
5)	Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large may also be detailed in the EIA report.
6)	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
7)	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc should be for the life of the mine / lease period.
8)	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
9)	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
10)	A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be

	issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
11)	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
12)	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
13)	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
14)	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly detailed mitigative measures required, should be worked out with cost implications and submitted.
15)	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the State Wildlife Department/Chief Wildlife Warden under the Wildlife (Protection) Act, 1972 and copy furnished.
16)	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
17)	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
18)	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
19)	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village located in the mine lease area will be

	shifted or not. The issues relating to shifting of Village including their R&R and socio-economic aspects should be discussed in the report.
20)	One season (non-monsoon) primary baseline data on ambient air quality (PM <sub>10</sub> , SO <sub>2</sub> and NO <sub>x</sub> ), water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM <sub>10</sub> , particularly for free silica, should be given.
21)	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
22)	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
23)	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
24)	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
25)	Impact of the project on the water quality, both surface and groundwater should be assessed and necessary safeguard measures, if any required, should be provided.
26)	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
27)	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
28)	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
29)	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project.
30)	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement

	for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered.
31)	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA report.
32)	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
33)	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given.
34)	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP.
35)	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
36)	Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
37)	Detailed environmental management plan to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
38)	Public hearing points raised and commitment of the project proponent on the same along with time bound action plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
39)	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.
40)	The cost of the project (capital cost and recurring cost) as well as the cost towards implementation of EMP should clearly be spelt out.

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**List of Participants**

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| 1.  | Shri M.S. Nagar  | Chairman         |
| 2.  | Dr. S. Subramaniyan  | Member           |
| 3.  | Dr. L. Ajay Kumar  | Member           |
| 4.  | Dr. S.K. Peshin  | Member           |
| 5.  | Shri P.K. Verdia   | Member           |
| 6.  | Prof. G.S. Roonwall  | Member           |
| 7.  | Dr. Saroj Director, MoEF   | Member Secretary |
| 8.  | Dr. R. B. Lal, Deputy Director, MoEF   |                  |
| 9.  | Dr. Sonu Singh, Deputy Director, MoEF  |                  |
| 10. | Representative of <b>M/s Dalmia Cements (Bharat) Ltd.</b>                    |                  |
| 11. | Representative of <b>M/s Hanuman Minerals</b>                                |                  |
| 12. | Representative of <b>M/s Department of Industries &amp; Commerce, Punjab</b> |                  |
| 13. | Representative of <b>M/s Bhilwara Mines &amp; Minerals</b>                   |                  |
| 14. | Representative of <b>M/s Hindalco Industries Limited</b>                     |                  |
| 15. | Representative of <b>M/s Ultra Tech Cement Ltd.</b>                          |                  |
| 16. | Representative of <b>M/s Orient Abrasives Ltd.</b>                           |                  |
| 17. | Representative of <b>M/s Ashapura Minechem Limited</b>                       |                  |
| 18. | Representative of <b>M/s B.C. Mohanty &amp; Sons Pvt. Ltd.</b>               |                  |
| 19. | Representative of <b>M/s Jaiprakash Associates Ltd.</b>                      |                  |
| 20. | Representative of <b>M/s Prism Cement Ltd.</b>                               |                  |
| 21. | Representative of <b>M/s ACC Ltd.</b>  |                  |
| 22. | Representative of <b>M/s KJS Ahluwalia</b>                                   |                  |
| 23. | Representative of <b>M/s Bhartesh Construction Company</b>                   |                  |
| 24. | Representative of <b>M/s Manglore Minerals Pvt. Ltd.</b>                     |                  |

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