

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

SUMMARY RECORD OF 20th MEETING OF THE RECONSTITUTED COMMITTEE OF THE EXPERT APPRAISAL COMMITTEE FOR ENVIRONMENTAL APPRAISAL OF MINING PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The 20th 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 **May 28-30, 2014**. The list of participants is annexed.

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

Agenda Item No. 1:

(1.1). Confirmation of the minutes of the 19th EAC Meeting.

The Minutes of the 19th Meeting of EAC held during **April 29-30, 2014** were confirmed and circulated.

Agenda Item No. 2:

Day 1: 28th May, 2014 (Wednesday)

Consideration of Environmental Clearance Proposals

(2.1) Enhancement of production capacity of Kolihan Copper Mine from 1.0 million TPA to 1.5 million TPA (ROM) by M/s Hindustan Copper Ltd., located at Village-Kolihan, Tehsil-Khetri, District Jhunjhunu, Rajasthan (163.23 ha) (Consultant: MECON Limited, Ranchi)-EC

The proposal is for expansion of copper ore mining from 1.0 million TPA to 1.5 million TPA (ROM) of copper ore in the mine lease area of 163.23ha. The mine lease area is located at village Kolihan, Tehsil Khetri, District Jhunjhunu, Rajasthan. The Latitude and Longitude of the site are North 28°00'41.79"N - 28°01'23.77" and East 75°45'50.99"E - 75°46'54.08" respectively on the toposheet no. 44P/16.

The proposal was considered by the Expert Appraisal Committee (Mining) in its meeting held during June 20-22, 2012 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by the Ministry vide letter no. J-11015/61/2012.IA.II(M), dated 23.07.2012. The Proponent submitted the EIA/EMP report to the Ministry seeking environmental clearance after conducting public hearing.

The Committee noted that the Ministry has earlier accorded the environmental clearance for the project vide MoEF letter no. J-11015/378/2007-IA.II (M) dated 04.03.2009 for the production capacity of 1.0 million TPA of copper ore. The certified compliance report was submitted by the Regional Office of the MoEF, dated 13.06.2013. The Committee deliberated on the compliance report in detail.

The total mine lease area is 163.23 ha. Out of this, 161.83ha is forest land and 1.40ha is barren land. MoEF has granted forestry clearance for 167.707ha (161.83 ha inside the mine lease and 5.877ha outside the Mine lease area) vide letter nos. 8-5/97-FC, dated 16.12.1997 and 10.02.1998. The latest mining plan for the project is approved by IBM vide letter no 584(4)(3) (427)/2012 dated 25.07.2013. The mine lease is valid up to 23-11-2016.

The method of mining will be underground mechanized with transverse open blast hole stoping method using 165 mm dia. holes drilled from level to level / Drill Level to Extraction level. The Ore beneficiation [not under the present scope] shall be done at KCC concentrator, located adjacent to the production shaft of Khetri copper mine. From surface stockpile, ore will be transported by 7.4 km long bi-cable aerial ropeway to the concentrator plant. The life of the mine will be about 20 years. The anticipated waste generation till conceptual plan period shall be 5,38,883 m³, 50% waste rock will be dumped into underground open stopes and remaining will be hoisted through shaft to ultimately dump into the dumping yard, situated nearby, over 1.64 ha rocky barren land. The PP informed that they have made proper planning for storage of wastes to be lifted due to sinking of a new mine shaft. PP has engaged Indian School of Mines (ISM), Dhanbad to periodically monitor ground movement systematically through establishing subsidence pillars. The subsidence study was conducted by ISM, Dhanbad and an interim report was submitted. PP reported that 1200 m³/day water will be required for the expansion of the project. As much as 50% of this demand has been planned to be met through recycling. About 200 m³/day of mine discharge / seepage water shall be collected and recycled back to mine for use. 400m³/day fresh water shall be continued to be drawn from existing tube wells located at Kharkhara. Permission from CGWA has been obtained for drawl of 400 m³/day of ground water.

Project Proponent reported that there is no wildlife sanctuary/tiger reserve/national park located within the 10 km radius of mine lease area. In this regard, a map and list of flora-fauna duly authenticated by DFO, Jhunjhunu has been submitted by the Project Proponent. PP reported that Peafowl is the only schedule-I fauna found in the study area. Necessary conservation plan for Peafowl has been submitted by the PP, however it has not been approved by the Chief Wild Life Warden. The Committee was of the view that the conservation plan shall be approved by the Chief Wild Life Warden.

Baseline studies were carried out during September-November 2012. The Committee deliberated and was of the opinion that the base line data collected were within the permissible limits as prescribed by the CPCB. The Public Hearing for the project was conducted on 27.12.2013. The representative of Regional Office

from the Rajasthan State Pollution Control Board was present. The issues raised during the public hearing were discussed during the meeting.

After deliberations, the Committee decided that the proposal be **deferred** and that the Proponent shall furnish the following information for further consideration.

- (i) The Committee noted that the Road condition between Stockpiles and the mine is not good. PP needs to improve the condition of the road and submit the details;
- (ii) Shaft location and dumps handling details to be submitted; Shaft sinking/Shaft raising methodology may be provided;
- (iii) Waste quality of the waste removed during shaft sinking may be provided;
- (iv) Viability of aerial rope way beyond 1.0 million TPA to be explored and information submitted;
- (v) Status of FC Clearance for 7.5km aerial rope way;
- (vi) Final report of subsidence monitoring and forests area affected due to subsidence and reclamation plan; and
- (vii) Conservation plan for Schedule-I species shall be approved by the Chief Wild Life Warden.

Re-Consideration of Environmental Clearance Proposals

(2.2) Mohanpura Limestone Mines with production capacity of 0.80 million TPA(ROM) of limestone 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 earlier appraised in the EAC meeting held during December 16-17, 2013 wherein the Committee deferred the proposal and sought additional information. PP vide letter dated 22.03.2014 has submitted the additional information. Accordingly, the proposal was placed in the present meeting.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 21st -23rd 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 26th March, 2012 and further amended on 9th 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) by dumpers & further from Sitapuri Mine to Proposed Cement Plant through 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 m³ of topsoil and 1.61 million m³ 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 Forests 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 in the EAC meeting held during December 16-17, 2013, the Committee noted following deficiencies and deferred the proposal: -

- (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 samples 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.

PP vide letter dated 22.03.2014 has submitted the above mentioned information. The Point wise explanation of the queries is as given below: -

- (i) As per query point no.1, for use of Surface Miner, samples were reanalyzed and as per the ISRM (International Society of Rock Mechanics) standards, values of basalt and coralline limestone were found to be extremely hard and with higher than acceptable limit, thus, the applicability of surface miner is not feasible. Looking into the same, hard rocks, which form a thick capping, will have to be excavated using conventional method of mining comprising of drilling and blasting.
- (ii) *As per reply of query point no.2*, Details of all the surrounding villages have been provided along with the area of each of the villages No. of House Holds, Population and Distance of Villages from individual working pits have also been provided. Mitigation measures for ensuring that there is no impact on nearby villages are also provided. .
- (iii) *As per reply of query point no.3*, Sukar is a seasonal river which remains dry for most part of the year. Mining lease has not been granted up to a

horizontal distance of 50 m on either side of the river. Moreover, the nearest mining pit shall be 500 m away from the river. Transport across the river shall be through tippers which will ply on the existing road and bridge. A green belt shall be constructed along the stretch of roads to be used for transport. No adverse impact is therefore foreseen on the river. Limestone crusher will be installed at Sitapuri mine (about 3 km away from Mining Area). Limestone will be transported via bridge already constructed on Man River. Therefore no adverse impact is foreseen. However, adequate measures will be taken to mitigate dust emissions during transportation on haul road.

- (iv) *As per reply of query point no.4*, Out of total lease area of 1026 ha., about 102.37 ha will be excavated in 6 no. of pits, out of which, 34.92 ha will be reclaimed by backfilling (22.76 ha would be afforested & 12.16 ha area would be fully rehabilitated by bench/slope plantation) and the remaining 67.45 ha area will be converted to a reservoir to store rainwater. About 0.40 ha area will be covered under roads and about 655.87 ha area will remain undisturbed. Out of total lease area, acquired area is 121.512 ha (Govt. Land: 31.267 ha & private land 90.245 Ha) and area to be acquired is 248.618 ha (Govt. Land : 191.93 & private land 56.688 ha).
- (v) *As per reply of query point no.5*, Occupational health hazards would mainly arise from exposure to dust and noise, the other possible risk would be on account of handling explosive and blasting. Possible mitigation measures would include spraying of water on all dust generating points, development of green belt, closed cabins in HEMM, use of silencers, use of Personal Protective Equipment etc. Health Checkup of individuals shall be carried out as per the provisions of Mines Rules.
- (vi) *As per reply of query point no.6*, primary survey for flora fauna was given in the query reply. The same has been authenticated by DFO, Dhar.
- (vii) *As per reply of query point no.7*, the extent of explosive required for achieving the production was re-investigated keeping the same operating parameters as mentioned in the mining plan approved by the Indian Bureau of Mines (IBM). The study reveals that it is possible to reduce the explosive consumption from 107 Kg of charge per blast hole to 95 kg per blast hole.

Based on the information submitted, presentation made by the Proponent and discussions held, the Committee **recommended** the proposal for environmental clearance for mining of limestone with production capacity of 0.80 million TPA (ROM).

(2.3) Mining of Flag Stone (minor mineral) with production capacity of 11,700 TPA (4,500 m³) by M/s Indra Pathar Shramic Shakari Samiti Maryadit Suwakheda, located at Village-Suwakheda, Tehsil Jawad, Distt Neemuch, Madhya Pradesh (117.532 ha) (Consultant: M/s Enviro Techno Consult, Nagpur (Maharashtra) – EC

The proposal is for mining of Flag Stone (minor mineral) with production capacity of 11,700 TPA (4,500 m³) by M/s Indira Patthar Shramik Sehkari Samiti. The mine is located at Village-Suwakheda, Tehsil Jawad, Distt Neemuch, Madhya Pradesh.

The proposal was earlier considered in the 7th EAC meeting held during May 15-17, 2013 wherein the Committee **recommended** the proposal for environmental clearance with additional specific conditions (i) Excess use of pesticide should be reduced, (ii) Occupational health and safety measures, especially frequency to be enhanced for workers who are having some ailments like BP, diabetes, smokers etc. should have health checkup once in six months, and (iii) Implementation of issues raised during the public hearing (as per the budgetary provisions made therein), should be provided to the Ministry.

The proposal was examined in the Ministry and on perusal, it is noted that the M.P. Minor Mineral Rules, 1996 was amended on 23.03.2013 and the approval of mining plan from the Department of Mines & Geology is necessary. Accordingly, the Ministry has requested PP to submit the approved mining plan. In this context, PP vide letter dated 03.04.2014 has submitted the approved mining plan from the Department of Mines & Geology, Govt. of MP which was deliberated by the Committee and found adequate.

Based on the information submitted, presentation made by the Proponent and discussions held, the Committee **recommended** the proposal for environmental clearance for mining of Flag Stone (minor mineral) with production capacity of 11,700 TPA (4,500 m³).

(2.4) Enhancement in production capacity of Lead-Zinc Ore mine from 0.35 million TPA to 1.0 million TPA by M/s Hindustan Zinc Limited, located at Village Kayar, District- Ajmer, Rajasthan (480.45 ha) (Consultant: VIMTA Labs Ltd, Hyderabad)-EC

The proposal of M/s Hindustan Zinc Limited is for enhancement of production from 0.35 million TPA to 1.0 million TPA of Lead-Zinc Ore in its existing underground mine at Kayar, Ajmer District, Rajasthan over a mining lease area of 480.45 ha. The mine lease area lies between Latitude 26^o 31' 30" N to 26^o 32' 30"N, Longitude 74^o 41' 00" E to 74^o 42' 00"E and is covered by Survey of India Topo sheet no. 45 J/10.

The proposal was earlier appraised in the 12th EAC meeting held during 31st October, 2013 – 1st November 2013 wherein the Committee deferred the proposal and sought additional information. PP vide letter dated 08.02.2014 has submitted the additional information. Accordingly, the proposal was placed in the present meeting.

The proposal was considered by the Expert Appraisal Committee (Mining) in its meeting held during 23-25 May, 2013 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by the Ministry vide letter no. J-11015/47/2012.IA.II (M) dated 06.07.2012. The proponent submitted the EIA/EMP report after conducting Public Hearing to the Ministry for seeking environmental clearance.

The Ministry has earlier accorded the environmental clearance for existing integrated cement project vide MOEF letter no. J-11011/267/2008-IA II (I) dated 11.12.2009 for 0.35 million TPA of Lead-Zinc ore. The certified report on compliance of the conditions stipulated in the earlier EC was submitted by the Regional Office of MoEF, Lucknow vide letter dated 31.07.2013. The Committee deliberated the compliance status at length.

The modified mining plan with progressive mine closure plan has been approved by Indian Bureau of Mines (IBM) vide letter no. 584(5) (3) (406)/11, dated 07.05.2013. The mine lease area is 480.45 ha. Out of this 445.82ha is Agricultural land, 11.1 ha is waste land and 23.53ha is Govt. land. No forest land is involved. The Mining Lease has been sanctioned to M/s Hindustan Zinc Limited, vide letter of Government of Rajasthan no. ML No. 16/92, dated 28/02/1998 for a period of twenty years.

Mining is by mechanized underground method. The life of mine is 15 years. Proponent reported that latest mechanized equipment for development drilling, mucking, and hauling will be deployed at the mine. The blast design, stope stability and monitoring is being done under guidelines of CIMFR Dhanbad. The total water requirement for the mine will be 560 m³/day. Out of which, 75 m³/day fresh water sourced from PHED for domestic consumption, 200 m³/day of treated sewage water sourced from Ajmer city with recycled quantity of 50 m³/day from internal STP and 88 m³/day from operations and 147 m³/day mine dewatering will be reused for dust suppression. The Ore will be transported to Rampura Agucha mine for mineral beneficiation. About 143,000 m³ waste will be generated from the mine development during the Phase-I of mining and this would be dumped in a specifically assigned area of 1.0 ha within the lease boundary. The waste will be used for back filling.

Proponent informed that since it is underground mining operations, hazardous situations may arise leading to accidents and accordingly mitigation measures as prescribed in the Metalliferous Mines Regulations, 1961, will be adopted. Proper precautions and remedial measures will be taken to prevent the occurrence of hazards.

The baseline data was generated for the period during pre-monsoon season i.e. March 2012 to May 2012. All the parameters for water and air quality were within permissible limits. The Committee noted that the base line monitoring data were prior to the issuance of TORs. PP informed the Committee that they had requested to use the base line data during the presentation in the EAC meeting held during May 23-25, 2012 to determine the TORs, however it was not reflected in the Minutes of the meeting. The Committee deliberated the issues and were of the opinion that as the base line data was well within the permissible limits as prescribed by the CPCB, the base line data could be accepted.

It was reported by the PP that no ecologically sensitive area/protected areas such as National Parks, Wildlife Sanctuaries, Tiger Reserves fall within the study area (10 km radius of the mine boundary). However, two Reserved Forests and two Protected Forests exist within the 10 km area. One Schedule I species i.e. Peacock was reported in the study area during survey.

The Public Hearing was conducted on 25.06.2013 under the chairmanship of Mr. Gajendra Singh Rathore, Additional District Collector, Ajmer. The representative of Regional Office from the Rajasthan Pollution Control Board was also present. The Committee discussed the issues raised during the public hearing.

The total cost of the project is Rs. 350 crores. The PP has earmarked Rs. 4.30 crores towards Environmental Protection Measures. PP informed that Rs. 150 Lakhs have been earmarked towards socio-economic welfare measures for the nearby villages. PP reported that 17 petitions were filed by the appellants for higher compensation. The Committee desired that such important issues of compensation should be sorted out mutually with the intervention of Panchayat or local Govt., if needed.

Based on the presentation made and discussions held in the EAC meeting held during 31st October, 2013 – 1st November 2013, the Committee noted following deficiencies and deferred the proposal: -

- (i) Need to have site specific Environment Policy for Lead & Zinc in view of biological Impacts of lead on the food chain, animal life and human life;
- (ii) Details of ventilation plan and dust containment measures for underground mining activities;
- (iii) Details of Occupational health;
- (iv) Details of blasting pattern and safety system underground.
- (v) Details of influence of water on the proposed mining;
- (vi) Species specific wild life conservation plan;

- (vii) Commitments to the implementation of the recommendations of the Specific Studies w.r.t Mine Safety Report provided by BHU and CIMFR;
- (viii) Details of infrastructure facility for the mine workers need to provide as per TOR condition 32; and
- (ix) Details of Endangered and native species reported in the study area need to be planted and a nursery for their proliferation developed.

PP vide letter dated 08.02.2014 has submitted the above mentioned information with regard to site specific environmental policy, ventilation plan, dust suppression measures, details of occupational health, blasting pattern underground and safety systems, subsidence and impact on ground water, wild life conservation plan, implementation of CIMFR recommendations, Infrastructure facility to mine workers & proliferation of endangered species of flora etc.. The Point wise explanation of the queries is as given below: -

- (i) The Proponent has developed the site specific environmental policy and implemented.
- (ii) The Proponent informed that ISM, Dhanbad has carried the ventilation network modelling & simulation study and reported that provision of Personal Protective equipments and necessary training and awareness programs for mine workers will be undertaken in line with DGMS guidelines,
- (iii) The Proponent has submitted the details of occupational health measures. The Committee deliberated the issues and was of the opinion that PP shall also include the monitoring of lead in blood in the schedule of health check-up.
- (iv) Blasting design and pattern were explained as per CIMFR recommendations. The blasts are to be monitored regularly for recording ground vibration and noise. Also scientific experts to be consulted as and when required for designing the blasts for keeping the ground vibrations within the prescribed permissible limits. Non electric/ electronic detonators to be used for development and stope blasting. Whenever required, the deck charging of holes to be practiced to ascertain the maximum charge per delay as per recommendations.
- (v) With regard to details of influence of water on the proposed mining, the CIMFR has conducted three dimensional numerical modeling to predict the subsidence from underground stoping. The subsidence and its impact on water underground was discussed and the Committee emphasised that there is need to monitor the nearby water bodies.
- (vi) Peacock is the only Schedule I fauna in study area for which proponent has developed conservation plan. The conservation plan is forwarded to the MoEF

vide letter no. 10 dated 15.01.2014 by the Additional Principal Chief Conservator of Forests & Chief Wildlife Warden Jaipur, Rajasthan.

- (vii) Proponent explained the recommendations of CIMFR study and importance of monitoring the surface subsidence during mining operations.
- (viii) Proponent informed that they had provided the details of infrastructure facilities viz. ambulance and first aid facilities, vocational training center, rest shelter with wash room and locker facility etc. for mine workers.
- (ix) Proponent reported the progress made on the proliferation efforts of the 3 endangered species namely *Commiphora wightii*, *Anoageissus sericea*, *Butea monosperma*. Also explained the details of saplings planted and plan for going forward. Proponent plans to develop nursery at Kayar Mines.

Based on the information submitted, presentation made by the Proponent and discussions held, the Committee **recommended** the proposal for environmental clearance for enhancement in production capacity of Lead-Zinc Ore mine from 0.35 million TPA to 1.0 million TPA with specific conditions (i) PP shall carryout monitoring of lead in the bodies of the employees and the villagers in the areas surrounding the mine in their schedule of health check-up. (ii) The blasting is to be monitored regularly for recording ground vibration and noise. (iii) The nearby water bodies should be monitored every six months and report submitted to Regional office of the MoEF. to ascertain impact due to lead contamination (iv) A nursery should be developed to protect 3 endangered plant species, namely *Commiphora wightii*, *Anoageissus sericea*, and *Butea monosperma*. (v) The conservation plan for Schedule I species which has been approved by the Additional Principal Chief Conservator of Forests & Chief Wildlife Warden Jaipur, Rajasthan vide letter no. 10 dated 15.01.2014 should be fully implemented.

Amendment in Environmental Clearance Proposal

(2.5) Limestone Mining Project with production capacity of 1.0 million TPA of Limestone (ROM) by M/s Reliance Cementation Pvt. Ltd., located at village Badhi Ghorwai, Tehsil Maihar, District Satna, Madhya Pradesh (129.802 ha)-Amendments in EC condition

The Proposal is for amendments in EC to delete the General condition no. (xiii) for the project of M/s Reliance Cementation Pvt. Ltd., located at village Badhi Ghorwai, Tehsil Maihar, District Satna, Madhya Pradesh.

The Ministry of Environment and Forests vide letter dated 14.02.2014 has accorded the environmental clearance to M/s Reliance Cementation Pvt. Ltd. for opening of new mine for production of 1.0 million TPA of limestone (ROM) in the Mine lease area of 129.802ha, located at village-Badhi-Ghorwai, Tehsil-Maihar, District-Satna Madhya Pradesh. The General condition no. (xiii) of the EC is as follows:

“The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely leopard, elephant etc. spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the Wildlife Conservation Pan, so prepared specific to the project site, shall be effectively implemented. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhopal”.

The PP vide letter dated 28.02.2012 has requested to delete the General condition no. (xiii), as no endangered fauna (including leopard and elephant) was found in the study area during baseline survey and the same.

Based on the information submitted, presentation made by the Proponent and discussions held, the Committee **recommended** to delete the condition no. (xiii), as no endangered fauna (including leopard and elephant) was reported in the study area.

CONSIDERATION OF TOR PROPOSALS

(2.6) Nowgaon Ochre, White Earth and Bauxite Mine with proposed production capacity of 20,000 TPA by M/s Madhya Pradesh Mineral Supply Company, located at village-Nowgaon, Tehsil-Majhgawan, Distt. Satna, Madhya Pradesh (7.40 ha) (Consultant: Grass Roots Research & Creation India (P) Ltd.)-TORs

The proposal of M/s Madhya Pradesh Mineral Supply Company is for Nowgaon Ochre, White Earth and Bauxite Mining with proposed production capacity of 20,000 TPA in the mine lease area of 7.40ha. The Mine Lease area is located at village: Nowgaon, Tehsil: Majhgawan, District: Satna , Madhya Pradesh. The co-ordinates of Nowgaon Ochre, White Earth & Bauxite Mine are 24°53'01.4" N to 24°53'09.3" N Latitude and 80°54'02.7" E to 80°54'22.1" E Longiyude respectively. It is category "A" project due to Inter-State Boundary of Uttar Pradesh & Madhya Pradesh (about 7.0 km in North Direction). There are no National Parks or Wildlife Sanctuaries, Eco Sensitive Zones within 10 km of study area.

The mining lease was executed in favor of M/s. Madhya Pradesh Minerals Supply Co. on 01.10.1985 over 23.60 Acre (9.55 ha) lease area for 20 years up to 30.09.2005. Area of 5.29 Acres of mining lease was surrendered by the applicant vide letter No. - 5/MPM/85 dated 25.04.1997. The balance lease hold area of 18.31 Acres (7.40 Ha) was applied by the lessee for 1st renewal. The renewal application (Form-"J") was filed on 02.08.2004 i.e. one year before of expiry of lease for 20 years over an area of 18.31 Acre or 7.40 ha. Total water requirement will be 6.0 KLD. This water will be supplied from the tube well from nearby villages. The estimated cost of the project is Rs. 1.0 Crore. It is reported by the project proponent that there is no court case/litigation pending against the project.

The Committee observed that this is **violation case** as mine was operated from 2005 to 2011 without obtaining prior environmental clearance after lease fell due for renewal. PP reported that the mining activities have been stopped w.e.f. 01.03.2012. PP mentioned that Madhya Pradesh Pollution Control Board Bhopal vide letter dated 30.03.2012 has issued direction for closure of the unit under section 33 A of the Water (Prevention & Control of Pollution), Act 1974 & u/s 31 A of the Air (Prevention & Control of Pollution) Act 1981. MoEF may also to take actions of violations as per OM dated 27.06.2013.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs as per Annexure-I. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

(2.7) Enhancement in production capacity of Adityana Limestone Mine from 71,553 TPA to 4,00,000 TPA by M/s Saurashtra Chemicals located at village Adityana, Talika Ranavav, District Porbandar, Gujarat (97.61 Ha) (Consultant: Mantec Consultants Pvt. Ltd.)-TORs

The Proposal was **deferred** as per the request of Project Proponent vide letter dated 27.05.2014 that PP could not attend the meeting.

(2.8) Karmau Limestone Mining with proposed production capacity of 0.20MTPA by M/s Jaiprakash Associates Limited located at village Karmau, Tehsil Rampur Baghelan, Distt., Satna, Madhya Pradesh (150.028ha) (Consultant: Jaiprakash Associates Limited)-TORs

The proposal is of M/s. Jaiprakash Associated Limited for production of 0.2 million TPA of limestone in the ML area of 150.028 ha. The mine lease area is located at village-Karmau Tehsil-Rampur Baghelan, District Satna, Madhya Pradesh. The Latitude and Longitude of the mine lease area are 24°35'42" N to 24°36'37" N and 81°02'23" E to 81°03'31" E respectively. The present proposal of Karmau Limestone Mines is to cater the partial requirement of Jaypee Sanjeevani Cement Plant which is located at a distance of 4.7 km towards East.

The total mine lease area is 150.028 ha. Out of this, 146.159 ha is private land (agricultural) and the balance 3.869 ha is Government waste land. No forest land is involved. Method of mining will be opencast mechanized. The mining process involves drilling and blasting, loading and transportation of the excavated material. The working depth of the mine is 17 m. The life of the mine is 31 years. The Mine

Plan has been approved for 0.2 MTPA by IBM vide letter no: 314(3)/2010-MCCM(C)/MP-14 dated 19.10.2010. The overburden generated for first five years will be about 93,559 m³ with a stripping ratio of 1:0.05 (LS to OB). Water requirement of 75 m³/day will be met from water reservoir of Beladevmaudaldal limestone mine which is located at a distance of 5.0 km, NE, rain water reservoir and from mine pit sump. The cost of the project is Rs. 30 Crores.

PP reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant Reserves etc. exist within the study area (10 km radius of mining lease boundary). No court case /litigation is pending.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs as per Annexure-I. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The the analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories. All the original copies of testing/analysis report should be made available during appraisal of the project;
- (ii) Cumulative impact of other mines located in the vicinity of MLA;
- (iii) Impact study of cumulative impact on the carrying capacity of Tons River;
- (iv) Project to coordinate Regional EIA for the region to be done by the State Govt. along with all mining projects;
- (v) Details of grazing land; and
- (vi) Details of impacts and their mitigation to protect the Nala surrounding the mine lease area.

(2.9) Mining of Stone with production capacity of 10 Lakhs TPA (ROM) by M/s Muneer Enterprises, located at village-Amarpur Jorasi, Tehsil-Narnaul, District-Mahendragarh, Haryana (10.72ha) (Consultant: Mantec Consultants Pvt. Ltd.)-TORs

The proposal of M/s Muneer Enterprises is for mining of 10 Lakhs TPA of Stone (ROM) in the mine lease area of 10.72 ha. The Mining Lease area is located at Khasra no-145 Village-Amarpur Jorasi, Tehsil- Narnaul, District- Mahendragarh, Haryana. The proposed production capacity is 10,00,000 TPA. The Mine Lease area lies between 27° 59' 27" to 27° 59'45" N, 76° 03'51" to 76° 04'04"E. The Project is located in seismic zone-IV. It is 'A' category project due to the presence of Haryana & Rajasthan Interstate boundary (about 7.41km west) within 10 Km radius of the lease area.

The Mining is proposed to be carried out by mechanized method of opencast working using shovel and dumper combination. Drilling and blasting are involved for dislodging the mineral. Apart from mining, the loading and transportation up to stack yard shall be done mechanically. The total mine lease area is 10.72ha. The Letter of Intent has been issued by the Department of Mines & Geology, Govt. of Haryana vide Letter No.DGM/HY/ML/Amarpur Jorasi/2013/167, dated 30.01.2014.

The total water requirement is 10.0 KLD including water demand for domestic purpose, dust suppression & green belt development which shall be met by tanker supply. Proponent reported that no ecologically sensitive area such as National Parks, Wildlife Sanctuaries, and Tiger Reserves falls within the study area (10 km radius of the mine boundary). The total cost of project would be around Rs. 4 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** and that the Project Proponent along with EC proposal should also furnish the followings: -

- (i) Details of Transportation of mined out materials as per the Indian Road Congress for both the ways (loaded as well as unloaded trucks) load and its impact on Environment;
- (ii) Details of excavation schedule & sequential mining plan;
- (iii) The base line data shall be collected so as to represent the whole mine lease area;
- (iv) Details of stations for continuous monitoring to be carried out in each Block in the core area;
- (v) Disaster Management Plan;
- (vi) Project Proponent shall furnish all the analysis/testing reports of water, air, soil, noise etc. using the MoEF/NABL accredited laboratories. All the original analysis/testing reports should be made available during appraisal of the project;
- (vii) Details of outcome of the court case in CWP No. 27700 of 2013 before the Hon'ble High Court of Punjab & Haryana as mentioned in the Lol letter issued by the Mines & Geology Department of State Govt. of Haryana; and
- (viii) Impact of all existing mines on the present land use in the study area.

(2.10) Janardanpur Limestone Mine with production capacity of 0.5 million TPA of limestone by M/s. Jaiprakash Associated Limited, located at village Janardanpur, Tehsil – Rampur Baghelan, District–Satna, Madhya Pradesh (135.435ha)-TORs

The proposal is of M/s. Jaiprakash Associated Limited is for production of 0.5 million TPA of limestone in the ML area of 135.435ha. The mine lease area is located near Janardanpur village, Rampur Baghelan Tehsil, Satna district, Madhya Pradesh. The latitude and longitude of the mine lease area are 24° 36' 11" N to 24° 36' 55" N and 81° 04' 07" E to 81° 05' 28" E respectively. The present proposal of Janardanpur limestone deposit is to cater the partial limestone requirement of Jaypee Sanjeevani cement plant which is located at a distance of 4.9 km towards South.

The total mine lease area is 135.435 ha. Out of this, 134.715ha is private land (agricultural) and the balance 0.720 ha is Government waste land. No forest land is involved. Method of mining will be opencast mechanized. The mining

process involves drilling & blasting, loading and transportation of the excavated material. The working depth of the mine is 19 m. The life of the mine is 32 years. The mine plan has been approved for 0.5 MTPA by IBM vide letter no: 314(3)/2010-MCCM(C)/MP-15 dated 19.10.2010. The overburden generated for first five years will be about 74,598 m³ with a stripping ratio of 1:0.08 (LS to OB). Water requirement of 75 m³/day will be met from water reservoir of Beladevmaudaldal limestone mine which is located at a distance of 2.5 km, NE, rain water reservoir and from mine pit sump. The cost of the project is Rs. 30 Crores.

PP reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant Reserves etc. exist within the study area (10 km radius of mining lease boundary). No court case /litigation is pending.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs as per Annexure-I. Further, the Project Proponent, along with EC proposal, should also furnish the followings:-

- (i) The the analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories. All the original copies of testing/analysis report should be made available during appraisal of the project;
- (ii) Project to coordinate Regional EIA for the region to be done by the State Govt. along with all mining and industrial projects;
- (iii) Cumulative impact of other mines located in the vicinity of MLA; and
- (iv) Details of grazing land.

(2.11) Kallankurichi Limestone Mine (GO No. 469) with production capacity of 0.05 million TPA by M/s. Tamil Nadu Cements Corporation Ltd., located at Tehsil & District: Ariyalur, State Tamil Nadu (66.11ha)-(Consultant- Consulting Engineers Group Ltd.)-TORs

The proposal of M/s. Tamil Nadu Cements Corporation Ltd. is for Kallankurichi Limestone Mine with production capacity of 0.05 million TPA of limestone (ROM) in the MLA of 66.11ha. The mine is located at Tehsil & District: Ariyalur, State-Tamil Nadu.

The total mine lease area is 66.11ha. Out of this, 62.89.5ha is patta land and 3.16.5ha is Government land. No forest land is involved. The mining plan along with Progressive Mine Closure Plan has been approved by the IBM vide letter dated 12.07.2012. Method of mining will be opencast mechanized. The mining process involves drilling & blasting, loading and transportation of the excavated material. Life of mine is 40 years.

PP reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant Reserves etc. existing within the study area (10 km radius of mining lease boundary).

The Committee observed that this is **violation case** as mine was operated without obtaining prior environmental clearance after lease fell due for renewal in 2005 and also enhanced the production of limestone. The State Govt. has issued the Mine lease vide GO 469 dated 21.05.1985 and is valid up to 12.11.2005. MoEF may also take action for violation as per OM dated 27.06.2013.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs as per Annexure-I. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories. All the original Reports of testing/analysis should be made available during appraisal of the project;
- (ii) Project to coordinate Regional EIA for the region to be done by the State Govt. along with all mining and industrial projects; and
- (iii) Cumulative impact of other mines located in the vicinity of MLA.

(2.12) Kallankurichi Limestone Mine (GO No. 344) with production capacity of 0.20 million TPA of limestone by M/s. Tamil Nadu Cements Corporation Ltd., located at Tehsil & District: Ariyalur, State Tamil Nadu (240.61 ha)-(Consultant- Consulting Engineers Group Ltd.)-TORs

The proposal of M/s. Tamil Nadu Cements Corporation Ltd. is for Kallankurichi Limestone Mine with production capacity of 0.20 million TPA of limestone (ROM) in the MLA of 240.61ha. The mine is located at Tehsil & District: Ariyalur, State-Tamil Nadu.

The total mine lease area is 240.61ha. Out of this, 218.825ha is patta land and 21.785 ha is Government land. No forest land is involved. The mining plan along with Progressive Mine Closure Plan has been approved by the IBM vide letter dated 30.01.2012. Method of mining will be opencast mechanized. The mining process involves drilling & blasting, loading and transportation of the excavated material. Life of mine is 28 years.

PP reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant Reserves etc. existing within the study area (10 km radius of mining lease boundary).

The Committee observed that this is **violation case** as mine was operated without obtaining prior environmental clearance after lease fell due for renewal in

2001 and also enhanced the production of limestone. The State Govt. has issued the Mine lease vide GO 344 dated 10.03.1980 and is valid up to 26.04.2001. MoEF may also take action for violations as per OM dated 27.06.2013.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs as per Annexure-I. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories. All the original Reports of testing/analysis should be made available during appraisal of the project;
- (ii) Project to coordinate Regional EIA for the region to be done by the State Govt. along with all mining and industrial projects; and
- (iii) Cumulative impact of other mines located in the vicinity of MLA.

(2.13) Kallankurichi Limestone Mine (GO No. 456) with production capacity of 0.28 million TPA of limestone by M/s. Tamil Nadu Cements Corporation Ltd., located at Tehsil & District: Ariyalur, State Tamil Nadu (194.165ha)-(Consultant- Consulting Engineers Group Ltd.)-TORs

The proposal of M/s. Tamil Nadu Cements Corporation Ltd. is for Kallankurichi Limestone Mine with production capacity of 0.28 million TPA of limestone (ROM) in the MLA of 194.165 ha. The mine is located at Tehsil & District: Ariyalur, State-Tamil Nadu.

The total mine lease area is 194.165 ha. Out of this, 149.665ha is patta land and 44.50ha ha is Government land. No forest land is involved. The mining plan along with Progressive Mine Closure Plan has been approved by the IBM vide letter dated 12.07.2012. Method of mining will be opencast mechanized. The mining process involves drilling & blasting, loading and transportation of the excavated material. Life of mine is 28 years.

PP reported that no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant Reserves etc. existing within the study area (10 km radius of mining lease boundary).

The Committee observed that this is **violation case** as mine was operated without obtaining prior environmental clearance after lease fell due for renewal in 2005 and also enhanced the production of limestone. The State Govt. has issued the Mine lease vide GO 456 dated 16.05.1985 and is valid up to 12.11.2005. MoEF may also take actions of violations as per OM dated 27.06.2013.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **prescribed** the TORs as per Annexure-I. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories. All the original Reports of testing/analysis should be made available during appraisal of the project;
- (ii) Project to coordinate Regional EIA for the region to be done by the State Govt. along with all mining and industrial projects; and
- (iii) Cumulative impact of other mines located in the vicinity of MLA.

(2.14) Black Granite Mine of M/s. Tamil Nadu minerals Ltd, located in S.F. No. 883 of village Ajjanahali, taluk pennagaram, District Dharmपुरi, Tamil Nadu, (8.98.5 ha)-TORs

The proposal of M/s. Tamil Nadu Minerals Ltd. was inadvertently placed in this Meeting. The Proposal is a Category 'B' Project, which is already transferred to SEIAA.

Amendment in Environmental Clearance Proposals

(2.15) Bhandanpur Limestone Mining Project of M/s. Maihar Cement, located at village(s)- Bhandanpur North Patti, Bhandanpur South Patti, Umrou, Piprahat & Srinagar, Tehsil-Maihar, District-Satna, Madhya Pradesh (663ha) (Consultant: JM Environet Pvt. Ltd., Haryana)-Amendment in EC

The proposal of M/s Maihar Cement is for amendments in Environment Clearance for the Bhandanpur Limestone Mine, located at Village Bhandanpur North Patti, Bhandanpur South Patti, Umrou, Piprahat & Srinagar, Tehsil-Maihar, District-Satna, Madhya Pradesh.

The Ministry has earlier accorded the environmental clearance for project vide MOEF letter no. J-11015/620/2007-IA II (I) dated 20.08.2008 for 2.3 million TPA of limestone by opencast mechanized method involving lease area of 663ha.

The Project Proponent vide letter dated 24.12.2013 has mentioned that they have carried out the re-assessment of the limestone deposit and found that the limestone reserve have increased to 74.945 million tonnes and depth of the deposit has also increased and life of mine will also increase to 32 years. The details are given below: -

S. No.	Name of pit & blocks	Ultimate working depth given in Environmental Clearance (in AMSL)	Proposed depth after re-assessment (in AMSL)
1.	Pit E-1 (Eastern Block)	386	340
2.	Pit C-1 & C-2 (Central Block)	379	357
3.	Pit W-1, W-2 & W-3 (Western Block)	386	329

PP requested the amendment in Environmental Clearance for mining at below ultimate working depth given in existing environmental clearance of Bhandanpur Limestone Mine without any change in limestone production capacity and ML Area.

After deliberations, the Committee decided that the proposal be **deferred** and that the Proponent shall furnish the following information for further consideration.

- (i) Copy of approved mining plan for proposed depth;
- (ii) Hydrogeological study report; and
- (iii) Certified Compliance Report of Regional Office of the MoEF for earlier EC.

(2.16) Bhandanpur Limestone Mining Project of M/s Maihar Cement, located at village(s)-Moharwa and Bhandanpur North Patti, Tehsil-Maihar, District- Satna, Madhya Pradesh (296.956 ha) (Consultant: JM Environet Pvt. Ltd., Haryana)-Amendment in EC

The proposal of M/s Maihar Cement is for amendments in EC for the mining project located at village(s)-Moharwa and Bhandanpur North Patti, Tehsil-Maihar, District- Satna, Madhya Pradesh.

The Ministry has earlier accorded the environmental clearance for project vide MOEF letter no. J-11015/622/2007-IA II (I) dated 26.08.2008 for 1.297365 million TPA of limestone by opencast mechanized method involving lease area of 296.956ha.

The Project Proponent vide letter dated 24.12.2013 has mentioned that they have carried out the re-assessment of the limestone deposit and found that the limestone reserve have increased to 54.289 million tonnes and depth of the deposit has also increased and life of mine will also increase to 16 years. The details are given below: -

S. No.	Name of pit & blocks	Ultimate working depth given in Environmental Clearance (in AMSL)	Proposed depth after re-assessment (in AMSL)
1.	North Block (B1-B2)	358	340
2.	Pit A	364	360
3.	Pit B	370	358

PP requested the amendment in Environmental Clearance for mining at below ultimate working depth given in existing environmental clearance of Bhandanpur Limestone Mine without any change in limestone production capacity and ML Area.

After deliberations, the Committee decided that the proposal be **deferred** and that the Proponent shall furnish the following information for further consideration.

- (i) Copy of approved mining plan for proposed depth;
- (ii) Hydrogeological study report; and
- (iii) Certified Compliance Report of Regional Office of the MoEF for earlier EC.

Day 2: 29th May, 2014 (Thursday)

CONSIDRATION OF EC PROPOSALS

(2.17). Jamirdihi Pyroxenite, Dunite, Quartz & Quartzite Mines of M/s Indian Marble Company in Sundergarh District, Orissa-(Production Capacity: 3,60,000MTPA Pyroxenite, 25,000 MTPA Quartz, 50.646 ha) (Consultant: SENES Consultants India Pvt. Ltd. Noida (U.P.)-EC

The Jamirdihi Pyroxenite, Dunite, Quartz and Quartzite Mines is located in village Jamirdihi, Bonai Sub Division of Sundergarh district, Orissa. The geographic location of the mine falls under the Survey of India's Topo- Sheet No. 73 C/13 (1:50,000 scale). The coordinates for the ML are Latitude: 21°59'18" to 21°59'40" N; Longitude: 84°54'28" to 84°55'12" E.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 17-18 February 2010 to determine the Terms of Reference (ToR) for undertaking EIA study. The TOR were issued on 4th March 2010 vide letter No. J-11015/08/2010-IA.II (M). The Mine Lease Area is 50.646 ha, which is a non-forest Govt. land. The mining lease deed was executed on 16.05.2003 and is valid up to 15.05.2023. The second scheme of mining was approved by Director of Mines, Odisha vide letter No. MXXXI(b)-34/13- 736 dated 21.01.2014

The opencast mine has been operated since 2003. In this period manual mining method had been adopted to excavate the ore and removal of overburden by using common mining implements such as crowbar, spades, shovel, basket, etc. It is proposed to continue the mining on a single shift basis with semi-mechanized methods. The various mining operation like rock breaking, loading into trucks, crushing, etc will be carried out mechanically and excavation & sizing of lump ore, sorting of ore and waste will be carried out manually. Drilling and blasting would not be required for the mining operation. The mineable reserve is Pyroxenite 1.68 million tons and Quartz and Quartzite 0.226 million ton. The anticipated life of mine for Pyroxenite is 5.06 years and Quartz and Quartzite is 9.23 years.

Sizing of Ore is proposed by installing a 180 TPH mobile crusher plant within the ML area. No beneficiation is required for the mineral as the Quartzite is of high silica content i.e. about more than 98% silica and the Pyroxenite of high grade. It is estimated 20% of the total excavated material will be waste. At present, there is no external waste dump. During the proposed mining phase, two dump sites over an area of 28,370 sq. m. will be used as external dumps. Height of the dumps will be 8 m. Approximately 72% waste will be utilised for back filling of mined the quarry.

About 77 KLD water will be required for the project. 75 KLD will be sourced from surface water body (Kurhadi Nala) and 2 KLD from Ground water. Application for withdrawal permission has been submitted to Department of Water Resource, Odisha. The ground water level in the study area varies from 2.8 m b.g.l to 5.4 m b.g.l. Mine working will not intersect the ground water table.

It was reported by Project Proponent that ML area is non-forest Government land. There is no sensitive ecological habitat like National Parks, Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant reserves within 10km radius of ML area. A detailed wildlife study has been carried out. No Schedule I species have been reported or recorded from the study area. The floral and faunal checklist has been authenticated by the Forest Department.

Baseline studies were carried out during pre monsoon season of 2012 (March-May). All the parameters for water and air quality were within permissible limits. The Public Hearing was conducted on 30th September 2013 at Jamirdihi village under Bonai Sub-division of Sungargarh district. Sri Rabindra Nath Mishra, Additional District Magistrate, Rourkela chaired the meeting. The issues raised during the Public Hearing meeting were, inter alia, pollution control, development of the area, employment opportunity to the local villagers, provision of basic amenities and infrastructure. The villagers also demanded peripheral development like water supply facility, health check-up and supply of free medicine, plantation, dust suppression measures and improvement of educational facility. The action plan with budgetary provisions was submitted by PP. The estimated Project Cost is Rs. 4 Crores.

It was reported by the Project Proponent that there is no court case/litigation pending against the project. However, the project is in violation of the EIA Notification, of September 2006, as mine has been operating since 2003 without obtaining environmental clearance.

While discussing the proposal, EAC members indicated that consultant was not able to answer the queries raised by the Members. After detailed deliberations and discussions, the Committee decided to **defer the proposal** and that the proponent shall furnish the following information to the committee for further consideration:

- 1) PP to make revised EIA on the basis of approved mine plan. The EIA was prepared and public hearing was conducted without approved mine plan. The occupational health impact due to quartz mining should be properly incorporated in the EIA.
- 2) Free silica monitoring data in ambient air shall be given.

3) Revised 'Questionnaire', updated geological information with geological map and water demand shall be submitted.

(2.18) Dongri Iron Ore Mine of M/s. Godawari Power & Ispat Ltd at Village Kachche, Tehsil Bhanupratappur, Distt. Uttar Bastar (Kanker), Chhattisgarh (106.60 ha to 138.96 ha) with addition of 0.7 MTPA in existing capacity of 0.705 MTPA with total 1.405 MTPA production (J.M. EnviroNet Pvt. Ltd)-EC

The proposal is for Ari Dongri Iron Ore Mining Project (Expansion of Iron Ore Mining Lease Area from 106.60 ha to 138.96 ha and Production Capacity from 0.705 MTPA to 1.405 MTPA) located At Village: Kachche, Tehsil: Bhanupratappur, District: Uttar Bastar Kanker (Chhattisgarh). The Latitude and Longitude of the mine site 32.36 ha area is 20° 24' 27" to 20° 24' 54.00" N and 81° 03' 56" to 81° 04' 14.00" E and for mine site for 106.60 ha area is 20° 24' 03" to 20° 24' 54" N and 81° 03' 46" to 81° 04' 34" E.

The proposal was considered by the Expert Appraisal Committee in its meeting held during 19th-21st December, 2012 to determine the Terms of Reference for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/384/2012-IA.II (M) dated 5th March 2013.

The certified compliance report by Regional Office, MoEF, Western Region, Bhopal issued vide letter No. 3-7/2012/(ENV)/811 dated 09.04.2014 was submitted. The presentation with regard to compliance of earlier EC issued Vide. No. J-11015/339/2006.IA-II(M) dated 25.06.2007 was made. The compliance report was found to be satisfactory.

The total mine lease area (including existing 106.60 ha and proposed 32.36 ha) is forest land. Grant of Mining Lease in favour of M/s. Godavari Power & Ispat Private Ltd. (GPIL) for 106.60 ha by State government was vide letter no. F 3-58/2003/12(2) dated 22nd September, 2008. Letter of Intent (LOI) issued by Department of Mineral Resources, Govt. of Chhattisgarh in favour of GPIL for 32.36 ha was dated 8th October, 2010. Forest Clearance has been obtained for diversion of 106.60 ha of Forest Land for its Ari Dongri Iron Ore Mine of M/s GPIL issued by MoEF (FC Division) vide its letter no 8-5/2007-FC dated 04/08/08. For ML Area: 32.36 ha, proposal has been recommended for I-stage clearance under the provisions of the Forest (Conservation) Act, 1980 for diversion of 32.36 ha of Forest Land vide letter no F. No. 8-36/2012-FC dated 24.01.2013.

Approval of Modifications in Mining Plan over an area of 106.60 ha by IBM, Nagpur has been granted vide its letter No. 314(3)/2010-MCCM(CZ)/MP-41 28th November, 2011. Approval of Mining Plan along with Progressive Mine Closure Plan (ML Area: 32.36 ha) has been secured from IBM, MCCM Central Zone vide Letter No. 314 (3)/2010 – MCCL (CZ)/MP – 35 dated 23rd May 2011.

It is reported by the Project Proponent (PP) that the Opencast mine working will be done by semi-mechanized method, using shovel dumper combination and average bench height of 6m and width 12.0 m will be kept. Life of the mine for ML Area 106.60 ha and 32.36 ha is 6 years and 8 years respectively. The total

mineable reserves for ML Area 106.60 ha and 32.36 ha are 2.60 million tonnes and 1.43 million tonnes respectively. The iron ore produced from the proposed expansion mining project will be captively used in the sponge Iron/ Steel Plant of the Company located at Siltara Industrial Area, Siltara, District Raipur (Chhattisgarh). Waste generated from the area will be dumped at the waste dump located at earmarked sites as per mining plan in non-mineralized area. The water requirement is estimated as 25 KLD, Water will be sourced from nearby villages (for drinking) and water accumulated in mine sump. Mine Working will not intersect the ground water table. Detailed Hydro geological study has been carried out for the Project.

It was reported by the PP that the no National Park, Wild Life Sanctuaries, Tiger Resaves, Elephant Corridors, Biosphere Reserves etc. within 10 km radius from mining leas boundary. No Schedule I species are found/ reported within 10 km radius area. Baseline studies were carried out during Winter Season, 2012-13. (Dec.2012 to Feb, 2013). All the parameters for water and air quality were found to be within permissible limits. Public hearing was held on 23.12.2013 at Janpad Panchayat Office Premises, Tehsil: Bhanupratappur, District: Uttar Bastar, Kanker (Chhattisgarh). The PH was chaired by Mr. M.L. Sirdaar, Upper Collector, Uttar Bastar (Chhattisgarh). The issues raised during public hearing were also considered and discussed during the Meeting, which includes Employment, infrastructure, environmental protection and socio-economic development. Employment is being given to local people as per their qualification and proper training is also being given. Air pollution control measures are being adopted and sprinkling of water is being done. Tree Plantation is also being done. As per the local requirements, it was informed by the PP that they would give preference to locals for employment; health care, education and assistance in vocational training, etc.will also be provided. Socio-economic development will also receive PP's attention.These have been incorporated in the Project Plan with budgetary provisions.

The estimated cost of the project is Rs. 8.91 Crores and Cost for EMP: Capital Cost – Rs. 80 Lakhs/- and recurring cost for EMP Rs. Rs. 30 Lacs / annum. It was reported by the PP that there is no court case/litigation pending against the Project and no violation is reported.

The proposal was deficient of information relating to mine lease/approved mine plan as per TORs prescribed and the Committee decided to **defer the proposal** to be brought back to the Committee after the following information is submitted:

- 1) Amalgamated mine lease deed/LOI of 138.96 ha may be submitted for which TOR was issued.
- 2) Approved mining Plan for 138.96 ha may be submitted as the EIA study has been carried out for 139.96 ha.

(2.19) Bauxite Mining of M/s Ex-Servicemen Welfare Association, Village Shahuwadi, District Kolhapur, Maharashtra (95.06 ha)(1,50,000 ton/annum)(Consultant: Yogiraja Industrial Consultant, Pune)-EC

It was noted by the Committee that the proposed site is located in ESA of Western Ghat as per the draft notification issued vide S.O. 733 (E) 10.03.2014. Therefore, the Committee decided that the proposal **cannot be considered** by it as of now.

(2.20) Expansion of Captive Limestone Mine of M/s Chettinad Cement from 4.0 to 10 MTPA at Kallur Village, Gulbarga District, Karnataka (422.94ha)(Consultants: M/s Mineral Engineering Services, Bellary, Karnataka)-EC

The Mining Lease for Limestone is over an extent of 422.94 ha located in Kallur Village, Chincholi Taluk, Gulbarga District in Karnataka State. The area is falling on Topo-sheet No.56 G/7 & G/11 with Latitude: N 17°22'22.22" to N 17°23'52.73" and Longitude: E 77°26'38.38" to E 77°28'05.04". The mining lease area of the Captive Limestone Mining over an Extent of 422.94 ha consists of 414.72 ha of Patta Land owned by the company and 8.22 ha of Government Land. It is now proposed to enhance the capacity of Cement Plant, located adjacent to the mine in Sangem & Kallur villages of same Taluk, from 2.5 to 8.25 million tonnes per annum. In order to meet this increased production of cement, it is proposed to expand the capacity of the Captive Limestone Mine from existing 4.0 to 10.0 MTPA.

The proposal for the expansion was considered by the Expert Appraisal Committee in its meeting held during 25th to 27th May 2011 to determine the Terms of Reference (ToR) for undertaking detailed EIA study. The ToR was issued by MoEF Vide Letter No J-11015/29/2011-IA.II(M) dated 27th June 2011. Further, with reference to the application made by the proponent vide letter Chettinad Cement/Kallur Mine Expansion/ToR Extn/2013 dated 28th Jan 2013 for extension for validity of TOR, the proposal was considered by the EAC in its meeting held during 16th to 18th April 2013 and the Committee recommended extension of validity period for TOR by one year from 27th June 2013 to 26th June 2014 vide letter No J-11015/29/2011-IA.II(M) dated 22nd May 2013.

Prior EC was obtained for the production of 4.0 million tons of Limestone per annum from MoEF, New Delhi vide Letter No J-11011/399/2008-IA.II (I) dated 18th June 2000 for the Integrated Cement Plant with Captive Power Plant and Captive Limestone Mine at Sangem & Kallur, with specific and general conditions on Pollution Control, Environmental Management and Method of Working etc., which are duly complied with and the Certified Copy of the Compliance Report duly signed and issued by the Director (S), Regional Office MoEF, Southern Zone, Bangalore vide letter No EP/12.1/19 of 10-11/KAR/ 4585 dated 27th December 2013 was included in the EIA & EMP Report.

The Mining Lease has been granted by the Government of Karnataka vide Letter No DMG/MLS:1921/AML07/2009-10 /SL 11 dated 9th October 2009 for an extent of 422.94 ha in Kallur Village, Chincholi Taluk, Gulbarga District in

Karnataka State for a period of 30 years. The Modified Mining Plan was approved by Indian Bureau of Mines vide Letter No MP/GLB/Lst-243-SZ/411 dated 23rd July 2012.

The Opencast mining will be done by mechanized method using drilling & blasting and deploying HEMM. The deposit is horizontally bedded and covered by the black cotton soil of thickness varying from 0.5 to 4.5 m (average 1.7 m) and is devoid of any complex geological/structural disturbances. It forms a simple deposit with almost flat topography. The proved mineable reserves of this deposit are 32.77 MT and the mineable resources are 180 MT. The black cotton soil is scrapped and collected by hydraulic excavators & bulldozer, loaded by loaders and transported by dumpers to the temporary stacking yard for using the same concurrently for erection of bunds in the safety barriers, along the mine boundary and for afforestation works. The Limestone is mined by adopting deep hole drilling with 150mm diameter holes and blasted with slurry and ANFO explosives.

The black cotton soil benches will be of average height about 1.7m and width of about 10m and the bottom Limestone benches will be of 9m height and width will be about 12 m with a working pit slope angle around 36°. The proposed maximum depth of the pit is 37.7 m bgl, 1.7 m in topsoil and 36 m in bottom limestone. The pit water is collected in the sump developed below the bottom most bench and pumped out through centrifugal pumps. No Beneficiation is involved as the entire Limestone produced can go as plant feed.

No wastes are generated and the entire Limestone produced is used as the plant feed. As no wastes are generated, there is no proposal for backfilling of the pit. At conceptual stage the leftover black cotton soil will be spread over the topmost Limestone bench for the development of vegetation.

The water requirement for expansion proposals is 130 KLD out of which 125 KLD will be met from pit water and 5 KLD for drinking is met from the bore well. CGWA approval is available for 900 KLD. For expansion purpose, the permission for additional water drawl will be taken from CGWA. The Hydrological study report was submitted. The water table in the core zone is 19 m bgl during pre-monsoon and 10 m bgl in post monsoon and pit will reach maximum depth of 37.7 m bgl during the 3rd year of operation, thus there will be water intersection the permission for ground water intersection shall be taken from CGWA.

The Chincholi Reserved Forests is located at a distance of 3.2 km in northeast of ML boundary. It was informed by PP that the Chincholi WLS was declared as WLS in 2011 after the establishment of the Mines at Kallur & ICP at Sangem (K) and Kallur. Schedule I Fauna found in this area are: Leopard, Indian Wolf, Black Buck, Python, Indian Mud Turtle, Common Indian Lizard, Indian Peafowl, Common Kite, Kite, Pariah Kite, Spotted Owlet, Grey hornbill, Dragan Fly and Plain Tiger. The application in the MoEF for NBWL clearance for the proposed expansion has been submitted along with a detailed Conservation Plan for wildlife.

Baseline studies were carried out for one season (post monsoon) during September 2012 to November 2012. All the parameters for water, air and noise

were within the limits. The Public Hearing/Consultation for the enhancement of production of Integrated cement plant with Captive Power Plant and Captive Limestone Mine was conducted at the Project site in Kallur Village on 09.10.2013. The PH was chaired by Dr. N.V. Prasad, Deputy Commissioner, Gulbarga District, Karnataka. The issues raised by the public include air, water and noise pollution control measures, quality of air, water and noise, land acquisition cost, local employment, various CSR related demands by local villagers, solid wastes, traffic & impact on roads, environmental monitoring, tree plantation, forest protection & development, following Rules & Regulations, payments for land givers, health care, proposed Railway Line. Action plan along with budgetary provision was submitted by PP and it was informed to the Committee that currently Rs 1.5 crores per annum has been allocated for CSR. The estimated cost for the proposed expansion of the mining Project will be Rs. 560 lakhs. It was reported by the PP that there are no court cases and also there are no violations of any statutory rules.

After detailed deliberations, the Committee **deferred the proposal** and sought the following additional information for further consideration:

- (i) The baseline data shall be monitored collected as per the IMD guidelines and one month data furnished.
- (ii) The species specific conservation plan for schedule-I species approved by Chief Wildlife Warden shall be submitted.
- (iii) Status of NBWL Clearance shall be provided.
- (iv) Action plan with budgetary provision on the issues raised during public hearing should be furnished.

(2.21) Gudipadu Limestone Mine for 1.0 MTPA limestone production of M/S BMM Cements Limited at Gudipadu village, Yadiki Mandal, Anantapur District, Andhra Pradesh.(Consultant: B.S.ENVI-Tech (P) Ltd. Hyderabad)

The mine is located near Gudipadu Village, Yadiki Mandal, Anantapur District, Andhra Pradesh and is located between 77058'12"-78000'15" East longitude and 15005'03"- 15007'16" North latitude and at an average elevation of 412 m above MSL. The site is a part of Survey of India Toposheet no 57 E/16 & 57 I/4. The proposal was considered for TOR by the Expert Appraisal Committee in its meeting held during 21-23 November, 2012. The Terms of Reference approved by MoEF for carrying out the Environmental Impact Assessment study were issued vide letter No. J-11015/231/2012-IA.II (M) dated 19.02.2013.

Area of the mining lease is 454.59 Ha. Out of the total mining lease area of 454.59 Ha, 52.96 Ha is Govt. Barren rocky land and balance 401.623 Ha is private patta land owned by BMM. The proposal is to produce 1.0 MTPA of Limestone by adopting fully mechanized mining methodology. The Mining plan is approved by IBM vide Letter 19.02.2014

BMM proposed to adopt mechanised opencast mining methodology which involves drilling and blasting. Drilling operations will be conducted with 115 mm dia Atlas Copco make, ROC – 203 crawler mounted drills with Atlas Copco compressor of 445 Cfm. Hydraulic excavators will be deployed to load the blasted limestone into Dumpers. The blasted/ excavated limestone will be sent to crusher, located just on the boundary of the lease. From the crusher the material will be conveyed to plant through belt conveyor.

The top soil generated (8.54 million cu. m) during the life of the mine will be stacked temporarily in the dumps and will be utilised for afforestation purposes in the 7.5 m barrier zone and road barrier zone. No other solid waste will be generated from the mine.

BMM requires about 45 m³/day of water and this requirement will be met from the ground water through the bore wells and after development of the mine pit, BMM will switch over to the mine pit water. Out of the total quantity of 45 m³/day, about 25 m³/day will be used for dust suppression, 15 m³/day for greenbelt and about 1 m³/day will be used workshop and 4 m³/day will be used for domestic purposes.

The mine is located on a gently sloping terrain, which is about 448– 380 m above MSL with average MSL of 412 m. the ultimate depth of mining is 46 m bgl i.e 366 m msl. The water table lies at 40 m (290 m RL) from the general ground level of 330 m MSL. The mine will be worked upto a depth of 46 m (366 m MSL) which is above the water table. Hence there is no possibility of encountering ground water in the working pits.

It was reported by the PP that there are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves existing/proposed within 10 km of the mine lease. There are no Schedule – I species recorded in the study area

Baseline studies were carried out during Winter Season 2012 -13. The Public Hearing for the Proposed Project was conducted on 02.05.2013. The issues raised during public hearing were mainly employment and drinking water facilities and developmental activities. BMM has budgeted an amount of Rs 135 lakhs to implement various developmental measures during the first five years of operation of the mine.

The estimated budget for proposed for 1.0 MTPA Limestone production is 24 Crores. An amount of Rs. 2.0 Crores is earmarked for implementation of the environmental management plan. It was informed by PP that there are no litigations pending against the project with direction /order passed by any Court of Law.

After detailed deliberations the Committee **recommended** the proposal for grant of EC subject to submission of following information:

- (i) An affidavit from PP that draft mining plan used for public hearing and the Mine plan approved by the IBM were same without any qualitative and quantitative change.
- (ii) A report on change in flow of stream due to mining and impact of 50 m barrier created along the stream shall be submitted.
- (iii) Questionnaire with respect to endangered species should be updated and submitted.
- (iv) Environmental Policy of the organization duly signed by the Competent Authority.
- (v) Action plan with budgetary provision on the issues raised during public hearing.

RECONSIDRATION OF EC PROPOSALS

(2.22) Iron Ore Beneficiation Plant of M/s Divyajyothi Steel Ltd., village taranagar Sandur taluk, distt. Bellary, Karnataka (20.48ha) (Iron Ore Beneficiation of 0.6 MTPA throughput pelletization of 0.4 MTPA throughput)(Consultants: M/s Global Environment & Mining Services , Karnataka)-EC

The proposal was considered in the Expert Appraisal Committee in its meeting held during May 25-27th, 2011; however, due to lack of information with regard to site coordinates, the consideration of the proposal was deferred. Then the proposal was considered by the Expert Appraisal Committee in its meeting held during 21-23rd June, 2011 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter No. J-11015/72/2011-IA.II(M) dated 29th July, 2011. In accordance with the TORs, the Proponent submitted an EIA/EMP Report to the Ministry vide letter dated 28th February, 2013.

The proposal is for setting up of an iron ore Beneficiation Plant with a throughput capacity of 0.6 million TPA along with pelletization plant of 0.4 million TPA. The lease area is 20.48 ha. No forestland is involved. Narihalla dam is reported to be at a distance 3.5 km. It was stated by the project proponent that the filter press technology will be adopted. It was also stated that tails cake will be stacked in tailing dump area and used in brick manufacturing. The site coordinates are 15°07'20.2" – 15° 07' 45.2" N Latitude and 76°38' 01.8" – 76°38'34.8"E. Longitude.

Baseline data has been collected during December 2011 to February, 2012. Public Hearing was held at the Project site at Tarangara Village on 15.12.2012 and chaired by Additional Deputy Commissioner, Bellary. Issues raised during the Public Hearing include dust pollution, crop loss due to dust, dust compensation of Rs.3000/ per acre to the surrounding 10 km agricultural land, employment to local

people, regular employment to locals rather than contract employment etc. It is reported by the proponent that there is no court case/litigation pending against the Project.

Based on the presentation made, discussions held and information submitted, the Committee in its meeting held during 16-18 April 2013, desired the proponent to submit the following information:

- (i) Questionnaire to be submitted as per EIA/EMP;
- (ii) Details of Land use pattern to be submitted;
- (iii) Source of raw material / storage / final transportation of beneficiated ore to be submitted. In flow and out flow details are also to be submitted;
- (iv) Details of waste management to be submitted;
- (v) Action plan with budgetary provisions on points raised during public hearing to be submitted;
- (vi) Date wise Ambient Air Quality Data to be provided;
- (vii) The Compliance of TORs to be submitted.
- (viii) Details of disposal and storage of filter cakes to be provided.
- (ix) Details of transport of ore to be provided.

On submission of the information the proposal was re-considered in the meeting held during 20-22 November 2013. The Committee noted that the Questionnaire were not appropriately filled in and details of the waste management with particular reference to tailing dam was not provided. In addition, the Committee suggested to monitor time series data for ground water table and AAQ data from four monitoring stations as proposed site is located in severely polluted area.

On submission of the information the proposal was re-considered in the present meeting. The Committee noted that the Questionnaire was not appropriately filled and many vital baseline data have not been mentioned in the questionnaire. Further the wrong information has been filled in respect of several points. Consultant was not also fully prepared to answer the queries of the committee members.

After detailed deliberations the Committee **recommended** the proposal for EC subject to submission of revised questionnaires.

(2.23) Yadwad Limestone Mines of M/s Dalmia Cement (Bharat) Ltd., Village Yadwad and Kunnal, Distt. Belgaum Karnataka (1157.26ha)(4.30 MTPA) (Consultant: M/s B.S. Envi Tech Pvt. Ltd., Hyderabad).

The proposed Project is located at Yadwad (Gokak) & Kunnal (Ramdurg) Village, Gokak & Ramdurg Tehsil, Belgaum District, Karnataka. The Mining lease

area falls on Survey of India Toposheet No. 47P/4 bounded by the co-ordinates, Latitudes: N 16o09'58 - 16o13'21"; Longitudes: E 75o10'43" - 75o12'11". The proposal was considered by the Expert Appraisal Committee in its Meeting held during 8-9th April, 2009 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. MoEF prescribed the TOR for the proposed project vide letter no. J-11015/36/2009-IA.II dated 30th April 2009. The same TOR was reiterated by MoEF with increased lease area (1228.63 ha) vide letter no F.No.J-11015/36/2009-IA.II(M) dated 13.07.2012 with validity till 12.07.2014.

The proposed project is a captive mine for DCBL's Cement Plant being established near Yadwad Village, Gokak Taluk, Belgaum District, Karnataka. Area of the mining lease is 1228.63 Ha. The entire area is non-forestland. As per the revenue record, Patta lands: 1162.58 ha and Govt. land: 66.05 ha. The land use pattern of the core zone is Agricultural land 1158.89 ha, Roads: 3.69 ha and Water Body: 66.05 ha. The Mining plan is approved by IBM vide Letter MP/BLG/GOA – (KNT)/LST – 278 – SZ/1032 dated 12.07.2013 for 1223.78 ha.

The mine working will be carried out by conventional opencast fully mechanized mining method. The mining will involve drilling, blasting, loading and transportation of the excavated material. The height of the benches will be maintained at about 9.0 m. The diameter of drill hole will be approx 150 mm. Deep hole blasting will be carried out with slurry explosives/ANFO. Electric delay detonators with detonating fuse will be used. Non-electric initiation system (NoNel) of blasting with shock tube detonators in combination with noise trunk delays will also be used.

The total estimated mineable reserves are 69.14 million tonnes. Life of mine is approximately 19 years at the proposed rated production of about 4.3 MTPA. A total of 8.45 million m³ of reject including topsoil will be handled during the life of the mine. About 7.1 million m³ of rejects generated will be used for backfilling an area of 24 ha to an average height of 30 m.

The requirement of water in the mine will be approximately 500 m³/day. This requirement is proposed to be met from the resource of the integrated Cement Plant/water harvesting of mine pit after development. Mining is envisaged upto a depth of 39 m bgl (548 m RL) and will not intersect the ground water table as the general water table in the area is at a depth of about 120 m below ground level (bgl). Hydrogeology study has been carried out by M/s Hydro Geo Survey Consultant, Jodhpur.

It was reported by the project proponent that there are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors or Tiger/Elephant Reserves within 10 km of the mine lease and there are no Schedule – I species recorded in the study area. Baseline studies were carried out during post monsoon season (September-November) 2012. The Public Hearing for the project was conducted in survey no. 365 and 369 of mining area, 0.5 kilometer from Hosakote road, Yadwad village, Gokak Taluk, Belgaum District, Karnataka on 20.09.2013. The Public Hearing was conducted under the Chairmanship of Shri N. Jairam, Deputy Commissioner and District Magistrate, Belgaum District. The issues raised during

public hearing were also considered and discussed during the meeting which inter alia, included Cement Plant construction, land acquisition/compensation, employment and CSR activities. A budgetary provision of Rs. 275 lakhs has been made under CSR to meet the requirements raised during PH. The Capital cost of the proposed Project is Rs 72 Crores. An amount of Rs. 30 Lakhs is earmarked for implementation of the environmental management plan. Recurring Cost for Environment protection is estimated to be Rs 11.20 Lakhs per annum.

Pursuant to Karnataka Gazette Notification No DMG/AML/ADV/07-08 dated 18.01.2007 and 22.05.2007, application of DCBL is considered for grant of ML over 1228.63ha. Smt. Shobha Chikkud, applied over an area of 4.85 ha for limestone mineral covering the above notified area and a grant notification was issued. The Hon'ble High Court passed an order on 04.10.2009 directing DMG to execute the lease which was challenged by DCBL before Hon'ble High Court. The Hon'ble High Court, in its interim order, directed to maintain status-quo until final orders.

As per the DMG's letter no. DMG:MLS:384 AML 07: 11-12/13834 dated 24.02.2012, Mining Plan for 1228.63 ha mine was prepared and submitted to IBM on 24.05.2012 for approval. However, based on a subsequent communication from DMG to IBM vide letter no DMG:MLS/Supt/2012-13 dated 27.05.2013, the Mining Plan is approved for the area 1223.78 ha excluding the area under litigation which is pending before Hon'ble High Court of Karnataka.

The proposal was placed in EAC meeting held during 24-25 February 2014 the Committee sought the following information:

- (i) A plan for maintaining 60 meter barrier either side from Doda Halla Nalla with protection measures like green belt etc.
- (ii) There is inconsistency in 'Total Area' mentioned in TOR, PH and EIA report; clarification on limestone production capacity 4.734 MTPA or 4.3 MTPA and mine lease area 1228.63 or 1223.78 ha.
- (iii) Legal status of lease area and the court case pertaining to the part of the lease.
- (iv) Submission of Certified and translated copy of Letter of MLA of the Taluk in English Language.
- (v) Baseline data of post monsoon season for month of October-December should.
- (vi) Permission for withdrawal of Water from Ghatprabha River.
- (vii) R&R Plan with respect to private homestead and agriculture land.

The Committee after reconsidering the above information **recommended** the proposal for Environmental Clearance subject to latest position of the legal case furnished by the proponent.

(2.24) Manganese Ore Mining of M/s Aditya Minerals Private Ltd. distt. Adilabad, AndhraPradesh (89.01ha) (Manganese Ore 11273.8 TPA)(TEAM Lab and Consultants).

The proposal is for Manganese Ore production of 10,000 TPA by Aditya Minerals Pvt. Ltd. located at Sy. No: 85, 90, 91, 93, 94, 109, 110 to 115 & 133 of Pimparikunta Village, Tamsi Mandal & Sy. No: 100 to 103 & 112 to 114 of Guda Village, Jainath Mandal, Adilabad District, Andhra Pradesh. The Longitude and Latitude of the ML area is 78° 28' 07" E to 78° 29' 47" E and 19° 47' 55" N to 19° 45' 40" N respectively.

The proposal was considered by the Expert Appraisal Committee (EAC) for mining projects during its meeting held on September 28-30, 2010 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/232/2010-IA.II (M) dated 25th October, 2010. The proponent submitted its Application to the Ministry on 24th March, 2012 for seeking environmental clearance after conducting the Public Hearing. The proposal was earlier placed in 30th EAC meeting held during 29th-31st August 2012 wherein the proposal was deferred as the Project Proponent did not attend the meeting.

The Project Proponent made a presentation with regard to compliance of TOR for mining of Manganese Ore with a capacity of 10,000 TPA. It is reported by the Project Proponent (PP) that the mine lease area is 89.01 ha, which is a plain patta land. Scheme of mining (including progressive mine closer plan) is approved by IBM vide Letter No. AP/ADB/MP/Mn-19/HYD dated 23.08.2010. It is a plain patta land, no forest land is involved in the mine lease area. Lease deed was obtained from the Department of Mines and Geology, Govt. of Andhra Pradesh vide proceeds. No. 2644/M/2004 dated 13.07.2009. The Project Proponent has further informed that this proposal is for a renewal of mining lease. The mine was earlier operating since 1970 and then closed since 2009 as mine lease fell due in 2009. It is reported by the PP that Total Geological Reserves are about 1,47,374 Tonnes with average grade of 24-33%.

It is reported by the Project Proponent that the method of mining will be by open cast method, top soil cover will be removed by manual means. The upper limestone bed, which overlies the manganese horizon will be removed after blasting. Depth of mining is restricted to 5.5m BGL and the ground water level in this area is 50m BGL, hence mining activity will not intersect ground water table. Life of the mine is 15 years. The water requirement is estimated as 12 KLD, which will be obtained from nearby villages through tankers. The waste generation will be 2,34,059 m³ (soil-15,658 m³+Lime stone-2,18,401m³) during scheme period, area earmarked for over burden/ waste dump is 2.64ha and area proposed for top soil storage is 0.2 ha. The waste generated will be progressively backfilled in the working pits. The reclaimed land will be covered with top soil and grass will be grown to avoid erosion of land. For transportation of material, temporary road of length 630m and width 3m is proposed from material storing place to the existing village road.

It was reported by the PP that there are no Wild Life Sanctuary/Tiger Reserve/National Park within 10km radius of the ML area. Arli Reserve Forest is located at a distance of 6.5km in NW direction and Tamsi Reserve Forest located at a distance of 7.72km in West direction. Penganga River is flowing at a distance of 3.0km in North direction, Andhra Pradesh and Maharashtra state boundary is located at a distance of 3.0km in North direction. Baseline studies were carried out during post monsoon season of 2010. All the parameters for water and air quality were within permissible limits.

The Public Hearing for the proposed Project was conducted at Pimparikunta Village on 17.08.2011. The PH was chaired by Dr. A. Ashok, IAS, Collector & District Magistrate, Adilabad. The issues raised during public hearing were also considered and discussed during the Meeting, which inter-alia, included that there should not be any asthma, TB cases among the mine workers nor any fatalities in the mine pits, nor should any effluent be discharged from the mine lease area. Air pollution control measures should be adopted (by sprinkling of water etc.), plantation should be raised, rainwater harvesting measures should be undertaken etc. As per the villager's requirements, it was informed by the PP that they would give preference to local employment; health issues, providing education, participation in development of village road and assistance in vocational training etc. These have been incorporated in the Project Action Plan with budgetary provisions.

The cost of the project is Rs. 20.0 Lakhs and cost proposed for environmental protection measures is Rs. 17 Lakhs and Recurring cost is Rs. 5.5 Lakhs. Fund allocated for CSR is Rs. 5.9 Lakhs. It was reported by the PP that there is no court case/litigation pending against the project.

The Committee had sought following information in the Meeting held during June 26-28th 2013:

- (i) Though Schedule-I species are found, no Conservation Plan has been prepared. In this context, an authentic list of Schedule I species should be provided and a Conservation Plan with Species specific habitats and conservation measures should be prepared in consultation with the Forest Department of State Govt. and submitted.
- (ii) Questionnaire containing all details need to be submitted.
- (iii) Detailed Action plan on notarized affidavit should be provided with budgetary provision on public health, education, air & water pollution and other issues raised during the public hearing.
- (iv) Detailed Action plan on notarized affidavit should be provided with budgetary provisions for socio-economic development of the local Communities.
- (v) Supporting Details of the provisions made towards Project Cost and Cost of EMP (capital and recurring cost) including PH commitments and CSR should be furnished in a Tabular form.

On submission of information, the proposal was placed in the present meeting. The PP submitted revised Questionnaire, detailed Action Plan with budgetary provisions on public health, education, air & water pollution and other issues raised during the public hearing and socio-economic development of the local Communities. The fund allocation for CSR activities was increased from 2 lakhs to 5.9 lakhs per annum.

On submission of the information the proposal was re-considered in the meeting held during January 27-28, 2014, the Committee was of the view an authentic list of Schedule I species should be provided and a Conservation Plan with Species specific habitats and conservation measures including community sensitization programme for conservation of such species should be prepared in consultation with the Forest Department of State Govt. and submitted. The Committee decided to defer the proposal to be brought back to the Committee after the aforesaid information is submitted.

Based on the presentation and information submitted by the PP, the Committee **recommended** the proposal for EC subject to submission of species specific conservation plan for schedule-I species duly approved by Chief Wildlife Warden of the State Govt. which should include the budgetary allocation and time bound implementation schedule.

(2.25) Augmentation of Limestone production from 3,80,000 TPA to 7,80,000 TPA Jaggayyapeta Limestone Mine of M/s Rashtriya Ispat Nigam Limited Located at Tehsil Jaggayyapeta, District Kirishna, Andhra Pradesh (1295ha) (Consultant: M N Dastur & Co. (P) Ltd.).

The Proposal was first considered by the EAC in its meeting held during 25-26 February, 2010. TOR were issued by MoEF vide letter No. J-11015/28/2010 IA-II(M) dated 9th March 2010. The limestone Mine at Jaggayyapeta (JLM) is a captive mine of Rashtriya Ispat Nigam Limited (RINL) for their Visakhapatnam Steel Plant (VSP). The mine with acquired ML area of 1295 ha (3199 acres) is in operation since 1989. RINL has obtained the 1st renewal of ML area for 20 years with effect from 8th September 2000 from the Directorate of Mines & Geology, Govt. of AP. Mining Scheme was approved by Regl. Controller of Mines & Incharge (South Zone), Bangalore of Indian Bureau of Mines in October 2010. The final EIA/EMP Report has been prepared in accordance with the aforesaid TOR and based on the Proceedings of Public Hearing (PH) conducted by APPCB on 04.04. 2012. Issues raised by the Public during Public hearing were addressed by the Project Proponent with commitment for implementation. AAQ data was collected from April to June 2010. The AAQ data is seen to be within permissible limits. VSP is presently undergoing expansion programme of liquid steel production to 6.3 MTPA from 3.4 MTPA. In view of VSP expansion, RINL proposes to increase the limestone production at Jaggayyapeta to 0.78 MTPA from the present production level of 0.38 MTPA.

Present consumption of water is 330 KLD which will be increased by 200 KLD. The proposed augmentation would be confined within the existing ML area. Estimated cost of the Project is Rs. 32.87 Crores.

The Committee sought following information in the meeting held during January 16-18th 2013:

- (i) There are number of mines surrounding this mine lease area and cumulative impact of the study area needs to be studied and reported.
- (ii) Complete list of flora and fauna is required to be provided by PP.
- (iii) Air quality data at the crushing plant show very high air pollution, the reasons for which need to be ascertained and appropriate control measures need to be put in place. Proposed special Action Plans in this regard may be spelt out.
- (iv) The Questionnaire needs to be revised appropriately and resubmitted.
- (v) A complete list of flora and fauna including endangered and endemic species needs to be submitted.

On submission of information, the proposal was re-considered in the EAC meeting held during 27-28 January 2014. It was noted that the information submitted was not satisfactory with respect to cumulative impact study, endangered and endemic species and control measures to deal with high air pollution in crushing plant. Further on submission of the information the proposal was re-considered in the present meeting. The Committee **recommended** the proposal for the grant of environmental clearance with additional specific condition that Cumulative impact assessment for air quality shall be carried out and report shall be submitted along with implementation plan of the suggested mitigation measures to Regional Office of MoEF within one year.

CONSIDERATION OF TOR PROPOSALS

(2.26) MCW Limestone Mine of M/s Mancherial Cement Company (P) Ltd. located in Thimmapur village of Mandamarri Mandal and Gadapur of Mancherial Mandal, Distt Adilabad, Andhra Pradesh. (278.5 ha)(4.0 Lakh Tonnes/annum) (Consultant: Bhagavathi Ana Labs Hyderabad)

The MCW Limestone Mine lease was granted to M/s Associated Cement Company Ltd. for limestone mining over 769.00 Ha in Nagaram, Pochampadu, Gadapur, & Thimmapur villages in Laxettipet Taluq of Adilabad District, Andhra Pradesh in 1956 and renewed on 09.04.1976 for 20 years. The mine operations started in August 1958. M/s ACC Ltd. applied for 2nd renewal of mining lease over 769.00 Ha and subsequently they have opted to a reduced extent of 278.50 Ha for a further period of 20 years w.e.f. 09.04.1996.

Second renewal of the mine lease was granted for limestone over an extent of 278.50 Ha area in favour of M/s Associated Cement Company Ltd for a further period of 20 years w.e.f. 09.04.1996 and also accorded permission to M/s ACC Ltd. for transfer of said mining lease in favour of M/s Mancherial Cement Company (P) Ltd for the un-expired portion of the lease period i.e. upto 08.04.2016. The mine

lease was transferred from M/s ACC Cement to M/s Mancherial Cement Company (P) Ltd. in the year 2008.

The MCW Limestone mine is located in 278.50 Ha area in Sy No. 31 of Thimmapur village in Mandamarri Mandal and Sy. No. 21 of Gadapur village in Mancherial Mandal, Adilabad District, Andhra Pradesh. The lease area falls between Latitudes 18°54'51.5874" N to 18°55'36.9474" N and Longitude 79° 22' 40.512" E to 79°25'4.296" E.

The MCW Limestone mine consists of 278.50 Ha Mining lease area, which falls in Govt. revenue land. The mine is in operation since 1958 and it is proposed to produce 4.0 Lakh TPA limestone from the mine. There is no forest land involved in the mine lease area.

The MCW Limestone mine is an opencast mechanized mine. The highest limestone production of 414,628 tonnes was achieved in the year 1991-92. The limestone produced from MCW limestone mine is consumed in MCW Cement Plant of the Company located at Mancherial. The plant has 3.35 Lakh TPA cement production capacity. Considering the maximum rated production of 0.40 MTPA, the mine life is estimated to about 60 years. The water requirement is estimated as 60 KLD, which is obtained from rainwater accumulated in mine pits.

It was reported by the PP that the ML area falls in Govt. revenue land and is surrounded by Rally reserve forest land. Kawal Wildlife sanctuary & Tiger Reserve is located at about 35 km NW of ML area. There are no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves (existing as well as proposed) with in 10 km of mine lease.

The estimated cost of the project is Rs. 2.95 Crores. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **deferred** the proposal and sought following clarification before considering for prescribing the TORs:

- (i) The lease was transferred from M/s ACC Ltd. to M/s Mancherial Cement Company (P) Ltd. for unexpired portion of the lease period. Clarification may be provided as to why this should not be considered as change in scope of the project.
- (ii) Due to 2nd renewal and transfer of lease project has violated the provisions of EP(A), 1986/ EIA notification 1994/2006. The proponent may submit the clarification.

(2.27) Black Granite Mine with production capacity of 4372 m³/annum of M/s Tirumala Granites located in Sector 217 & 218 Veerasettipalli (B) Reserve Forest, Yadamarri Mandal, Chittoor District, Andhra Pradesh (6.1 ha) (Consultant: Sri Sai Manasa Nature Tech (P) Ltd)

The Mine Lease area is located at Compartment no. 217&218 of Veerasettipalle "B" Reserved Forest, Yadamarri Mandal, Chittoor District, Andhra Pradesh. The Mine Lease area is between 13005'29.0" N to 79000'20.7" E. The

Project is located in Seismic Zone – III. It is 'A' category project as the site is located within 10 Km radius i.e. Andhra Pradesh –Tamil Nadu State Boundary – 0.9 km- South.

The proposed project is Open cast mine working with semi-mechanized method for extracting of Black Granite by developing benches of 5m height. Director of Mines and Geology, Hyderabad granted the quarry lease to M/s. Tirumala Granites vide Proceedings No: 3256/R4-2/03 dated 05.02.2003. Total water requirement for the mining lease area is 4KLD. It is reported by the project proponent that there is no court case/litigation is pending against the project. The estimated cost of project is Rs. 40 Lakhs.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **deferred** the proposal and suggested to submit the revised Form-I and PFR as two different sets of Form-1 had been submitted.

(2.28) Minor Mineral Mine with production 1,42,200 MTPA of M/s Anita Kumari located at Mauja Kola, Mohal Ranoh, Tehsil Jaswan, District kangra, HP (14-24-98 ha) (Consultant: Mantec consultants Pvt. Ltd)

The proposal of Anita Kumari is for production of 1,42,200 TPA of Sand, Boulder Bajri (Minor Mineral) from the mine lease area of 14-24-98 hectare in the bed of Sohan Khad. The Mining Lease area is located at Khasra No. 1/1 and 71/1, Village- Mauja Kotla, Mohal Ranoh, Tehsil- Jaswan, District- Kangra, Himachal Pradesh. The proposed production capacity is 1,42,200 TPA. The lease area lies in the Sohan khad of River Beas. The Mine Lease area lies between 31°51' 294" N to 31°51' 876" N, 75°57'145" E to 75°57'700" E.

It is an 'A' category project due to presence of Punjab – Himachal Pradesh interstate boundary at a distance of 0.7 Km from the mine site. The proposed project is an open-cast mining project, confined to excavation of sand, bajri & boulder from the proposed site. The operation will be manual with use of hand tools like shovel, pick-axe, pan, sieves, etc. Sand will be separated from bajri and boulders by sieving process. The LOI has been given vide No. Udyog-Bhu-(Khani-4)Laghu-407/2009-8024 dated 19-11-2013, issued by the Govt. of Himachal Pradesh.

The total water requirement is 1.5 KLD including water demand for domestic purpose, dust suppression & green belt development which shall be met by ground water & tanker supply. The estimated cost of project is around Rs. 2.0 Lakh. Based on the information furnished and presentation made by the project proponent and discussions held, the Committee **deferred** the proposal and suggested to submit the revised Form-I and PFR including details of location of Lake Bird Sanctuary as this information was not provided in the documents.

(2.29) Limestone mine of M/s Bharathi Cement Corporation Pvt. Ltd, located at Village Palli, Thuraka Palli & T. Sadipiralla, kamalapuram mandal, District Kadapa, Andhra Pradesh. (95.368 ha) (0.5 LTPA) (Consultant: Bhagavathi Ana Labs Hyderabad)

The proposal is for the proposed New Limestone Mine (ML 95.368 ha) with total production (Limestone) capacity of 0.5 Lakh Tonne Per Annum (LTPA) in Pandillapalli, Thurkapalli and T. Sadipiralla villages, Kamalapuram mandal, YSR (Kadapa) district, Andhra Pradesh. The latitude and longitude of the site range between 14°35'27" N to 14°36'24"N and 78°35'25" E & 78°36'35" E respectively. It is covered under survey of India topo-sheet no 57J/10.

It was informed by PP that earlier ToR was issued vide MoEF letter No. J-11015/233/2010-IA.II(M) dated 25th October, 2010. Upon expiry of the above mentioned ToR on 25.10.2012, the Project Proponent sought extension for validity of ToR. The extension of validity of TOR for additional one year i.e. from 25th October, 2012 to 24th October, 2013 was granted vide letter no. J-11015/233/2010-IA.II(M) dated 1st April, 2013. Since land issues were not yet settled with owners, Project Proponent could not complete the process of Public Hearing. Subsequently, Proponent was not able to submit the final EIA/EMP Report within the stipulated time i.e. by 24th October, 2013. Hence this Application for fresh TOR.

The mine lease area is 95.368 ha of Private dry agriculture land. Mining will be carried out by opencast manual method. However, drilling and blasting will be carried out in the limestone and dozing in the soil bench. The Cement Plant, the captive one of the applicant, is being located at a distance of 3 km to the SSW.

Total water requirement is 74 KLD which would be used for mine operation, dust suppression, drinking and green belt development. Ultimate working depth will be 50 m bgl. Mine working will intersect ground water table. It was reported by the PP that there is no wildlife sanctuary/tiger reserve/national park, etc within the 10 km radius area around the mine lease. The estimated cost of the project is Rs 9.5 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 **prescribed the TORs** for undertaking detailed EIA study as per **Annexure-I**. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

(2.30) Limestone mine of M/s Bharathi Cement Corporation Pvt. Ltd, located at village T. Sunkesula & Tippalur, Yerragutla Mandal, District Kadapa, AP. (206.144 ha) (0.5 LTPA)(Consultant: Bhagavathi Ana Labs Hyderabad)

The proposal is for the proposed New Limestone Mine (ML 206.144 ha) with total production (Limestone) capacity of 0.5 Lakh Tonne Per Annum (LTPA) in Villages- T.Sunkesula and Tippalur Mandal- Yerraguntla, District-YSR (Kadapa), Andhra Pradesh. The latitude and longitude of the site range between 14°35'52" & 14°36'46" N and 78°33'26" & 78°34'40" E respectively. It is covered under survey of India topo-sheet no 57J/10.

It was informed by PP that earlier ToR was issued vide MoEF letter No. J-11015/234/2010-IA.II(M) dated 25th October, 2010. Since land issues were not yet settled with owners, Project Proponent could not complete the process of Public Hearing. Subsequently, the Proponent was not able to submit the final EIA/EMP Report within the stipulated time. The mine lease area is 206.144 ha of Private dry agriculture land.

The mining will be carried out by opencast manual method. However, drilling and blasting will have to be carried out in the limestone and dozing in the soil bench. Total water requirement is 74 KLD which would be used for mine operation, dust suppression, drinking and green belt development. Ultimate working depth will be 25 m bgl. Mine working will not intersect ground water table.

It was reported by the PP that there is no wildlife sanctuary/tiger reserve/national park, etc within the 10 km radius area around the mine lease. The estimated cost of the project is Rs 19 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**. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

(2.31) Silica sand and Quartzite mine of M/s Shaik Jamal Vali located at Sy. No. 374 of Vepucherla village, Muddaur Mandal, Kadapa Distt., Andhra Pradesh. (116.27 ha)(32,130 TPA).

The Mine Lease area is located at Sy. No 374 of Velpucherla Village, Muddanuru Mandal, Kadapa District of Andhra Pradesh. The Mine Lease area is between Latitude 14°36'42" and 14°37'21" and Longitude 78°21'41" and 78°22'48". The opencast mine will be operated by manual method by using drilling & blasting. The proposed production is 32,130 tons of silica sand and quartzite per year.

Based on the recommendation of the Director of Mines and Geology, the Government of Andhra Pradesh have proposed to grant Mining lease for quartzite/

Silica sand with a request to submit the approved Mining Plan vide GOVT. Memo No 18404 / MIII(1)/2007-1, dated: 16.12.2008. For this purpose a Mining Plan has been prepared and obtained approval from Joint Director of Mines & Geology, Cuddapah Zone vide their approval letter no. 917/MP – YGL/2009 Dated 09/02/2009.

It is reported by the Project Proponent that there is no court case / litigation pending against the Project. The estimated cost of the project is 51.50 lakhs. Based on the information furnished and presentation made by the project and discussions held, the Committee **prescribed the TORs** for undertaking detailed EIA study as per **Annexure-I**. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

(2.32) Mica, Feldspar, Quartz & Vermiculite Mines of M/s Narayana Mining Company, located at jogipalli Village, Sydapuram Mandal, Nellore district, Andhra Pradesh(25.526ha)(2820 Cu.mt per Annum)

The Proposal was **deferred** as the Project Proponent did not attend the meeting.

(2.33) Construction of Screening Plant-II and associated facilities at Donimalai, of M/s NMDC Limited located at Donimalai Complex, Bellary Distt., Karnataka. (39.32 ha)(Screening plant –II capacity 7.0 MTPA. Tailing dam capacity 13.40 million tonnes.

It was noted that Form-I and PFR was wrongly filled; therefore, the Committee suggested that revised Form-I and PFR shall be submitted for further consideration of the proposal. The proposal was therefore **deferred**.

(2.34) Girgoan Bauxite Mine Project of M/s Sahydri Vibhag Audhogik Sahakari Vikas Sanstha Mining company Pvt. Ltd. located at Gigroaon Village, Shahuwadi Taluka, Kolhapur Distt. Maharashtra (75.96ha)(108830 TPA) (Consultant: GLOBAL Environment & Mining Services)

It was noted by the Committee that the proposed site is located in ESA of Western Ghat as per the draft notification issued vide S.O. 733 (E) 10.03.2014 (page 162). Therefore, the Committee decided that the proposal **cannot be considered** in the meeting.

Day 3: 30th May, 2014 (Friday)

CONSIDERATION OF EC PROPOSALS

(2.35) Silica Sand Mine of M/s V.U.S.B. Bhushan Kumar located at Village Bukkapuram, Mandal-Veldurthi, Distt. Kurnool, Andhra Pradesh (121.457ha, 2,66,299TPA)(Consultant: Pioneer Enviro Pvt. Ltd.).

The proposal is for Opencast Manual and semi mechanized mining of Silica sand proposed by V.U.S.B. Bhushan Kumar at Survey No.203, Village Bukkapuram, Mandal Veldurthy, District Kurnool, Andhra Pradesh (121.457 ha). The Latitude - 15o 36' 44.92" to 15o 35' 40.86" N and Longitude – 78o 06' 09.55" to 78o 07' 16.12" E.

The proposal was considered by the Expert Appraisal Committee in its 10th meeting held during 21 – 23rd of August, 2013 to determine the Terms of Reference for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/190/2013-IA.II (M) dated 18th November, 2013.

The mine lease area is 121.457 Ha, which is Govt. waste land. The Mining Plan is approved by Joint Director of Mines & Geology, Government of Andhra Pradesh vide letter No. 1691 / MP – KNL /2013 dated 18.05.2013. The proposed production of Silica Sand is to the tune of 2,66,299 TPA with an anticipated intercalated waste generation of 10% which would be stored at the dump site. As yellow ochre is occurring sporadically only at foot slopes of the ML area, it would be stacked separately. During the first five years of mining, it is not proposed to mine yellow ochre. The lessee proposes to produce 14,79,440 tons of ROM / Rock mass from the applied mining lease area during the Plan period. Silica Sand will be worked by opencast semi-mechanized method with a bench height of 3m and convenient bench width (not less than the bench height) for the machinery to move. The total anticipated land that will be broken during the scheme period will be 18.96 hectares or 1,89,672 Sqm.

Open cast mining will be carried out in this mine by manual and semi mechanization by using compressor operated jack hammer drills, excavators, and dumper etc., Transportation will be made by trucks to dispatching points. Drilling and Blasting is required to mine the Silica Sand. There is no top soil in proposed mining area for first five years. So there will not be any soil excavation in this plan period. The total waste generation during this Plan period will be 1,47,944 tonnes. The intercalated waste generated will be dumped over an area of 0.40 ha or 4,076 m². Total waste generation during the life of the mine will be 31,62,224 Tonnes. The waste will be used for laying roads and the balance will be dumped at the dump site on the Eastern portion of the ML area.

Water required for proposed mining activity will be 60 KLD and it will be met from ground water source. No intersection of mining activity with ground water table is anticipated. Hence no Hydrogeological study was carried out. 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 October, 2013 to December, 2013. All the parameters for water and air quality were within permissible limits. The Public Hearing for the Proposed Project was conducted at Bukkapuram Grampachayat office, Bukkapuram Village, Veldurthy Mandal, Kurnool District, Andhra Pradesh on 14.02.2014. The Public Hearing was chaired by Shri. S. Rama Swamy, Addl. 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 protection of nearby fields and social development of village.

As per the villager's requirements, it was informed by the PP that they would give priority to local employment and implements 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. 90.0 Lakhs. Cost for Environmental protection and occupational health is Rs. 34.0 Lakhs. For CSR Rs. 16.0 Lakhs/annum will be allocated. It was informed by PP that no court case is pending or any violation has been done in this proposed project.

Based on the information submitted by the Proponent and discussion held in the meeting, the Committee **recommended** the Proposal for environmental clearance for Silica Sand Mining with production capacity of 2,66,299 TPA (ROM) with additional specific conditions that:

- (i) Local plants available in the lease area will be translocated and planted in the green belt area and survival monitored.
- (ii) The villages located near the mine leases boundary shall be taken up for peripheral development to ensure over all development from dedicated CSR funds of the project.

(2.36) Silica Sand Mine of M/s V.U.S.B. Bhushan kumar located at Village Bukkapuram, Mandal-Veldurthi, Distt. Kurnool, Andhra Pradesh (108.032ha, 2,51,988 TPA)

The proposal is for Opencast Manual and semi mechanized mining of Silica sand by V.U.S.B. Bhushan Kumar at Survey No.339/A, Village Bukkapuram, Mandal Veldurthy, District Kurnool, Andhra Pradesh (108.032 ha). The site is located between Latitude - 15° 34' 14.33" to 15°35' 06.25" N and Longitude – 78° 04' 15.25" to 78° 07' 14.74" E.

The proposal was considered by the Expert Appraisal Committee in its 10th meeting held during 21 – 23rd of August, 2013 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/191/2013-IA.II (M) dated 05th November, 2013.

The mine lease area is 108.032 Ha, which is Govt. waste land. The Mining Plan is approved by Joint Director of Mines & Geology, Government of Andhra

Pradesh vide Mining Plan approval Letter No. 1688/MP – KNL /2013 dated 18.05.2013. The proposed production of Silica Sand to the tune of 2,15,988 TPA with an anticipated intercalated waste generation at the rate of 10% which would be stored at the dump site. As Yellow ochre is occurring sporadically only at foot slopes of the ML area it would be stacked separately. Silica sand will be worked by opencast semi-mechanized method with a bench height of 3m and convenient bench width (not less than the bench height) for the machinery to move. The total anticipated land that will be broken during the scheme period will be 15.38 hectares or 1,53,838 Sqm.

Open cast mining will be carried out in this mine manually and by using compressor operated jack hammer drills, excavators, and dumper etc. Transportation will be made by trucks to dispatching points. Drilling and Blasting is required to mine the Silica Sand. There is no top soil in proposed mining area for first five years. So there will not be any soil excavation in this plan period. The total waste generation during this plan period will be 1,19,993 tones. The intercalated waste generated will be dumped over an area of 0.40 ha or 4,076 m². Total waste generation during the life of the mine will be 79,09,920 Tonnes. The waste will be used for laying roads and the balance will be dumped at the dump site of the ML area. Water required for proposed mining activity will be 50 KLD and it will be met from ground water source. No intersection of mining activity with ground water table is anticipated. Hence no Hydrogeological study was carried out. 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 October, 2013 to December, 2013. All the parameters for water and air quality were within permissible limits. The Public Hearing for the Proposed Project was conducted at Bukkapuram Grampachayat office, Bukkapuram Village, Veldurthy Mandal, Kurnool District, Andhra Pradesh on 14.02.2014 at 2:00 PM. The Public Hearing was chaired by Shri. S. Rama Swamy, Addl. 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 protection of nearby fields and social development of village. As per the villager's requirements, it was informed by the PP that they would give priority to local employment and implements all the measures to control dust pollution. These have been incorporated in the Project Plan with budgetary provisions.

The estimated cost of the project is Rs. 80.0 Lakhs. Cost for Environmental protection and occupational health is Rs. 30.0 Lakhs. For CSR Rs. 13.0 Lakhs/annum will be allocated. It was reported by PP that no court case is pending or any violation has been done in this proposed project.

Based on the information submitted by the Proponent and discussion held in the meeting, the Committee **recommended** the Proposal for environmental clearance for Silica Sand Mining with production capacity of 2,51,988 TPA (ROM) with additional specific conditions that:

- (i) Local endangered and other rare or valuable plants available in the lease area and suited for translocation, may be translocated and planted in the green belt area and their survival monitored.
- (ii) The villages located near the mine leases boundary shall be taken up for peripheral development to ensure over all development from dedicated CSR funds of the project.
- (iii) Project to make plan for six families (nomads) staying close to the mine by making provisions of water, electricity and house and also ensuring education to their children as proposed by the PP.
- (iv) The natural stream shall be protected by making 100m no-development zone on both banks. Plantation of local species may be carried out in this zone.

(2.37) Bukkapuram Silica Sand Mine of M/s V.U.S.B. Bhushan Kumar located at Village Bukkapuram, Mandal-Veldurthi, Distt. Kurnool, Andhra Pradesh (54.846ha, 81,005 TPA)

The proposal is for Opencast Manual and semi mechanized mining of Silica sand proposed by V.U.S.B. Bhushan Kumar at Survey No.214, Village Bukkapuram, Mandal Veldurthy, District Kurnool, Andhra Pradesh (54.846 ha). The Latitude - 15° 35' 09.85" to 15° 35' 50.74" N and Longitude – 78° 06' 16.85" to 78° 07' 17.80" E.

The proposal was considered by the Expert Appraisal Committee in its 10th meeting held during 21 – 23rd of August, 2013 to determine the Terms of Reference for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/189/2013-IA.II (M) dated 05th November, 2013.

The mine lease area is 54.846 Ha, which is Govt. waste land. The Mining plan is approved by Joint Director of Mines & Geology, Government of Andhra Pradesh vide Mining plan approval Letter No. 1690/MP–KNL/2013 dated 18.05.2013. The proposed production of Silica Sand to the tune of 81,005 TPA with an anticipated intercalated waste generation of 10% which would be stored at the dump site. As Yellow ochre is occurring sporadically only at foot slopes of the ML area it would be stacked separately. Silica sand will be worked by opencast semi-mechanized method with a bench height of 3m and convenient bench width (not less than the bench height) for the machinery to move. The total anticipated land that will be broken during the scheme period will be 5.76 ha or 57,696 Sq.M.

Open cast mining will be carried out in this mine by manually and semi mechanization by using compressor operated jack hammer drills, excavators, and dumper etc., Transportation will be made by trucks to dispatching points. Drilling and Blasting is required to mine the Silica Sand. There is no top soil in proposed mining area for first five years. So there will not be any soil excavation in this plan period. Only 10 % of the waste will be generated. The total waste generation during this plan period will be 45,002 tones. The intercalated waste generated will be dumped over an area of 0.88 ha/ 8,800m². Total waste generation during the life

of the mine will be 15,58,596 Tons. The waste will be used for laying roads and the balance will be dumped at the dump site in the ML area.

Water required for proposed mining activity will be 30 KLD and it will be met from ground water source. No intersection of mining activity with ground water table is anticipated. Hence no Hydrogeological study was carried out. 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 October, 2013 to December, 2013. All the parameters for water and air quality were reported to be within permissible limits. The Public Hearing for the Proposed Project was conducted at Bukkapuram Grampachayat office, Bukkapuram Village, Veldurthy Mandal, Kurnool District, Andhra Pradesh on 15.02.2014. The Public Hearing was chaired by Shri. S. Rama Swamy, Addl. 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 protection of nearby fields and social development of village. As per the villager's requirements, it was informed by the PP that they would give priority to local employment and implements all the measures to control dust pollution. These have been incorporated in the Project Plan with budgetary provisions.

The estimated cost of the project is Rs. 60.0 Lakhs. Cost for Environmental protection and occupational health is Rs. 22.0 Lakhs. For CSR Rs. 5.0 Lakhs/annum will be allocated. It was informed by the PP that no court case is pending or any violation has been done in this proposed project.

Based on the information submitted by the Proponent and discussion held in the meeting, the Committee **recommended the Proposal** for environmental clearance for Silica Sand Mining with production capacity of 81,005 TPA (ROM) with additional specific conditions that:

- (i) Local endangered and other rare or valuable plants available in the lease area and suited for translocation, may be translocated and planted in the green belt area and their survival monitored
- (ii) The villages located near the mine leases boundary shall be taken up for peripheral development to ensure over all development from dedicated CSR funds of the project.

(2.38) Pellet Plant (1.0 MTPA) with Upstream Slime Beneficiation facilitates at Iron Ore Complex (IOC) Dalli –Rajhara, District-Balod, Chhattisgarh of M/s Steel Authority of India Ltd. (19ha), Consultant: NEERI.

The Proposal is for setting-up 1 MTPA Pellet Plant with upstream slime beneficiation facilities at Iron Ore Complex (IOC) Dalli- Rajhara of M/s Steel Authority of India Ltd (19 Ha) in the Balod District of Chhattisgarh state. The area is acquired land of Bhilai Steel Plant is a non-agricultural waste land and non-forest

revenue land. The area is covered under Survey of India Toposheet No. 64H/2 and lies between Latitude from 20°34'40.651" N to 20°34'56.671" N and Longitudes from 81°02'09.043" E to 81°02'36.637" E.

The proposal was considered by the Expert Appraisal Committee (non-coal mining) in its 5th meeting held during 13-15th March 2013, to determine the Terms of Reference for undertaking detailed EIA study. The TOR was issued by MoEF vide letter No. J-11015/437/2012-IA.II (M), dated 14th May, 2013.

It is a proposal to set up a 1 MTPA pellet plant with upstream beneficiation facilities in the 19 Ha, acquired land of Bhilai Steel Plant & the total area is outside the mining lease. The proposed project area of 19 Ha is at Iron Ore Complex, Dalli-Rajhara of SAIL in Balod District. It is at a distance of 95 km from Durg railway station. Hitkasa tailing dam, the major source of slime is adjacent to the proposed site. The proposed site is located on the North-Western valley of Dalli-Rajhara range. Area generally is a flat terrain.

The proposed slime beneficiation consists of beneficiation of low grade iron slimes generated in course of beneficiation of iron ore. The slime will be beneficiated using state-of-the-art techniques like jigging, spiralling, magnetic separation (WHIMS) etc. The pelletisation process includes storage and handling of raw materials; grinding, proportioning and mixing; balling, induration and cooling; & finished product storage and dispatch.

For 1.0 MTPA (3125 TPD) pellet plant, the raw materials like - Iron ore fines (1105600 TPA), Limestone (19200 TPA), Coke Breeze (19200 TPA) and Bentonite (19840 TPA) respectively will be received directly in the pellet plant and stored in raw material bunkers of respective grinding units. Storage capacity of each material shall be based on 15 days requirement. The grinding of iron ore fines will be carried out in the beneficiation plant.

The total waste generated will be 1.19 MTPA. The total water requirement for the proposed project will be 1140 m³/h and the water recovered from the system will be 1044.70 m³/h, taking into the account of water loss due to spillage, domestic & drinking purpose etc. The makeup water will be 188.10 m³/h which is about 4515 m³/day & 14,44,800 m³/year (320 working days per year). The total water requirement will be provided from existing "Boridih" Dam of Iron Ore Complex of Bhilai Steel Plant.

It was reported by PP that no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/Protected area/Critically Polluted Areas (existing as well as proposed) exist within 10 KM Radius. In the study area four schedule-I species, Monitor Lizard, Python, Peafowl and Sloth Bear were recorded.

Baseline studies were carried out during summer season (March-May 2013). All the parameters for water and air quality were within permissible limits. The Public Hearing for the proposed Project was conducted at "Bital" village on 15.01.2014. The Public Hearing was presided over by Shri Alok Pandey, ADM-Balod district of Chhattisgarh State. The issue raised during Public Hearing were

considered and discussed in details during the meeting, which inter-alia included that there will not be any type of discharge of effluent from the proposed Project area, preventing the slit flowing into the agricultural land, air pollution control measures to be adopted, raising of trees through development of green belt in & around proposed area and sprinkling of water etc. It was informed by the PP that the local employment, health service, education and assistance in vocational training etc will be given due attention. These have been incorporated in the EIA/EMP report with budgetary provisions. The estimated cost of the project is 812.18 Crores. It was informed by PP that no court case is pending relating to the proposed project.

After detailed deliberations the Committee sought the following additional information and **deferred** the proposal:

- (i) The Public Hearing was opposed therefore it may be clarified and revised action plan for public hearing shall be submitted.
- (ii) The species specific conservation plan dully approved by Chief Wildlife Warden of the State Govt. shall be submitted.
- (iii) Revised questionnaire for the proposal shall be submitted.

(2.39) Srikurmam Mineral Sand Mine of M/s Trimex Sands Pvt. Ltd., Village Vatsavalasa, Mandal Gara, District Srikakulam, Andhra Pradesh (59.27ha) (2.0MTPA to 6.0 MTPA)(Consultant Bhagavathi Ana labs Ltd. Hyderabad)

The proposal is for expansion of Mineral Sand Mining from 2 MTPA to 6 MTPA & Mineral Sand production from 0.63 MTPA to 0.93 MTPA. Mine lease area is 720 ha for mining of heavy mineral sand having Ilmenite, Rutile, Zircon, Garnet, Sillimanite & 59.27 ha Plant Area located at Vatsavalasa & Tonangi Villages, Gara Mandal, Srikakulam District, Andhra Pradesh. The area is covered under Survey of India Toposheet No. 74B/3, B/4, B/7 and lies between Latitude from 18°15'56" N to 18°19'19" N and Longitudes from 84°02'39" E to 81°07'44" E.

The State Govt of Andhra Pradesh has granted a mining lease for mining of heavy mineral sand having Ilmenite, Rutile, Zircon, Garnet, Sillimanite minerals from 23.02.2004 to 22.02.2034 in 720 ha area at Vatsavalasa & Tonangi Villages, Gara Mandal, Srikakulam District, Andhra Pradesh. The Ministry of Environment & Forest has granted Environmental and CRZ clearance for the project for 2.0 MTPA. The PP has submitted application for expanding mining capacity from 2.0 MTPA to 8.0 MTPA, in July 2011. The proposal was considered by the Committee to determine TOR in the Meeting during 21 – 23rd September 2011. It was decided that a sub-Committee of EAC may undertake a site visit before making recommendations for TOR.

The project was further considered by EAC in Meeting held during January 23 – 25th 2012 wherein the PP made a request to allow them to start collecting environmental data for the purpose of preparing the EIA / EMP Report pending visit of sub-Committee. The matter was placed before the EAC for their consideration.

After deliberating the matter, the Committee agreed that the proponent may be allowed to collect baseline data for preparation of EIA/EMP report for the forthcoming pre-monsoon season 2012.

A duly constituted sub-Committee of the EAC from MoEF visited the project site on 17th March 2012 and inspected the project activities and also looked in to the compliance status of the existing Environmental Clearance conditions submitted by the project proponent. MoEF issued the TOR for undertaking detailed EIA study vide letter No J-11015/175/2011-IA.II(M) dated 6th July 2012.

The project proponent decided to reduce the capacity of expansion from 8.00 MTPA to 6.00 MTPA due to technical and market issues involved. In this regard, the PP was permitted for downscaling the earlier proposal of expansion from 8.0 MTPA to 6.0 MTPA vide letter No. J-11015/175/2011-IA.II (M) dated 09.09.2013.

The Mine lease area is 720 ha & Plant area is 59.27 ha situated outside ML area. There is no forest land in the lease area. Scheme of Mining for a further period of five years from 2009-2010 to 2013-2014 was approved by the Indian Bureau of Mines vide letter no AP/SRK/MP/Garnet-2/Hyd dated 18/6/2009 and by Atomic Minerals Directorate for Exploration and Research (AMD) vide letter no. AMD/MPA/3M/TSPL/720Ha/2009 dated 17.08.2009.

The mine is opencast and will be worked by mechanized method involving dry mining and dredging. No drilling and blasting are involved or sorting of the material at the mine site. Run-off mine ore will be mined and concentrated with advanced environment friendly equipment and technology, wherein ore mining, concentration, backfilling and afforestation on reclaimed land takes place simultaneously, thus limiting the gap between mining and rehabilitation to pre-mining stage to only a few months.

Mined/dredged heavy mineral sand is screened, slurried and pumped to a pre-Concentration Plant (CP) to concentrate minerals in the ROM into three to four mineral rich concentrates. The concentrates from this Plant will be further transported to a Mineral Separation Plant (MSP) for separation of individual minerals. Heavy mineral sand from lower layers having high slime content is will be additionally cleaned in a slime cleaning plant before it is pumped to the pre-Concentration Plant. The excavated area will be simultaneously refilled with tailings generated from pre-Concentration Plant and afforested with local suitable plant species and restore the ecological balance of the area. Total Mineral Reserves are about 27.98 million tonnes with mineral resources of 37.45 million tonnes. Life of the mine is about 8 years.

It was reported by the PP that solid waste generation will be about 22.958 million tonnes of silica sand which form the reject quantity during the first five years when 27.65 million tonnes of ROM will be handled. The plant waste/tailings contain shells, silica & silt/slime and this waste sand will be dewatered by cyclones. The tailings which form about 83% of ROM will be transported/pumped back for refilling the mined out areas and subsequent afforestation.

The total water requirement for the project is estimated as 15,000 KLD. The PP already holds permission to draw 500 m³/hr from the Vamsadhara River. It was reported by PP that mining will be carried out below the ground water table, however there is no mine dewatering involved. A comprehensive hydrogeological study carried out by Andhra University was submitted.

It was reported by the PP that there is no wildlife sanctuary/tiger reserve/national park, etc within the 10 km radius area around the mine lease. Schedule I species i.e Olive Ridley Turtle is found in the study area.

Baseline studies were carried out during summer season 2012 (March –May). All the parameters for air, water, and noise quality were reported to be within prescribed standards. The study on the impact of the mining on olive riddle turtle, traffic, ground water, flora & fauna etc. are also carried out and submitted along with final EIA. HTL/LTL demarcation by authorised agency has also been carried out and report submitted.

It was informed by the PP that the Public Hearing for the project was conducted on 29.12.2012 near Project site. The PH was chaired by District Collector, Srikakulam. The issues raised during public hearing are considered and discussed in the final EIA. It was informed by Project Proponent that as per the villager's requirements, they would give preference to locals for employment; health issues, providing education and assistance in vocational training etc. The estimated cost of the project is Rs 140 Crores. It was reported by the project proponent that there is no court case against the project.

After detailed deliberations the Committee recommended the proposal for grant of EC subject to submission of following information:

- (i) Production details of each mineral along with ROM.
- (ii) Detail plan and commitment for establishment of Turtle conservation centre/cell.
- (iii) Details of R&R plan for the people displaced and entering into agreement with the company.
- (iv) Report on replenishment of sand.
- (v) Revised questionnaire of the proposal.
- (vi) The species specific conservation plan duly approved by Chief Wildlife Warden shall be submitted.
- (vii) An affidavit that mining plan approved by AMD used for public hearing and the Mine plan approved by the IBM are the same.

RE-CONSIDRATION OF EC PROPOSALS

(2.40) Koira iron ore mine of M/s Essel Mining & Industries Ltd. District Sundargarh, Odisha (90.143 ha) (1.5 MTPA to 4.0 MTPA) (Consultant: B.S.ENVI-Tech (P) Ltd. Hyderabad).

The Mine site is located at Koira, Nuagaon, Kadodiha & Harischandrapur Villages, Koira Taluk, Sundergarh District, Odisha with an average msl of about 560 - 630 m. The site falls between latitude 21° 53' 40" to 21° 54' 20" N and longitude 85° 13' 20" to 85° 14' 00" E and part of study area falls within the Survey of India Toposheet No. 73 G/1. The proposal was considered for TOR by the Expert Appraisal Committee in its meeting held during 22nd September, 2011 and TOR was issued vide letter No. J-11015/171/2011-IA.II (M) dated 25th October, 2011. Extension of validity of TOR was considered in EAC meeting held during September 25-27, 2013. The extension of validity of TOR was granted vide letter dated 18th November 2013. The prior environment clearance for 1.5 MTPA was granted to the project vide letter no. J-11015/599/2007-IA.II(M) dated 24th September 2008. The certified compliance report of the EC was discussed during the EAC meeting.

The proposal is for enhancement of the Iron ore production from 1.5 to 4.0 MTPA by adopting deep hole drilling & blasting with fully mechanized open cast mining method. Area of the mining lease is 90.143 ha. The Iron ore produced from the mine will be transported to the crusher located at 1.5 km from the mine pit. The crushed Iron ore will be transported to different destinations by road from mines-head to different Railway sidings as well as plants as per buyer's requirement.

During the entire period of the mining, a total of about 0.37 million tonnes of waste will be generated and will be utilized for backfilling. The waste material generated during the earlier mining operations is dumped over an area of 2.934 ha. The old mature dumps are protected and rehabilitated by plantation programme. This area will be reduced to 1.515 ha during the course of mining as part of the dump area is located on mineralized area. The waste from this dump area will be backfilled in mined out quarry in SE part of the lease. Total reclaimed area up to 31.3.2013 is 2.196 ha. The Mining plan is approved by IBM vide letter dated 29.03.2011 no. 314(3)/2010MCCM/SP.

The main sources of water supply are dug wells and bore wells within the mining lease area equipped with pumping arrangement. The mine is presently using 100 m³/day of water for various purposes at mine-sites and colony. With the increase in production, the total water requirement will increase to 500m³/day and this requirement will be met from the above sources. Koira Iron ore mine has obtained NOC from CGWA for withdrawal 500 KLD Water vide letter dated 05.03.2008 no. 21-4(29)/SER/CGWA/ 2008-588. The mine working will not intersect the Ground Water Table. It was reported by the PP that no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves existing/proposed, are located within 10 km of the mine lease boundary.

Baseline studies were carried out during post monsoon season 2012 (September, October and November 2012). The Public Hearing for the Project was conducted on 26.09.2013. The Public Hearing was presided over by Shri Rabindra Nath Mishra, OAS(S), Additional District Magistrate, Rourkela, Sundargarh. The issues raised during public hearing were also considered and discussed during the meeting, which inter-alia, included, air pollution control measures to be adopted, raising of plantation, sprinkling of water etc. It was informed by the PP that they would give preference to local people for employment and also provide facilities related to health issues, education, vocational training etc. These have been incorporated in the Project Plan with budgetary provisions.

Capital budget for proposed increase in production of Iron Ore from 1.5 to 4.0 MTPA is 50 Crores. A case for violation of provisions of Environment (Protection) Act, 1986 at Koira Iron Mines was registered vide no. CrI.Case No.2 (c) C.C. 38/13 in the court of Sub-Divisional Judicial Magistrate, Bonai.

The proposal was considered in the EAC meeting held during January 27-28, 2014 wherein the following information was sought:

- (i) Certified copies of land schedule showing the correct status of Non Forest land i.e. agriculture, patta land involved in the mining project.
- (ii) Status of litigation/case against the company
- (iii) As per TOR point 8 the Organisation Structure showing the reporting of Environmental non-compliance to the Directors of the company.
- (iv) Handling of additional traffic due to the expansion/material movement in various directions from the project site with details of entire transport route plan.
- (v) Concrete timeline for construction of workshop and the ETP.
- (vi) The detailed R&R plan for private agricultural land.
- (vii) Possibility of using/disposing murrum/red ochre.

On submission of the information that 90.143 ha 59.458 ha is forest land, 30.685 ha non-forest land 10.81 ha private land. It was informed by pp that 44 families will be effected and land will be acquired as per Land Acquisition Act 2013. The case on violation 38/2013 under Section 15 of the EPA has been filed and is yet to be listed. It was informed by PP that the additional traffic due to the expansion/material movement in various directions from the project site which will add to the State Highway is designed to bear the load. The construction of workshop and the ETP will be completed by 2015. The murrum/red ochre will be stock piled separately for future utilization.

Based on the information submitted, presentation made by the project proponent and discussions held, the Committee **recommended** the proposal for the grant of environmental clearance subject to their being bound by any restriction

on the carrying capacity study of the area based upon the Shah Commission report on iron & manganese ores mining in Odisha.

(2.41) Kukurdih Limestone Mine of M/s UltraTech Cement Ltd. Village Kukurdi, Distt. Raipur Chhattisgarh (251.527ha) (5.0 MTPA) (Consultant: J.M. Environ Net Pvt. Ltd.)

The proposal is for Kukurdih Limestone Mine (ML Area: 251.527 ha., Limestone Production Capacity: 5.0 MTPA) by M/s UltraTech Cement Ltd., located at Village Kukurdih, Taluka– Balodabazar, District- Balodabazar–Bhatapara (Chhattisgarh). The Latitude and Longitude of the site are 21°39´ N to 21°40´ N and 82° 05´ E to 82° 07´ E. The proposal was considered by the Expert Appraisal Committee in its meeting held during 24-26th November, 2010 to determine the Terms of Reference (TOR) for undertaking detailed EIA study. The TORs were issued by MoEF vide letter no. J-11015/274/ 2010-IA.II(M) dated 28th March, 2011 and 30th August, 2011. The proponent submitted their EIA/EMP to the Ministry for seeking environmental clearance on 25th March, 2013.

The mine lease area is 251.527 ha, which is non forest land. The Mining plan is approved by IBM vide Letter No. 314(3)/2008-MCCM(CZ)/MP -24 dated 18th December, 2008. It is reported by the Project Proponent (PP) that the mine working will be by Mechanized Opencast Method, utilizing heavy earth moving machines and with deep hole drilling and controlled blasting techniques, with proper benching of deposit to exploit the available limestone reserves. Bench Height is 8 m to 10 m, Width – more than 30 m (working bench), Stripping ratio (t:m³) - 1:0.14. It is reported by the PP that Total Geological Reserves are about 120.23 million tonne. Total reserves under Proved Mineral Reserves are about 96.01 million tonnes. Life of the mine is 19 years.

The total quantity of overburden is 9.22 Mm³. During initial five years it is proposed to dump all OB in the form of embankment along lease boundary. Interburden amounting to 13.09 million m³ will be stacked as a dump in the North-Western area of the lease. The dump will be spread over an area of 8.05 ha and will have height of 14 m to 15 m. The interburden / waste material in stacks will be analyzed to find out, if it can be blended with limestone being dispatched to Cement Plant. The balance material will be backfilled. Mineral Rejects are estimated at 9.36 MT.

The water requirement is estimated as 215 KLD, Water will be sourced initially from ground water and later, on development of mine sump, water requirement will be fulfilled from both ground water and water accumulated in mine sump. Permission for drawl of ground water has been obtained from CGWA (combined for Kukurdih mine and proposed new Cement Plant near Kukurdih mine) vide their letter no. 21 – 4(57)/NCCR/CGWA/2009-540 dated 4.09.2009.

Mine Working will intersect the Ground Water Table. Detailed Hydrogeological study has been carried out for the Project. Prior permission for the same will be obtained from the concern Govt. Authority. Limestone will be crushed within mining lease area (crusher will be installed within mining lease area) and transported to

fulfil the limestone requirement for the new Cement Plant and existing operating Plants at Rawan Cement Works and Hirmi Cement Works of M/s UltraTech Cement Ltd.

It was reported by the PP that the no Ecological Sensitive Areas (National Park, Wild Life Sanctuaries, Tiger Resaves, Elephant Corridors, Biosphere Reserves etc exist within 10 km radius from mining lease boundary. Dabadih Reserved Forest is at a distance of ~2.5 km South; Mohtara reserved forest at ~8.5 km NE and Sonbarsa & Latwa Reserved Forest is at ~5.5 km NE.

Baseline studies were carried out during winter season 2011-2012. All the parameters for water and air quality were within permissible limits. The Public Hearing for the Proposed Project was conducted at Piprahi Village on 30.11.2012. The PH was chaired by Shri M. Kalyani, Addl. District Magistrate, District Balodabazar – Bhatapara. The proponent informed that the Chairman of the Public Hearing is of the level of ADM as per EIA Notification, 2006. The issues raised during Public Hearing were also considered and discussed during the meeting, which infrastructure facility i.e. ITI, Medical & Engineering College for education along with electricity, drinking water, road etc. will be provided by the Project Proponent, employment will be given to local people as per their qualification and proper training will also be given. Air pollution control measures will be adopted, raising of plantation, sprinkling of water etc will also be done. As per the villagers' requirements, it was informed by the PP that they would give preference to locals for employment; health issues, providing education, and assistance in vocational training etc. These have been incorporated in the Project Plan with budgetary provisions. It was reported by the PP that there is no court case/litigation pending against the project and no violation.

The cost of the project is Rs 150 crore. Cost for EMP: Capital Cost – 1.5 crore and recurring cost for EMP Rs. 10 Lakh/annum. It was suggested by the Committee that plantation of green belt should be based on the requirement of local people and native species should be selected for plantation and a detailed list of endemic species shall be provided in the EIA Report.

The Committee had sought the following information in the meeting held during May 15-17th 2013:

- (i) The Annexures mentioned in the list in EIA report were not enclosed.
- (ii) Mine plan is in the name of M/s Grasim Industries Ltd instead of M/s Ultra Tech Cement Ltd.
- (iii) Coordinates of mine plan and EIA report are not consistent.
- (iv) Chapter 11 states that no R&R plan is applicable whereas the lease area involves, around 224 land owners to be affected. Details to be submitted as per point 9 of TOR along with sample survey.
- (v) The EIA report submitted to Ministry and that circulated to the EAC members were different.
- (vi) Cumulative impact of water availability in the area shall be obtained from Central Ground Water Authority.

On submission of information the proposal was placed in the meeting held during January 27-28, 2014. The PP submitted the Annexure mentioned in EIA report. It was informed by the PP that lease deed for Kukurdih Limestone Mine has been executed in the name of UltraTech Cement Limited on 4th November 2010, the mine plan was prepared in year 2008 before execution of lease deed. Procedure for change of name (for Mining Plan approval) from Grasim Industries Ltd. to UltraTech Cement Limited is under process with IBM, Nagpur. PP informed that correct Coordinates of the mining lease area given in the Approved Mining Plan are Latitude: 21°39' N to 21°40' N and Longitude: 82° 05' E to 82° 07' E. The detailed action plan for R&R was prepared for the project and submitted. PP informed that a request letter to CGWA, New Delhi has been submitted for cumulative impact of water availability in the area as per discussion held during final technical presentation; however no response have been received till now from CGWA regarding the same.

The Committee in the meeting held during January 27-28, 2014 sought the status of NOC for grazing land by the concerned Panchayat and alternate road proposal for the people of the area in lieu of existing road inside the lease area is needed. The PP submitted the NOC for grazing land from the Panchayat and an affidavit that alternative road to the villagers will be provided.

Based on the information submitted by the Proponent and discussion held in the Meeting, the Committee **recommended** the proposal for environmental clearance with additional specific condition that alternate road for the villagers shall be constructed and commissioned at the earliest but not later than 3 years from date of issue of EC as a measure to mitigate significant social impact.

CONSIDERATION OF TOR PROPOSALS

(2.42) Unit –I Chinnakomerla Lime Stone Mine Project of M/s VP Cements (P) Ltd. located at Chinakomerla Village, Mylavaram Mandal, Y.S.R. Kadapa Distt., Andhra Pradesh. (384 ha, 4.2 MMTPA) (TEAM Lab and Consultants).

The limestone mine Lease area is located at Chinnakomerla village, Mylavaram Mandal, YSR Kadapa District, Andhra Pradesh. The mine lease area falls between the co-ordinates of 14°55' 53.6" to 14°57' 08.4" N Latitude and 78°20'55.9" to 78°23'15.4"E Longitude. It was reported by PP that the mine lease area is surrounded by open lands in all directions except west i.e. Nawabpeta to Bhimagundam road is passing adjacent to the ML area and crossing the ML area in NW part. Dalmia Cements Ltd. Cement Factory is at a distance of 1.0km in south direction of the ML area. Nawabpeta Hamlet is located at a distance of 0.5km in west direction and Chinnakommerla Village is located at a distance of 2.2km in southwest direction. Penneru River is at a distance of 9.5 km in south direction and Kunderu River is at a distance of 9.3km in NE direction. It was reported by PP that there are no national parks, wild life sanctuaries and critically polluted areas within 10 km radius of the ML area.

Government of Andhra Pradesh, Industries and Commerce (M. III) Department proposed for grant of Mining Lease for 20 years period vide their Memo

No. 478/M.III(1)/2013-1 dated 02.09.2013. The proposed method of mining is mechanized by developing the benches by employing deep drilling, blasting, hydraulic excavators and dumpers.

Water requirement for the proposed mining is 110 KLD shall be met from ground water through bore wells. It was informed by PP that there is no court case/litigation pending against the project. It is a green field project, no violation cases are involved. Total cost estimated for the proposed project is Rs. 13.87 Crores and Cost estimated for EMP is Rs. 2 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. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

(2.43) Unit-II Gundlakunta Limestone Mine of Mining Project of M/s VP Cements (P) Ltd. located at Gundlakunta Village, Peddamudiam Mandal, Y.S.R. Kadapa Distt., Andhra Pradesh. (730.59 ha) (5.6 MMTPA) (Consultant: TEAM Lab and Consultants)

The Mine Lease area is located at Gundlakunta village, Peddamudiam Mandal, YSR Kadapa District, Andhra Pradesh. The mine lease area lies at the co-ordinate 14°56'15.2" N Latitude and 78°23'37.8" E Longitude. It was reported by PP that the mine lease area is surrounded by open lands in all directions and Gundlakunta to Salevariuppalapadu road is passing through the ML area. Dalmia Cements Ltd. Cement Factory is at a distance of 4.5km in southwest direction of the ML area. Gundlakunta Village is located at a distance of 0.4km in North direction. Penneru River is at a distance of 9.0 km in south direction and Kunderu River is at a distance of 6.0km in NE direction. It was reported by PP that there are no national parks, wild life sanctuaries and critically polluted areas within 10 km radius of the ML area. There are no reserve forests within 15 km radius.

The LOI has been granted vide Ref. A/283/2012, dt. 02.01.2013. The proposed method of mining is mechanized for limestone production by developing the benches by employing deep drilling, blasting, hydraulic excavators and dumpers. Water requirement for the proposed mining is 220 KLD shall be met from ground water through bore wells. It was informed by PP that there is no court case/litigation pending against the project. It is a green field project, no violations cases are involved. Total cost estimated for the proposed project is Rs. 22.76 Crores and Cost estimated for EMP is Rs. 3.0 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. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

(2.44) Minerals and metals with production 17,520 MTPA by M/s. Tirupati Minerals & Metals located at Buti Bori Industrial Area Nagpur, District, Maharashtra.

The proposal involves the production of Ferro Alloy and Manganese Oxide along with Manganese ore beneficiation unit. The Committee was of the view that project involves production of Ferro Alloy and Manganese Oxide. Therefore, the Committee could not consider the proposal, as subject doesn't fall under the purview of this Committee.

(2.45) Silica Sand Mine of M/s Sheshagiri Rao & Company located at Sy. No.624/A Kothapatnam Village, Kota Mandal, Nellore Distt. Andhra Pradesh (50.60ha) (2,00,000 TPA).

The Mine Lease area is located at S y. No 628/A of Kothapatnam Village, Chillakur Mandal, Nellore District of Andhra Pradesh. The Mine Lease area is between 14o05'28.0"N to 14o06'32.2"N and 80o06'06.5"E to 80o06'26.6"E. The mine is operated by manual opencast method without using drilling & blasting. The proposed production is 2,00,000 tons of sand per year.

The mining lease was granted, vide G.O.Ms.No.176 of Industries & Commerce (Mines-III) Dept., dated 03.07.2007, and the ML was executed on 08.08.2007 for a period of 20 years vide PROCS No.2424/M/2002 dated: 08-08-2007 of the ADM&G, NLR. The mining plan was approved under letter No: 7737/R3(2)/MP/2005 Dated 08.12.2005 by the Dept of Mines & Geology, Hyderabad. Subsequent Mining scheme is approved by DMG vide letter no: 285/MS/NLR/2013 dated 03-07-2013.

The water requirement for this proposed mining activity will be only for Dust suppression purpose: 8.0 KLD, Domestic purpose: 1.0 KLD and Greenbelt purpose: 1.0 KLD. There is no generation & discharge of wastewater from this mine.

It is reported by the project proponent that there is no court case / litigation is pending against the project. The estimated cost of the Project is Rs. 50 lakhs. It was noted that this is a case of violation as the mine was operating since 2007 till 2014 without obtaining EC. 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 subject to MoEF taking actions on violations as per OM dated 12.12.2012 and 27.06.2013.

Further, the Project Proponent, along with EC proposal, should also furnish the followings:-

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

RE-CONSIDERATION OF TOR PROPOSALS

(2.46) Umbershet Bauxite Mine of M/s Ashapura Minechem Ltd., located at village umbersher, Taluka Dapoli, Distt.- Ratanagiri, Maharashtra(99.8619ha) (Expansion of Bauxite mining from 2.26 LTPA to 5.0 LTPA) (Consultant: Bhagavathi Ana Labs Ltd.)

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:

Latitudes : 17° 55' 24.47"N, 17° 55' 33.92"N
Longitudes : , 73° 05'15.73"E, 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. The proposal was considered in the meeting held during 16-17 December 2013 based on 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.

The PP requested for reconsideration of the proposal mentioning that the amalgamation of the two mine leases is a lengthy process. The Mining Lease for Umbershet Bauxite Mine and Rowale Bauxite Mine was granted separately by Govt.

of Maharashtra vide two separate orders. The Mine lease for Umbershet Bauxite Mine was granted vide Order No. MMM-1002/CR 510/IND-9 dated 21.12.2004 and for Rowale Bauxite Mine vide letter No. MMM-1003/CR 555/IND-9 dated 15.02.2005. The amalgamation of two mines is like the getting new Mining Lease and process will take 3 and 4 years as lot of paper work and many Government Departments are involved in the process.

The Mining Plans for Umbershet Bauxite Mine was approved by Indian Bureau of Mines vide letter No. MP/MAN-568 (MAH)/ GOA-2004-05 dated 16.12.2004 and subsequently scheme of Mining was approved vide letter No. MS/RTGN/GOA(MAH)/BX-51-SZ/238 dated 01.07.2010 for the period 2009-10 to 2013-14. Whereas Mining Plan for Rowale Bauxite Mine was approved by Indian Bureau of Mines vide letter No. MP/MAN-572 (MAH)/GOA-2004-05 dated 02.02.2005 and subsequently Scheme of Mining was approved vide letter No. MS/RTGN/GOA (MAH)/BX-50-SZ/325 dated 01.07.201 for the period 2011-12 to 2015-16.

The Environmental Clearance for Umbershet Bauxite Mine for the production Capacity of 36,000 TPA was obtained from MoEF vide letter No. F. No. J-11 0151 461 2006-IA-II(M) dated 29.12.2006 and for enhancement of production capacity up to 2,26,000 TPA was obtained vide letter No. F. No. J-11015/275/2007-IA-II(M) dated 31.10.2008. The Environmental Clearance for Rowale Bauxite Mine for the production Capacity 60,000 TPA was obtained from MoEF vide letter No. F. No. J-11015/44/2006-IA-II(M) dated 26.12.2006 and for enhancement of production capacity up to 2,50,000 TPA was obtained vide letter No. F. No. J-110 15/274/2007-IA-II(M) dated 31.10.2008.

Likewise Consent to Establish for Umbershet Bauxite Mine and Rowale Bauxite Mine were obtained separately from MPCB. These two mines are operated in two different villages and getting consent from the two villages may arise interest of conflict between Rowale and Umbershet villages.

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. Further, the Project Proponent, along with EC proposal, should also furnish the followings: -

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

(2.47) Rowale Bauxite Mine of M/s Ashapura Minechem Limited located at village Rowale Taluka Dapoli, Dist. Ranthnagiri, Maharashtra (218.285ha) Expansion of Bauxite Mining from 2.5LTPA to 8.0LTPA) (Consultant: Bhagavathi Ana Labs Ltd.)

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.

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.

The Proposal was considered in the Meeting held during 16-17 December 2013 based on 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.

The PP requested for reconsideration of the proposal mentioning that the amalgamation of the two mine leases is a lengthy process. The Mining Lease for Umbershet Bauxite Mine and Rowale Bauxite Mine was granted separately by Govt. of Maharashtra vide two separate orders. The Mine lease for Umbershet Bauxite

Mine was granted vide Order No. MMM-1002/CR 510/IND-9 dated 21.12.2004 and for Rowale Bauxite Mine vide letter No. MMM-1003/CR 555/IND-9 dated 15.02.2005. The amalgamation of two mines is like getting new Mining Lease and the process will take 3 and 4 years as lot of paper work and many Government Departments are involved in the process.

The Mining Plans for Umbershet Bauxite Mine was approved by Indian Bureau of Mines vide letter No. MP/MAN-568 (MAH)/ GOA-2004-05 dated 16.12.2004 and subsequently scheme of Mining was approved vide letter No. MS/RTGN/GOA(MAH)/BX-51-SZ/238 dated 01.07.2010 for the period 2009-10 to 2013-14. Whereas Mining Plan for Rowale Bauxite Mine was approved by Indian Bureau of Mines vide letter No. MP/MAN-572 (MAH)/GOA-2004-05 dated 02.02.2005 and subsequently Scheme of Mining was approved vide letter No. MS/RTGN/GOA (MAH)/BX-50-SZ/325 dated 01.07.201 for the period 2011-12 to 2015-16.

The Environmental Clearance for Umbershet Bauxite Mine for the production Capacity of 36,000 TPA was obtained from MoEF vide letter No. F. No. J-11 0151 461 2006-IA-II(M) dated 29.12.2006 and for enhancement of production capacity up to 2,26,000 TPA was obtained vide letter No. F. No. J-11015/275/2007-IA-II(M) dated 31.10.2008. The Environmental Clearance for Rowale Bauxite Mine for the production Capacity 60,000 TPA was obtained from MoEF vide letter No. F. No. J-11015/44/2006-IA-II(M) dated 26.12.2006 and for enhancement of production capacity up to 2,50,000 TPA was obtained vide letter No. F. No. J-110 15/274/2007-IA-II(M) dated 31.10.2008.

Likewise Consent to Establish for Umbershet Bauxite Mine and Rowale Bauxite Mine were obtained separately from MPCB. These two mines are operated in two different villages and getting consent from the two villages may raise conflict of interest between Rowale and Umbershet villages.

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. Further, the Project Proponent, along with EC proposal, should also furnish the followings:-

- (i) The analysis/testing of water, air, soil, noise etc. by the MoEF/NABL accredited laboratories.
- (ii) All the original copies of testing/analysis report should be made available during appraisal of the project.

(2.48) Limestone Mine with production capacity 0.65 Lakh TPA (including magnesia limestone) by M/s. The India Cements Limited, located at Village- Tenkulam, Taluk & District-Tirunelveli, Tamil Nadu (14.395 ha) (Consultant: Creative Engineers & Consultants)-TORs

The proposal is of M/s The India Cements Limited for Limestone production capacity of 0.65 Lakh TPA (including high magnesia limestone) in the M.L. area of 14.395ha. The mine lease is located at Village- Tenkulam, Taluk & District-Tirunelveli, Tamil Nadu. It is a category 'A' project due to presence of Gangaikondan Spotted Deer Sanctuary notified under the Wild Life Protection (Act), 1972 within 10 km of study area. Government of Tamil Nadu vide G.O. No. 150, dated 01.10.2013 has declared Gangaikondan Reserved Forests as 'Gangaikondan Spotted Deer Sanctuary' and notified under the Wild Life Protection (Act), 1972.

The Proposal was earlier considered in the 17th EAC meeting held during February 24-25, 2014 wherein the Committee noted that it is case of **violation** as Proponent had mined out limestone from 1993-94 to 2012-13 without prior environmental clearance. MoEF may take action on violations as per OM dated 12.12.2012 and 27.06.2013. In this context, MoEF vide letter dated 04.04.2014 has initiated actions as per MoEF OM dated 12.12.2012 and 27.06.2013.

Further, PP vide letter dated 28.04.2014 has requested to re-examine the directions issued and to pass appropriate orders so as to facilitate the resumption of the mining operations. Accordingly, the proposal was considered in this meeting.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee reiterated its stand that it is case of **violation** as Proponent carried out mining of limestone from 1993-94 to 2012-13 without prior environmental clearance. The Committee **prescribed** TOR as per Annexure-I, subject to fulfillment of Violation.

(2.49) Limestone Mine with production capacity 0.36 Lakh TPA (including high magnesia limestone) by M/s The India Cement limited, located at Village- Ramaiyanpatti, Taluk & District – Tirunelveli, Tamil Nadu (7.330ha) (Consultant: Creative Engineers & Consultants)-TORs

The proposal is of M/s The India Cements Limited for Limestone production capacity of 0.36 Lakh TPA (including high magnesia limestone) in the M.L. area of 7.330 Ha. The mine lease is located at Village- Ramaiyanpatti, Taluk & District – Tirunelveli, Tamil Nadu. It is a category 'A' project due to presence of Gangaikondan Spotted Deer Sanctuary notified under the Wild Life Protection (Act), 1972 within 10 km of study area. Government of Tamil Nadu vide G.O. No. 150, dated 01.10.2013 has declared Gangaikondan Reserved Forests as 'Gangaikondan Spotted Deer Sanctuary' and notified under the Wild Life Protection (Act), 1972.

The Proposal was earlier considered in the 17th EAC meeting held during February 24-25, 2014 wherein the Committee noted that it is case of **violation** as Proponent had mined out limestone from 1993-94 to 2012-13 without prior

environmental clearance. MoEF may take actions on violations as per OM dated 12.12.2012 and 27.06.2013.

Further, PP vide letter dated 28.04.2014 has requested to re-examine the directions issued and appropriate orders may be passed so as to facilitate the resumption of the mining operations. Accordingly, the proposal was considered in this meeting.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee reiterated its stand that it is a case of **violation** as Proponent carried out mining of limestone from 1993-94 to 2012-13 without prior environmental clearance. The Committee **prescribed** TOR as per Annexure-I, subject to fulfillment of Violation.

(2.50) Limestone mine with production capacity 2.52 Lakh TPA (including high magnesia limestone) by M/s The India Cements Ltd., located at village- Ramaiyanpatti, Taluk & District– Tirunelveli, Tamil Nadu (28.430ha) –TORs

The proposal is of M/s The India Cements Limited for Limestone production capacity of 2.52 Lakh TPA (including high magnesia limestone) in the M.L. area of 28.430 Ha. The mine lease is located at Ramaiyanpatti Village, Tirunelveli Taluk & District. It is a category 'A' project due to presence of Gangaikondan Spotted Deer Sanctuary notified under the Wild Life Protection (Act), 1972 within 10 km of study area. Government of Tamil Nadu vide G.O. No. 150, dated 01.10.2013 has declared Gangaikondan Reserved Forests as 'Gangaikondan Spotted Deer Sanctuary' and notified under the Wild Life Protection (Act), 1972.

The Proposal was earlier considered in the 17th EAC meeting held during February 24-25, 2014 wherein the Committee noted that it is case of **violation** as Proponent had enhanced the limestone mining capacity and mined out limestone from 1993-94 to 2012-13 without prior environmental clearance. MoEF may take actions on violations as per OM dated 12.12.2012 and 27.06.2013.

Further, PP vide letter dated 28.04.2014 has requested to re-examine the directions issued and appropriate orders may be passed so as to facilitate the resumption of the mining operations. Accordingly, the proposal was considered in this meeting.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee reiterated its stand that it is a case of **violation** as Proponent had enhanced the limestone mining capacity and Proponent carried out mining of limestone from 1993-94 to 2012-13 without prior environmental clearance. The Committee **prescribed** TOR as per Annexure-I, subject to fulfillment of Violation.

(2.51) Limestone mine with production capacity 0.30 Lakh TPA of limestone by M/s. The India Cements limited, located at village Tenkulam, Taluk & District- Tirunelveli, Tamil Nadu (24.965 ha) (Consultant: Creative Engineers & Consultants) –TORs

The proposal is of M/s. The India Cements Limited for Limestone production capacity of 0.30 Lakh TPA in the M.L. area of 24.965 Ha. The mine lease is located at located at village Tenkulam, Taluk & District- Tirunelveli, Tamil Nadu. It is a category 'A' project due to presence of Gangaikondan Spotted Deer Sanctuary notified under the Wild Life Protection (Act), 1972 within 10 km of study area. Government of Tamil Nadu vide G.O. No. 150, dated 01.10.2013 has declared Gangaikondan Reserved Forests as 'Gangaikondan Spotted Dear Sanctuary" and notified under the Wild Life Protection (Act), 1972.

The Proposal was earlier considered in the 17th EAC meeting held during February 24-25, 2014 wherein the Committee noted that it is case of **violation** as Proponent had enhanced the limestone mining capacity and mined out limestone from 1993-94 to 2012-13 without prior environmental clearance. MoEF may take actions on violations as per OM dated 12.12.2012 and 27.06.2013. In this context, MoEF vide letter dated 04.04.2014 has initiated actions as per MoEF OM dated 12.12.2012 and 27.06.2013.

Further, PP vide letter dated 28.04.2014 has requested to re-examine the directions issued and appropriate orders may be passed so as to facilitate the resumption of the mining operations. Accordingly, the proposal was considered in this meeting.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee reiterated its stand that it is a case of **violation** as Proponent had enhanced the limestone mining capacity and Proponent carried out mining of limestone from 1993-94 to 2012-13 without prior environmental clearance. The Committee **prescribed** TOR as per Annexure-I, subject to fulfillment of Violation.

(2.52) Limestone Mines with production capacity of 4.0 Lakh TPA including magnesia limestone by M/s India Cements limited, located at village -Sethurayanpudur–Taluk & District–Tirunelveli, Tamil Nadu (29.895Ha) (Consultant: Creative Engineers & Consultants) -TORs

The proposal is of M/s. The India Cements Limited for Limestone production capacity of 4.0 Lakh TPA (including magnesia limestone) in the M.L. area of 29.895 ha. The mine lease is located at Village- Sethurayanpudur, Taluk & District- Tirunelveli Tamil Nadu. It is a category 'A' project due to presence of Gangaikondan Spotted Deer Sanctuary notified under the Wild Life Protection (Act), 1972 within 10 km of study area. Government of Tamil Nadu vide G.O. No. 150, dated 01.10.2013 has declared Gangaikondan Reserved Forests as 'Gangaikondan Spotted Dear Sanctuary" and notified under the Wild Life Protection (Act), 1972.

The Proposal was earlier considered in the 17th EAC meeting held during February 24-25, 2014 wherein the Committee noted that it is case of **violation** as Proponent had enhanced the limestone mining capacity and mined out limestone from 1993-94 to 2012-13 without prior environmental clearance. MoEF may take actions on violations as per OM dated 12.12.2012 and 27.06.2013. In this context, MoEF vide letter dated 04.04.2014 has initiated actions as per MoEF OM dated 12.12.2012 and 27.06.2013.

Further, PP vide letter dated 28.04.2014 has requested to re-examine the directions issued and appropriate orders may be passed so as to facilitate the resumption of the mining operations. Accordingly, the proposal was considered in this meeting.

Based on the information furnished and presentation made by the project proponent and discussions held, the Committee reiterated its stand that it is a case of **violation** as Proponent had enhanced the limestone mining capacity and Proponent carried out mining of limestone from 1993-94 to 2012-13 without prior environmental clearance. The Committee **prescribed** TOR as per Annexure-I, subject to fulfillment of Violation.

Additional Agenda item:

(3.1): Visit Report of Sub-Committee on project "Expansion of Rampura Agucha Lead and Zinc Opencast and Underground mining Project of (5.0 million TPA to 6.15 million TPA) and Beneficiation Capacity of Beneficiation Plant (5.0 million TPA to 6.15 million TPA) by M/s Hindustan Zinc Ltd., located at Village-Agucha, Tehsil-Hurda, District-Bhilwara, Rajasthan-Amendments in EC

The proposal is for amendments of EC with regard to dump height for the project of Rampura Agucha Lead and Zinc Opencast and Underground mining Project (5.0 million TPA to 6.15 million TPA) and Beneficiation Plant of capacity (5.0 million TPA to 6.15 million TPA) of M/s Hindustan Zinc Ltd., located at Village Agucha, Tehsil Hurda, District Bhilwara, Rajasthan.

MoEF had accorded the Environmental Clearance vide letter no. J-11015/260/2008-IA.II (M) dated 11th December 2009 and amended the same on 5th March 2012 with regard to transportation of mineral by Rail. The Proponent requested to amend the specific condition no. (v) of the EC granted vide dated 11th December, 2009 with regard to increasing the dump height from 100 m to 140 m. The proposal was appraised in the 9th Meeting of the Reconstituted Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) held during July 22nd-24th, 2013 wherein the Committee deliberated the issues with regard to increasing the dump height and its impacts and sought the following clarifications:

- (i) Copy of modified mine plan with regard to dump height need to provided;

- (ii) Monitoring Report of dump slope using Slope stability radar needs to be submitted; and
- (iii) Details of study that 'No damage to environment would be caused due to increase of height' needs to be submitted;

During the deliberations, the Committee was also of the view that before further consideration, a sub-Committee, comprising Shri P. K. Verdia, EAC Member, Prof. A. K. Bhatnagar, EAC Member and Officials of MoEF should visit the mine and submit an Inspection Report.

The Proponent has submitted the above mentioned information along with a detailed Study Report by CIMFR Dhanbad, for optimum slope design of 140m height and fugitive dust modeling assessment report by VIMTA LABS Ltd., Hyderabad. The Ministry has accepted the recommendations of the EAC and accordingly, the aforesaid Sub-Committee of EAC visited the mining site and proposed area of dumping on March 01, 2014 along with representatives of Project Authorities.

On the basis of field inspection, perusal of records, technical reports and discussion with the Project Authorities, the Sub-Committee made the following observations: -

- (i) Rampura Agucha Mine of M/s. HZL of Bhilwara District, Rajasthan falls in Survey of India (SOI) Topo sheet No. 45K/9 and 45K/13 location coordinates of mine are 25°50'15" North Latitude and 74°44'15" East Longitude. It is located on flat plain between Jaipur and Udaipur and approximately about 225 kms North – North East of Udaipur and about 200 kms South-South West of Jaipur. The mine is approachable from Jaipur-Kishangar-Bhilwara by NH 79 upto village Rupahili and then 13 kms Tar road upto Rampura Agucha.
- (ii) The Altitude of the site is about 390m above mean sea level (MSL). The area is classified as semi-arid region which is characterized by high temperature in the month of April to October. Rainfall occurs predominantly in the monsoon season during June to September months and average rainfall in the region of last five year is 455 mm. There is no major drainage course cutting across the mine area.
- (iii) The rocks of Rampura Agucha constitute a part of pre-Cambrian Banded Gneissic Complex (BGC) group of rocks. The general trend of rock formation is NNE-SSW to NE-SW with moderate to steep South easterly dip. The ore body has been proved for a strike length of 1.55 km. with average width of 58 m. The host rocks in the central part are graphite-mica-sillimanite gneissic/ schist with calc-silicate enveloping ore body. Long bands of amphibolites with pegmatite bodies are present.
- (iv) The present waste dump is on the base of hard rock having a footprint of approx. 260 ha in a (BGC) single designated location as per approved mine

plan. Presently, the waste is disposed in 5 lifts of 20m each and inspection was done at far south end of the waste dump behind the mine tower. Presently, the waste dump has attained its height of 100m at south end of waste dump with overall slope angle of 27 degree. During inspection at the extreme south end it is observed that a thick plantation has been carried out on all the matured benches. The thin layer of soil cover is being removed prior to dumping and spread over the matured dump slope for growing vegetation; besides using it for lining while constructing the tailing dam. Geo-textiles with vetiver grass plantation has been carried out on the slopes and a few local species of plants are being grown over other slopes. The Green covering is visible on the slopes. Garland drain is formed at the toe of the dump. It has been observed that maximum utilization of the waste has been done in construction of tailing dam.

- (v) The samples of dump material from different parts and depth of the already existing dump were tested in the soil and rock laboratory of CIMFR as informed by the Project Authorities and geotechnical parameters were considered for optimum slope design of the dump. Direct shear tests have also been conducted on direct shear test machine. The slope stability design was done on the basis of these results.
- (vi) The stability analysis was done by GALENA software which is based on limit equilibrium method. This is one of the commonly used design methods which permit determination of slope performance with variation in all the parameters involved in slope design. The Sub-Committee has also seen the Radar Station situated near mine pit and is about 150m, southwest of waste dump site. The Sub-committee Members observed the regular monitoring being carried out by radar for waste dump and mine's working. Proponent has already submitted a detailed report of slope stability analysis to MoEF vide their letter dated 14.10.2013 and also given to Sub-Committee members at the time of inspection.
- (vii) The applicable geo-mining conditions take note of the presence of pervious gneiss in the overburden material and the angle of repose has been considered to be 37°. The stability analysis has been carried out to determine the safe extents of dump slope configuration, suitable for present geo-mining conditions. The design parameters of the proposed dumps are:
 - (a) Height of individual layers - 20 m.
 - (b) No. of layers- 7
 - (c) Min. exposed width at top two decks/ lifts- 24 m (100-120)
 - (d) Min. exposed width of roots of the decks downwards- 20 m
 - (e) Ultimate slope of dump- 27°
- (vii) The mine is working with shovel dumper combination whereby the blasted material from the mine pit is being carried in 95-220 tonnes tippers to the designated dumping sites over lifts of 20 m each. The unloaded material is then pushed with the help of track dozer for dump extension and

maintaining a level surface at the unloading point, with a gentle dip towards outside to avoid accumulation of rain water on dump surface and to prevent 'ponding'. Dumping over subsequent lifts is to be done once the existing lift is advanced sufficiently. A minimum 20 m width is maintained between the toe of the working lift and crest of the lower lift and necessary compaction is also done.

(viii) Waste dumping and rehabilitation of waste dumps: -

- (a). Top soil is removed from the dump Floor before dumping.
- (b). All round the periphery of dump, a collector drain/ bund has been formed to divert the rain water away from the dump to a collector pond where the solids settle in.
- (c). The dump top is properly leveled with gentle slope to avoid water accumulation and retention on dump top / dump benches. To prevent rain water from flowing along the slopes, a network of paved drains is maintained.
- (d). The non-active area/ mature area of the waste dump is being covered with geo-textiles/soil and plantation is being done over the covered surface.
- (e). Different species of grasses like (Cenchrus setigerus (Dhamon), Albizzia labbea (Sirao) and Chyrosogon Zizanioides (Vetiver) are being grown over the slopes.
- (f). Major species like Shisham, Neem, Acacia, Cassia, Samla, Ber, Amaltas, Kaner, Kieker, Khejadi, Pipal, Subool, Parkinsonia have been planted on stabilized dump slopes.

Information provided by the proponent:

With respect to point raised in the earlier meeting that "Details of study that 'No damage to environment would be caused due to increase of height' needs to be submitted", the Project Authority has submitted two reports as follows: -

- (a) To assess the impact of height increase of waste on air quality of the nearby areas, a Fugitive Dust Modeling has been carried out by M/s Vimta Labs Hyderabad in June 2013 i.e. on Assessment of impact due to waste dump raise from present 100m to 140m height. The study highlights that there would be negligible increase in the dust load.
- (b) To assess any leachable properties of the waste dump material a TCLP study for waste dump material has been carried out by M/s Vimta Labs Hyderabad in March 2013. The report highlights that all the leachable elements are well within the stipulated norms.
- (c) As per the EC letter condition no. 'v' , a six monthly compliance report needs to be submitted to MoEF. The proponent has informed that they are regularly submitting the reports. Last report was submitted vide letter no. HZL/RA/ENV/MoEF/2013-14/394 dated 23.11.2013.

- (d) The environment impacts of increasing the height could be Fugitive dust generation and Noise. The mitigation measures for control of fugitive dust generation are that thick plantation is being carried out over the matured benches and on the periphery of the mine. Geotextiles are being laid over the slopes providing green cover over the slopes and controlling the fugitive emissions. There would be minimal noise impact due to waste dump activities. By creating more lifts at existing dump it would further increase the linear distance from the outer periphery or boundary hence much reduced noise levels at boundary wall. Moreover a 20m width of green belt has been developed all along the boundary which would further attenuate the noise.
- (e) Fugitive dust modeling study :The proponent informed that the study has been carried out by M/s Vimta Labs. The prediction of impacts on air environment has been carried out by employing USEPA approved Fugitive Dust Model (FDM). Fugitive Dust Model is a Mathematical simulation air quality model specifically designed for computing concentration and analysis of the dispersion of fugitive dust. The model is based on the well-known Gaussian plume Formulation for computing concentrations. The model has been specifically adapted to incorporate an improved gradient-transfer deposition algorithm. Gravitational settling velocity and a deposition velocity are calculated by FDM for each class. Concentration and deposition are computed at all user-selectable receptor locations. The inference of the report is that on perusal of the data covered under each activity reveals that there will be a marginal increase in terms of dust load by $< 0.1 \text{ ug/m}^3$. However, it can be observed that the resultant ambient air quality after considering the point source emissions, fugitive /area source emissions and line source emissions are well below the limits as per the conditions laid down by Rajasthan State Pollution Control Board and the area has sufficient carrying capacity to accommodate the industrial development. The predominant wind direction is from WSW direction followed by NE and there will be a very marginal increase in dust load by $< 0.1 \text{ ug/m}^3$ in the nearby areas.
- (f) Impact of rainfall: As per the data provided by the proponent and the local meteorology department there has been no cloud burst since 1987. The earlier data are not available. As per the information provided by the proponent, in case of heavy rains / cloud burst, the runoff water would be channelized through stone pitched garland drain to the siltation pond. The garland drains are adequately designed. The proponent has provided data that there had been maximum rainfall of 156.5mm in a day in the year 2012 and the runoff water was well channelized by garland drains to the siltation pond. There has been no instance of sliding till date since the operations began.
- (g) Garland drain of dimensions 2.0m x 1.5m having a length of about 8.2km is dug all along the waste dump toe with siltation pond of 15,000m³

capacity that provides adequate retention time for settling of silts. Retaining wall of 1.5m height is made along with the garland drain. As per the information provided by the proponent, quantum of silt generated each year is approx. 500m³. The garland drain and siltation pond is cleaned every year before the onset of the monsoon. The silt is utilized for plantation over the mature benches.

The Sub-Committee deliberated the issues at the mine site and **recommended** the proposed raising of the dump height from 100m to 140m (in two lifts of 20m each) for consideration by EAC with additional specific conditions, viz: (i) The open cracks, whenever developed in the partially consolidated new dump mass, should be consolidated with proper filling/leveling with the help of dozer / compactors; (ii) Dump foundation preparation should be done by excavating and removing soil before dumping, to improve the frictional resistance at the base of dump. It should be filled with Over burden containing stones; (iii) There should not be any dumping in pool water or on slushy ground; (iv) Discontinuous dumping should be avoided to check water accumulation between two isolated dumps; (v) During rainy season, an officer should be deputed to go in and around the dump site every morning to see the effectiveness of drain. If any blockage is observed, immediate steps should be taken to make it effective; (vi) The dumps should be surveyed periodically to produce up-to-date and accurate dump geometry; (vii) The slope and stability monitoring by radar should be done and its report should be sent to MoEF and its Regional office every six-months; (viii) The dump design should be reviewed by CIMFR or any other scientific agency after reaching dump height of 120m and its report sent to MoEF and its Regional office; (ix) Waste dump has to be managed as per the guidelines of DGMS and quarterly monitoring report to be submitted to DGMS; (x) On stabilized dumps, more species such as *Pongamia*, *Bombax ceiba*, Tamarind, Arjun, *Gravillea robusta* and Amla be planted.

In addition, the Radar monitoring system should satisfactorily sub-serve the dual objectives viz. (i) Investigative Monitoring to provide an understanding of the slope behavior over time and typical response to external events(e.g. Precipitation and seasonal fluctuations) and (ii). Predictive Monitoring: To provide a warning of a change in behavior, enabling the possibility of limiting or intervening to prevent hazardous sliding. The data so analyzed should be provided with reference to the above.

In order to improve stability of benches, (i) Paved drains are to be provided to protect the slope surfaces against rain-cuts and seepage during rains. These make a safe way to discharge top and surface water to the bottom of the dump; (ii) Constant vigilance on the condition of dumps with special reference to accumulation of water and development of cracks.

The Committee discussed the recommendations of the sub-Committee and **recommended** the proposal for proposed raising of the dump height from 100m to 140m (in two lifts of 20m each) with additional specific conditions as recommended by the sub-Committee.

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

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Annexure-I

S. No.	Terms of Reference (TORs)
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 ₁₀ , SO ₂ and NOx), water quality, noise level, soil and flora and fauna shall be collected and the AAO 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 ₁₀ , particularly for free silica, should be given.
21)	Air quality modeling 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 modeling 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. Shri P.K. Verdia | Member |
| 5. Prof. G.S. Roonwall | Member |
| 6. Dr. D Mohamed Kizhar Irshath | Member |
| 7. Dr. V.P. Upadhyay Director, MoEF | Member Secretary |
| 8. Dr. R. B. Lal, Joint Director, MoEF | |
| 9. Dr. Sonu Singh, Deputy Director, MoEF | |
| 10. Representatives of M/s Hindustan Copper Ltd. | |
| 11. Representatives of M/s Ultra Tech Cement Ltd. | |
| 12. Representatives of M/s Indra Pathar Shramic Shakari Samiti Maryadit Suwakheda | |
| 13. Representatives of M/s Hindustan Zinc Limited | |
| 14. Representatives of M/s Reliance Cementation Pvt. Ltd. | |
| 15. Representatives of M/s Reliance Cementation Pvt. Ltd. | |
| 16. Representatives of M/s Madhya Pradesh Mineral Supply Company | |
| 17. Representatives of M/s Jaiprakash Associates Limited | |
| 18. Representatives of M/s Muneer Enterprises | |
| 19. Representatives of M/s. Tamil Nadu Cements Corporation Ltd. | |
| 20. Representatives of M/s. Maihar Cement | |
| 21. Representatives of M/s Indian Marble Company | |
| 22. Representatives of M/s. Godawari Power & Ispat Ltd | |
| 23. Representatives of M/s Ex-Servicemen Welfare Association | |
| 24. Representatives of M/s Chettinad Cement | |
| 25. Representatives of M/S BMM Cements Limited | |
| 26. Representatives of M/s Divyajyothi Steel Ltd. | |
| 27. Representatives of M/s Dalmia Cement (Bharat) Ltd. | |
| 28. Representatives of M/s Aditya Minerals Private Ltd. | |
| 29. Representatives of M/s Rashtriya Ispat Nigam Ltd. | |
| 30. Representatives of M/s Mancherial Cement Company (P) Ltd. | |
| 31. Representatives of M/s Tirumala Granites | |
| 32. Representatives of M/s Anita Kumari | |
| 33. Representatives of M/s Bharathi Cement Corporation Pvt. Ltd | |
| 34. Representatives of M/s Shaik Jamal Vali | |
| 35. Representatives of M/s NMDC | |
| 36. Representatives of M/s Sahydri Vibhag Audhogik Sahakari Vikas Sanstha Mining company Pvt. Ltd. | |
| 37. Representatives of M/s V.U.S.B. Bhushan Kumar | |
| 38. Representatives of M/s Steel Authority of India Ltd. | |
| 39. Representatives of M/s Trimex Sands Pvt. Ltd. | |
| 40. Representatives of M/s Essel Mining & Industries Ltd. | |
| 41. Representatives of M/s VP Cements (P) Ltd. | |
| 42. Representatives of M/s. Tirupati Minerals & Metals | |
| 43. Representatives of M/s Sheshagiri Rao & Company | |
| 44. Representatives of M/s Ashapura Minechem Ltd. | |
| 45. Representatives of M/s. The India Cements Ltd. | |
